DRAFT SUBSEQUENT ENVIRONMENTAL IMPACT REPORT

SIERRA STAR MASTER PLAN PROJECT

Lead Agency:
Town of Mammoth Lakes
Planning Department
PO Box 1690
Mammoth Lakes, CA 93546

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April 2007

SIERRA STAR MASTER PLAN
DRAFT SUBSEQUENT ENVIRONMENTAL IMPACT REPORT

Submitted to:

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TABLE OF CONTENTS

APPENDICES

(Under Separate Cover)

APPENDIX A:	NOTICE OF PREPARATION (NOP) AND INITIAL STUDY
APPENDIX B:	RESPONSES TO NOP AND COMMENTS FROM EIR SCOPING MEETINGS
APPENDIX C:	AIR QUALITY DATA
APPENDIX D:	BIOLOGY DATA
APPENDIX E:	CULTURAL RESOURCES REPORT AND PEER REVIEW LETTER
APPENDIX F:	GEOTECHNICAL/HAZARDS REPORTS AND PEER REVIEW COMMENTS
APPENDIX G:	HYDROLOGY DATA
APPENDIX H:	NOISE DATA
APPENDIX I:	LETTERS FROM PUBLIC SERVICE AND UTILITY AGENCIES
APPENDIX J:	TRAFFIC DATA
APPENDIX K:	WATER SUPPLY ASSESSMENT

FIGURES

TABLES

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I. INTRODUCTION/SUMMARY

A. INTRODUCTION

The purpose of the Introduction/Summary is to provide the reader with a clear and simple description of the proposed project and its potential significant environmental impacts. Section 15123 of the California Environmental Quality Act (CEQA) Guidelines requires that the summary identify each significant effect and recommended mitigation measures and alternatives that would minimize or avoid potential significant impacts. The summary is also required to identify areas of controversy known to the Lead Agency, including issues raised by agencies and the public, and issues to be resolved, including the choice among alternatives and whether or how to mitigate significant effects. This section focuses on the major areas of the Project that are important to decision-makers and uses non-technical language to promote understanding. This summary is intended as an overview and should be used in conjunction with a thorough reading of the Draft Environmental Impact Report ("EIR" or "Draft EIR"). The text of this report, including figures, tables, and appendices, serve as the basis for this summary.

The subject of this Subsequent Environmental Impact Report (EIR) is the proposed Sierra Star Master Plan Project (Project). A detailed description of the Project is contained in Section III., Project Description of this report.

Because the Project will require approval of certain discretionary actions by the Town of Mammoth Lakes (Town), the Project is subject to the CEQA, for which the Town is the designated Lead Agency. The Town's Planning Division administers the process by which environmental documents for private projects are prepared and reviewed. On the basis of these procedures, it was determined that the Project may have a significant effect on the environment and that an EIR should be prepared.

B. PURPOSE OF THE EIR

The Town has commissioned this EIR on the Project for the following purposes:

- To satisfy CEQA requirements.
- To inform the general public, the local community, and responsible, trustee, and state and federal agencies of the nature of the Project, its potentially significant environmental effects, feasible mitigation measures to mitigate those effects, and reasonable and feasible alternatives.
- To enable the Town to consider the environmental consequences of approving the Project.
- For consideration by responsible agencies in issuing permits and approvals for the Project.

As described in §15121 (a) and 15362 of the CEQA Guidelines, an EIR is an informational document that will inform public agency decision makers and the public of the significant environmental effects of a

project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to a project. The purpose of this EIR, therefore, is to focus the discussion on those potential effects on the environment of the Project that the Lead Agency has determined are or may be significant. In addition, feasible mitigation measures are required, when applicable, that could reduce significant impacts to insignificant levels.

The Lead Agency is required to consider the information in the EIR, along with any other relevant information, in making its decision on the Project. Although the EIR does not determine the ultimate decision that will be made regarding implementation of the Project, CEQA requires the Town to consider the information in the EIR and make findings regarding each significant effect of the Project.

This Draft EIR was prepared in accordance with §15151 of the CEQA Guidelines, which defines the standards for EIR adequacy:

> *An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR would summarize the main points of disagreement among the experts. The courts have looked not for perfection; but for adequacy, completeness, and a good faith effort at full disclosure.*

C. PROPOSED PROJECT

The Sierra Star Master Plan (SSMP) would address future development of approximately 42 acres of the 114-acre site surrounding the existing 18-hole, 114-acre Sierra Star Golf Course. The site is located in the center of Town to the north of Meridian Boulevard and is bisected by Minaret Road. The site is currently designated as the Lodestar Master Plan (LMP) area that was designated by the Town in 1991. The LMP set development standards for an approximately 226-acre site situated around the Sierra Star Golf Course. The Project would involve changes to the 1991 LMP that would result in replacement of the LMP with a new master plan that would change the name, land area, and land uses set forth in the 1991 LMP. The SSMP would supersede the 1991 LMP.

Currently, a total of 457 residential units have been developed or approved under the LMP. No commercial space has been developed. Residential units that have been developed include a 46-unit condominium development (Area 1A, Mammoth Green), a 24-unit condominium Project (Area 1B, The Cabins at Crooked Pines), an 11-lot single family residential subdivision (Area 1C, Crooked Pines), an 8-unit apartment building (Area 1D), a 54-lot single family residential subdivision (Area 3, Starwood), a 35-unit Workforce Housing development (Area 4C, The Chutes), and a 32-unit townhome condominium Project (Area 5F, The Timbers). A 58-unit condominium Project (Area 5E, Solstice) and a 19-unit fractional share single-unit residential development (Area 6, Tallus) are currently under construction and

a 40-unit Workforce Housing condominium Project (Area 4B/4E) and a 28-unit townhome condominium Project (Area 5G, Woodwinds) were recently approved within the Master Plan area. Additionally, 44-units of density (4D, Mammoth Crossing) were sold to Western Resort Properties.

Under the Project, 763 new dwelling units could be developed for a total maximum of 1,220 dwelling units. Limited commercial development (up to a maximum of 29,000 square feet of commercial/retail space, 20,000 square feet of commercial/conference space, and 30,000 square feet of conference space) would also be allowed in specific sectors of the Project area with discretionary approval by the Town. A 200-foot maximum height would be allowed for one building for purposes of potentially attracting a hotel complex. This would exceed the Town's current height limit and the 65-foot height limit established by the LMP.[1] The LMP currently allows for 1,263 dwelling units of density. Therefore, the Project represents a reduction of 43 residential dwelling units.

Upon final approval of the Project, the SSMP would effectively replace the LMP for the remaining area to be developed.

D. AREAS OF KNOWN CONTROVERSIES

Section 15123 of the CEQA Guidelines requires an EIR to identify areas of controversy known to the Lead Agency, including issues raised by agencies and the public, and issues to be resolved. Environmental concerns raised at the EIR scoping meetings and in letters submitted to the Town in response to the Notice of Preparation (NOP) of the EIR include:

- Undiscovered Archaeological and Cultural Resources
- Density
- Building Heights and Setbacks
- Affordable Housing
- Internal Roadway
- Multi-Use Trail
- Adequate Parking
- Increased Traffic
- Aesthetics and Blocked Views

[1] *The building height for the hotel complex would be allowed eight feet of additional height beyond the permitted 65 feet due to inclusion of underground parking per the Town of Mammoth Lakes' Zoning Ordinance.*

- Air Quality
- Increased Noise
- Increased Light and Glare
- Water Supply
- Water Flow and Pressure Requirements (associated with building heights)
- Water Quality, Low Impact Development Standards
- Geologic Hazards (including lahar and avalanche)
- Emergency and Evacuation Plans
- Increased Demand on Public Services
- Snow Removal and Storage
- Fire Safety and Increased Service Demand

E. ALTERNATIVES

This Draft EIR considers a range of alternatives to the proposed project to provide informed decision-making in accordance with §15126(d) of the CEQA Guidelines. The alternatives analyzed in this EIR include: A) No Project: Buildout of the Lodestar Master Plan, B) Reduced Density: 15% reduction in size for every development area and C) Reduced Height Alternative: Same density as the Project but reducing the maximum height to 120 feet. For further discussion of these alternatives, see Section VI of this Draft EIR. Based on the analysis in Section VI, Alternative **C** (Reduced Height) was selected as the environmentally superior alternative.

F. SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Table I-1 summarizes the various environmental impacts associated with the Project; includes the mitigation measures recommended to reduce or avoid the environmental impacts; and identifies the level of impact significance after mitigation.

Table II-1
Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
AESTHETICS (AES)		
Impact AES-1 Consistency with Policies (1987 Adopted General Plan)		
The Project would be generally consistent with the applicable policies associated with aesthetics in the adopted General Plan with the exception of the height of the tower building in Area 5A and the alteration of views from the identified viewpoints. With respect to the view corridors, the development of the Project would result in significant impacts from three viewpoints identified as Major View Corridors or Vistas in the General Plan. However, the development of the Project would not substantially obstruct views of the surrounding mountains. Therefore, impacts relating to consistency with the existing General Plan would be less than significant and no mitigation measures are required.	No mitigation measures are required.	Less Than Significant
Impact AES-2 Public Views and Scenic Vistas	***Mitigation Measures AES-2***	
Photo simulations were prepared depicting views from ten publicly accessible viewpoints in the Project vicinity. A total of 20 photo simulations depicting views after the Project is constructed are discussed below. *The Village at Mammoth (Views 1 and 2):* The view of the Project site from The Village at Mammoth would not be altered with the development of the Project and no impact would occur. *Main Street and Minaret Road (Views 3 and 4):* The impact of the development of the Project on the view from the intersection of Minaret Road and Main Street/Lake Mary Road towards the Sherwin Range would be less than significant. *Main Street and Old Mammoth Road (Views 5 and 6):* The view of the Project site from the intersection of Main Street and Old Mammoth Road would not be altered with the development of the Project and no impact would occur based on the massing shown. *Town of Mammoth Lakes Office Parking Lot (Views 7 and 8):* The view of the site from the Town of Mammoth Lakes Office Parking Lot would not be altered with the development of the Project and no impact would occur. *Meridian Boulevard and Minaret Road (Views 9 and 10):* Due to the prominent visibility of the proposed structures and the identification of it as an important vantage in the General Plan, the development of the Project would result in a	Mitigation Measures AES-2a Prior to the issuance of building permits, all structures and associated facilities on the Project site shall comply with the applicable standards of the Design Guidelines for the Town of Mammoth Lakes (July 2004), in accordance with Mammoth Lakes Municipal Code Section 17.32.120. Mitigation Measures AES-2b Prior to the issuance of grading permits, the Project applicant shall ensure to the satisfaction of the Town of Mammoth Lakes Community Development Department that no trees shall be removed during Project development for the sole purpose of improving views from the developed site. Mitigation Measures AES-2a and 2b address the design of the Project and the potential removal of trees on the Project site. These measures would contribute to the overall aesthetic of the Project building and site characteristics and features. However, these mitigation measures would not reduce the visual impact of the tower building above the tree line at Views 2-3 and 9-10, nor eliminate the change to the views from Lake Mary Road and the Bridges. No mitigation measures exist that would reduce this impact to less than significant. Therefore, even with implementation of the Mitigation Measures AES-2a and 2b, this impact would remain significant and unavoidable.	Significant and Unavoidable

Table II-1
Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
significant impact with respect to visual character during both snow and non-snow conditions at this viewpoint. *Mammoth Creek Park (Views 11 and 12):* The view of the Project site from the Mammoth Creek Park would not be altered with the development of the Project and no impact would occur. *Sherwin Creek Road (Views 13 and 14):* Considering the limited view of the proposed tower building in Area 5A during non-snow and snow conditions, the impact on the view of the Project site from Sherwin Creek Road would be less than significant. *Lake Mary Road, South of Tunnel (View 15 and 18):* Due to the prominence of the proposed buildings from this viewpoint and the importance of this viewshed, as set forth in the General Plan, the impact of the Project on Views 15 and 18 would be significant. *Lake Mary Road and Twin Lakes (Views 16 and 17):* The Project would be distant, it would be the highest feature above the tree canopy. Although the Project would be not obscure any views it would be noticeable; therefore, this impact would be significant. However, the proposed tower building in Area 5A would be barely visible from the intersection of Lake Mary Road and Twin Lakes during snow conditions. The impact of the Project on the view from Lake Mary Road and Twin Lakes would be less than significant during snow conditions. *The Bridges (Views 19 and 20):* The proposed buildings would be somewhat less visible during snow conditions due to partial obstruction by snow banks, due to the prominence of the proposed buildings from this viewpoint and the importance of this viewshed, as set forth in the General Plan, the impact of the Project on this view would be significant.		
Impact AES-3 Scenic Resources within a State Scenic Highway		
In the vicinity of the Town of Mammoth Lakes, State Highway 203 is an eligible State Scenic Highway (not officially designated) and U.S. Highway 395 is an officially designated State Scenic Highway. The potential impact on views along Main Street at the intersection of Minaret Road and Main Street/Lake Mary Road would be less than significant with the development of the Project. No visual impact is anticipated at the intersection of Main Street and Old Mammoth Road.	No mitigation measures are required.	Less Than Significant

Table II-1
Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
Overall, the proposed buildings would be barely visible or not visible along State Highway 203 (Main Street). With respect to U.S. Highway 395, the Project would not be visible from any vantage point along its route due to intervening topography and no impact would occur.		
Impact AES-4 Visual Character and Design		
The Project would be designed to complement the existing alpine architectural character of nearby development and throughout the Town. Therefore, the Project would not degrade the existing character or quality of the Project site and its surroundings, and the associated impact would be less than significant and no mitigation measures are required.	No mitigation measures are required.	Less Than Significant
Impact AES-5 Signage	***Mitigation Measure AES-5***	
The Project would provide signage that is clear, understandable and attractive but which also creates a memorable environment and sense of place. The design of Project signage would be consistent with the Town's Design Guidelines, and the associated impact would be less than significant.	Prior to the issuance of building permits, all buildings containing three or more separate businesses shall prepare a Master Sign Plan, in accordance with the Mammoth Lakes Municipal Code Chapter 17.34 and 17.40.	Less Than Significant
Impact AES-6 Light and Glare	***Mitigation Measure AES-6***	
The lighting needs at the Project site would vary according to the type and intensity of use. Varying illumination levels would be developed which address the particular needs of outdoor spaces and activities: safety, security, vehicular and pedestrian movement, retailing, signage, etc. Excessive illumination would be avoided and lighting would be designed and placed that minimizes glare and reflection and light fixtures would be required than shelf the light source to direct light downward onto the structure and surrounding grounds to maintain "dark skies." The Project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area, and the associated impact would be less than significant.	Prior to occupancy, all lighting on the Project site shall comply with the applicable requirements of the Town of Mammoth Lakes Outdoor Lighting Ordinance, in accordance with Mammoth Lakes Municipal Code Chapter 17.34.	Less Than Significant

Table II-1
Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
Impact AES-7 Shading/Shadows		
Summer Solstice: As summer solstice shadows would not cast onto any shadow-sensitive uses in the Project vicinity, summer solstice shadow impacts would be less than significant. *Winter Solstice:* As winter solstice shadows would not cast onto any shadow-sensitive uses in the Project vicinity, winter solstice shadow impacts would be less than significant. *Autumn and Spring Equinox Shadows:* There are no established thresholds of significance for equinox shadows. However, the equinox shadows are for informational purposes only.	No mitigation measures are required.	Less Than Significant
Impact AES-8 Cumulative Impacts to Aesthetics		
There are 49 related projects in the vicinity of the Project. There are related projects that are close enough to the Project site to have a direct cumulative visual quality impact in combination with the Project. The effect of the Project combined with the related projects would be further alteration of existing views of Mammoth Mountain, the Sherwin Range, and other scenic resources identified in the General Plan. Therefore, the cumulative impacts would be considered significant. Because the Project would account for approximately 228 acres of the new development within the Town, the Project's incremental contribution to the significant cumulative impact would be significant and unavoidable.	No mitigation measures are available to address the Project's incremental contribution to the significant cumulative impact.	Significant and Unavoidable
AIR QUALITY (AQ)		
Impact AQ-1 Construction/Demolition Impacts	***Mitigation Measure AQ-1***	
Foreseeable construction activities for the Project would include site preparation, grading, placement of utilities and other infrastructure, placement of foundations for structures, and fabrication of structures across the entire 228.8-acre Project area. Emissions during grading and construction would be caused by material handling, traffic on unpaved or unimproved surfaces, use of paving materials and architectural coatings, exhaust from construction worker vehicle trips, and exhaust from diesel-powered construction equipment.	The Project applicant shall require that the following practices be implemented by including them in the contractor construction documents to reduce the emissions of pollutants generated by heavy-duty diesel-powered equipment operating at the project site throughout the project construction phases: a. Water all construction areas at least twice daily; b. Cover all trucks hauling soil, sand, and other loose materials;	Less Than Significant

Table II-1
Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
Construction-related activities associated with the Project would result in dust and equipment exhaust emissions that could, at times, contribute to nuisances to adjacent residential uses located on both sides of Minaret Road. In addition, the Project would be developed in separate phases, so there may be portions of the site that are built and occupied by residents while adjacent portions of the site are undergoing construction. However, unless particulate emissions are reduced by implementation of feasible control measures, impacts caused by these emissions would be potentially significant. As a result, construction activities in each of the five development areas that comprise the Master Plan Project area would result in potentially significant air quality impacts.	c. Apply clean gravel, water, or non-toxic soil stabilizers on all unpaved access roads, parking areas and staging areas at constructions sites; d. Remove excess soils from paved access roads, parking areas and staging areas at construction sites; e. Sweep streets daily (with mechanical sweepers) if visible soil material is carried onto adjacent public streets; f. Hydroseed or apply non-toxic soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more); g. Enclose, cover, water twice daily, or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.); h. Limit traffic speeds on unpaved roads to 15 miles per hour; i. Install gravelbags, cobble entrys, or other Best Management Practices (BMPs) erosion control measures to prevent silt runoff to public roadways; j. Replant vegetation in disturbed areas as soon as possible; k. Install wheel washers for all exiting trucks or wash off the tires or tracks of all trucks and equipment leaving the construction site; l. Install wind breaks at the windward sides of the construction areas; m. Suspend excavation and grading activities when wind (as instantaneous gusts) exceeds 25 miles per hour; n. The idling of all construction equipment shall not exceed five minutes; o. Limit the hours of operation of heavy duty equipment and/or the amount of equipment in use; p. All equipment shall be properly tuned and maintained in accordance with the manufacturer's specifications; q. When feasible, alternative fueled or electrical construction equipment shall be used for the project site; r. Use the minimum practical engine size for construction equipment; and	

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Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	s. Gasoline-powered equipment shall be equipped with catalytic converters, where feasible.	
Impact AQ-2 Impact AQ-2 Operational Emissions	***Mitigation Measure AQ-2***	
Operational emissions generated by both stationary and mobile sources would result from normal day-to-day activities on the Project site after occupation. The Project would increase vehicular traffic in the Town by a total of 7,350 vehicle miles traveled (VMT) per day. Although this represents a reduction in total VMT from the previously approved 1991 Lodestar Master Plan, this would still increase annual PM10 emissions by less than seven percent in an area that is already in non-attainment for PM10. This would be considered a significant impact.	The Project applicant shall require the following implementation measures to reduce PM10 operational emissions: a. The Project shall include a transportation demand management program to reduce overall VMTs, in order to demonstrate compliance with the Federal PM10 standard of 150 µg/m.3 The program shall include, but not be limited to, circulation system improvements, shuttles to and from parking areas, and the location of facilities to encourage pedestrian circulation. b. The Project shall be linked to existing developed areas through existing road networks, public transit systems, open space systems, and bicycle and pedestrian systems. c. The Project shall implement trip reduction measures particularly during PM peak traffic hours to disperse trips between parking areas and mountain portals to and from the ski area. d. Multi-family developments within the Project area shall be required to pay the street sweeping fee. e. Residential condominium units shall enter into a transit fee agreement with the Town consistent with the Town's established Transit Fee Agreement Program. f. No solid fuel burning appliances, other than EPA Phase III-certified wood burning and pellet stoves, shall be permitted within multi-family and lodging developments.	Less Than Significant
Impact AQ-3 Cumulative Impacts to Air Quality		
The Air Pollution Control District does not have numerical thresholds to determine whether the Project would result in a cumulatively considerable net increase of PM_{10} or 0_3 precursors. However, 0_3 impacts are primarily the result of pollution generated in the San Joaquin Valley. Thus, an increase of 0_3 precursor emissions as a result of the Project would not substantially contribute to the exceedances of the State 0_3 standard.	See Mitigation Measure AQ-2 above.	Less Than Significant

Table II-1
Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
According to the Town's General Plan Update EIR, the increase in PM_{10} emissions would be considered cumulatively considerable even without development of the Project. In addition, the increase in PM_{10} emissions as a result of the Project would be considered a significant impact. However, implementation of Mitigation Measure AQ-2 would reduce Project PM_{10} emissions to a less-than-significant level. Therefore, implementation of these measures would also reduce the Project's cumulative impact on air quality to a less-than-significant level.		
BIOLOGICAL RESOURCES (BIO)		
Impact BIO-1 Special-Status Species	***Mitigation Measures BIO-1 Special-Status Species***	
Based on the Biological Assessment Report conducted by WRA, eleven special status wildlife species have a moderate or high potential to occur within the Project site and these species or their potential habitat may be impacted by the Project. No special status plants are present on-site. Recommended applicable sensitive species surveys and mitigation measures are outlined below. Suitable roost habitat is present for four special status bat species: long-eared myotis, long-legged myotis, fringed myotis and Yuma myotis. Potential roost habitat within the Project site includes any mature (greater than 25-inch diameter at breast height) tree stand and any large snags or felled trees. Subsequent permitting processes with resource agencies could result in additional mitigation beyond that required by the Town of Mammoth Lakes in the CEQA process. Any additional mitigation required by these agencies would be incorporated as a condition of their permit authorization.	*Mitigation Measure BIO-1a* To avoid impacting breeding or hibernating bats, tree and snag removal shall occur in September and October, after the bat breeding season and before the bat hibernation season. If snag and tree removal is to take place outside of this time frame, a pre-construction bat survey should be conducted. If no roosting bats are found during the survey, no further mitigation would be required. If bats are detected, a 50-foot buffer exclusion zone should be established around each occupied snag or tree until the roosting activities have ceased. Since raptors and other birds may potentially nest within the trees and shrubs that occur in and adjacent to the Project site, there is a potential for construction-related impacts to nesting birds. Snags are also an important habitat requirement for cavity nesting bird species. Disturbance that results in the abandonment of an active nest is considered a significant impact. However, implementation of Mitigation Measure BIO-1b below would reduce these potential impacts to a less than significant level. Subsequent permitting processes with resource agencies could result in additional mitigation beyond that required by the Town of Mammoth Lakes in the CEQA process. Any additional mitigation required by these agencies would be incorporated as a condition of their permit authorization. *Mitigation Measure BIO-1b* To avoid impacting nesting birds and/or raptors, **one** of the following must be implemented: • Conduct vegetation removal and other ground disturbance activities associated with construction during September through March, when birds are not nesting; **OR-**	Less Than Significant

Table II-1
Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	• Conduct pre-construction surveys for nesting birds if construction is to take place during the nesting season. A qualified wildlife biologist shall conduct a pre-construction raptor survey no more than 30 days prior to initiation of grading to provide confirmation on presence or absence of active nests in the vicinity (at least 300 feet around the project site). If active nests are encountered, species-specific measures shall be prepared by a qualified biologist in consultation with the California Department of Fish and Game (CDFG) and implemented to prevent abandonment of the active nest. At a minimum, grading in the vicinity of the nest shall be deferred until the young birds have fledged. A minimum exclusion buffer of 25 feet is required by CDFG for songbird nests, and 200 to 500 feet for raptor nests, depending on the species and location. The perimeter of the nest-setback zone shall be fenced or adequately demarcated with staked flagging at 20-foot intervals, and construction personnel restricted from the area. A survey report by the qualified biologist verifying that the young have fledged shall be submitted to the Town of Mammoth Lakes prior to initiation of grading in the nest-setback zone.	
Impact BIO-2 Sensitive Natural Communities		
No riparian vegetation or other sensitive communities exists within or adjacent to the Project site. While the Jeffrey pine-fir forest plant community present on-site is not considered sensitive.	No mitigation measures are required.	Less Than Significant
Impact BIO-3 Jurisdictional Resources	***Mitigation Measure BIO-3***	
The drainage features identified within the Project site appear to be ephemeral; however, these features are considered potentially jurisdictional by the Corps, Regional Water Quality Control Board (RWQCB) and CDFG. Impacts to portions of ephemeral drainages A and B from Grove Road are being permitted separately under the Lodestar Master Plan project; however, impacts to the remaining portions of these drainages may also occur under the Project requiring additional regulatory permits. In addition, the mapped wetland is also considered potentially jurisdictional by the Army Corps of Engineers (Corps) and RWQCB and may also be impacted by the Project. Subsequent permitting processes with resource agencies could result in additional mitigation beyond that required by the Town of Mammoth Lakes in the CEQA process. Any additional mitigation required by these agencies would be incorporated as a condition of their permit authorization.	A formal jurisdictional delineation report shall be submitted to and verified by the Corps. The Project should be reconfigured to avoid impacts to potentially jurisdictional features to the maximum extent feasible. If avoidance is not feasible, permit applications shall be submitted to the Corps, RWQCB and CDFG for impacts to these features. Mitigation measures associated with permit applications may include impact minimization measures such as increased culvert sizes, bridging and seasonal work restrictions, and possibly habitat compensation measures such as the restoration or creation of similar habitat in the vicinity. A Pre-Construction Notification shall be submitted to the Corps (if using a NWP 39, or as required by other NWPs), including a mitigation plan to compensate for the loss of waters of the U.S. Impacts to potentially jurisdictional features shall not occur until the permits are received from the appropriate regulatory agencies, or correspondence is received from the agencies indicating that a permit is not required.	Less Than Significant

Table II-1
Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
Impact BIO-4 Wildlife Movement and Habitat Connectivity		
The Project is unlikely to disrupt wildlife movement and will not impede the use of native wildlife nursery sites or migration corridors. In addition, no major migratory routes for mule deer or other important migratory animals in the region, occurs within the Urban Growth Boundary which entirely encompasses the Project site. Therefore, no significant impacts to wildlife movement, migration corridors, or nursery sites will occur from the Project.	No mitigation measures are required.	Less Than Significant
Impact BIO-5 Conformance with Town Policies and Ordinances	***Mitigation Measure BIO-5***	
Proposed development would conflict with the intent of some policies of the Town's Municipal Code regarding tree removal. The Jeffrey pine-fir forest plant community present on-site contains many trees that would meet the minimum size (6 inches in diameter) to require approval from the Town prior to removal. The Project should be designed to conform with the municipal code such that existing trees and vegetation are preserved to the maximum extent possible. The removal of live trees over 6 inches in diameter may result in significant impacts.	Prior to the removal of any trees greater than 6 inches in diameter, a final analysis of the value of trees removed shall be prepared by a licensed forester or arborist. Prior to removal of any trees greater than six inches in diameter a development permit or a tree removal permit must be approved by the Town. Said tree replacement shall be within the project area, or off-site; as may be approved by the Community Development Director.	Less Than Significant
Impact BIO-6 Conformance with Adopted Habitat Conservation Plans, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.		
No Habitat Conservation Plans, Natural Community Conservation Plans or other local or regional plans have been adopted within the Town's Urban Growth Boundary (UGB) which encompasses the site; therefore, no impacts are anticipated and no mitigation is considered necessary.	No mitigation measures are required.	Less Than Significant
Impact BIO-7 Cumulative Impacts to Biological Resources		
Based on a review of the related projects in the vicinity of the Project site and aerial photographs, few of these projects are likely to have significant impacts to biological resources due to their small size or location in existing developed areas. With respect to the biological impacts identified under the Project, related projects in the area also have the potential to impact nesting birds, bats, waters of the U.S. and State, and protected trees. However, with the measures proposed to mitigate these impacts under the Project, and given the small size of the related projects as	No mitigation measures are required.	Less Than Significant

Table II-1
Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
compared to the Project, these impacts are not anticipated to be cumulatively considerable or significantly adverse when evaluated with other related projects in the vicinity. The Town's Draft General Plan Update EIR acknowledges that the anticipated population increase as a result of the Project and the related projects, may have significant impacts upon special status species within the adjacent Inyo National Forest (INF), and it is anticipated that the final General Plan Update, when adopted, will include policies requiring the Town to work closely with agencies, including the INF, to ensure that the regional natural ecosystem is maintained. In addition, compliance of the project, and other development in the Town, with existing and anticipated future General Plan Update policies requiring the Town to work closely with regional agencies to ensure that the regional natural ecosystem is maintained, will address potential cumulatively considerable or significantly adverse impacts to sensitive natural resources.		
CULTURAL RESOURCES (CULT)		
Impact CULT-1 Impacts to Known Cultural Resources		
Two known resources, CA-MNO-529 (P26-000529) and CA-MNO-2487 (P26-002487), are located within the Project site. *CA-MNO-529 (P26-000529):* The northernmost portion of prehistoric archaeological site CA-MNO-529 (P26-000529) lies within portions of Areas 5A and 7 within the Project site. Data recovery excavations conducted at the site were considered to have exhausted the research potential of the site (Basgall 1983). The site is not considered to constitute a unique archaeological resource under CEQA. *CA-MNO-2487 (P26-002487):* The westernmost portion of prehistoric archaeological site CA-MNO-2487 presently lies under an existing golf course, but the majority of the site area lies within Area 5B/5C/5D within the Project site. It is not eligible for National Register of Historic Places inclusion (Kautz 1991). The site is not considered to constitute a unique archaeological resource under CEQA. Thus, the Project would result in less-than-significant impacts to the two previously recorded cultural resources located within the Project site.	No mitigation measures are required.	Less Than Significant

Table II-1
Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
Impact CULT-2 Impacts to Unknown Cultural Resources	***Mitigation Measures CULT-2***	
The Project area is sensitive for prehistoric and historic archaeological resources, and human remains. Buried (previously unrecorded) prehistoric and historic archaeological deposits may be present within the Project site. In addition, previously unidentified features and/or diagnostic artifacts within previously recorded sites may be present within the Project site. Ground-disturbing construction associated with the Project has the potential to result in significant impacts to unrecorded buried archaeological deposits. As such, mitigation measures are recommended that would reduce any such impacts to unknown cultural resources a less-than-significant level. As the Project area is sensitive for buried prehistoric and historic archaeological resources, and ground-disturbing construction associated with the Project has the potential to result in significant impacts to such unknown cultural resources, the following mitigation measures are recommended to reduce Project-related impacts to a less-than-significant level under CEQA.	*Mitigation Measure CULT-2a* A Mitigation Monitoring and Reporting Plan (MMRP) shall be prepared by a qualified archaeologist prior to Project construction. The MMRP shall outline the protocol for notification, temporary protection, documentation, and evaluation of previously unrecorded cultural resources encountered during construction, as well as mitigation of Project-related impacts to any such resources that are considered significant under CEQA, and the curation of any artifacts or samples collected in the field. The MMRP shall include a sample data recovery plan and a curation agreement. This document shall be completed prior to commencement of any ground-disturbing activity associated with the Project site (including clearing, brushing, grubbing, vegetation removal, disking, grading, trenching, excavation, and/or boring). *Mitigation Measure CULT-2b* A qualified archaeologist shall monitor all initial ground-disturbing grading and excavation activity in native soils. (Construction work within stockpile material does not require monitoring.) The construction monitor shall be supplied with maps and site records for the previously recorded cultural resources within the Project site, so that she/he can distinguish new resources from those that have been previously recorded and evaluated. The monitor shall prepare a daily monitoring log recording the type of work monitored, soil conditions, discoveries, and general observations. *Mitigation Measure CULT-2c* Previously unknown cultural resources identified during Project construction shall be protected through temporary redirection of work and possibly other methods such as fencing (to be outlined in the MMRP) until formally evaluated for significance under CEQA. In the event that previously unrecorded cultural resources are exposed during construction, the monitor shall be empowered to temporarily halt construction in the immediate vicinity of the discovery while it is documented and evaluated for significance. Construction activities may continue in other areas. If the discovery is evaluated as significant under CEQA, additional work such as data recovery excavation may be warranted to mitigate Project-related impacts to a less-than-significant level.	Less Than Significant

Table II-1
Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	Mitigation Measure CULT-2d Procedures of conduct following the discovery of human remains have been mandated by Health and Safety Code §7050.5, Public Resources Code §5097.98 and the California Code of Regulations §15064.5(e) (CEQA). According to the provisions in CEQA, if human remains are encountered at the site, all work in the immediate vicinity of the discovery shall cease and necessary steps to ensure the integrity of the immediate area shall be taken. The Mono County Coroner shall be notified immediately. The Coroner shall then determine whether the remains are Native American. Once the Coroner determines the remains are Native American, the Coroner shall notify the NAHC within 24 hours, who will, in turn, notify the person the NAHC identifies as the most likely descendent (MLD) of any human remains. Further actions shall be determined, in part, by the desires of the MLD. The MLD has 24 hours to make recommendations regarding the disposition of the remains following notification from the NAHC of the discovery. If the MLD does not make recommendations within 24 hours, the owner shall, with appropriate dignity, reinter the remains in an area of the property secure from further disturbance. Alternatively, if the owner does not accept the MLD's recommendations, the owner or the descendent may request mediation by the NAHC. *Mitigation Measure CULT-2e* A monitoring report shall be prepared upon completion of construction monitoring, summarizing the results of the monitoring effort. Site records for any newly recorded or updated cultural resources shall be appended to the monitoring report. *Mitigation Measure CULT-2f* Artifacts or samples collected during the course of construction monitoring and any testing or data recovery associated with newly discovered resources shall be curated in perpetuity in an appropriate facility upon completion of analysis and processing.	
Impact CULT-3 Cumulative Impacts to Cultural Resources		
The Project in combination with the related projects would result in additional development. Impacts to cultural resources (including historic, archaeological, and paleontological resources, as well as human remains) tend to be site-specific and are assessed on a site-by-site basis. Therefore, the Project would not contribute to any potential cumulative impacts, and cumulative impacts to cultural resources would be less than significant and no mitigation measures are required.	No mitigation measures are required.	Less Than Significant

Table II-1
Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
GEOLOGY & SOILS (GEO)		
Impact GEO-1 Fault Rupture		
The Project site is not located within either Earthquake Fault Zones or Alquist-Priolo Hazard Zones and the potential for fault rupture is considered to be low. Therefore, Project impacts related to fault rupture would be less than significant and no mitigation measures are required.	No mitigation measures are required.	Less Than Significant
Impact GEO-2 Strong Seismic Ground Shaking		
The Project site is located in a Seismic Zone 4 based on 1997 Uniform Building Code (UBC) and 2001 California Building Code (CBC). However, the Project applicant would be required to design and construct the Project in conformance to the most recently adopted CBC design parameter. Conformance with current CBC requirements would reduce the potential for structures on the Project site to sustain damage during an earthquake event, and Project impacts related to ground shaking would be less than significant and no mitigation measures are required.	No mitigation measures are required.	Less Than Significant
Impact GEO-3 Liquefaction	***Mitigation Measures GEO-3***	
Up to 5.5 feet of alluvial deposits consisting of loose sand and silty sand is present at the site. In addition, perched water may develop at the site. Based on these anticipated site conditions, the potential for liquefaction to occur is considered very low due to the lack of groundwater and the presence of medium dense to dense nature bearing soil at the site. However, in areas where loose alluvial soil is left in place and subsurface drainage is not added, a small potential for soil liquefaction still would exist. Because the potential for liquefaction to occur at the site is considered low, the potential for ground failures associated with liquefaction (i.e., lateral spreading, post-liquefaction reconsolidation, and sand boils) is also considered low. Impacts would be significant.	*Mitigation Measure GEO-3a* Design level investigations shall evaluate the potential for soil liquefaction at locations where springs and other sources of water are present. *Mitigation Measure GEO-3b* The design level geotechnical report shall evaluate the potential for localized liquefaction including supplemental subsurface exploration, laboratory testing, engineering analysis, and development of additional mitigation measures if found to be necessary. Potential mitigation measures may include over-excavating and replacing loose or soft soils with engineered fill compacted to current compaction standards. *Mitigation Measure GEO-3c* Prepare site-specific geotechnical reports for individual developments to be built within the Project site prior to construction.	Less Than Significant

Table II-1
Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	Mitigation Measure GEO-3d Implement all recommendations contained within these site-specific geotechnical reports, including those pertaining to site preparation, fill placement, and compaction; foundations; concrete slabs-on-grade; pavement design; lateral earth pressures and resistance; and surface drainage control. *Mitigation Measure GEO-3e* The final grading, drainage, and foundation plans and specifications shall be prepared and/or reviewed and approved by a Registered Geotechnical Engineer and Registered Engineering Geologist. In addition, upon completion of construction activities, the Project applicant shall provide a final statement indicating whether the work was performed in accordance with Project plans and specifications and with the recommendations of the Registered Geotechnical Engineer and Registered Engineering Geologist.	
Impact GEO-4 Cyclic Densification		
Cyclic soil densification is a phenomenon in which non-saturated, cohesionless soil is densified by earthquake vibrations, resulting in ground surface settlement. Cyclic densification should be considered a potential minor hazard at the Project site. However, these types of minor impacts are not considered to represent a substantial risk to life and property and therefore do not represent a significant impact under CEQA. Impacts would be less than significant and no mitigation measures are required.	No mitigation measures are required.	Less Than Significant
Impact GEO-5 Landslides and Avalanches		
The potential for rock falls or snow avalanches to occur on the Project site is considered low and no evidence of landslides has been observed. Therefore, Project impacts related to landslides and avalanches would be less than significant and no mitigation measures are required.	No mitigation measures are required.	Less Than Significant

Table II-1
Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
Impact GEO-6 Volcanic Activity	***Mitigation Measure GEO-6***	
A small to moderate volcanic eruption could occur somewhere along the Mono-Inyo Craters volcanic chain producing pyroclastic flows and surges as well as volcanic ash and pumice fallout that could significantly impact the Project site. However, the presence of the Project on the site would not increase the risk of such volcanic activity affecting either existing or proposed development in the vicinity of the site. This risk is present throughout the Town and surrounding areas. Thus, Project impacts related to volcanic activity would be less than significant.	The Project Applicant should prepare an emergency evacuation plan in consultation with the Town in order to provide for the orderly evacuation of the Project site in the event of either a major earthquake or incidents of increased volcanic activity.	Less Than Significant
Impact GEO-7 Carbon Monoxide		
The Project site is not located in an area associated with high levels of carbon dioxide. Therefore, impacts would be less than significant and no mitigation measures are required.	No mitigation measures are required.	Less Than Significant
Impact GEO-8 Soil Erosion/Loss of Topsoil	***Mitigation Measure GEO-8***	
The Project site may be subject to soil erosion and loss of topsoil. Without proper implementation of erosion control measures during construction and operation of the Project, the site could sustain soil erosion and loss of topsoil. This would be considered a significant impact.	Permanent erosion control measures for construction identified in the Project's Storm Water Pollution Prevention Plan (SWPPP) per the requirements of the California State Water Resources Control Board (SWRCB) adopted in accordance with the General Construction Activity Storm Water Permit (GCASWP) shall be implemented. The required implementation of the Best Management Practices (BMPs) identified in the Project's SWPPP would ensure that Project construction activities within the SSMP area would not cause substantial erosion on- or off-site. Additionally, for post construction, erosion control measures designed to minimize soil loss from exposed areas of the Project site shall be determined in consultation with the Town's Department of Public Works.	Less Than Significant
Impact GEO-9 Geologic and Soil Instabilities		
Moraine deposits in conjunction with the potential for shallow groundwater in the southwest portion of the Project area could result in slope instabilities. However, as noted, groundwater has not been encountered during subsurface exploration. Therefore, Project impacts related to soil instabilities would be less than significant.	No mitigation measures are required.	Less Than Significant

Table II-1
Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
Impact GEO-10 Expansive Soils		
As noted, no expansive soils have been mapped or encountered in the Town. Therefore, Project impacts related to expansive soils would be less than significant and no mitigation measures are required.	No mitigation measures are required.	Less Than Significant
Impact GEO-11 Septic Tanks or Alternative Waste Water Disposal Systems		
No septic tanks or alternative waster water disposal systems are proposed as part of the Project. Therefore, Project impacts related to soils incapable of supporting these uses would be less than significant and no mitigation measures are required.	No mitigation measures are required.	Less Than Significant
Impact GEO-12 Cumulative Impacts to Geology and Soils		
Geotechnical impacts related to future development in the Town would involve hazards associated with site-specific soil conditions, erosion, volcanic activity, and ground-shaking during earthquakes. The impacts on each site would be specific to that site and its users and would not be common or contribute to (or shared with, in an additive sense) the impacts on other sites. Therefore, cumulative geology and soil impacts would be less than significant and no mitigation measures are required.	No mitigation measures are required.	Less Than Significant
HAZARDS & HAZARDOUS MATERIALS (HAZ)		
Impact HAZ-1 Listed Hazardous Materials Sites		
Phase I Environmental Site Assessments (ESAs) were prepared for Area 1D, at the southwest portion of the Project site, the La Sierra's Restaurant Site, adjacent to Area 2D, at the northern portion of the Project site, and the Old Lumber Site at the corner of Main Street and Back Road. Four underground storage tanks were identified within 0.5 mile of Area 1D; however, none of these sites were determined to present environmental concerns. Three sites of environmental concern were initially listed within 0.5 mile of the La Sierra's Restaurant Site (adjacent to Area 2D); an additional three orphan sites were also located within a 0.5 mile radius of the La Sierra's Restaurant Site. All of these sites had reached closure status by 2004, when the Phase I ESA was prepared for the La Sierra's Restaurant Site with the exception of the former Mammoth Mobil Mo-Mart (currently known as Center Street Shell), and the Mammoth Lakes Chevron. As of 2004, the Center Street Shell was involved in on-going monitoring in connection with 1987 and 1997 diesel	No mitigation measures are required.	Less Than Significant

Table II-1
Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
leaks. With respect to the Mammoth Lakes Chevron, as of 2004, the site was still undergoing monitoring in connection with potential UST contamination. Based on the location of the Mammoth Mobil Mo-Mart and the Mammoth Lakes Chevron sites, any potential contamination from either site would not be expected to affect any portion of the Project site. The lack of any known hazardous materials sites up-gradient from the Project site indicates that the Project would have very little potential to be impacted by groundwater contamination from any surrounding listed hazardous materials sites. As such, impacts related to hazardous materials would be less than significant and no mitigation measures are required.		
Impact HAZ-9 Cumulative Impacts from Hazards & Hazardous Materials		
Development of the Project in combination with the 49 related projects has the potential to increase the risk for accidental release of hazardous materials. Because hazardous materials and risk of upset conditions are largely site-specific, evaluation of hazardous materials would occur on a case-by-case basis. Therefore, with full compliance with local, State, and federal laws pertaining to hazards and hazardous materials, cumulative impacts would be less than significant and no mitigation measures are required.	No mitigation measures are required.	Less Than Significant
HYDROLOGY & WATER QUALITY (HYD)		
Impact HYD-1 Water Quality Standards	***Mitigation Measure HYD-1***	
Construction-Related Impacts Construction activities associated with all proposed development within the proposed Project area would be subject to inspection and would be required to be conducted in conformance with the General Construction Activity Storm Water Permit. Coverage under this permit must be obtained from the California State Water Resources Control Board prior to start of construction. The General Permit requires that non-stormwater discharges from construction sites be eliminated or reduced to the maximum extent practicable, that a Stormwater Pollution Prevention Plan (SWPPP) be developed governing construction activities for the project, and that routine inspections be performed of all stormwater pollution prevention measures and control practices being used at the site, including inspections before and after storm events. The required implementation of the Best Management	In consultation with the Town of Mammoth Lakes, the project applicant shall identify and implement a suite of stormwater quality BMPs designed to address the most likely sources of stormwater pollutants resulting from operation of the proposed development projects within the proposed SSMP area. Pollutant sources and pathways to be addressed by these BMPs include, but are not necessarily limited to, parking lots, maintenance areas, trash storage locations, rooftops, interior public and private roadways, and storm drain inlets. The design and location of these BMPs will be subject to review and comment by the Town. Implementation of these BMPs shall be assured by the Public Works Director and Town Engineer prior to the issuance of Grading or Building Permits.	Less Than Significant

Table II-1
Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
Practices in the Project's SWPPP would ensure that project construction activities within the Project area would not cause the violation of any water quality standards within Mammoth Creek. Thus, the Project would not be considered to have a significant impact on the ability of Mammoth Creek to attain all applicable water quality standards. *Operation-Related Impacts* Impacts to water quality generated from Project operation can be reduced through the proposed implementation of BMPs designed to be protective of receiving water quality. Compliance with the Mitigation Measure HYD-1 would reduce potentially significant impacts resulting from project operation on receiving water quality in Mammoth Creek to a less-than-significant level.		
Impact HYD-2 Drainage Pattern Alteration		
Construction-Related Impacts The required implementation of the BMPs in the Project's construction SWPPP would ensure that project construction activities within the Project area would not cause substantial erosion or siltation on- or off-site. Thus, the Project would be considered to have a less-than-significant impact in terms of increasing on- or off-site erosion and siltation through the alteration of existing drainage patterns. *Operation-Related Impacts* The proposed installation of permanent storm control facilities and sedimentation/infiltration basins will reduce project-generated erosion and siltation impacts. Thus, impacts pertaining to Project operation-generated erosion and siltation anticipated to result from new development within the Project area would be considered less-than-significant.	See Mitigation Measure HYD-1 above	Less Than Significant
Impact HYD-3 Drainage System Capacity	***Mitigation Measure HYD-3***	
Under existing conditions, the Project area conveys stormwater runoff and run-on (from adjacent upstream areas) to three control points in the Town's storm drainage system: Control Points 1, 2, and 3.4. The existing 100-year, 24-hour storm event peak flows generated at these three control points are 132, 48, and 153 cubic feet per second, respectively.	In consultation with the Town of Mammoth Lakes, the project applicant shall identify and implement a suite of storm drainage routing and conveyance infrastructure components designed to reduce on- and off-site flooding to the maximum extent feasible and to convey stormwater runoff and run-on across the site to the downstream components of the Town's storm drain system in a manner consistent with the capacity of such components. The design,	Less Than Significant

Table II-1
Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
Compliance with the mitigation measure below would reduce potentially significant impacts resulting from project operation on the Town's drainage infrastructure capacity to a less-than-significant level.	sizing, and location of these drainage components will be subject to review and comment by the Town. Implementation of this storm drainage infrastructure shall be assured by the Public Works Director and Town Engineer prior to the issuance of Grading or Building Permits.	
Impact HYD-4 Cumulative Impacts to Hydrology & Water Quality		
Development of the Project in combination with the related projects would result in the further infilling of uses in an urbanized area. Each individual related project would be required to submit a drainage analysis to the Town. Therefore, cumulatively considerable impacts to the Town's existing or planned stormwater drainage system capacity would be less than significant.	No mitigation measures are required.	Less Than Significant
LAND USE AND PLANNING (LU)		
Impact LU-1 Physically Divide an Established Community		
This Project would replace the existing LMP for the area. The proposed development for the SSMP is within the existing development areas of the LMP, which would not create a physical barrier within the community or otherwise divide contiguous land uses. Therefore, the Project would not physically divide an established community, and impacts would be less than significant.	No mitigation measures are required.	Less Than Significant
Impact LU-2 Conflict with Applicable Land Use Plans, Policies, or Regulations		
The Project site is currently governed by the land use policies and regulations set forth in the 1987 General Plan, the 1991 LMP, and the Zoning Ordinance. The Project would be generally consistent with the applicable policies in the 1987 General Plan with the exception of the height of the tower building in Area 5A, the alteration of views from the identified viewpoints, and lot coverage. Thus, Project impacts would be less than significant.	No mitigation measures are required.	Less Than Significant

Table II-1
Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
Impact LU-3 Conflict with Applicable Habitat Conservation Plan or Natural Community Conservation Plan		
The Project would not conflict with an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plans. Therefore no further analysis of this issue is required. Thus, Project impacts would be less than significant.	No mitigation measures are required.	Less Than Significant
Impact LU-4 Cumulative Impacts to Land Use		
Cumulative land use impacts could occur if other related projects in the vicinity of the Project site would result in land use impacts in conjunction with the Project. Of the 49 related projects, 41 are residential projects located within the Town of Mammoth Lakes. Each of these related projects would be required to demonstrate consistency with the goals, policies, and objectives of the 1987 General Plan, applicable regional plans. These requirements ensure that cumulative land use impacts will be avoided or mitigated to less-than-significant levels.	No mitigation measures are required.	Less Than Significant
NOISE		
Impact NOISE-1 Exposure of Persons to Excessive Noise Levels	***Mitigation Measures NOISE-1***	
Construction Noise Due to the close proximity of some existing off-site residential uses to the Project site, the construction noise levels experienced by these off-site uses during construction of the Project would exceed the maximum exterior noise level standards allowed for mobile and stationary construction equipment under the Town Noise Ordinance. As such, a significant impact could result. To reduce the noise levels resulting from construction of the Project to the extent feasible, Mitigation Measures NOISE-1a and NOISE-1b shall be implemented. *Traffic Noise Levels On-site* Upon completion of the Project, noise levels within the Project site would be dominated by vehicular traffic on the surrounding roadways. Based on the conceptual site plan for the Project showing the locations of the proposed residential uses relative to the surrounding roadways, none of the residential uses proposed in the Project site would be located within the 60 Ldn contours of the	*Mitigation Measure NOISE-1a* Construction activities shall be limited to between the hours of 7 A.M. and 8 P.M., Monday through Saturday. Work hours on Sundays and Town recognized holidays shall be limited to the hours between 9 A.M. and 5 P.M., and shall be permitted only with the approval of the building official or designee. *Mitigation Measure NOISE-1b* Project developers shall require by contract specifications that the following construction best management practices (BMPs) be implemented by contractors to reduce construction noise levels: • Provide advance notification of construction to the immediate surrounding land uses around a development site • Ensure that construction equipment is properly muffled according to industry	Less Than Significant

Table II-1
Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
related roadways. Thus, the proposed residential uses within the Project site would not be exposed to traffic noise levels exceeding 60 Ldn. Thus, impacts associated with traffic noise levels onsite would be less than significant.	standards • Place noise-generating construction equipment and locate construction staging areas away from residences, where feasible • Schedule high noise-producing activities between the hours of 8 A.M. and 5 P.M. to minimize disruption on sensitive uses • Implement noise attenuation measures to the extent feasible, which may include, but are not limited to, noise barriers or noise blankets	
Impact NOISE-2 Excessive Construction-Related Groundborne Vibration	***Mitigation Measure NOISE-2***	
Construction activities that would occur within the Project site would include grading and excavation, which would have the potential to generate low levels of groundborne vibration. Some of the multi-family residential uses located adjacent to the Project site's boundaries could experience excessive vibration levels during construction at the Project site. As such, a significant impact could result. In an effort to minimize the vibration levels experienced by the existing off-site residential uses located near the Project site, Mitigation Measure NOISE-2 shall be implemented to require the operation of vibration-generating equipment to be located as far away from vibration-sensitive sites as possible.	Project developers shall require by contract specifications that construction staging areas along with the operation of earthmoving equipment on a construction site within the Project site would be located as far away from vibration-sensitive sites as possible. Contract specifications shall be included in the Project construction documents, which shall be reviewed by the Town prior to issuance of a grading permit.	Less Than Significant
Impact NOISE-3 Temporary Increases in Noise (Construction Noise)		
The uses nearest the Project site that are sensitive to construction noise are the existing multi-family residential uses located on both sides of Minaret Road that are adjacent to the Project site's boundaries. However, the construction activities would only occur during the permitted hours designated in the Town's Municipal Code, and thus would not occur during recognized sleep hours for residences or on days that residents are most sensitive to exterior noise. As such, while the physical impact from an increase in ambient noise levels would occur from the construction activities associated with the Project, an adverse effect on the nearby residents would not occur. Therefore, with compliance with the Town's Municipal Code and Noise Ordinance, the magnitude of this impact would be reduced to a less-than-significant level.	No mitigation measures are required.	Less Than Significant

Table II-1
Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
Impact NOISE-4 Permanent Increases in Noise (Operational Impacts)		
Traffic Noise The increase in traffic resulting from implementation of the Project would increase the ambient noise levels at sensitive off-site locations in the Project vicinity. Because the increase in local noise levels at all nine roadway segments resulting from implementation of the Project would not exceed the established thresholds of significance, they would not represent a substantial permanent increase in ambient noise levels. Therefore, this impact would be less than significant and no mitigation measures are required. *On-Site Non-Vehicular Noise* Upon completion of the proposed residential developments associated with the Project, sources of noise that would be generated by operation of the new residential buildings would include new stationary sources such as rooftop heating, ventilation, and air conditioning (HVAC) systems. In addition, limited commercial development (up to a maximum of 29,000 square feet of retail space and up to a maximum of 50,000 square feet of conference center/commercial space) would also be allowed in specific sectors of the plan area with discretionary approval by the Town. With compliance with the provisions of the Town Noise Ordinance, potential noise impacts associated with HVAC systems and commercial loading dock activities would be less than significant and no mitigation measures are required.	No mitigation measures are required.	Less Than Significant
Impact NOISE-5 Exposure of Persons to Excessive Noise Levels from an Airport		
The Project is not located within two miles of a public airport. Because development of the Project would not locate sensitive receptors within the airport's 65 Community Noise Exposure Levels (CNEL) contour, the Project would not expose people residing or working in the Project area to excessive noise levels. As such, no impact would occur.	No mitigation measures are required.	Less Than Significant
Impact NOISE-6 Exposure of Persons to Excessive Noise Levels from a Private Airstrip		
The Project site is not located in the vicinity of a private airstrip. As such, no	No mitigation measures are required.	Less Than Significant

Table II-1
Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
impact would occur.		
Impact NOISE-7 Cumulative Impacts to Noise		
The Project in combination with the related projects would result in an increase in construction-related and traffic-related noise in the Project area. However, each of the related projects would be subject to Section 15.08.020 of the Town Municipal Code. In addition, each of the related projects would also be subject to Section 8.16.090 of the Town Noise Ordinance, which establishes noise standards for mobile and stationary construction equipment. With conformance with Sections 15.08.020 of the Town Municipal Code and 8.16.090 of the Town Noise Ordinance, the cumulative construction noise impact would be less than significant. While cumulative development in the Project vicinity would include a total of 49 related projects, some of which are in close proximity to the Project site, the construction activities for each related project would only occur during the permitted hours designated in the Town's Municipal Code, and thus would not occur during recognized sleep hours for residences or on days that residents are most sensitive to exterior noise. As such, while the physical impact from an increase in ambient noise levels would occur from the construction activities associated with the related projects, an adverse effect on nearby residents would not occur. Therefore, the cumulative impact of the Project would be less than significant. Cumulative development in the Town would not result in the exposure of people to or the generation of excessive groundborne vibration, due to the localized nature of vibration impacts and the fact that all construction would not occur at the same time and at the same location. Therefore, the cumulative impact of the Project would also be less than significant. Since the Project would not contribute to an increase in noise levels of 3.0 dBA Ldn or greater at any of the nine analyzed roadway segments, the cumulative impact of the Project would be less than significant. With regard to stationary sources, it is also not expected that there would be a cumulatively significant impact. With compliance with the provisions of the Town Noise Ordinance, potential noise impacts associated with HVAC systems would be less than significant and no mitigation measures are required	No mitigation measures are required.	Less Than Significant

Table II-1
Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
POPULATION AND HOUSING (POP)		
Impact POP-1 Population Growth Associated with Employment		
Population Growth Due to Temporary Jobs Construction of the Project is anticipated to generate temporary construction-related jobs. The work requirements of many construction projects are highly specialized so that construction workers remain at a job site only for the time frame in which their specific skills are needed to complete a particular phase of the construction process. As such, a substantial number of permanent residents would not likely be generated as a result of the construction of the Project and impacts associated with population growth due to temporary jobs would be less than significant. *Population Growth Due to Permanent Jobs* The Project includes 29,000 square feet of commercial/retail space, 20,000 square feet of commercial/conference space, and 30,000 square feet of conference space, which would serve the convenience needs of residents and would be accessible from within the site only. Because it is not expected that the nature of the jobs that would be provided by the Project would cause employees from surrounding areas to relocate their places of residence to the Project area, impacts associated with population growth due to permanent jobs would be less than significant.	No mitigation measures are required.	Less Than Significant
Impact POP-2 Population Growth Associated with New Infrastructure		
Infrastructure associated with the Project would serve the Project site and would not facilitate additional development as a result of increased infrastructure. Additionally, the Project is consistent with the Draft 2005 General Plan. Therefore, impacts associated with the development of the Project would be less than significant.	No mitigation measures are required.	Less Than Significant
Impact POP-3 Population Growth Associated with New Housing		
The Project is consistent with 1987 General Plan population projections and is anticipated to contribute eight percent to future build-out development. Therefore, impacts to population growth associated with the development of the Project would be less than significant.	No mitigation measures are required.	Less Than Significant

Table II-1
Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
Additionally, the Project will comply with the Affordable Housing Mitigation Regulations per the vested rules of the Development Agreement and will provide housing for the estimated number of its Full Time Equivalent Employee (FTEE) associated with the Project. A housing mitigation development plan will be submitted along with the project generating the need for the housing. Housing will be provided at 250 sq. ft. per FTEE. Therefore, impacts to affordable housing associated with the development of the Project would be less than significant.		
Impact POP-4 Cumulative Impacts to Population and Housing		
Of the 49 related projects, 42 include residential developments within the Town, totaling 2,716 dwelling units that would accommodate a population of 6,627 persons. When combined with the Project's 763 units and estimated population of 1,862 persons, cumulative residential development amounts to 3,479 units and 8,489 persons. By 2024, development of the Project in conjunction with the applicable related projects would account for approximately 21 percent of the 16,710 units and approximately 77 percent of the 11,000 permanent residents, forecasted by the Draft 2005 General Plan EIR For the reasons noted above, development of the Project in conjunction with the applicable related projects would assist the Town in meeting its fair share of regional housing need, constituting a beneficial rather than adverse housing impact. Because development of the Project and the related projects would help address a portion of unmet housing demand and serve anticipated population growth in the Project area, either directly (for example, by proposing new homes and businesses), or indirectly (for example, through extension of roads or other infrastructure), cumulative impacts would be less than significant and beneficial rather than adverse.	No mitigation measures are required.	Less Than Significant

Table II-1
Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
PUBLIC SERVICES (PS)		
Impact PS-1 Police Services		
According to the Mammoth Lakes Police Department (MLPD), although additional police equipment and staff would be necessary to accommodate the Project, the additional demand for police services created by the Project would not require the need for new or altered police facilities other than those currently planned for future police staffing and facilities. Therefore, Project impacts on police services would be less than significant and no mitigation measures are required.	No mitigation measures are required.	Less Than Significant
Impact PS-2 Cumulative Impacts to Police Services	***Mitigation Measures PS-2***	
The Project in conjunction with the related projects would require that the new police facility be completed in the next two to three years or in the later phases of the Project to meet these needs. As a result, cumulative police protection impacts are considered to be significant. New police facilities would be required in order to fully mitigate this significant cumulative impact to a less-than-significant level. Because the Project in conjunction with anticipated cumulative development would result in significant impacts related to police protection services, mitigation measures are recommended by the MLPD.	***Mitigation Measure PS-2a*** Bars and restaurants that cater to late night crowds will have trained security personnel in order to reduce demand on police services. ***Mitigation Measure PS-2b*** Provide fair share of Developer Impact Fees to assist the MLPD in the construction of a public safety and dispatch facility and holding facilities as needed. ***Mitigation Measure PS-2c*** Provide private security as required within the commercial components of the Project to patrol to reduce criminal behavior and work in conjunction with law enforcement to solve crimes and crime problems.	Less Than Significant
Impact PS-3 Fire Services		
According to the Mammoth Lakes Fire Protection District (MLFPD), with the mutual-aid agreement with neighboring fire districts, their current staffing, and equipment, facility levels are adequate to accommodate the Project's demand for fire protection services. In addition, the MLFPD is a participant in the Town's Emergency Operations Plan (Plan). The Plan would be revised with the development of the Project to include any needed updates or changes. It is anticipated that minor changes would be needed to update the Plan. Therefore, Project impacts related to fire protection services would be less than significant.	No mitigation measures are required.	Less Than Significant

Table II-1
Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
Impact PS-4 Cumulative Impacts to Fire Services		
According to the MLFPD, implementation of the related projects would not require the need for new staff or new or altered fire protection facilities. The MLFPD is in the process of remodeling and enlarging Fire Station 1 in response to additional community development. The MLFPD is anticipating the hiring of more fulltime positions to increase their capability to respond to additional calls and the associated administrative work that will come along with increased development. MLFPD is also involved in the development of a strategic plan that will aid the department in planning for the future. Therefore, cumulative impacts to fire protection services would be less than significant and no mitigation measures are required.	No mitigation measures are required.	Less Than Significant
Impact PS-5 School Services		
Based on the developer fees established by each of the school districts, the Project applicant would be required to pay $2.63 per square foot of residential development and $0.42 per square feet of commercial development. As stated previously, provided in §65996 of the California Government Code, the payment of such fees is deemed to fully mitigate the impacts of new development on school services. Therefore, with payment of these required developer fees, Project impacts to school services would be less than significant and no mitigation measures are required.	No mitigation measures are required.	Less Than Significant
Impact PS-6 Cumulative Impacts to School Services		
As with the Project, the applicants of the related projects would be required to pay developer fees to the Mammoth Unified School District; payment of these fees would fully mitigate any impact that the related projects would have on school services. Therefore, cumulative impacts to school services would be less than significant and no mitigation measures are required.	No mitigation measures are required.	Less Than Significant

Table II-1
Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
Impact PS-7 Park Services		
The proposed recreational amenities in conjunction with the Town's current facilities and the collection of Developer Impact Fees that support the Town's park and recreation fund would be adequate to accommodate the Project's demand for parks and recreational services. As development occurs, within the project area, Developer Impact Fees will be paid to the Town to offset the recreational facilities and maintenance. No additional parks or recreational facilities beyond what are proposed would be required. Therefore, Project impacts to park services would be less than significant and no mitigation measures are required.	No mitigation measures are required.	Less Than Significant
Impact PS-8 Cumulative Impacts to Park Services		
Similar to the Project, the applicants of the related projects would be required to pay Developer Impact Fees that support the Town's park and recreation fund; payment of these fees would fully mitigate any impact that the related projects would have on park and recreational services. As stated previously, the Project's impacts to park services would be less than significant. Therefore, cumulative impacts to school services would be less than significant and no mitigation measures are required.	No mitigation measures are required.	Less Than Significant
Impact PS-9 Snow Removal Services		
Roadway maintenance and snow removal on private roads and private property is the responsibility of the land owners. Therefore, Project impacts to the Town's snow removal services would be less than significant and no mitigation measures are required.	No mitigation measures are required.	Less Than Significant
Impact PS-10 Cumulative Impacts to Snow Removal Services		
The implementation of the related projects would not require the need for new staff or new or altered public works facilities. Therefore, cumulative impacts to snow removal services would be less than significant and no mitigation measures are required.	No mitigation measures are required.	Less Than Significant

Table II-1
Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
TRANSPORTATION/TRAFFIC (TRANS)		
Impact TRANS-1 Project Trip Generation		
Winter Saturday daily and peak-hour trips were generated for the Project using trip rates from the Mammoth Lakes Transportation Model (MTM) and the Community Noise Exposure Levels (ITE)Trip Generation Manual, 7th Edition. The MTM was developed with the specific goal of providing analyses of the interrelated issues of land use, transportation demand, and air quality. Trip rates from the MTM were used to develop daily trip forecasts. Peak-hour traffic volumes were derived from peak-to-daily ratios and in/out splits for similar land uses from the ITE Trip Generation Manual, 7th Edition. Project impacts would be less than significant.	No mitigation measures are required.	Less Than Significant
Impact TRANS-2 Internal Circulation and Access		
The Project's major internal roadway (Sierra Star Parkway/Grove Road) would provide access to Meridian Boulevard and Minaret Road. Areas 2A, 2B, 2C, 5A, 5B, 5C, 5D, and 7 of the Project would have access to Sierra Star Parkway and Grove Road. This traffic would enter the site via the three unsignalized intersections of Sierra Star Parkway/Meridian Boulevard, Minaret Road/Sierra Star Parkway, and Minaret Road/Secondary Sierra Star access (south of Ullr Lodge). Area 4 would not have access to Sierra Star Parkway. This traffic would enter the site via an internal roadway. Traffic exiting from Area 4 to the north would use this roadway to exit onto Main Street. Traffic exiting to the south would use Dorrance Street and either Joaquin Road or Manzanita Road to Meridian Boulevard. Therefore, impacts would be less than significant.	No mitigation measures are required.	Less Than Significant
Impact TRANS-3 LOS Intersection Analysis		
Based on the trip assignment of the Project, Sierra Star Parkway/Meridian Boulevard is forecast to operate at an acceptable LOS C (16.5 seconds of delay), Minaret Road/Sierra Star Parkway Boulevard-Grove Street is forecast to operate at an acceptable LOS D (greater than 35 seconds of delay but less than four vehicle-hours), and Minaret Road/Secondary Sierra Star secondary access is forecast to operate at an acceptable LOS C (18.2 seconds of delay).	No mitigation measures are required.	Less Than Significant

Table II-1
Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
At Minaret Road/Sierra Star Parkway-Grove Street, the northbound and southbound left turns out of the Project onto Minaret Road are the primary reason that the intersection is forecast to operate at over 35 seconds of delay. Because the northbound and southbound directions are uncontrolled, no delay would be experienced by the vehicles traveling on Minaret Road, and there is minimal delay for vehicles turning right into or out of Sierra Star Parkway/Grove Street. The delay would not exceed the criteria of four vehicle-hours and therefore would not be considered to be a significant impact. Traffic generated by Area 4A will not have access to Sierra Star Parkway. Instead, this traffic will enter the site via an internal roadway that provides access to Main Street and Dorrance Street. Traffic exiting from Area 4A to the north will use the internal roadway to exit onto Main Street. Traffic exiting to the south will be able to exit onto Dorrance Street and then use either Joaquin Road or Manzanita Road to travel to Meridian Boulevard. The addition of traffic from the proposed project would not cause traffic volumes along Joaquin Street or Manzanita Street to exceed the capacity of these roadways and impacts would be less than significant.		
Impact TRANS-4 Project Level of Service	***Mitigation Measure TRANS-4***	
The unsignalized intersection of Minaret Road/Old Mammoth Road is forecast to operate at LOS F with development of both the Project and other reasonably foreseeable projects. The intersection of Minaret Road/Old Mammoth Road is forecast to exceed the four hour criteria in both the baseline and Project conditions, therefore impacts would be significant.	Restripe the southbound approach to provide for separate left- and right-turn lanes at Minaret Road/Old Mammoth Road in order to improve the LOS to an acceptable LOS C (22.6 seconds of delay).	Less Than Significant.
Impact TRANS-5 Parking		
Short-term surface parking would be provided adjacent to the check-in locations with guests then directed to underground parking structures located under the major residential buildings. The affordable residential units in Area 4A would be allowed surface parking for both resident and guest use. Surface parking would be provided for golf course use. Shuttle stops would be located at transit shelters. The project will be required to provide adequate parking as part of the approval process. Therefore the project would not result in inadequate parking capacity and impacts would be less than significant.	No mitigation measures are required.	Less Than Significant

Table II-1
Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
Impact TRANS-6 Bicycle and Pedestrian Facilities		
The pedestrian and bicycle system within the Project would include interior trails and sidewalks fronting internal streets as well as connecting trails from recreational amenities, outdoor spaces and neighborhoods. Walkways to and from residential areas as well as trail connections that would tie into the larger Town-wide recreational trail network would be provided. Therefore, impacts would be less than significant.	No mitigation measures are required.	Less Than Significant
Impact TRANS-7 Transit		
A gondola may be constructed that would transport patrons from Area 5 to the Little Eagle ski area. Although the gondola is not part of the Project, it is reasonable to expect that this amenity, if developed, would result in a reduction in vehicle trips to and from the Little Eagle ski area. The gondola was analyzed as part of the April 13, 1995 Mammoth Transportation Model Final Report. According to this report, the gondola was forecast to carry approximately 3,450 daily and 600 peak hour passengers. Based on this study, it is anticipated that gondola person-trips results in a reduction of 1,643 daily and 286 peak hour vehicle trips. Gondola patrons would be expected to originate primarily from Area 5 of the Project. Patrons from Project Areas 2 or 4 would not be as likely to use the gondola because of the distance that it would be necessary to walk to access the gondola. Therefore, the reduction in vehicle trips attributed to the gondola is applied only to Project Area 5. Vehicles destined to Eagle Lodge ski area from Project Area 5 would use Sierra Star Parkway to access and turn right on Meridian Boulevard, then travel west on Meridian Boulevard to Eagle Lodge ski area. This route would not include any study area intersections. Therefore, the results of the level of service analysis would be the same for the Project with and without the gondola. However, it should be recognized that with the construction of the gondola, the vehicle trips generated by the project would be reduced by 30 percent during the peak hour on a typical winter Saturday. Therefore, impacts to transit would be less than significant.	No mitigation measures are required.	Less Than Significant

Table II-1
Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
Impact TRANS-8 Air Traffic		
The Project does not result in a change in air traffic patterns and impacts would be less than significant.	No mitigation measures are required.	Less Than Significant
Impact TRANS-9 Hazards		
The Project would not substantially increase hazards due to a design feature or incompatible uses and impacts would be less than significant.	No mitigation measures are required.	Less Than Significant
Impact TRANS-10 Emergency Access		
The Project would not result in inadequate emergency access and impacts would be less than significant.	No mitigation measures are required.	Less Than Significant
Impact TRANS-11 Policy Consistency		
As noted, the Project will provide for pedestrian and bicycle facilities, and would provide for bus/shuttle shelters sited to facilitate the safety, use and comfort of passengers using transit within the Project area. Therefore the Project would not conflict with adopted policies, plans, or programs supporting alternative transportation and impacts would be less than significant.	No mitigation measures are required.	Less Than Significant
Impact TRANS-12 Cumulative Impacts to Transportation & Traffic		
The unsignalized intersection of Minaret Road/Old Mammoth Road is forecast to operate at LOS F with development of both the Project and other reasonably foreseeable projects. The intersection of Minaret Road/Old Mammoth Road is forecast to exceed the four hour criteria in the baseline and Project conditions, therefore cumulative impacts would be significant.	See Mitigation Measure TRANS-4.	Less Than Significant

Table II-1
Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
UTILITIES & SERVICE SYSTEMS (UTIL)		
Impact UTIL-1 Wastewater Generation		
The Project's estimated average wastewater generation is approximately 94,290 gallons per day (gpd) (.09 million gallons per day [gpd]) and the peak wastewater generation rate is 136,405 gpd (.14 mgd). Therefore, the Project's anticipated average daily flow would be approximately six percent of the current usage and the peak daily flow would be approximately five percent of the current usage. The Project would represent approximately three percent of the peak daily flow capacity of the WWTP for peak daily flows up to 4.9 mgd. Thus, Project impacts related to wastewater treatment capacity would be less than significant and no mitigation measures are required.	No mitigation measures are required.	Less Than Significant
Impact UTIL-2 Wastewater Infrastructure		
The connection fees for the Project would help to pay for the necessary upgrades to the sewer collection pipelines. Although MCWD plans to upgrade these pipelines in the future, MCWD cannot guarantee that timelines for the upgrades will coincide with development associated with the Project. Project impacts related to wastewater infrastructure would be less than significant and no mitigation measures are necessary.	No mitigation measures are required.	Less Than Significant
Impact UTIL-3 Cumulative Wastewater Generation		
Implementation of the Project in combination with the related projects would further increase demands on wastewater infrastructure and treatment capacity. The Project and the related projects would generate approximately at an average daily rate of approximately 409,626 gpd (.41) mgd and a peak flow rate of approximately 583,672 gpd (.59 mgd) of wastewater at peak flow. The potential need for the related projects to require upgraded wastewater lines to accommodate wastewater generated by these projects is site-specific, and there is little, if any, cumulative relationship between the development of the Project and the related projects. In addition, many of the related projects consist of redevelopment that would result in the elimination of existing wastewater generation patterns at these sites. Thus, the total amount of wastewater generation is likely overstated. Nonetheless, as noted above, the MCWD has a remaining capacity of 3.2 mgd of wastewater at peak daily flows that can be accommodated at the WWTP; thus cumulative impacts to the	No mitigation measures are required.	Less Than Significant

Table II-1
Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
remaining capacity of the WWTP would be less than significant and no mitigation measures are required.		
Impact UTIL-4 Cumulative Wastewater Infrastructure		
The potential need for the related projects to require upgraded wastewater lines to accommodate wastewater generated by these projects is site-specific, and there is little, if any, cumulative relationship between the development of the Project and the related projects. In addition, the connection fees paid by individual developers would help to pay for the necessary upgrades to the sewer collection pipelines described above. In consideration of the above, cumulative impacts related to wastewater infrastructure would be less than significant and no mitigation measures are required.	No mitigation measures are required.	Less Than Significant
Impact UTIL-5 Water Supply	***Mitigation Measures UTIL-3***	
The Project's estimated average water demand is approximately 125,005 gpd (140 acre feet per year [afy]) and the peak water demand is approximately 194,190 gpd (218 afy). According to the existing water supply available to the MCWD there is sufficient water supply at average and peak times in both normal and multiple dry years for the Project. Thus, Project impacts to water use within the Town would be considered less than significant and no mitigation measures are required. Because the Project would not result in any significant impacts related to water service, no mitigation measures are required. However, to further reduce the Project's demand on water services, the following measures are recommended:	*Mitigation Measure UTIL-5a* The applicant should ensure that the landscape irrigation system be designed, installed and tested to provide uniform irrigation coverage. Sprinkler head patterns shall be adjusted to minimize over spray onto walkways and streets. *Mitigation Measure UTIL-5b* The applicant should install either a "smart sprinkler" system to provide irrigation for the landscaped areas or, at a minimum, set automatic irrigation timers to water landscaping during early morning or late evening hours to reduce water losses from evaporation. Irrigation run times for all zones shall be adjusted seasonally, reducing water times and frequency in the cooler months (fall, winter, spring). Sprinkler timer run times shall be adjusted to avoid water runoff, especially when irrigating sloped property. *Mitigation Measure UTIL-5c* The applicant should select and use drought-tolerant, low-water consuming plant varieties to reduce irrigation water consumption. *Mitigation Measure UTIL-5d* The applicant should install ultra-low flush water toilets and urinals and shall limit the number of showerheads to one high efficiency fixture per stall, in new construction. Low-flow faucet aerators should be installed on all sink faucets.	Less Than Significant

Table II-1
Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
	Mitigation Measure UTIL-5e The applicant shall be subject to the provisions of a recycled water ordinance adopted by the Town pursuant to Article 10.9, beginning with Section 65601 of the Government Code, and titled Water Recycling in Landscaping Act (Act) at such time as the Town is notified by the Mammoth Community Water District of the future availability of recycled water. In addition, the Sierra Star Master Plan shall include a provision that, for all projects constructed or approved prior to the notice, the applicant shall use their best efforts to use recycled water consistent with the Town, the Act, and water district policy. *Mitigation Measure UTIL-5f* The applicant should install Energy Star dishwashers and clothes washers.	
Impact UTIL-6 Water Infrastructure		
According to the MCWD, the Project's engineering work is expected to be sufficient to relieve the piping constraints that have been identified. As such, new or expanded water lines beyond these would not be needed to convey water to the Project site. Therefore, Project impacts related to water infrastructure would be less than significant and no mitigation measures are required.	No mitigation measures are required.	Less Than Significant
Impact UTIL-7 Cumulative Impacts to Water Supply		
According to the Town, all of the related projects are generally consistent with their respective land use designations. The MCWD has developed an expected total water demand for the Town of 4,898 afy at Town buildout utilizing the unit counts projected in the Town of Mammoth Lakes General Plan Update Draft EIR (October 2005), including the related projects. As discussed previously, there would be insufficient supplies of water during dry years at Town buildout without the Project. Consequently, there would also be insufficient water for the Project plus the related projects during dry water years. Deficiencies of over 1,000 acre feet (af) would occur in a single dry year, which is considered the lowest historical runoff for the watershed. Thus, impacts of the Project together with the related projects on overall MCWD water supply during single and multiple dry year scenarios would be significant. As stated previously, MCWD is working to develop new groundwater sources, use recycled water, and implement water restrictions as a means to increase supplies to	No mitigation measures are available to address the Project's incremental contribution to the significant cumulative impact.	Significant and Unavoidable

Table II-1
Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
resolve any potential water supply deficiencies during drought periods. However, even with full implementation of these various water supply projects, it is expected that insufficient water would be available to meet projected demand during a single dry year. Therefore, because these future water sources do not exist at present the Project's contribution to overall water supply demand within the Town would be cumulatively considerable, and cumulative water supply impacts would be significant.		
Impact UTIL-8 Cumulative Water Infrastructure		
The potential need for the related projects to require upgraded water lines to accommodate water consumption by these projects is a site-specific issue that would be evaluated on an individual basis by the MCWD. Additionally, there is little, if any, cumulative relationship with respect to water infrastructure between the Project and the related projects given the distance separating the related projects from the Project site. As stated previously, all of the related projects are generally consistent with their respective land use designations. Therefore, the capacity of the main water lines serving the projects would be considered adequate, because the infrastructure was designed to accommodate planned development in the Town. In consideration of the above, cumulative impacts related to water infrastructure would be less than significant and no mitigation measures are required.	No mitigation measures are required.	Less Than Significant
Impact UTIL-9 Short-Term Construction Impacts on Solid Waste Disposal		
Based on a construction waste generation rate of 4.38 pounds of waste for every square foot of new residential construction, and 3.89 pounds of waste for every square feet of commercial construction, development under the Project is expected to generate approximately 2,242.4 tons of waste over the construction period. Recycling of construction-related waste materials in compliance with the Town's recycling program would substantially reduce this waste stream that would otherwise go to a landfill. As stated previously, the remaining capacity for landfills is 1.7 million cubic yards of compacted waste. As such, the Landfill would have adequate capacity to accommodate the construction waste generated by the Project. Therefore, the Project's construction impacts on solid waste services would be less than significant and no mitigation measures are required.	No mitigation measures are required.	Less Than Significant

Table II-1
Summary of Environmental Impacts & Mitigation Measures

Environmental Impact	Mitigation Measures	Level of Significance after Mitigation
Impact UTIL-10 Long-Term Operational Impacts		
Over the long-term, the Project would be expected to generate approximately 4 tons of solid waste per day. The remaining combined daily capacity for the Benton Crossing Landfill is 1.7 million cubic yards of compacted waste. As such, the Landfill would have adequate capacity to accommodate the operational waste generated by the Project. Additionally, through the Town's efforts to comply with AB 939, the Town has successfully diverted 38 percent of its waste from the local landfill through the Town's recycling program. The Project would be incorporated into the Town's recycling program. Thus, it is likely that the amount of solid waste generated by the Project that would go to the local landfills would be much less than the estimated approximately 4 tons per day. Therefore, the long-term operational impacts of the Project on solid waste services would be less than significant.	No mitigation measures are required.	Less Than Significant
Impact UTIL-11 Cumulative Impacts to Solid Waste		
The Project and the related projects would generate approximately 18.79 tons of solid waste per day. The combined remaining daily intake of the Landfill is 500 tpd, and thus, adequate capacity would exist to accommodate the 18.79 tons per day (tpd) disposal needs of the Project and the related projects. Similar to the Project, the related projects would participate in the Town's reduction and recycling program, further reducing the amount of solid waste to be disposed of at the local landfill. Therefore, cumulative impacts to solid waste services would be less than significant and no mitigation measures are required.	No mitigation measures are required.	Less Than Significant

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II. ENVIRONMENTAL SETTING

A. INTRODUCTION

This section provides a brief overview of the Project site's existing regional and local setting. Additional descriptions of the environmental setting as it relates to each of the environmental issues analyzed in Section IV (Environmental Impact Analysis) of this Draft EIR are included in the environmental setting discussions contained within Sections IV.A through IV.N. Also provided in this section is a list of related projects, which is used as the basis for the discussions of cumulative impacts throughout Section IV.

B. EXISTING CONDITIONS

Regional Setting

The Project site is located in the Town of Mammoth Lakes (Town), Mono County, California. The Town is located on the eastern slopes of the Sierra Nevada at an elevation of approximately 7,900 feet above sea level within Section 34, Township 3 South, Range 27 East. The Town is located approximately 168 miles south of Reno, Nevada, and approximately 310 miles north of Los Angeles, California. Neighboring communities of the Town include June Lake to the northwest, Benton to the east, and Tom's Place to the southeast (refer to Figure II-1 and Figure II-2). Regional access is provided by U.S. Highway 395 and California State Highway 203. Major arterials which provide access to the site include Minaret Road to the north and south, Main Street to the north, Joaquin Road to the east, Meridian Boulevard to the south, and Lake Mary Road to the west.

Local Setting

The Project site is located in the center of Town to the north of Meridian Boulevard and is bisected by Minaret Road. The Project site is comprised of the following Assessor's Parcel Numbers (APN) and associated land use areas shown in parenthesis: 33-330-33 (Area 1D), 33-330-50 (Areas 2A, 2B/2C, 2D, 4A), 33-330-54 (Area 5), 33-330-55 (Areas 5B/5C/5D) and 33-330-25 (Area 7).

The Project site is currently designated as the Lodestar Master Plan (LMP) area. The LMP was adopted by the Mammoth Lakes Town Council in May 1991 and was revised in November 1992. The Project area is included as a part of the Development Agreement by and among the Town and Intrawest Affiliates as of April 4, 2002. The LMP set development standards for an approximately 226-acre[1] site situated around the Sierra Star Golf Course (Area G, 112 acres located west and east of Minaret Road and north and south of Meridian Boulevard).

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[1] *The LMP area is 226 acres and the SSMP area is 228.8 acres. This difference is due to more accurate surveying that has taken place on the property since the LMP was adopted in 1991 and the addition of the 1.01-acre "Callahan" property to Area 4 in 2005.*

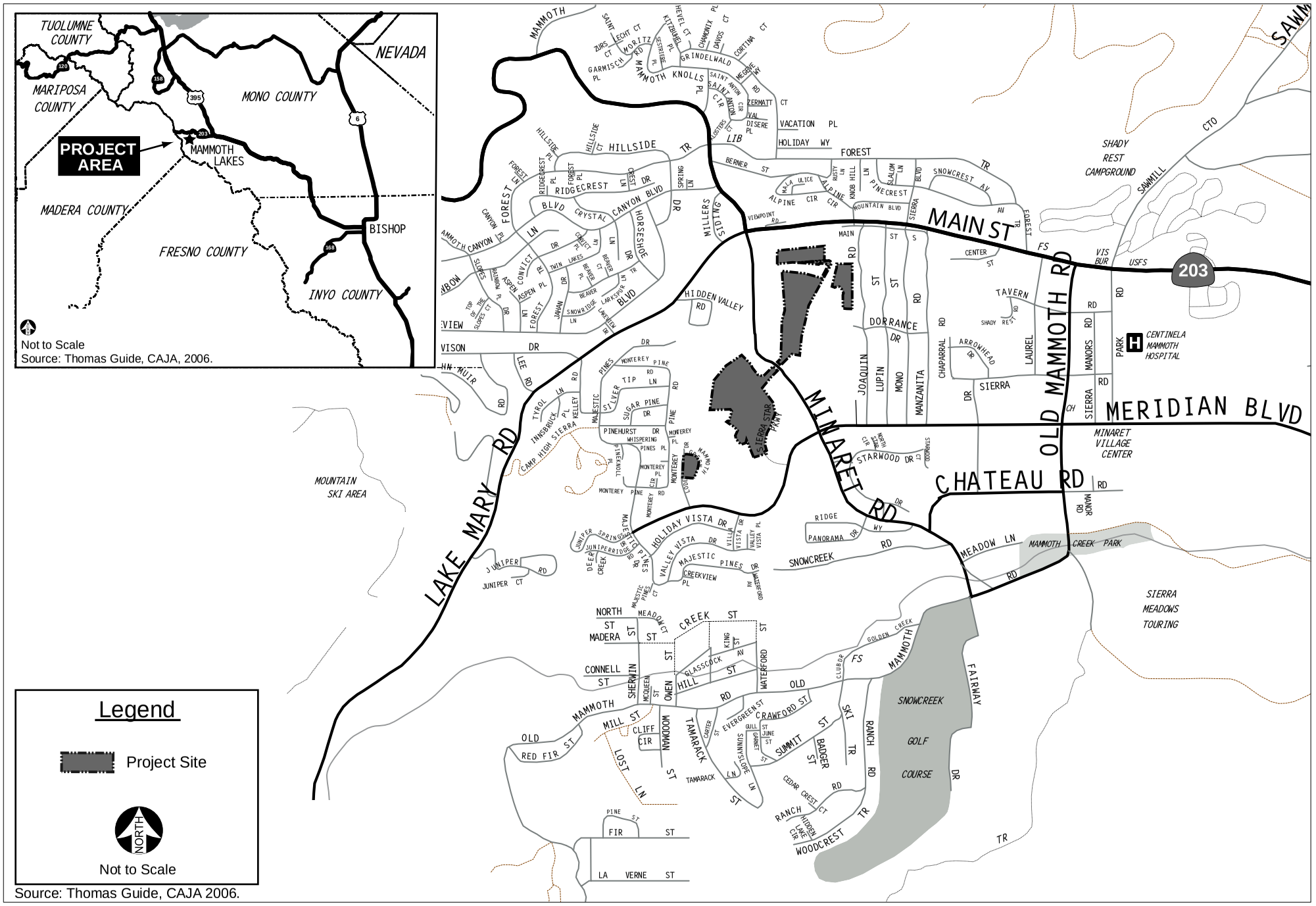

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Figure II-1
Regional & Vicinity Map

Source: Integrated Design Studio, CAJA, April 2006.

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Figure II-2
Aerial Photograph

The LMP envisioned the development of a major commercial, residential, and recreational hub within the Town including 1,263 residential units and 80,000 square feet of proposed commercial space. In June of 2005, a 1.01 acre site was added to Planning Area 4 (Ordinance No. 05-07) that added another 12 units of residential density to the LMP area for a total of 1,263 units. Uses permitted within the LMP include, but are not limited to, golf and tennis courts, swimming pools and spas, single family and multi-family dwellings, hotels, commercial uses and various recreational facilities. The Project would address future development of approximately 42-acres of the approximately 106-acre plan area surrounding the existing 18-hole, 112-acre Sierra Star Golf Course.

The 1987 General Plan is currently in the process of being updated. A Draft General Plan was prepared and distributed to the public for review in April 2005 and was revised in September 2005. The EIR for the Draft General Plan was completed in October 2005 and has been reviewed by the public. The review process for the Draft General Plan and the EIR for the Draft General Plan will continue in 2007[2], at which time the Town can consider adoption. Because the adoption of the Draft General Plan is an ongoing process, the standard for analysis used in this Draft EIR is based on the 1987 General Plan. The 1987 General Plan land use designation for the Project site is Resort (R), which is characterized with primary emphasis to visitor lodging, amenities and services. Development in the Resort designation is generally applied to large parcels and is physically connected internally and to all primary visitor oriented destinations with an integrated system of streets, sidewalks, and recreational paths.[3]

Surrounding Land Uses

The Project site is primarily bounded to the east, south and west by completed LMP developments. The northwest portion of the Project site is bordered by The Village at Mammoth resort area. Surrounding land use zoning includes Resort (R), Specific Plan (SP), Commercial Lodging (CL), Residential Single Family (RSF), and Residential Multi-Family 1 (RMF-1) (refer to Figure II-3 through Figure II-8).

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[2] *Correspondence, Jen Daugherty, Assistant Planner, Town of Mammoth Lakes, December 12, 2006.*

[3] *Town of Mammoth Lakes, 1987 adopted General Plan, Land Use Designation chapter, http://www.ci.mammoth-lakes.ca.us, retrieved February 20, 2006.*

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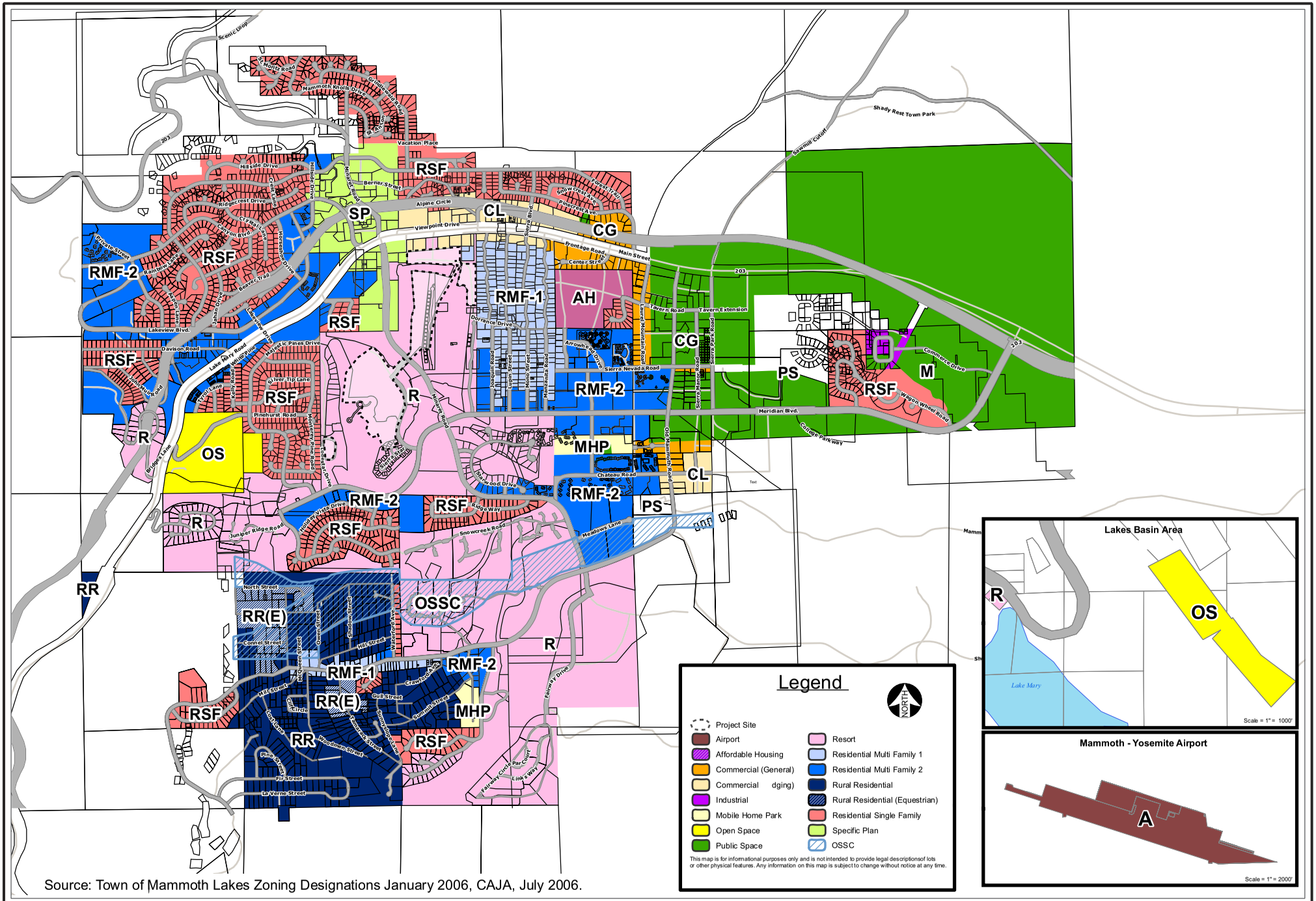

Source: Town of Mammoth Lakes Zoning Designations January 2006, CAJA, July 2006.

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0 1000 2000 3000 4000
Scale (Feet)

Figure II-3
Zoning Map

View 1: Looking south towards the project site from Main Street and Minaret Road.

View 2: Looking northeast towards the project site across Meridian Boulevard.

View 3: Looking northwest towards the project site across Meridian Boulevard.

Source: Christopher A. Joseph & Associates, 2006.

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Figure II-4
Views of the Existing Project Site

View 4: Looking east towards the project site from Lodestar Drive.

View 5: Looking north-northwest towards the project site from the intersection of Minaret Road and Meridian Boulevard.

View 6: Looking west-northwest towards the project site from the intersection of Minaret Road and Meridian Boulevard.

Source: Christopher A. Joseph & Associates, 2006.

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Figure II-5
Views of the Existing Project Site

View 1: Looking north towards restaurant uses across Lake Mary Road at Minaret Road.

View 2: Looking southeast towards resort uses from Minaret Road.

View 3: Looking northeast towards residential uses (under construction) on Sierra Star Parkway.

Source: Christopher A. Joseph & Associates, 2006.

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Figure II-6
Views of the Surrounding Uses

View 4: Looking northwest towards residential uses on Sierra Star Parkway.

View 5: Looking east towards residential uses from Meadow Ridge.

View 6: Looking south towards residential uses on Meridian Boulevard.

Source: Christopher A. Joseph & Associates, 2006.

View 7: Looking southeast towards residential uses on Lodestar Drive.

View 8: Looking north towards infrastructure uses (water treatment) on Meridian Boulevard.

View 9: Looking east towards residential uses (under construction) from Meridian Boulevard.

Source: Christopher A. Joseph & Associates, 2006.

C. RELATED PROJECTS

Sections 15126 and 15130 of the State California Environmental Quality Act (CEQA) Guidelines provide that Environmental Impact Reports (EIRs) consider the significant environmental effects of a proposed project as well as "cumulative impacts." Cumulative impacts refer to two or more individual effects that, when considered together, are considerable or that compound or increase other environmental impacts (CEQA Guidelines Section 15355). Cumulative impacts may be analyzed by considering a list of past, present, and probably future projects producing related or cumulative impacts [CEQA Guidelines Section 15130(b)(1)(A)].

All related projects (i.e., those projects with pending applications, recently approved, under construction, or reasonably foreseeable projects that could produce a related or cumulative impact on the local environment when considered in conjunction with the proposed project) are included in the EIR. These projects can include, if necessary, projects outside of the control of the Lead Agency or, a summary of projections contained in an adopted or certified general plan or related planning document which describes or evaluates regional or area-wide conditions contributing to the cumulative impact. For an analysis of the cumulative impacts associated with these related projects and the Project, the reader is referred to the cumulative impact discussions under each individual impact category in Chapter IV.

Table II-1 lists the related projects identified for the Project. These related projects consist of all approved, proposed, or projects currently under construction located in the Town (refer to Figure II-9). The list includes projects of various land uses, including Low-Density Residential, High-Density Residential, Commercial, Institutional Public Resort, Industrial and the North Village Specific Plan.

Table II-1
Related Projects

Number	Project Applicant & Description	Location	Land Use	Size
1	**Snowcreek 6, The Lodges** 106 unit multi-family development	40-070-17 Ranch Road	HDR - R	106 units
2	**Mono County Library** A new library is under construction. Breaking ground Spring 2006.	35-010-32 Meridian Boulevard	IP – PS	12,000 sf
3	**Mammoth Hospital** Expansion to existing hospital	185 Sierra Park Road	IP – PS	40,000 sf
4	**Mammoth View, LLC** Swiss Chalet hotel/condominium and residence club with 71 units.	33-080-07, -09, -10, -11 Main Street	HDR – CL	71 units
5	**Mammoth Gateway** 11 unit condominium	3771 Main Street	HDR – CL	11 units
6	**Sean Combs – 8050 A and B/ Coast Pacific** 23 unit multi-family residential condominiums	33-044-04 Canyon Boulevard	V – SP	23 units

Table II-1
Related Projects

Number	Project Applicant & Description	Location	Land Use	Size
7	**Tosca/ Big Air Mountain, LLC, John Harriman** 2 buildings, 11 unit PUD	1773 Old Mammoth Road	RMF-1	11 units
8	**Stonegate Mammoth, Elliott Brainard** phase 1, single family residential	33-100-26, -41 Minaret Road	LDR -1 – SP	14 units
9	**Monache/Westin** a condominium hotel with 230 dwelling units, related service functions, and recreational facilities; a parking structure with 236 spaces; 4,000 sf public restaurant	33-020-31 Hillside Drive	SP	230 units 4,000 sf
10	**Grey Eagle, John Hooper** 12 units within 6 buildings	35-025-04 Mountain Boulevard	HDR – CL	12 units
11	**Intrawest** Sierra Star Development Solstice Condominiums 58 residential condominium units within 9 structures	33-330-36, -37, -39, -46 Sierra Star Parkway	HDR - R	58 units
12	**Tallus, Eric Fishburn** 19 single family residences, fractional use 60 units of density sold within the Sierra Star Master Plan Area	33-330-51 Obsidian Place	LDR -1 – R	19 units
13	**Mammoth Lakes Fire Protection District** demolition of old station and construction of new station; Under Construction	3150 Main Street	IP – PS	17,600 sf
14	**Aspen Village Phase 1& 2/ Mammoth Lakes Family Associates** Phase 1: affordable housing project with 48 units and a community center. Phase 2: 23 "townhome" condominium units on a 1-acre site. Project is located adjacent to (behind) workforce housing units under development ("Aspen Village") to the immediate west of the Snowcreek Athletic Club.	1616-1700 Old Mammoth Road	HDR – R	71 units
15	**Grey Fox/John Hooper** three buildings with 2 units in each building 6 townhomes and understructure parking	59 Hillside Drive	HDR – RMF-2	6 units
16	**Meridian Court/ Mammoth Lakes Housing** workforce housing - 24 units	504 Mono Street	HDR – RMF-2	24 units
17	**Lodestar Mammoth Crossing/ Western Resort Properties** 45-unit condominium hotel located in Planning Area 1 of the Lodestar Master Plan	5862 Minaret Road	HDR – R	61 units
18	**Intrawest & Mammoth Lakes Housing, Inc. (Callahan Affordable Housing)** Tentative Tract Map and Use Permit Application to subdivide a 2.49-acre site within Planning Area 4B/4E of the Lodestar Master Plan into 40 Residential Condominium Units within 7 structures for Workforce Housing	3701 Main Street	HDR – R	40 units

Table II-1
Related Projects

Number	Project Applicant & Description	Location	Land Use	Size
19	**Golden Eagle Villas, Gordon Smith** 6-unit condominium project in the North Village Specific Plan Area	1102 Forest Trail	NVSP – SP	6 units
20	**Charlie Christensen** 3 unit condominium project	195 Davison Road	HDR – RMF-2	3 units
21	**Sierra Star Four-Five Dev. Corp.** 3.58-acre site, 28 Townhome Condominium Units within 8 structures. Buildings 1 and 6 are two 3-bedroom unit structures with each unit having a two-car garage. Buildings 2, 3, 4, 5, 7 and 8 are four 3-bedroom unit structures with two of the units having a 2-car garage and two of the units having a 1-car garage.	33-330-55 Sierra Star Parkway	HDR – R	28 units
22	**Mark Neave** 2 lot subdivision for 2 condominium units	33-160-32 Joaquin Road	HDR – RMF-1	2 units
23	**Mark Neave** 4 lot subdivision into 4 residential condominiums with common area	125 and 139 Davison Road	HDR – RMF-2	4 units
24	**Mammoth 8050-C** 8050 Building C consists of 21 fractional-share condominium ownership units and 76 understructure parking spaces. The units are to be maintained as a private residence club.	6085 Minaret Road	HDR – SP	21 units
25	**Storied Places/Mammoth Bridges Development** 22 fractional ownership condominium units on a 3.2-acre site.	888 Bridges Lane	HDR – R	22 units
26	**Harrer Residence** 10,136 square foot single family residence	218 Juniper Road	R	1 unit
27	**S. Minaret Development Co.** "South Hotel" in the East Village (Phase 2) of the Village at Mammoth. The project is a 247 unit condominium "flag" hotel with spa and pool facilities, meeting rooms, two retail units along Minaret Road, and a two-level understructure parking garage with 297 spaces.	333-043-05, -06, -15, -16 Berner Street	HDR – SP	247 units
28	**Mammoth Hillside-Canyon Boulevard 8050/Mammoth Hillside LLC** Phase I approval of a mixed-use, 193-unit condominium hotel in the North Village Specific Plan area (west side of Canyon Boulevard above Lake Mary Road). The project includes 30 townhome condominiums (Phase II), conference facilities, restaurant, spa, and understructure parking garage with 260 spaces on approximately a 7-acre site.	31-110-27, 33-010-02, 32-020-10, -11, -21, -31 Canyon Boulevard	SP	193 units

Table II-1
Related Projects

Number	Project Applicant & Description	Location	Land Use	Size
29	**Eagle Lodge-Juniper Ridge/MMSA** Amend the Juniper Ridge Master Plan to include the Eagle Lodge development. Eagle Lodge is a mixed-use skier day lodge, commercial, and residential development located on a 3.81-acre site. The plan would allow 180 dwellings, an understructure parking facility (190 spaces), a small open ice rink, conference rooms, and a convenience market.	4000 Meridian Boulevard	HDR – R	180 units 21,000 sf
30	**Snowcreek Hilltop/Chadmar** Snowcreek VII, a multi-family residential project with 118 condominiums within 37 buildings, 9 duplexes, 12 triplexes, and 16 four-plexes. The site is 38.26 acres.	85 and 1254 Old Mammoth Road	HDR – R	118 units
31	**Sam Walker & Brent Allen** 2 buildings in the Industrial Park for a Micro-Brewery and Metal Fabrication Business	156 Commerce Drive	I – M	19,126 sq
32	**Ward Jones** 1 condominium building consisting of 54 units and an understructure parking facility (139 spaces) on a 1.54 acre site (Holiday Haus). 54	3863 and 3905 Main Street	HDR – CL	54 units
33	**Mammoth Lakes 3789, LLC** 22 one bedroom condo lofts and one full-time employee unit	3789 Main Street	HDR – CL	23 units
34	**Clearwater Mammoth** mixed-use hotel/condominium with 480 rooms, retail and restaurants, and 577 underground parking spaces on 6 acres	164, 202, 248 Old Mammoth Road	HDR – CG	480 units 28,205 sf
35	**JMJ Mammoth, LLC** "Hillside 88"- 4 unit condominium building with understructure parking	190 Shadow Street	HDR – SP	4 units
36	**Mammoth Lakes Foundation** Student Housing - Phase I, 70 units in 2 buildings	1500 College Parkway	HDR – PS	70 units
37	**Hidden Creek Crossing/ Shady Rest** 25 acre forested site; 460 residential units (100 affordable, 100 workforce, 260 market rate) and 31,000 square feet of commercial space.	35-010-20	HDR – AH	460 units 31,000 sf
38	**Visitor's Bureau Visitors and Welcome Center**	2500 Main Street	Forest Service Land	5,500 sq
39	**The Jeffreys/ Mammoth Lakes Housing** 14 unit affordable housing apartment community	312 and 336 Lupin Street	HDR – RMF-1	14 units
40	**David & Diana Hines** 4 unit condo project	176 and 196 Lakeview Boulevard	HDR – RMF-2	4 units
41	**Town of Mammoth Lakes** Municipal parking garage consisting of 340 parking spaces.	99 Canyon Boulevard	IP	340 parking spaces
42	**Cardinal Investments** 95 unit, 190 room condominium hotel	2 Meadows Lane	RMF-2	95 units

Table II-1
Related Projects

Number	Project Applicant & Description	Location	Land Use	Size
43	**501 Center** Conversion of existing building to 9 units	501 Old Mammoth Road	CG	9 units
44	**Steier Residence** 4,124 square foot single family residence	285 Fir Street	RSF	1 unit
45	**Veterinary Clinic** 3,600 square foot veterinary clinic	3599 Main Street	CL	3,600 sf
46	**Horman Residence** 4,400 square foot single family residence	485 Fir Street	RSF	1 unit
47	**Mueller Residence** 5,100 square foot single family residence	319 Le Verne Street	RSF	1 unit
48	**Wilcox Residence** 5,275 square foot single family residence	285 Le Verne Street	RSF	1 unit
49	**Bauer Residence** single family residence with 30% lot coverage	2204 Old Mammoth Road	RR	1 unit

Land Use Key:
sf = square feet
LDR-1 = Low-Density Residential 1
LDR-2 = Low-Density Residential 2
HDR-1 = High-Density Residential 1
HDR-2 = High-Density Residential 2
RSF = Residential Single Family
RMF = Residential Multi-Family
RR = Rural Residential
C = Commercial
CG = Commercial General
IP = Institutional Public
R = Resort
I = Industrial
NVSP = North Village Specific Plan

Source: Town of Mammoth Lakes Development Tracking, Dennis Hartwick and Craig Olson, April 28, 2006.
2005 General Plan Land Use Designations, http://www.ci.mammoth-lakes.ca.us, March 2006.

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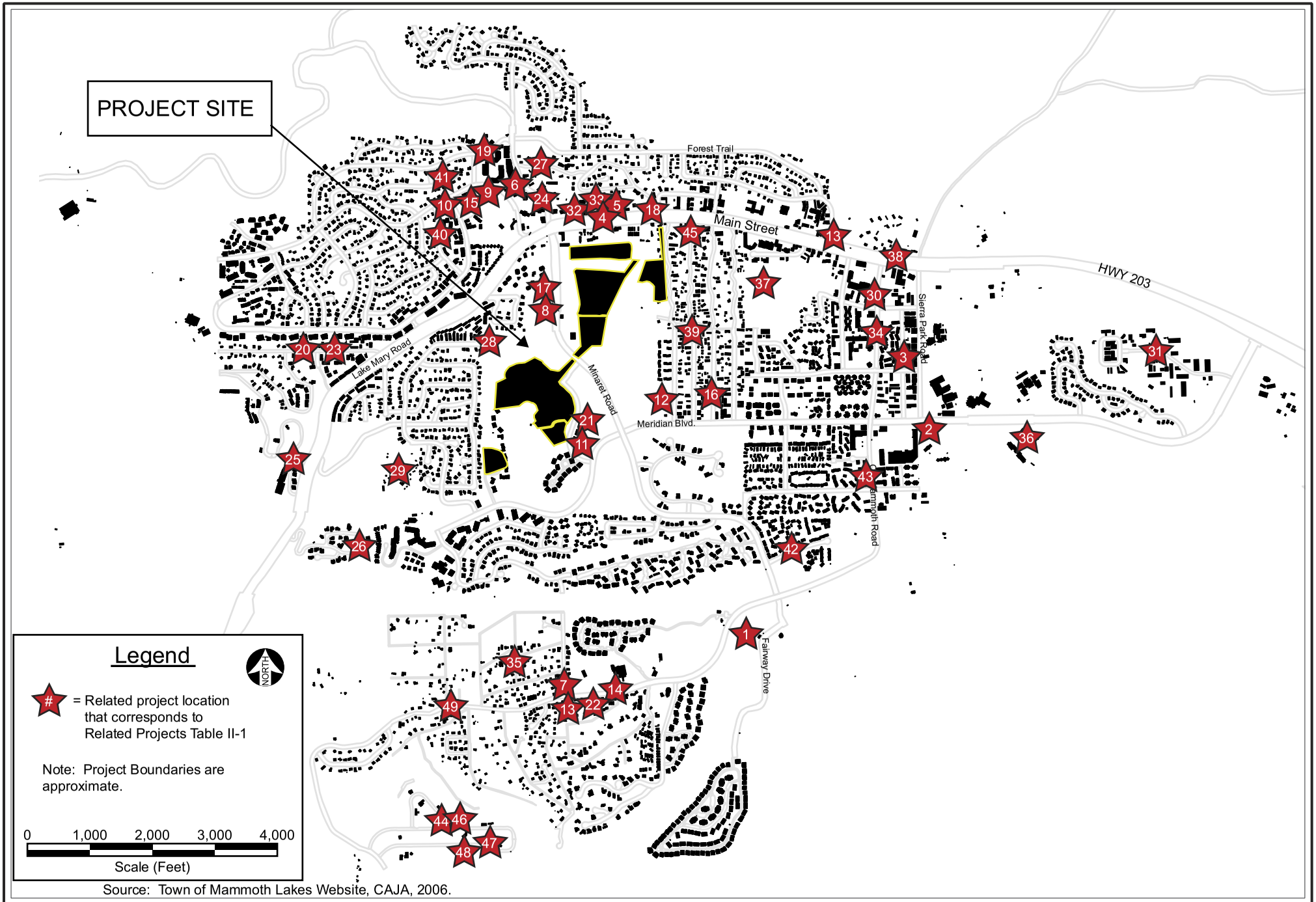

Source: Town of Mammoth Lakes Website, CAJA, 2006.

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Figure II-9
Related Projects Map

III. PROJECT DESCRIPTION

A. PROJECT APPLICANT

The project applicant for the proposed Sierra Star Master Plan Project (Project) is:

Mammoth Mountain Ski Area Development Co, LLC (MMSA-DC)
6900 South McCarran Boulevard, Suite 3000
Reno, NV 89509 USA

B. PROJECT CHARACTERISTICS

The following is a description of the land use requirements, parking requirements, transportation linkages, and infrastructure improvements integral to the development of the Project. The Project will involve changes to the currently approved 1991 Lodestar Master Plan (LMP) (as amended) that will result in replacement of the LMP with a new master plan that will change the name, land area, and land uses set forth in the 1991 plan for the remaining portion of the LMP that has not been developed. The Project being evaluated in this Draft EIR pertains only to the portion of the existing LMP area that will be covered by the proposed Sierra Star Master Plan (SSMP). The Project does not include the remainder of the existing LMP area within which development has either already occurred or is currently in progress, unless redeveloped in the future. Figures III-1 and III-2 represent the land use development of the SSMP and the LMP respectively; while Figure III-3 illustrates an overlay comparison of the two plans.

Site History – Existing Lodestar Master Plan

The LMP set development standards for an approximately 226-acre site situated around the Sierra Star Golf Course (Area G, 112 acres located west of Minaret Road and north of Meridian Boulevard as well as in the southeast corner of the intersection of Minaret Road and Meridian Boulevard). The LMP envisioned the development of a major commercial, residential, and recreational hub within the Town including 1,263 residential units and 80,000 square feet of proposed commercial space. Currently, a total of 457 residential units have been developed or approved under the LMP. No commercial space has been developed. Residential units that have been developed include a 46-unit condominium development (Area 1A, Mammoth Green), a 24-unit condominium project (Area 1B, The Cabins), an 11-lot single family residential subdivision (Area 1C, Crooked Pines), an 8-unit apartment building (Area 1D), a 54-lot single family residential subdivision (Area 3, Starwood), a 35-unit Workforce Housing development (Area 4C, The Chutes), and a 32-unit townhome condominium project (Area 5F, The Timbers). A 58-unit condominium project (Area 5E, Solstice) and a 19-unit fractional share single-unit residential development (Area 6, Tallus) are currently under construction and a 40-unit Workforce Housing condominium project (Area 4B/4E) and a 28-unit townhome condominium project (Area 5G, Woodwinds) were recently approved within the LMP area.

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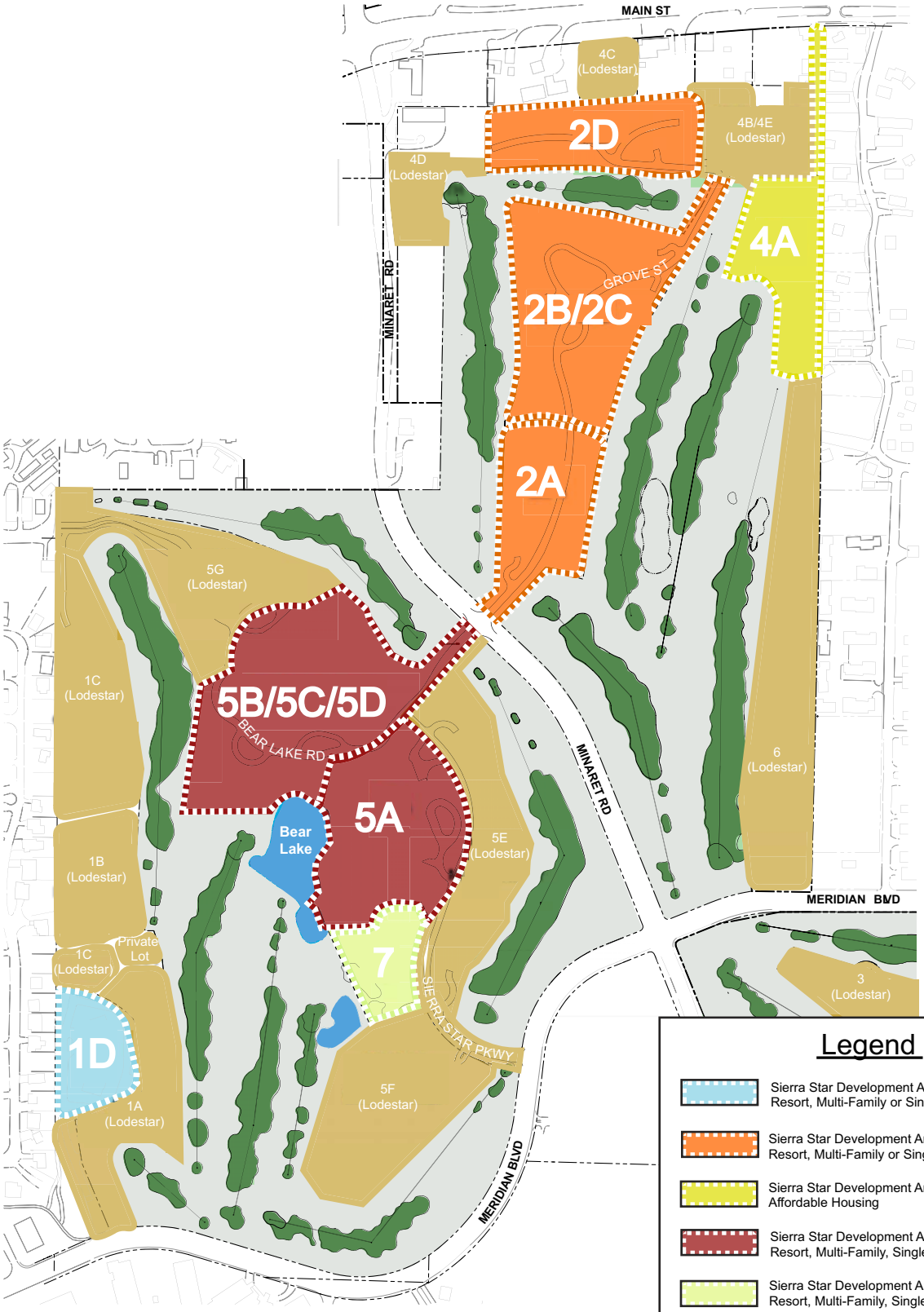

Source: Perkins Design Associates, CAJA, July 2006.

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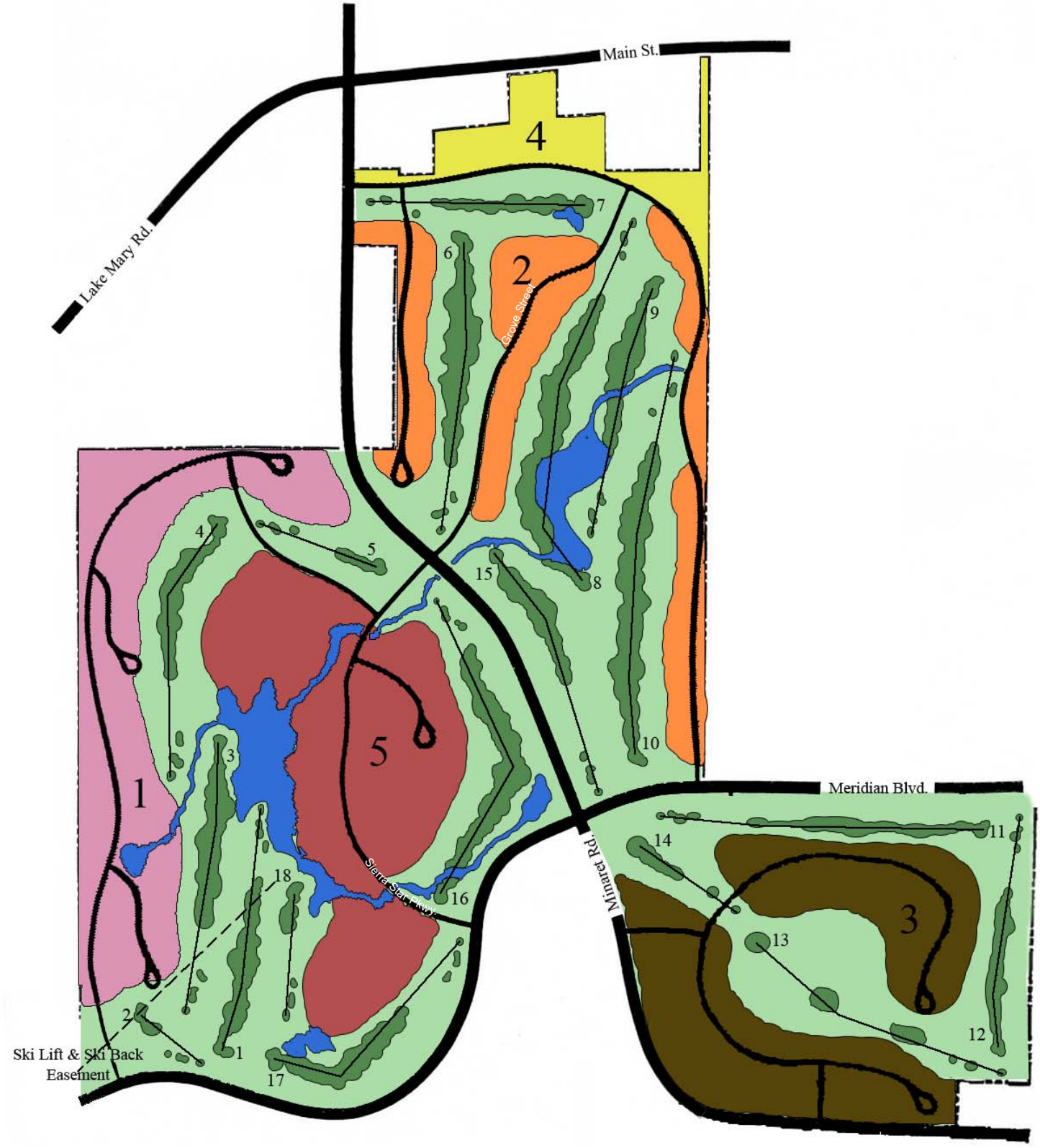
Figure III-1
Sierra Star Master Plan
Development Areas / Land Use



Source: Integrated Design Studio, CAJA, December 2005.

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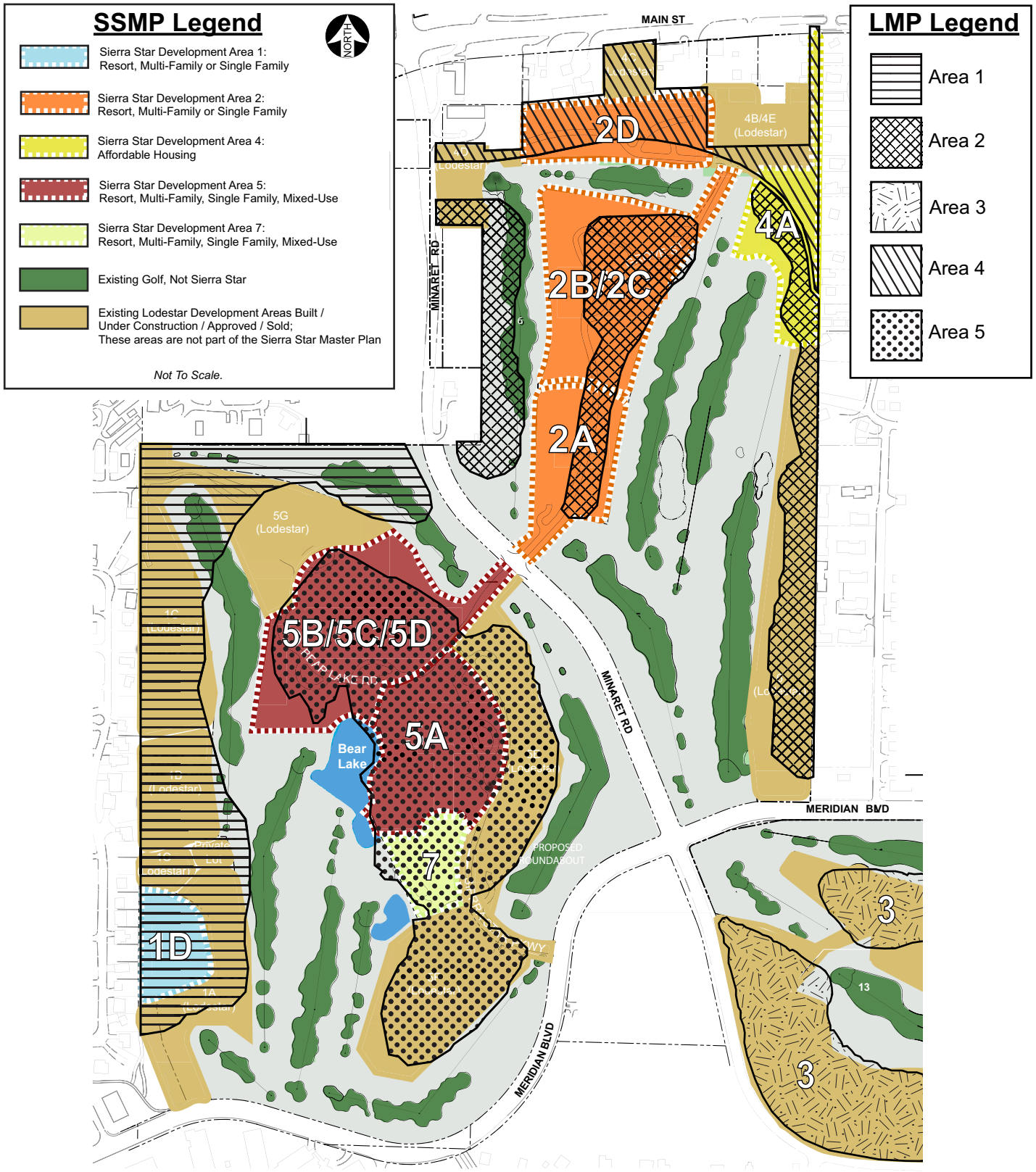
Figure III-2
1992 Amendment to the
1991 Lodestar Master Plan
Development Areas / Land Use



Note: Color Coded Areas, Golf Course, and Labels from 2005 Sierra Stra Master Plan. Hatched areas represent development areas as defined under the 1991 Lodestar Master Plan Land Use Diagram.

Source: Perkins Design Associates, IDS, CAJA, April 2007.

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Figure III-3
Master Plan Comparison Diagram

Additionally, 44-units of density (4D, Mammoth Crossing) were sold to Western Resort Properties. The 4D: Mammoth Crossings (Lode*Star) project was approved by the Planning Commission on February 14, 2007 with 44 units of density.

Distinctions between the Sierra Star Master Plan and the Lodestar Master Plan

The SSMP modifies the density and nature of development that will occur within the approximately 42 remaining acres of the previously approved 226-acre LMP project area. The LMP provides for a maximum of 1,263 dwelling units. A total of 457 dwelling units have been built in portions of the LMP area that are outside of the Project area and will not be subject to the SSMP unless redeveloped in the future. As a result, if the SSMP is approved, the total maximum density within the 226-acre LMP area will be 1,220 dwelling units (the 457 built dwelling units plus the 763 proposed under the Project). The LMP area is 226 acres and the SSMP area is 228.8 acres. This difference is due to more accurate surveying that has taken place on the property since the LMP was adopted in 1991 and the addition of the 1.01-acre "Callahan" property to Area 4 in 2005.

The SSMP proposes less commercial space, fewer dwelling units, and less density than currently approved for the SSMP area under the LMP. The SSMP proposes 29,000 square feet of commercial/retail space, 20,000 square feet of commercial/conference space, and 30,000 square feet of conference space, a total of 79,000 square feet, as compared to the LMP which includes 80,000 square feet of commercial space. This primarily reflects a difference in the intensity of proposed commercial use. Reduced intensity of commercial use is proposed to reduce competition with existing and proposed retail at The Village at Mammoth and with existing retail along Main Street and Old Mammoth Road. The developable areas of the SSMP area are not easily visible from public roads and therefore commercial uses within the Project site will be at a competitive disadvantage. Additionally, it was determined that the nature and scope of commercial development within the Project site will be better suited to serving the needs of resort guests.

The SSMP proposes a total of 1,220 dwelling units for the SSMP area compared to the 1,263 dwelling units approved under the LMP. The SSMP proposes a total density of 5.3 dwelling units per acre compared to the density of 5.6 dwelling units per acre approved under the LMP.

Table III-1 distinguishes the number of acres, dwelling units, and density between the existing LMP and the proposed SSMP. This information is summarized as follows:

- SSMP regulates the remaining 42 acres not developed under the LMP
- Development agreement – what has been completed and what remains to be completed
- SSMP incorporates six ordinance revisions to the LMP (Ordinances 92-16, 01-01, 03-01, 04-11, 05-05, and 05-07)

- LMP had a maximum buildout density of 1,263 units and 80,000 square feet of commercial space
- SSMP proposes a maximum buildout density of 1,220 units with 29,000 square feet of commercial/retail space, 20,000 square feet of commercial/conference space, and 30,000 square feet of conference space, a total of 79,000 square feet

Table III-1
Maximum Dwelling Units - Lodestar Master Plan versus Sierra Star Master Plan

1991 Lodestar Master Plan Maximum Dwelling Units				2005 Sierra Star Master Plan Maximum Dwelling Units			
Development Areas	Acres	Dwelling Units (DU)	Density (DU/acres)	Development Areas	Acres	Dwelling Units (DU)	Density (DU/acres)
Area 1	20	180	9.0	Area 1	15.6	113	7.2
Area 2	15.3	143	9.3	Area 2	16.7	223	13.4
Area 3	22	61	2.8	Area 3	21.9	54	2.5
Area 4(1)	3	112	28	Area 4	8.5	188	22.1
Area 5	22.7	660(2)	27.8	Area 5	33.6	535(3)	15.9
–(7)	7.7	67	8.7	Area 6(4)	7.7	67	8.7
–(7)	2.3	40(2)	30.4	Area 7(5)	2.3	40	17.4
Total Residential	**93**	**1,263**	**13.6**		**106.3**	**1,220**	**11.5**
Area G (Golf Course)	116	–	–		111.5	–	–
Other(6)	17	–	–		11.0	–	–
Total Site	**226**	**1,263**	**5.6**		**228.8**	**1,220**	**5.3**

(1) Town parcel was amended into the LMP in 2005 adding 12 units and 1.01 acre. (2) Total approved number of dwelling units (DU) for Area 5 under the LMP as indicated by the Town in correspondence dated February 28, 2007. The representative 700 DU were analyzed prior to the adoption of Town code which designated 1 studio or 1 bedroom as being equal to ½ DU. For the purposes of comparing LMP to SSMP, the total 700 DU (660 DU Area 5 + 40 DU Area 7) is equal to 450 residences and 500 hotel rooms.
(3) 357 residences and 356 hotel rooms proposed. Based on Town code, 1 studio or 1 bedroom is equal to ½ DU; thus, 356 hotel rooms are equivalent to 178 DU. The representative DU for the hotel rooms (178) plus the DU for the residences (357) equals a total of 535 DU.
(4) Area 6 was part of Area 2 in the 1991 LMP.
(5) Area 7 was part of Area 5 in the 1991 LMP.
(6) Other = roadways, sidewalks, etc…
(7) These areas were not defined under LMP. The dwelling units that were included as part of Areas 2 and 5 in LMP have been separated out for comparison purposes.

Sources: 1991 LMP, 2005 SSMP, and the Town of Mammoth Lakes Department of Community Development.

As shown in Table III-1, the LMP area is 226 acres and the SSMP area is 228.8 acres. As stated previously, this difference is due to more accurate surveying that has taken place on the property since the LMP was adopted in 1991 and the addition of the 1.01-acre "Callahan" property to Area 4 in 2005.

Proposed Project – Sierra Star Master Plan

The Project will refocus remaining development within the SSMP area toward the creation of transient occupancy units, establishment of a more efficient transportation and circulation system, and the development of additional affordable housing units. Under the Project, a total maximum of 763 new dwelling units will be developed for a total of 1,220 dwelling units (including units previously constructed, under construction, or approved). As noted, 44 units were sold, 210 units have been built, 77 units are currently under construction, and 68 units were recently approved. These 457 units will be considered part of the baseline condition and the EIR will evaluate the impacts of the proposed 763 units. The Project will include single family residential, townhomes, condominiums, workforce housing, a destination resort hotel, and resort lodges. Limited commercial development (up to a maximum of 29,000 square feet of commercial/retail space, 20,000 square feet of commercial/conference space, and 30,000 square feet of conference space) will also be allowed in specific sectors of the plan area with discretionary approval by the Town. Table III-2 identifies the maximum dwelling units of the Project. Figure III-4 represents the conceptual design of the Project.

A Development Agreement (DA) is a contract between a local government unit (LGU) and a developer. A DA provides security to both parties. The DA provides the LGU with a legally binding document that the developer will provide infrastructure and/or pay fees required by a new project. The DA provides the developer with a legally binding document that they can build the project even if the LGU passes a growth-control initiative. A DA was prepared that covers the LMP/SSMP project area (portion sold to Fishburn), the Village at Mammoth (Intrawest properties), The Crest, The Bridges, Canyon Lodge Parcel, and the Twin Lakes Parcels (sold to Hooper). This DA is effective through April 4, 2022.

Table III-2
Maximum Sierra Star Master Plan Build Out

Areas	Acres	Proposed	Built/Under Construction/ Approved/Sold	2005 Sierra Star Master Plan Maximum Dwelling Units	Density (DU/acres)
		Dwelling Units (DU)	Dwelling Units (DU)	Dwelling Units (DU)	
Area 1 Total	**15.6**	**24**	**89**	**113**	**7.2**
Area 1A	*6.1*	*–*	*46*	*46*	*7.5*
Area 1B	*2.0*	*–*	*24*	*24*	*12*
Area 1C	*6.3*	*–*	*11*	*11*	*1.7*
Area 1D	*1.2*	*24*	*8*	*32*	*26.7*
Area 2 Total	**16.7**	**213**	*–*	**223**	**13.4**
Area 2A	*4.2*	*22*	*10*	*12*	*5.2*
Area 2B/2C	*8.5*	*139*	*–*	*139*	*16.4*
Area 2D	*4.0*	*62*	*–*	*62*	*15.5*
Area 3 Total	**21.9**	*–*	**54**	**54**	**2.5**
Area 4 Total	**8.5**	**69**	**119**	**188**	**22.1**
Area 4A	*3.6*	*69*		*69*	*19.2*
Area 4B/4E	*2.5*	*–*	*40*	*40*	*13.3*
Area 4C	*1.0*	*–*	*35*	*35*	*35*
Area 4D	*1.4*	*–*	*44*	*44*	*43.6*
Area 5 Total	**33.6**	**417**[(1)]	**118**	**535**[(2)]	**15.9**
Area 5A	*6.1*	*178*	*–*	*144*	*23.6*
Area 5B/C/D	*10.3*	*239*	*–*	*273*	*26.5*
Area 5E	*6.5*	*–*	*58*	*58*	*8.9*
Area 5F	*6.2*	*–*	*32*	*32*	*5.2*
Area 5G	*4.5*	*–*	*28*	*28*	*6.4*
Area 6	**7.7**	*–*	**67**	**67**	**2.5**[(3)]
Area 7	**2.3**	**40**	*–*	**40**	**17.4**
Total	**106.3**	**763**	**457**	**1,220**	**11.4**
Commercial	n/a	79,000 square feet[(4)]	–	79,000 square feet	n/a
Area G	111.5	–	–	–	–
Other	11.0	–	–	–	–
Total Site	**228.8**	79,000 square feet	–	**1,220**	**5.3**

(1) 239 residences and 356 hotel rooms proposed. Based on Town code, studio or 1 bedroom is equal to ½ DU; thus, 356 hotel rooms are equivalent to 178 DU. The representative DU for the hotel rooms (178) plus the DU for the residences (239) equals a total of 417 DU.
(2) 357 residences and 356 hotel rooms proposed. Based on Town code, 1 studio or 1 bedroom is equal to ½ DU; thus, 356 hotel rooms are equivalent to 178 DU. The representative DU for the hotel rooms (178) plus the DU for the residences (357) equals a total of 535 DU.
(3) Density was calculated using 19 units/7.7 acres because 67 units were approved, but only 19 units were built. The remaining units have been sold.
(4) Commercial/Retail/Conference can be located in Areas 2, 4A, and 5, however exact breakdown is not currently known thus the distribution assumed for this Draft EIR is 30,000 square feet (sf) in Area 2, 29,000 sf in Area 4, and 20,000 sf in Area 5.

Sources: 1991 LMP, 2005 SSMP, and the Town of Mammoth Lakes Department of Community Development.

Source: Perkins Design Associates, Integrated Design Studio, CAJA, July 2006.

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Figure III-4
Conceptual Site Plan

Upon final approval of the Project, the SSMP will effectively replace the LMP for the remaining portion of the overall area yet to be developed and any areas that have been constructed or approved if they should be redeveloped in the future.

The specific land uses for the Project are described above and as follows (refer to Figure III-1):

Image and Character

The Project will provide a broad range of activities, services and facilities for residents and visitors year round. The Project will be served by shuttle connections operated by the resort hotel in Area 5 between the Little Eagle Lodge, Canyon Lodge, and the Main Lodge of the Mammoth Mountain Ski Area. The Project will have the capacity to serve a large number of visitors, providing them with accommodations, dining, recreation, and entertainment. The Project will be conveniently connected to the commercially oriented Village at Mammoth and existing Old Mammoth Commercial areas by a system of public roads, trails and transportation described in further detail below.

Resort Structure and Recreation Amenities

The Project will be organized into a series of neighborhoods with a diversity of residential uses, outdoor use areas, and recreational amenities. The grouping of building types will create an interesting mix of residential types within distinct neighborhood contexts. The Project is viewed as a resort recreation center with multiple options for recreational amenities. These include the Sierra Star Golf Course, recreational trails and walkways, the golf course lake, individual pools, spas, and water play areas associated with resort hotels and hotels. The Project's outdoor use amenities will be located to take best advantage of south and southwest solar orientation between 10:00 AM and 4:00 PM. The Project is anticipated to benefit the Town and the public by increasing trails and open space, housing, recreational amenities, and job opportunities.

Infrastructure

Roadways

The existing major public roads that serve the Project site are Minaret Road and Meridian Boulevard. The number of intersections at the Project site will be limited. New internal access roads will be created on the east and west sides of the Project site. Internal roadways will be privately owned and maintained. The internal roadway system will provide access to various residential projects and neighborhoods. Trails and/or emergency access roadways will allow secondary points of access from internal streets and roadways, including a connection at Majestic Pines Drive. Roadway designs will fit the land and be sensitive to topography, vegetation and views. Safe crossings for pedestrians will be included. Access for parcels adjacent to Main Street/State Highway 203 will be allowed for affordable housing with California Department of Transportation (Caltrans) approval. (refer to Figure III-5) Sierra Star Parkway from Meridian Boulevard to Minaret Road has been completed. The road through Areas 5A and

5B/5C/5D is currently under construction under the LMP. The road from Minaret Road through Areas 2A and 2B/2C is also currently under construction under the LMP. All roads will be in conformance with Ordinance No. 05-05.

Pedestrian and Bicycle Circulation System and Places

The pedestrian and bicycle system will include interior trails and sidewalks fronting internal streets as well as connecting trails from recreational amenities, outdoor spaces and neighborhoods. Walkways to and from residential areas as well as trail connections that will tie into the larger Town wide recreational trail network which includes pedestrian trails, bike lanes and sidewalks that are adjacent to major roadways such as Minaret Road, Meridian Boulevard, and Main Street. (refer to Figure III-5) The walks will vary in width from 4 to 20 feet depending upon type and intensity of use. An eight foot paved trail with a 12 foot easement is the minimum requirement for most trails. Trails used for internal use only may have lesser widths. When possible, the major internal pedestrian corridors will be located adjacent to landscape features.

Vehicular Circulation and Parking Systems

Primary points of vehicular access into neighborhoods will be from Minaret Road or Meridian Boulevard. Access to the east side neighborhoods will be primarily from Minaret Road. West side lodge parking access will be provided from either Minaret Road or Meridian Boulevard. Secondary and emergency vehicle access to some areas on the east side may require roadway connections from Main Street/State Highway 203. Access to the Project facilities and lodging will be from an internal roadway system as previously described above. (refer to Figure III-5)

Short-term surface parking will be provided adjacent to the check-in locations and then guests will be directed to underground parking structures located under the major residential buildings. Short-term parking uses include passenger drop off and loading, service, deliveries, transit vehicles, and guest parking for residential uses. Some buildings may share check-in and parking access. Affordable residential units will be allowed surface parking for both resident and guest use. Surface parking will be provided for golf course use. There are no plans to provide any permanent day skier parking within the Project site. Shuttle stops will be located at transit shelters. The specific design, location, and operational criteria for these transit facilities will be considered in conjunction with the pending development of a community-wide transit system. Surface parking lots will be appropriately landscaped and will connect to pedestrian/bicycle walk/bike and trail systems. Where practical, the landscaping will include existing trees adjacent to and within surface parking areas.

Source: Perkins Design Associates, IDS, CAJA, April 2007.

CHRISTOPHER A. JOSEPH & ASSOCIATES
Environmental Planning and Research

NORTH

Figure III-5
Sierra Star Master Plan
Circulation and Access Map

Service

Service vehicles will be routed and managed to minimize conflicts with the Project's visitor activities and local traffic. All buildings will be serviced from internal roadways as opposed to Minaret Road or Meridian Boulevard. Space for short-term service parking in central service bays will be provided. The larger hotel and lodging facilities will have designated central facilities for service delivery and waste management. Service areas will be designed to accommodate required service vehicle sizes.

Emergency Vehicle Access

Emergency vehicles will circulate through the Project area using the internal roadway system. In addition, supplemental fire lanes will be developed in conjunction with the roadway system to provide looped secondary emergency vehicle access and egress. Fire lanes, turning radii and back up space around buildings will be designed in cooperation with local officials so as to be adequate for emergency and fire equipment vehicles. Pavements will be designed to support loads created by emergency vehicle traffic. Standpipe and fire suppression systems connections will be incorporated into architectural and landscaping design elements where practical and in location accessible to fire equipment.

Snow Management

Snow management will be addressed to ensure that residents and visitors are provided safe and convenient access to and from lodging and within the public use areas throughout the winter season. The adequacy of snow storage areas adjacent to driveways and parking areas will be evaluated based upon zoning code requirements for similar uses. Ground and roof level snow storage areas will be identified. Landscape snow shed areas will be designated and located adjacent to the base of buildings and will be sized to accommodate the anticipated volumes of snow. Roof forms will be designed in coordination with pedestrian areas at the base of buildings. Snow falling from roofs will be directed to landscaped areas at the base for the buildings or to lower level flat roofs. In limited areas, snow rails or fencing, heated gutters, and heated roof edges may be required to prevent snow shed and ice buildup. Snow will not be permitted to shed freely into active pedestrian areas. However, minor snow depths may remain on pedestrian paved areas during cold periods. When snow begins to melt and creates conditions for icing of surfaces, it will be removed or treated with anti-icing agents. Snow will be removed from heavily used pedestrian paved areas, ramps and stairs by snow melt systems. For other circulation routes and pedestrian areas, snow will be removed as soon as practical following snowfall to ensure access by emergency vehicles and easy pedestrian movement. Appropriate sized snow removal vehicles will be allowed into the pedestrian areas.

Grading and Drainage

The Project will develop the grades and topographic forms needed to achieve necessary grades for siting buildings in relationship to utility extensions, roads, pedestrian areas, man made or natural water features and channels, and golf course areas. Terraced or battered retaining walls will be preferred. Retaining

walls, material and color will maintain the natural setting and context. Where large vertical cuts or fills are required the use of retaining walls will be suggested to minimize the areas affected.

Grading will be done to create natural-looking slopes that have diversity in gradient and profile where feasible. Round and feather tops, toes and edges of slopes to blend naturally with adjacent grades. Slope rounding may be limited or eliminated in locations where the priority is tree retention or project improvements. All grading operations shall be carefully managed to avoid environmental damage to adjacent non-graded areas, to avoid water degradation in streams corridors, to riparian vegetation, to protect existing trees, and to minimize impacts on nearby properties. Where practical and appropriate to the design, existing trees will be preserved, either as groups or as individual trees. Grade disturbance within the tree's dripline will be avoided where feasible. Appropriate barricades and fencing will be installed by the contractor to protect preserved trees during grading operations.

Building Design

Form and Mass

The Project will organize the form and mass of a single building in relationship to the scale of neighboring buildings and in relationship to the size and use of adjacent open space. A 200-foot maximum height is proposed in Area 5A for purposes of potentially attracting a hotel complex. This proposed SSMP building height limitations exceeds the LMP height limit of 65 feet and would constitute a substantial change. Building mass will be varied to create variety in the character of the building elevations. Pitched roofs that vary in height, direction, and mass with occasional vertical accents will be encouraged. Building ends will be stepped to preserve sunlight into important outdoor use areas. Late afternoon sun is most important for outdoor uses and activities, especially those associated with water play.

Scale

A 200-foot maximum height is proposed in Area 5A for purposes of potentially attracting a hotel complex. This proposed SSMP building height limitations exceeds the LMP height limit of 65 feet and would constitute a substantial change.

Doors and windows will be of appropriate size, design, orientation and spacing and will be trimmed with materials and details appropriate to the climate and natural setting of the Eastern Sierra such as wood, wood-like materials, and natural stone. The ground floor of buildings will be scaled to human dimensions by the addition of gables, columns, arcades, cornices, porches, awnings, signage and other elements. Where appropriate, step eaves and cornice details will be incorporated into roof edges to give scale to the upper lines of walls.

Roof Form

The roofs serve to define the scale of the Project buildings. Roofs will vary in height, direction and mass so that the ridgeline will not have the appearance from public vantage points of being continuous. Dominant roof pitches are to range from 4:12 to 12:12. Flatter roof slopes in limited areas will be permitted for specific design effect, functional requirements or snow management purposes. Roof pitches greater than 12:12 are allowable if part of a unique architectural treatment or feature element. Fascias will be in scale with the building. Towers or other vertical architectural projections will be square, round or octagonal in form or otherwise architectural form of the structure. Skylights in the roof plane would be allowed if flat or in line with the roof plane. Roofing materials may be metal, asphalt shingle, flat concrete tile, slate, or shingle. Built-materials may be used on flat sections. Visible metal used for flashing, gutters, vents etc. must be non-reflective and painted to match the building. Where asphalt shingles are used on visually prominent roofs, the shingles will be a heavy grade architectural shingle. Chimneys will be compatible with the building design. Vent pipes will be architecturally screened or collected, if possible, into orderly clusters incorporated into chimney structures, or other architectural apparatuses. Mechanical equipment and elements such as video receivers will be concealed from view by architectural elements that complement the structure's design. All roof top accoutrements will be painted a dark color and be non-reflective. When flat roof sections are used they will have a distinctive cornice or architectural feature to screen the flat portion. Dormer roofs will be desirable and may include gable, shed, eyebrow or hip roof forms. They may extend up from the exterior wall line of the building, extend forward to create a bay window effect, or be part of the roof form. Gable ends will be preferred over hip ends. Snow management devices and roof drainage systems will be integrated into the roof and building design.

Building Facades

In addition to a structure's overall shape, mass, and form, building facades are a primary attribute in the appearance and scale of the building. The composition of openings will reflect the order of interior spaces and will not be organized solely for the sake of decorating the buildings. A variety in alignment, materials, and colors will be encouraged. The façade design will take into consideration the building appearance on all sides; i.e., the building façades will be attractive from all vantage points. The visual alignment of a façade will vary by slight steps in the building walls, by openings cut in the walls, or by angles in surfaces. The composition of color and varying use of materials will provide vertical breaks in the wall. Extended and recessed balconies will add rhythm and texture to the façades. Protruding balconies will have support details at the base of the balcony to express a structural support and thoughtful architectural detail as well as overhead protecting roof or structure. Recessed balconies will not be of a size or quantity so as to dominate the building facades; they will appear as openings in a wall rather than as the total façade. The Project will incorporate appropriate design features to adequately deal with snow shedding and snowfall into exterior balconies. Long, exposed, "motel like" exterior corridors to room entrances will be prohibited and unfinished structural concrete will not be permitted. Architectural finished concrete will be used as appropriate to the building design.

Building Base Lower Walls

The base of a mountain building is an important design element. The Project will develop base treatments appropriate to the scale and design of the building to resolve grade transitions, to achieve a comfortable building to ground relationship, to provide a durable surface resisting weather impacts, and to highlight the pedestrian entrance locations. Buildings will step with natural grade and accommodate the conditions of the site. The base treatment is the transitional factor in the relationship between land and building. Appropriate materials will be used to provide proper building to ground relationships. Full height stone walls on building ground floors will be encouraged for buildings at prominent locations. Stone that appears applied as a decoration or not a true element of the building will be avoided. Stone veneer will wrap around a visible building corner to provide a solid, natural appearance.

Windows and Doors

The organization of windows and doors will generally be orderly rather than abstract and reflect the directness of design that is typical of mountain architecture. The Project will use a variety of window types, however they will be typically rectangular and vertically oriented. The character of the interior space and views from the inside will be balanced with exterior design objectives. Window trim is to be raised to create shadow and dimension and may feature special designs at the top casing or sill. Window trim on stone or plaster-coated buildings may be stone, wood, or same material as the wall. Bay windows are encouraged as design elements when appropriate to building design, use, and exterior composition. Doors will be recessed within walls to gain scale, weather protection and a sense of entrance/arrival. Moldings, frames, paneling, and hardware used on doors will add to character to the overall building design. Transoms may be repeated above windows as well as doors to add richness and scale to the building, as well as increase interior light levels. Vertical windows beside doors, or in the entranceway structures, are recommended. Window boxes below window openings and window shutters may be used as a decorative element if they appear functional and are appropriately detailed.

Entrances and Porches, Arcades

The Project will emphasize the importance of pedestrian level entrances to the building or grouping of buildings. Porches will be slightly higher than adjacent walkways or streets. Passageways through or between buildings will have windows, special features and/or entrance doors on the sides. Ceilings will be well detailed, light in color and well lit. Walls will have trim, be well detailed, and be colorful. Arcades will allow a minimum of eight feet clear space between arcade columns and the adjacent building wall. Arcade columns will be adequately sized to be in scale with the building, but must not be overly large and/or spaced too closely. Arcade roofs may be flat or sloped to reflect other roof forms on the building. The roof form and roof drainage must be designed to prevent snow shedding, icicle build-up or rainwater dripping over major points of entry into the arcade. Arcade lighting will be provided for safety and for aesthetic quality.

Architectural Details

The Project will use architectural details that reflect local or regional forms and are consistent with the overall building design. The Project will give priority to the detail of door and window trim and building entrances as well as the eave lines of roofs and porch rail, balustrade and columns. The Project will use brackets, struts and columns to support large roof overhangs and balconies extending outward from building walls. These will be well shaped and emphasize the presence of connections to the building wall. Where appropriate, the Project will emphasize structural connections such as bolts, straps, pegs, etc., as opportunities for architectural detail.

Materials

The Project will create interesting building façades through the use of a diverse mix of materials. These building materials will be appropriate to the large scale and climatic extremes of the mountain region. Long-term durability, performance, and quality are important criteria in deciding which materials and finishes are appropriate to the prevailing climatic conditions at Mammoth. Precast concrete, poured-in-place concrete and architectural finished concrete may be appropriate in special conditions where a building is distinctly separate from others and where suitable for the design intent. Exposed structural concrete or non-architectural concrete block buildings will not be acceptable. "Split-faced" or other architecturally finished concrete block may be considered under special conditions for retaining walls and exposed portions of a parking garage and/or foundation wall in locations where visibility is limited. Limited applications of plaster coat will be acceptable, in particular for use on upper levels. Horizontal lap siding, vertical board and batten, or shingle siding (fiber cement) will be painted or stained. Fiber cement siding (such as "Hardiplank" or similar products) is discouraged on lower portions of building elevations. In general, metal or plastic siding materials will not be acceptable. Columns will be timber, log, metal, or stone clad. If metal is used, it must be well detailed. All columns will have base and top details which exhibit good connections to other materials. The use of stone and rock cladding at a structure's base is encouraged to fix the building to the ground.

Architectural Colors

The Project will use complimentary building colors throughout the Project site to create an overall architectural unity while introducing other colors to express individuality and diversity within neighborhoods, projects, or building groupings. The Project will use a variety of colors drawn from the colors found in nature within the Mammoth Lakes region on buildings, window and door trims, eaves, window shutters, signage, and entrance areas to create vitality and will avoid repetition of similar colors that will create a monotone appearance. The consideration of neighboring building colors when using strong, deep trim colors on doors, windows, balcony railings, shutters, and structural details will be taken into account. Building colors will be presented on a color board showing primary material colors for approval before use. Roof colors will be muted rather than bright. All visible metal will be painted to minimize glare. Untreated and shiny metal surfaces will not be acceptable. Where building walls step to

change direction, the wall color may change to emphasize the different façades. Color changes along a building facade will occur at inside, rather than outside corners. Where appropriate, wall colors may be vertically organized to express building modules or materials.

Structured or Underground Parking

The Project will provide underground parking facilities as required by the SSMP for the majority of the development. Surface parking for check in, tour bus, and delivery/service vehicles shall also be provided. Parking structures shall be designed to provide adequate width and height to accommodate most private vehicles. Considerations for height will factor the accommodation of vehicles with rooftop racks or cargo boxes. Design of the parking structures is to be consistent with the overall building design. The exterior and interior will incorporate the appropriate signage and lighting to enable convenient way finding and safety. The exit area will be properly lit to assist the vision of the driver leaving the garage. Placement of control gates will be coordinated with building and driveway design. Parking entrance location will not unduly conflict with pedestrian activity. The garage interiors will be well lit with fixtures that create a general light rather than point source glare. Exterior parking structure lighting will be designed to minimize glare and visible light sources by requiring light sources to be shielded and the light directed downward onto the structure and surrounding grounds. The signage will be appropriately sized, well lit, logical, and clearly visible and will conform to the signage plan for that neighborhood. With the exception of town homes, garages will have elevators and stairways leading to lobby spaces, building entries or assembly areas at upper levels. The elevator lobby area will be welcoming, convenient and easy to locate. The maximum slope of entry drives will not exceed 9 percent unless snow melted or covered by a roof. The quantity and layout for disabled spaces shall conform to ADA parking standards.

Landscape Design and Planting

Landscape Site Work

Landscape site work will be consistent with traditional approaches for the region, and will address current needs, codes, regulations and environmental considerations, and designed to enhance the user experience, safety, and enjoyment. The use of native plants that are indigenous to the Mammoth Lakes region is encouraged. Landscaping shall conform to the Town's adopted water-efficient landscape regulations.

Walls

Walls, embankments, and other retaining structures will be evaluated to assure appropriateness in use of materials, details and construction techniques to adhere to historic or regional forms. Landscape walls will complement and extend the character of adjacent building bases, and the adjacent natural forms. Low walls will be used in pedestrian areas as informal seating; wall widths and materials will be 16-22 inches in places, to allow comfortable sitting. Walls in the landscape are encouraged to be finished with stone. The use of artificial stone must be carefully considered in high maintenance areas. Walls may typically have a core of reinforced poured concrete or masonry blocks, but these surfaces will not be

exposed except in areas with little or no visibility from public areas unless an acceptable architectural finish is used. Where possible, landscape walls will appear to grow out of natural forms such as rock outcrops; larger boulders can be used to anchor ends of stone walls; in many cases stone and boulder faced embankments are a more appropriate solution to achieving grade transition than vertical walls. Wall caps must be a high quality durable material that is consistent and complementary with the wall material and adjacent structures. Wall caps should extend one inch to one and a half inches beyond the wall surface to provide a shadow effect. Where appropriate, use natural rock/boulders to achieve grade transitions.

Stacked Rock and Boulders

As much as practical, retaining systems will be or appear to be stacked rock. Boulders will be placed as prominent features of the site and landscape design and to reflect the pattern of large random boulders and clusters of boulders that occur naturally throughout Mammoth Lakes. Boulders will appear to be from the area. Where appropriate to the design, they will be as large as can be moved. Boulders will be placed in landscape areas and/or water features. Boulders will be incorporated adjacent to buildings, adjacent to and almost intruding into walkways, and as elements incorporated into low stone walls. Where practical, the appearance that the boulders were present and that the buildings and landscape had to be built around them will be created. In some places, a number of boulders will be clustered together to create a rock outcrop. The boulders used must have fairly flat planes so that they nest together. A group of round boulders that do not relate will not be stacked up together. Boulders will be set into the ground to blend with grades. In general, about 1/3 of a boulder will be buried. Boulders will not be perched directly on a finished surface. Stone and boulders will be placed in such a way as to create a natural appearance and will be clustered in some places, singular in others. Boulders will vary in size and placement to avoid uniformity. Boulders will be handled in a manner that will avoid machine scarring of the natural surfaces.

Curbs (Gutters, Swales)

The Project's use of curbs will be limited to situations where they are necessary for the separation of pedestrian/vehicular circulation and for concentration of drainage flows and snow removal. Curbs may be of poured concrete. The use of monolithic poured concrete curb and gutter combinations is permitted. The use of cobble-lined swales in lieu of a concrete curb and gutter is also permissible. Cobble-lined swales will be constructed with select, hand-placed cobble in accordance with Town standards. Drainage swales and gutters within paved areas will be of similar material to adjacent paving; in landscaped areas, swales will be lined with grass, soil, stone or a combination of these or similar materials. In traveled areas, storm inlet grates will be designed to allow bicycles and strollers to pass over them.

Steps, Stairs, and Ramps

The Project's steps will be convenient and safe to use both in summer and winter. Ramps will be employed to create barrier-free access to buildings in accordance with ADA standards. Stairs and ramps will be of materials and design appropriate to building styles and scale. Stairs and ramps may be of concrete, stone, wood or composite material. Typical riser height will range from 4 1/2 to 6 inches and typical tread width will range from 12 to 24 inches. In outdoor use areas these dimensions can vary to allow stepped ramps with wider tread spacing. Both stairs and ramps shall have handrails as required by applicable building codes; handrails, where possible, will be supported by open railings or balusters rather than solid walls; these railings will be integral and consistent with overall building character and represent an opportunity to create design interest either by detail or color or both. All stairs and ramps shall be designed in accordance with standards for safety and accessibility, and must facilitate snow removal through design.

Entries and Pedestrian Walkways (for trails, see "Recreational Amenities").

The Project's building entrances will be sized to accommodate several people together, be weather protected, be well lit, and convey a sense of welcome. This will be achieved with the detailing and color of doors and adjacent frames, slight recessing, lights to highlight the entrance, and quality hardware. The Project will develop pedestrian paths, bridges, or boardwalks that are safe, attractive and supportive of pedestrian activities. Materials and construction will be appropriate to the local and regional setting and complement the architecture and the uses to which they connect. Places of pedestrian ingress and egress will be defined by the architecture of buildings, by arrangements of lights, plants, or flagpoles, by use of landscape elements such as steps and special pavements, and by attractive signs and colors. Path widths are to be designed to accommodate expected pedestrian uses and level of use. (For trails, see "Recreational Amenities"). Pedestrian paths may be of asphalt, pavers, concrete, or ornamental stone; boardwalks and bridges to be constructed typically of wood or composite decks with wood, metal, or stone railings and structure. Boardwalks may be used in some locations under arcades, subject to assessment of noise issues. Major outdoor use areas will be paved in modular concrete pavers, or stone pavers. Colored and or textured concrete may be used in limited areas subject to maintenance considerations. Colors will be relatively neutral and compatible with adjacent building and wall surfaces; in some cases mixed pavements may be used to modulate scale and texture. Asphalt paving may be used in secondary pedestrian lanes. All pedestrian surfaces will have sufficient slope for positive drainage, and be durable enough and designed to accommodate snow removal, snow melt and deicing. Paths in landscaped or natural areas will reflect that setting by meandering form, varying width, and soft edges; these paths may be asphalt, concrete, gravel, wood chips, compacted soil, or decomposed stone. All plazas, paths, boardwalks, and bridges must conform to standards for safety and accessibility.

Utility Screening and Service Areas

The Project will minimize the visual impacts of aboveground utility structures and equipment including transformers, vents, condensers, fans, etc. Minimize the visibility of exterior service and storage areas. Locate equipment enclosures and storage containers in areas of low visibility, away from major public walks and streets and building entrances to the extent practical. Where possible locate utility structures in landscape areas where shrub planting can screen them. Use landscape materials, berms and tree planting, to visually screen exterior service areas, ramps, docks, etc. Painting of utility enclosures in colors compatible with the surrounding landscape palette is encouraged when permitted by utility companies. Where size of structure and location warrant, enclose service areas and utility structures behind walls, fences, or screens. Enclosure material will be consistent with adjacent buildings in materials, detailing, and color.

Utility Boxes and Manholes

The Project will minimize the visual and physical impacts of underground utility access structures. Avoid placing underground vaults and boxes adjacent to building entrances and landings for public stairs and ramps. Use of decorative manhole covers in prominent or visible locations is encouraged. Avoid collecting multiple vaults/boxes in single locations within major pedestrian areas.

Site Furnishings

The Project will provide comfortable, sturdy, attractive seating and furniture types and styles consistent with the architectural vernacular of adjacent buildings. Benches will generally have backs and be constructed of wood or metal; benches without backs and armrests will be used only in locations where a low visual plane must be maintained. Tables and chairs in outdoor use areas will be moveable for flexibility, ease of maintenance and seasonal variation. They will be consistent in scale, color, and detail to fit within respective outdoor spaces and building context. A variety of size, shape and materials will be encouraged over uniformity. Finely detailed furnishings of wood and metal are preferred. Informal seating in the form of low walls, long horizontal steps, and large boulders/rocks will be located adjacent to building entrances, pedestrian walks and outdoor gathering areas. Outdoor tables that can accommodate umbrellas or free standing umbrellas with stands, are recommended to allow sun/shade control; umbrellas will have a variety of sizes, colors and details, yet be consistent with the character of the neighborhood. Trash and recycling receptacles shall be provided in high use pedestrian areas, and shall be constructed of materials that complement adjacent buildings and materials.

Bus/Shuttle Shelters

The Project will include Bus/shuttle shelters sited to facilitate the safety, use and comfort of passengers using transit within the SSMP Project area. Shelters shall be sited to provide adequate distance from adjacent roadways to allow passenger staging, loading and unloading. Shelters, when feasible, shall be located on north and east sides of roadways to allow maximum solar exposure and facilitate snowmelt on

surrounding paved surfaces. Hard surface areas around shelters shall be adequate to serve passenger activities, be durable, and be connected to the local pedestrian trail and walkway network. Quick couplers to allow for water connection will be provided to allow the shelters to be easily cleaned. Shelters shall be constructed of durable materials that are compatible, complementary and consistent with the high mountain environment. Suggested materials include heavy timbers, logs, stone, structural metal and metal connectors, safety glass, etc. Colors of paints, stains, or finishes will be drawn from a palette complementary to the surrounding natural environment. Roof forms shall be designed to hold snow or to shed it away from active pedestrian areas. Shelter walls and orientation shall provide protection from prevailing winds to the extent possible. Signage and user information displays associated with the shelters shall be consistent with "Signage" guidelines and the Town code. Any commercial identification or advertising shall be understated and tasteful and be approved by the Town. Lighting used for shelters and adjacent areas will have shielded light sources so as not to create light spill or glare. See "Lighting" guidelines below.

Kiosks, Informational Boards, Menu Boards

The Project will provide permanent and temporary means for the posting of information, directions, notices, commercial advertising, etc. in a way that is physically and visually pleasing. Kiosks will be designed to reflect architectural detail and proportions of adjacent buildings; roofs will reflect the scale and character of the neighborhood as well as regional styles; materials may include stone for base, wood siding, stucco, or other materials consistent with adjacent building details at the ground level. Function of kiosks may be to provide visitor information, security, small commercial retail opportunities or other guest services. Size of kiosks will be related to function in compliance with regulations. Other informational boards and menu boards are allowed for visitor information and commercial purposes subject to a Master Signage Plan approval; these boards will be tasteful, complementary to the scale and detail of the adjacent neighborhood; they will be protected from weather either by clear covering or overhead protection of eaves, porches and canopies and shall be in conformance with Signage Guidelines. Where kiosks or boards are to allow posting of public notices/information, there shall be strict management requirements for maintaining order and updating information.

Drinking Fountains

The Project will incorporate drinking fountains that will be free standing; size and scale of drinking fountain will be based on proportion and scale of particular space. Material will be consistent with SSMP design context; stone, wood or metal can be appropriate for base/basin; fixtures will be copper, brass and stainless steel. Drinking fountains shall be accessible to the handicapped and have provisions for accommodating small children.

Bollards

The Project will provide attractive means to separate pedestrian and vehicular circulation zones, to restrict access to emergency vehicles, to organize public spaces, or to use as elements of transition between outdoor spaces. Rather than being seen as purely functional elements, bollards will be treated as potential visual features and will have consistency with neighborhood and regional character, and with other landscape elements such as lighting. Materials can be stone, concrete, wood or metal with appropriateness of material determined by location and function of bollard use. Colors can be used as directional devices or accents. Where emergency and/or service vehicle access is necessary, bollards must be easily removable or retractable consistent with Mammoth Lakes Fire Protection District requirements.

Trash Receptacles

The Project will provide functional, sanitary, convenient, visually attractive containers for disposal of refuse. Trash receptacles will have heavy plastic or metal liners removable for emptying trash. Receptacles may be of metal, wood, or concrete and will be sturdy and durable. Receptacles will be complementary in scale, color, and materials to the neighborhood. Receptacles may be freestanding or may be mounted on light poles or bollards. Receptacles will be located conveniently in areas of high pedestrian traffic and use, but not so prominently as to dominate attention or create visual clutter. Receptacles will be small animal and bear-proof containers.

Bicycle Racks

The Project will provide convenient, functional, visually unobtrusive locations for parking bicycles located out of pedestrian flow and close to destinations. Bicycle racks will be located in highly visible areas. Where possible, provide a backdrop for bicycle parking areas with landscape planting or other screening. Do not place bicycle racks in areas where pedestrian movement is impeded or snow removal impaired. Bicycle racks will be located near major entrances and lobbies of buildings. Bicycle racks will be typically of metal or wood and be of a style, detail and color, which are complementary to the neighborhood style.

Banners, Flags and Flagpoles

Flagpoles on the Project site will be used as an architectural element to help define important public spaces, arrival spaces, or ceremonial spaces, etc. Permanent flagpoles will be limited in use so as not to diminish their effect. Flagpoles will be used as landmarks to visually mark important spaces. Because poles have little visual interest at ground level and can contribute to visual clutter, careful attention must be taken to their location and arrangement. Poles will be freestanding, tapered, typically of metal or fiberglass, tops may be of polished brass or bronze. Plastic tubing is not appropriate for flagpoles. Color will be complementary to their surroundings, neutral colors may minimize the impact of flagpoles at pedestrian level.

Fencing

The Project will provide fencing that is functional, attractive, and appropriate. Fence height will not exceed that allowable by Town code without review and approval. Fencing will be appropriate to its function, neighborhood, and regional character; fences will reflect and extend adjacent building details where appropriate. The use of ornamental metal or decorative wood fences is appropriate to define edges of small terraces, garden areas, and pool enclosures. The use of vertical board and batten, or horizontal lapped siding for screening purposes is appropriate.

Tree Grates

The Project will include tree grates to protect the roots of trees. Tree grates will be located within paved areas and snow melted areas only, and to accommodate pedestrian movement in an attractive and safe manner. Grate materials may be heavy cast metal or pre-cast concrete in areas with heavy pedestrian traffic. Grate openings will not exceed 3/16 inches in width. In areas of less intense pedestrian use, tree grates are not required and may be replaced by low perennial plant materials planted at base of tree. Other treatments at tree base may include stone pavers set within a header placed on sand with fairly wide joints to allow penetration of air and water. Round grates may be easier to blend in areas with complex paving patterns; square grates may work well with square or rectangular paving grids.

Plant Containers and Planting

The Project will allow for use of plant materials in situations where in-ground planting is not possible. Plant containers may also be used as elements for defining space, as decorative additions to buildings, etc. Plant containers may be free standing, attached to buildings, such as window boxes, or hanging from structures, lighting standards, or wall brackets. Plant containers will be irrigated. Plant containers shall reflect the colors, materials, styles, and detail of the neighborhood character; they may be constructed from materials such as wood, concrete, stone and metal. Where containers are attached to building exteriors, provisions will be made for appropriate waterproofing and drainage.

The planted landscape on the Project site will incorporate trees and shrubs to revegetate disturbed areas, to buffer or frame views to allow summertime shading of outdoor places, to allow transition in scale and to soften building massing, and to introduce decoration and color into outdoor use areas. Planting on the Project site will use native conifers, deciduous trees, and shrubs. Trees will be primarily coniferous but with an intermixing of deciduous trees species. Trees will be grouped in informal masses rather than uniformly placed. Landscaping will be designed to be in scale with the surrounding public spaces and buildings. Tree canopies in pedestrian areas along roadways, and in outdoor use areas will be high enough to avoid blocking of views of building lobbies, signage, entries, and must provide clearance for emergency vehicles. Shrubs will be used in some locations to screen service areas and to soften the appearance of graded banks. Shrubs can be used to provide a foliage mass with special fall color or wintertime berry effect. Lawn will be planted sparingly within and around outdoor use areas as a simple

green cover and to provide casual relaxing spaces. Ground cover plants may be used on slopes too steep to mow. Meadow grasses and low growing native shrubs will be planted to create a naturalized understory under forest trees. Seasonal flowers will to be planted in high use areas. This includes plant beds in adjacent building entrances, flower boxes or pots on balcony rails and at windowsills, and in relationship to outdoor use areas. Plant materials in general will emphasize use of native plant species and low water requiring materials as required by Town code. Artificial plants or lawn will be prohibited. Irrigation will be installed in all landscape areas as required for maintenance. Drip irrigation will be used in non-lawn applications where possible.

Lighting

The lighting needs at the Project site will vary according to the type and intensity of use. Varying illumination levels will be developed which address the particular needs of outdoor spaces and activities: safety, security, vehicular and pedestrian movement, retailing, signage, etc. Excessive illumination will be avoided and lighting will be designed and placed that minimizes glare and reflection and to maintain 'dark skies'. Interior light escaping through windows could be minimized by the use of tinted glass or clear glass that has equivalent or less light transmission. Low-e glass could be used to increase overall efficiency.

Special Events Lighting

The Project will create opportunities for special lighting related to single events, seasonal displays, and ceremonial functions. Adequate weatherproof outdoor electrical receptacles in outdoor use areas from which power for lighting and sound may be pulled will be provided. In addition, adequate weatherproof outdoor electrical receptacles adjacent to specific trees, structures or other outdoor elements which may be lit for seasonal and holiday display will be provided.

Streets and Roadways

Lighting fixtures will typically be mounted on poles at 15 feet - 24 feet height with efficient lamp types (metal halide, high-pressure sodium, or other white light source). Illumination levels will be highest at intersections and along roadways carrying most traffic. Fixtures will be of a cutoff type designed to shield the light source and reduce light spill and glare at adjacent buildings and outdoor areas. Fixtures and supporting poles will be placed in locations which minimize visual impact (for instance, where trees and other landscape elements create an appropriate vertical backdrop). Illumination levels along roadways will provide minimum requirement for safety and directional orientation and be consistent with local policies and zoning regulations concerning roadway illumination levels. Fixture locations will be staggered rather than formally arranged. The intent is to preserve the mountain rural character rather than creating an urban one. Fixtures must be clear of snow storage areas.

Drop-off Parking, Transit Stops, and Service Areas

Lighting fixtures will typically be mounted on poles at 15 feet - 20 feet height or on building walls where appropriate. Metal halide, high-pressure sodium, or other efficient white lamp sources will be used. Illumination levels will be high enough to allow safety for vehicular and pedestrian circulation and service activities. Fixtures will be of cutoff design to shield the light source and eliminate spill and glare into adjacent areas. Where possible, particularly in parking areas, fixtures will be within landscaped areas. This is preferable to poles and fixtures standing alone. Fixtures will be clear of snow storage areas. Light fixtures will be decorative as well as functional with detail and ornamentation that complements architectural styles and elements.

Pedestrian Areas, Walkways, Outdoor Use Areas (Heavily Traveled)

Lighting fixtures will typically be mounted on poles, building walls or other locations. Bollard lights along walkways will be permitted if provisions for snow melt or snow removal is employed. Color corrected metal halide; high-pressure sodium, fluorescent or incandescent light sources are encouraged. Mercury vapor and low-pressure sodium sources will not be permitted. Illumination levels will be high enough to facilitate safe pedestrian travel, directional orientation and safety but not to create a bright, overly lit pedestrian environment. Use of cut off lighting fixtures (flat glass lens that eliminates or minimizes direct glare with no upward throw of light) will be used to prevent glare and light spill. Emphasis will be placed on creating higher illumination levels at building entrances, stairs, ramps, major pedestrian spaces, decision points, etc. General lighting will not overwhelm other secondary light sources used for signage, etc. Light fixtures will be decorative as well as functional with detail and ornamentation, which complements architectural styles and elements.

Pedestrian Paths, Trails, Parks (Less Traveled)

Lighting fixtures will be mounted on poles, bollards, etc., at heights between 3 feet to 15 feet. Lighting fixtures may be mounted in trees if there is no penetration of the tree trunk. Light sources may be high-pressure sodium, color corrected metal halide, fluorescent and incandescent. Low voltage fixtures may be used when appropriate for the intended uses. General lighting and illumination levels will be subdued. Lights should serve primarily as directional cues and used for safety at stairs, ramps and other areas that require visibility. Use of cut off lighting fixtures will be used to prevent glare.

Accent, Special Purpose, Decorative Lighting

Lighting fixtures will be mounted on buildings, poles, or ground locations at heights as required. High-pressure sodium, metal halide, incandescent, etc. will be used. Decorative lighting in trees will be appropriate for seasonal displays. Illumination of signs, building elements, landscape features, fountains or other significant elements is appropriate for special lighting effect. Fixtures, especially freestanding at ground level or installed in the ground, must be shielded to prevent glare and located in landscaped areas where the fixture is not a hazard to pedestrians.

Signage Lighting

Lighting fixtures typically incandescent, quartz or fluorescent, will be used for illuminating individual signs. Fixtures should be aimed and shielded to prevent glare. Neon lighting is discouraged as display lighting or signage illumination. Signage will be lit by external sources rather than by internally lit signs. Light fixtures will be unobtrusive and detailed to blend with and complement architectural detailing.

Signage

The Project will provide signage that is clear, understandable and attractive but which also creates a memorable environment and sense of place. The signage will reflect the character of the Project with regard to materials, form and use. A master sign plan will be prepared that will allow an implementation of a comprehensive signage program. Signage form and quality will relate directly to its purpose, context and location. Signage will inform and direct, but in a manner and style which creates a memorable impression. As such, signage will provide an opportunity to introduce architectural, whimsical, historical and/or sculptural character.

Regulatory and Directional

The Project will create a system of sign types that facilitate specific activities within public areas. Signage will primarily be used to communicate traffic and parking regulations. Regulatory signs will be standardized, yet be given unique character and identification within the Project by sign shape, graphic style, color or materials. Regulatory signs will be minimized and will be sized, mounted and placed with care to limit visual intrusion. Directional/identification signage will primarily be used to orient and direct visitors both in vehicles, on foot, or on bicycle. Directional/identification signage will be large enough to make information legible and to facilitate decision making (particularly from a car). Sign materials may vary considerably but should be consistent with regional character, the local neighborhood, and nearby architectural elements. Where possible, visually integrate directional/identification signs within the landscape context.

Commercial Signage

The Project will encourage attractive, appropriate, tasteful signage for commercial/retail identification. Signs will not be positioned so as to obscure any important architectural details. Monument signs may be employed for large commercial uses such as hotels. Monument signs will be integrated within the landscape and employ the use of materials appropriate to a mountain location. Projecting signs perpendicular to building faces are encouraged for retail uses. These will be positioned along the first floor façade at a level which allows good visibility from pedestrian areas but high enough to allow site clearance where required (8.0 feet minimum clearance). Projecting signs will be placed to emphasize special shapes, details or projections that characterize a particular façade, to draw attention to shop entrances or to emphasize window displays. Signs should be supported by brackets, which can be decorative as well. Each retail business will be allowed a single projecting sign. Window signs will not

obscure views into the business and will only be approved when they enhance the storefront. Flush mounted signs, when used, will be positioned within architectural features, such as transom panels above doorways, etc. Signs may be located on awnings or canopies when they are part of the building facade.

Sign Shape and Materials

The Project signs, which are symbolic and/or sculptural, are encouraged because they create visual interest and complexity. Sign shapes will be interesting but not overly complex. Materials will be durable and easy to maintain. Materials will be expressive of regional character and the local neighborhood as well as compatible with building finishes. Appropriate materials will include wood, high density polyurethane with simulated wood grain, metal, stone, glass, and acrylic. Materials may be painted and finished in a variety of ways.

Graphics

The signage lettering will be of sufficient size and of a style that is easily read. No more than two letter fonts on a single sign. As a general rule, letter forms should occupy no more than 75 percent of total sign panel area.

Illumination

Illumination external to the sign surface is required with lighting directed at the sign. Light sources for signage should be shielded and light levels should not compete with other functional lighting. Neon signs are discouraged.

Phasing & Schedule

The Project has been organized so that it will be developed in several phases. Each phase will stand-alone and operate successfully as a complete entity so that The Project is attractive and inviting throughout the entire development. Each phase will be coordinated with surrounding land uses, vehicular circulation, emergency access routes, and pedestrian bike and trail systems so that visitors are clearly guided and that there are logical transitions within the circulation network. Most construction phases will last approximately 18 to 24 months but some may be as long as 24 to 30 months. Some phases may be under construction simultaneously. Construction activities are proposed to be complete in 2012.

C. PROJECT OBJECTIVES

The objectives of the Project are as follows:

- To produce a development design that is appropriate to the character of the Mammoth Lakes region.
- To enhance the Town to be comparable to other high-quality mountain resort destinations in North America.
- To refocus the remaining development within the Master Planning Area toward the creation of transient occupancy units, establishment of a more efficient transportation and circulation system, and the development of additional affordable housing units and hotel and condominium units.
- To provide bicycle and pedestrian trails connections to existing trails and other town-wide circulation systems.
- To provide development that is responsive to the existing and expected future resort housing and hotel demand within the Town.

D. DISCRETIONARY ACTIONS

The Town of Mammoth Lakes is the lead agency for the Project. In order to construct the Project, the approval of the following discretionary actions will be required:

- District Zoning Amendment[1]
- Conditional Use Permit
- Design Review
- Tentative Tract Maps

[1] *The District Zoning Amendment is a one time action to approve the SSMP and does not occur at each project application.*

This Draft EIR serves as the environmental document for all discretionary actions associated with development of the Project. This Draft EIR is intended to be the primary reference document in the formulation and implementation of a mitigation monitoring program for the Project. This Draft EIR is also intended to cover all federal, state, regional and/or local government discretionary approvals that may be required to develop the Project, whether or not they are explicitly listed below. Federal, state and regional agencies that may have jurisdiction over the Project include, but are not necessarily limited to:

- US Army Corps of Engineers
- California Department of Transportation
- California Department of Fish & Game
- Great Basin Unified Air Pollution Control District (GBUAPCD)
- Lahontan Regional Water Quality Control Board (RWQCB)
- Mammoth Lakes Fire Protection District
- Mammoth Community Water District

IV. ENVIRONMENTAL IMPACT ANALYSIS
A. IMPACTS FOUND TO BE LESS THAN SIGNIFICANT

INTRODUCTION

Section 15128 of the CEQA Guidelines states:

> *"An EIR shall contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR."*

An Initial Study (IS) was prepared for the Project in September 2005 (see Appendix A). Based on the analysis contained in the study, it was determined that implementation of the project would not result in significant environmental impacts to the environmental impact topics listed below and therefore, are not discussed in detail in Section IV of this Draft EIR. (Some potential impacts are discussed in the various sections of Section IV and were determined to be less than significant; those issues are not discussed below.)

AGRICULTURAL RESOURCES

The Project would not convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use. The Project is not proposed on agricultural land nor is the land recognized as having the soil characteristics of important, prime or significant agricultural land. Thus, no further analysis of this issue is required.

The Project would not conflict with existing zoning for agricultural use or a Williamson Act contract. The Project site is not zoned for agricultural use and is not under Williamson Act contract. Thus, no further analysis of this issue is required.

The Project would not involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use. No agricultural land uses are located in proximity to the Project site. Thus, no further analysis of this issue is required.

HAZARDS AND HAZARDOUS MATERIALS

The Project would not create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials. The Project would not involve the routine transport, use or disposal of substantial quantities of hazardous materials. The Project would involve the development of residential (including hotel and resort), retail, and conference center/commercial land uses and would only involve the use of common household and maintenance solvents typically associated with such activities. As such, no impact would occur.

The Project would not create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the likely release of hazardous materials into the environment. The Project would not involve the routine transport, use, or disposal of substantial quantities of hazardous materials. Therefore, the Project would not have the potential to create upset or accidental release of substantial quantities of hazardous materials and no impact would occur.

The Project would not emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an exiting or proposed school. The Project site is not located within one-quarter mile of any existing or known proposed schools. Furthermore, the Project would not involve the routine transport, use, disposal, or accidental release of substantial quantities of hazardous materials. Therefore, the Project would not have the potential to emit substantial quantities of hazardous materials within one-quarter mile of an existing or proposed school and no impact would occur.

The Project is not located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, nor would the project result in a safety hazard for people residing or working in the project area. Therefore, the Project would not have the potential to result in an aircraft-related safety hazard for people residing or working in the project area and no impact would occur.

The Project is not within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area. Therefore, the Project would not have the potential to result in an aircraft-related safety hazard for people residing or working in the project area and no impact would occur.

The Project would not impair implementation of, or physically interfere with an adopted emergency response plan or emergency evacuation plan. The Project would not affect an emergency response plan. While the Project would introduce new development to the Project site, such development would conform with all applicable local, county, regional, State, and federal regulations pertaining to emergency safety. As such, the Project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan and no impact would occur.

The Project would not expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands. The Project site is located near the center of the Town of Mammoth Lakes and, although the Project site contains existing forest, the Project would not present any greater risk than would have been created under the existing Lodestar Master Plan land use designations for the Project site. Therefore, the Project would not expose people or structures to a significant risk of loss, injury or death involving wildland fires and no impact would occur.

MINERAL RESOURCES

The Project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state. A significant impact may occur if a project is located in an area used or available for extraction of a regionally-important mineral resource and the project converted an existing or potential future regionally-important mineral extraction use to another use or if the project affected access to a site used or potentially available for regionally-important mineral resource extraction. No mineral extraction activities are presently conducted or proposed on the Project site. Therefore, the Project would not result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state. Therefore, no impact would occur and no further analysis of this issue is required.

The Project would not result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. The Project site is not within the designated boundaries of any general, specific or land use plan designated for the extraction of any locally-significant mineral resources. Therefore, no impact to the loss of availability to locally-important mineral resources would occur. Therefore, no impact would occur and no further analysis of this issue is required.

RECREATION

The Project would not increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. A significant impact may occur if a project includes substantial employment of population growth which could generate a demand for park or recreational facilities that exceed the capacity of existing parks or recreational and causes premature deterioration of the facilities. Maintenance of public parks and recreational facilities in Mammoth Lakes is funded largely through the City general fund, through the Quimby Act and other park fees. The Project would not place an additional generation of demand on existing neighborhood and regional parks, and subsequent accelerated deterioration of the parks. As demand for park services by the Project is considered to be negligible, project impacts on maintenance of those facilities would likewise have no significant impact and no further analysis of this issue is required.

The Project would include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment. A significant impact may occur if a project includes the construction or expansion of park facilities and such construction would have a significant adverse effect on the environment. The Project is viewed as a resort recreation center with residential uses, outdoor use areas, and multiple options for recreational amenities. These include the Sierra Star golf course, recreational trails and walkways, the golf course lake, individual pools, spas, and water play areas associated with resort hotels and hotels. As previously stated, the Project's recreational amenities in conjunction with the Town's current facilities and the collection of Developer Impact Fees that support the Town's park and recreation fund would be adequate to accommodate the

Project's demand for parks and recreational services.[1] The Project provides for on-site recreational amenities and would not involve the need for construction or expansion of off-site public recreational facilities. Therefore, no significant impacts would occur and no further analysis of this issue is required.

[1] *Town of Mammoth Lakes Municipal Code Chapter 15.16 §15.16.085 part E, CAJA staff, April 14, 2006.*

IV. ENVIRONMENTAL IMPACT ANALYSIS
B. AESTHETICS

INTRODUCTION

This section addresses the subject of aesthetics with respect to the Project and includes a description of existing visual conditions and an evaluation of potential aesthetic effects associated with implementing the Project. Computer-generated visual simulations illustrating "before" and conceptual "after" visual conditions at the Project site as seen from three representative public vantage points are presented as part of the analysis. Digitized photographs and computer modeling and rendering techniques were used to prepare the simulation images.

In addition, this section addresses the subjects of nighttime illumination, daytime glare, and the effects of shade/shadow from proposed buildings. Computer models were used to determine approximate shadow patterns emanating from proposed buildings during the summer solstice, winter solstice, and spring and fall equinox.

ENVIRONMENTAL SETTING

Regulatory Framework

The Town of Mammoth Lakes (Town) is a recreation resort community located in the Eastern Sierra and contains a plethora of mountain meadows, creeks, mountain vistas, forests, and wildlife. Visitors enjoy the fishing, skiing, snowboarding, hiking, camping, bicycling, and other recreational pursuits throughout the year. To ensure the preservation of existing valuable visual resources and the Town's visual character, regulations and requirements pertaining to views and aesthetics have been integrated into the 1987 General Plan as well as the Mammoth Lakes Municipal Code.

The current General Plan of the Town was adopted in 1987. Although a recent update to that General Plan has been drafted, it has not been adopted. Because the adoption of the Draft General Plan is an ongoing process, the standard for analysis used in this Draft EIR is based on the 1987 General Plan. Therefore, the relevant policies that address aesthetics resources from the adopted 1987 General Plan are addressed below.

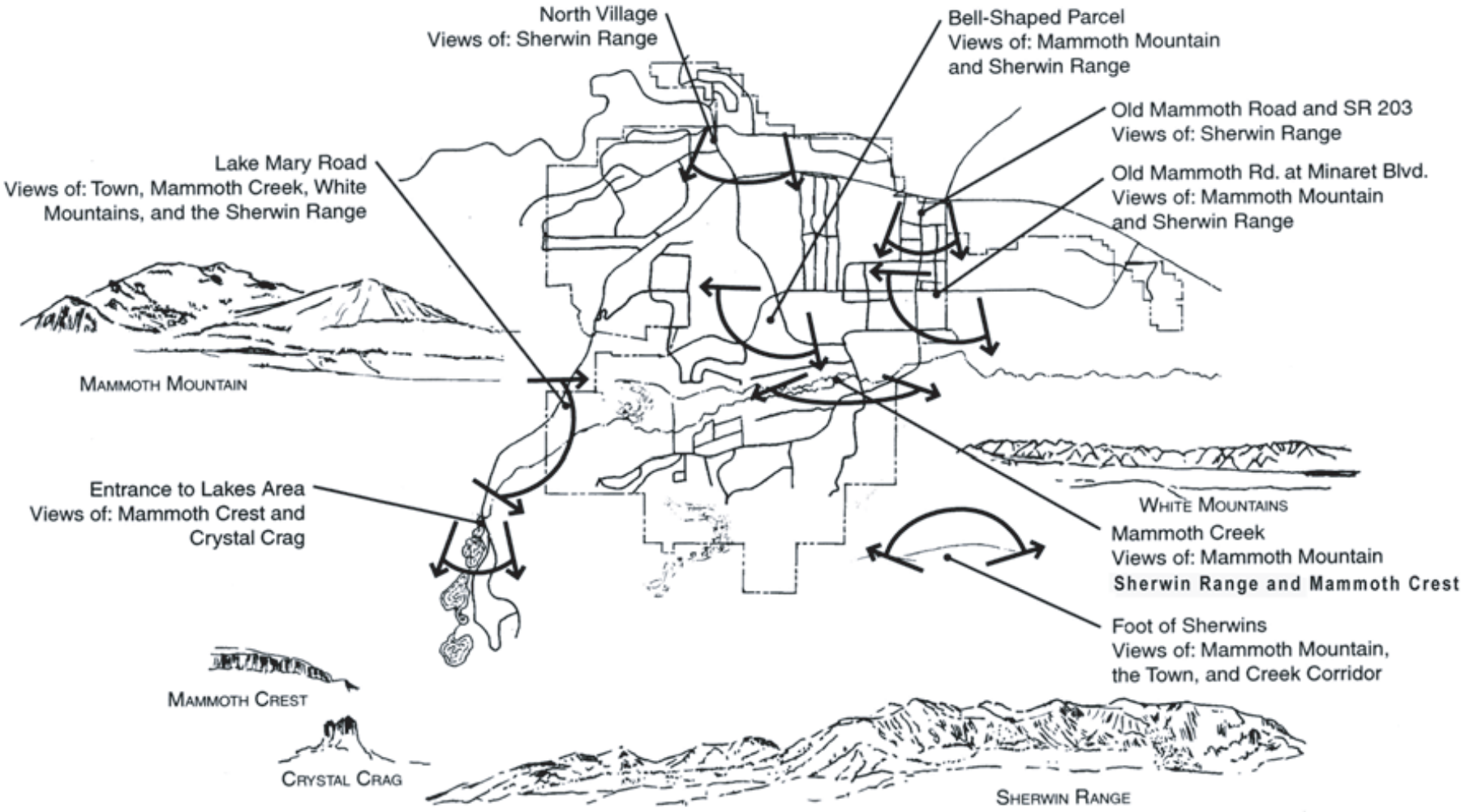
Mammoth Lakes Municipal Code Section 17.32.120 sets forth the design review process and authority. The Design Guidelines for the Town, in accordance with Mammoth Lakes Municipal Code Section 17.32.120, are a communication tool to assist the Town in guiding and evaluating both renovation of existing and new development projects. The Mammoth Lakes Municipal Code also sets forth design criteria for Signs and Outdoor Lighting (Section 17.40 and Section 17.34, respectively).

Adopted General Plan (1987)

Visual resources are addressed in the Conservation and Open Space Element of the Town's 1987 General Plan. As discussed therein, the Town's dramatic visual setting is one of the major attractions to residents and visitors.

According to the adopted 1987 General Plan, a viewshed is a visually significant area which may be viewed from the Town, along roadways to and within the community, and from other areas utilized by residents and visitors. Significant viewpoints in Mammoth Lakes include the ski slopes on Mammoth Mountain, Sherwin Bowl, Lake Mary Road, State Highway 203 east of Old Mammoth Road, Old Mammoth Road south of Mammoth Creek, the Gateway District – particularly along State Highway 203 and the Meridian extension, and U.S. Highway 395. Significant vistas may also occur in the space between buildings and properties, called "subvistas," and should be retained where appropriate.

Several policies in the adopted 1987 General Plan are applicable to the Project with respect to visual resources. Consistency with these policies is analyzed below under "Environmental Impacts."



Source: Town of Mammoth Lakes, General Plan, April 2005 (revised September 2005), Page ES-11.

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Environmental Planning and Research

Figure IV.B-1
Major View Corridors and Vistas

Design Guidelines

The Design Guidelines for the Town (the "Design Guidelines") are "intended to bring a comprehensive and unified approach to the review of development projects so that integration of individual projects can create an attractive community."

The Design Guidelines are based on core community values to guide future development to ensure that the Town retains its uniqueness as a mountain resort. The community values include the following:

- Mammoth Lakes' unique eclectic character;
- Identifiable neighborhoods;
- Maintenance of important views and vistas;
- The natural beauty of Mammoth Lakes;
- Healthy forest;
- Understandable, convenient and complete pedestrian, bike and transit connections;
- Building scale and proportions appropriate to a pedestrian environment;
- Use of natural, regional materials in the built environment;
- Encourage integrated systems design; and
- Environmentally sensitive design.

Each of the community values has associated design principles detailed in the Design Guidelines. The design principals are expressed throughout the Design Guidelines in the form of specific objectives and guidelines. The six objectives in the Design Guidelines include the following:

- **Site Design.** Proposed developments shall address the opportunities and limitations of the site and its surroundings. Integrate the relationship between the site's topography, existing vegetation, other natural features, adjacent properties, views, solar access, the uses proposed and the development plan.
- **Architectural.** The architectural style of buildings within the Town is currently diverse and of an eclectic quality. Residents and property owners identify with this character and would like to see it maintained, while improving the general quality of the built environment, pedestrian spaces and pedestrian relationships to buildings.

- **Landscape and Public Space.** The objective of any landscaping plan shall be to create a pleasant setting and to preserve and enhance the natural landscape character of the development area. The scale and overall design shall be such that new vegetation and landforms blend with the natural environment.

  Removal of trees, shrubs, and non-hazardous native plant materials generally shall be limited to that essential for development of the site.

  Each development application shall evaluate any and all existing trees on-site greater than six inches in diameter at shoulder height, and substantiate proposed removal to the Town. New vegetation should be of substantial size and variation to resemble a natural pre-disturbance condition.

- **Lighting.** Outdoor lighting plays a significant role in creating safe pedestrian environments, establishing character in the town and highlighting special features of the built environment. Ensure that exterior lighting conforms to the Municipal Code Chapter 17.34 – Ordinance No 03-09 "Outdoor Lighting" in addition to these Design Guidelines.

- **Signage.** Signage should reflect the character of the neighborhood with regard to materials, form and use.

  Signage form and quality should relate directly to its purpose, context and location.

  Signage should inform and direct, but in a manner and style which creates a memorable environment, particularly within pedestrian zones. As such, signage provides an opportunity to introduce whimsical, historical and/or sculptural character.

- **Outdoor Sales/Storefront Displays.** Outdoor sales, public events, and storefront displays provide the opportunity for businesses and event sponsors to create an attractive environment, adding interest and activity to the streetscape, and attracting residents/tourists and pedestrians/shoppers.

Mammoth Lakes Municipal Code

The Mammoth Lakes Municipal Code sets forth rules and regulations governing the design, use, and display of lighting and signs within the Town. It is acknowledged in the Mammoth Lakes Municipal Code that the economy of the Town is dependent upon aesthetics, as it is a tourist-based economy. Lighting and signs have the potential to substantially impact the environment and, as such, affect the local economy.

Outdoor Lighting

Chapter 17.34 of the Mammoth Lakes Municipal Code sets forth rules and regulations for outdoor lighting within the Town. The purpose of Chapter 17.34 is to accomplish the following:

- To promote a safe and pleasant nighttime environment for residents and visitors;
- To protect and improve safe travel for all modes of transportation;
- To prevent nuisances caused by unnecessary light intensity, direct glare, and light trespass;
- To protect the ability to view the night sky by restricting unnecessary upward projection of light;
- To phase out existing non-conforming fixtures that violate this chapter, including those owned by the Town and other public agencies; and
- To promote lighting practices and systems to conserve energy.

Section 17.34.060 of the Municipal Code requires that an Outdoor Lighting Plan be submitted in conjunction with an application for design review approval; a conditional use permit; subdivision approval; or, a building permit for a new structure or addition(s) of 25 percent or more in terms of gross floor area, seating capacity, or parking spaces (either with a single addition or cumulative additions). An Outdoor Lighting Plan is required for all new outdoor lighting installations on commercial (including four or more units of multi-family residences), industrial, public and institutional properties.

Signs

Chapter 17.40 of the Mammoth Lakes Municipal Code sets forth rules and regulations governing the display of signs within the Town. The purpose of Chapter 17.40 is to achieve the following:

- Recognize that commercial signs are a necessary means of useful communication for the convenience of the public;
- Regulate the number, location, height, size, design, construction, color and illumination of signs in order to maintain and improve the image, attractiveness and environmental qualities of the town;
- Preclude sign size and placement from conflicting with the principal permitted use of the site or adjoining sites;
- Regulate sign size in relationship to the scale of the street frontage and/or building face where such signage is to be placed;

- Enhance the attractiveness and economic well-being of the Town as a place to live, vacation and conduct business while cultivating the town's premier status in an increasingly competitive resort market;

- Protect, preserve and enhance the unique aesthetic character, beauty and charm of the Town, and thereby encourage the continued development of tourism within the town;

- Protect the public from hazardous conditions that can result from commercial signs which are structurally unsafe, obscure the vision of motorists, create dangers to pedestrian traffic, or which compete or conflict with necessary traffic signals and warning signs;

- Avoid the creation of a "tourist trap" atmosphere which can result when business enterprises compete for attention through the use of commercial advertising signs, and promote an overall visual effect which has a minimum of clutter;

- Eliminate distracting lighting and excessive glare by reasonably limiting the illumination of signs to subdued, adequately shielded or concealed light sources;

- Encourage the construction of commercial signs of natural materials which are aesthetically pleasing and are compatible with natural surroundings and the buildings to which they identify; and

- Retain permit affordability in order to promote maximum applicant revenues being used for creative signage.

Existing Visual Character

Project Site

The Project site is characterized by groves of alpine trees interspersed with an existing golf course and pockets of single-family and multi-family residences. The topography of the Project site is relatively flat with a gentle slope towards the southwest. Minaret Road, a north-south roadway, transects the Project site.

As illustrated in Figure III-1, Development Areas/Land Use, in Section III, Project Description, the Project consists of the following Development Areas: Area 1D consists of 1.2 acres and is located in the southwestern portion of the site; Area 2A consists of 4.2 acres and is located in the central portion of the site; Area 2B/2C consists of 8.5 acres and is located adjacent to the northern boundary of Area 2A; Area 2D consists of 4.0 acres and is located north of Area 2B/2C; Area 4A consists of 3.6 acres and is located in the northeastern portion of the site; Area 5A consists of 6.1 acres and is located in the central-southern portion of the site; Area 5B/5C/5D consists of 10.3 acres and is located adjacent to the northwestern

boundary of Area 5A; and Area 7 consists of 2.3 acres and is located adjacent to the southern boundary of Area 5A. The existing on-site land uses are discussed in detail in Section IV.I, Land Use and Planning.

Area 1D

Area 1D currently contains eight residential units that have been built or are under construction. Area 1D and its surrounding area have an alpine character; containing alpine forests intermixed with multi-family and single-family residences. Lodestar Drive, a north-south roadway, is located directly to the west of Area 1D and terminates near the northern boundary of Area 1C where the single-family residential lots are located within the "Crooked Pines" area. Mammoth Green is a short roadway extending from the northern terminus of Lodestar Drive in an arc toward the southeast.

Area 2A

Area 2A is currently undeveloped and contains a grove of alpine trees flanked on the west, east, and southeast by an existing golf course. Minaret Road delineates the southern boundary of Area 2A.

Area 2B/2C

Area 2B/2C is currently undeveloped and contains a grove of alpine trees flanked on the north, east, and west by an existing golf course.

Area 2D

Area 2D is currently undeveloped and contains a grove of alpine trees. North of Area 2D, there are existing commercial and multi-family residential land uses, fronting Main Street.

Area 4A

Area 4A is currently undeveloped and contains a grove of alpine trees flanked on the south and west by an existing golf course. Existing single and multi-family residences are located to the east of Area 4A, along Joaquin Road.

Area 5A

Area 5A is mostly undeveloped, and contains a grove of alpine trees and Bear Lake to the southwest. Existing trees are interspersed throughout Area 5A. Sierra Star Parkway extends along the eastern boundary of Area 5A. An existing golf course flanks the southern boundary of Area 5A.

Area 5B/5C/5D

Area 5B/5C/5D is mostly undeveloped and contains a grove of trees flanked on the west, south, and northeast by an existing golf course. The grove of trees in Area 5B/5C/5D extends beyond its northwestern boundary.

Area 7

Area 7 is undeveloped with trees. Sierra Star Parkway extends along the eastern boundary of Area 7.

Surrounding Area

The Project site is bounded to the east, south and west by Lodestar Master Plan (LMP) developments that have been constructed, are under construction, or are approved for construction. The Village at Mammoth resort area is located to the northwest of the Project site. The northern boundary of the Project site is dominated by existing commercial businesses, which front Main Street and Lake Mary Road.

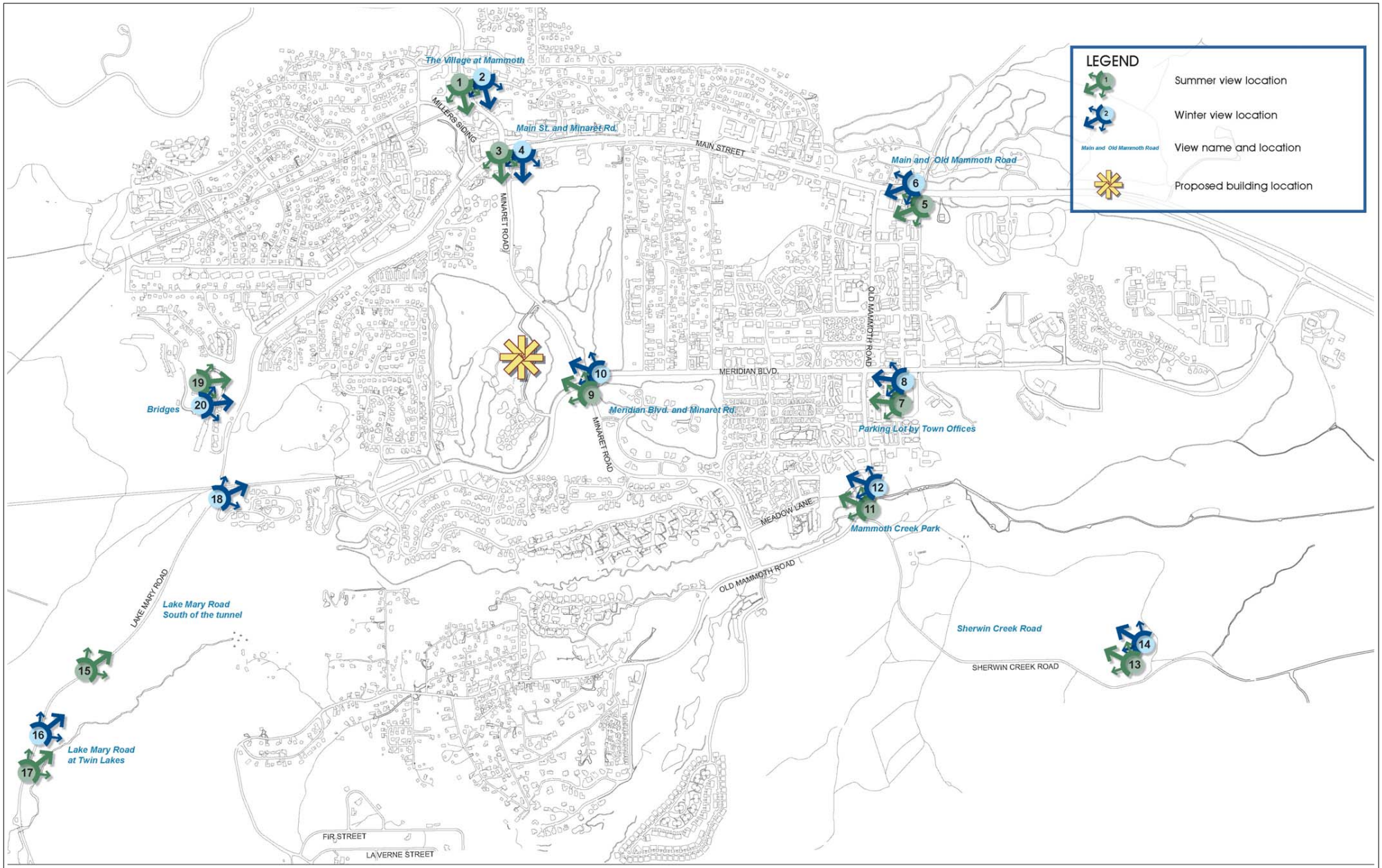
The LMP set development standards for an approximately 226-acre site situated around the Sierra Star Golf Course (Area G, 112 acres located west of Minaret Road and north of Meridian Boulevard as well as in the southeast corner of the intersection of Minaret Road and Meridian Boulevard). The LMP envisioned the development of a major commercial, residential, and recreational hub within the Town including 1,263 residential units and 80,000 square feet of proposed commercial space. Currently, a total of 457 residential units have been developed or approved under the LMP. No commercial space has been developed. Residential units that have been developed include a 46-unit condominium development (Area 1A, Mammoth Green), a 24-unit condominium project (Area 1B), an 11-lot single family residential subdivision (Area 1C, Crooked Pines), an eight-unit apartment building (Area 1D), a 54-lot single family residential subdivision (Area 3, Starwood), a 35-unit workforce housing development (Area 4C, The Chutes), and a 32-unit townhome condominium project (Area 5F, The Timbers). A 58-unit condominium project (Area 5E, Solstice) and a 19-unit fractional share single-unit residential development (Area 6, Tallus) are currently under construction and a 40-unit workforce housing condominium project (Area 4B/4E) and a 28-unit townhome condominium project (Area 5G, Woodwinds) were recently approved within the Master Plan area. Additionally, 44-units (4D, Mammoth Crossing) were sold to Western Resort Properties. The 4D: Mammoth Crossings (Lode*Star) project was approved by the Planning Commission on February 14, 2007 with 44 units of density.

Existing Viewsheds

Viewsheds refer to the visual qualities of a geographical area that are defined by the horizon, topography, and other natural features that give an area its visual boundary and context, or by development that has become a prominent visual component of the area. In the area surrounding the Project site, the existing viewsheds are defined primarily by major view corridors and vistas (see Figure IV.B-1) as well as the nearby roadways (e.g., Main Street/Lake Mary Road, Meridian Boulevard, and Minaret Road). The

major view corridors and vistas that could be potentially affected by the development of the Project as well as other viewpoints of interest are identified and discussed in detail below. The locations of all of these viewpoints are depicted in Figure IV.B-2, Viewpoint Location Map.

Public views are those which can be seen from vantage points that are publicly accessible, such as streets, freeways, parks, and vista points. These views are generally available to a greater number of persons than are private views. Private views are those which can be seen from vantage points located on private property. Private views are not considered to be impacted when interrupted by land uses on adjacent parcels, specifically if the Project complies with the zoning and design guidelines applicable to the site.



Not to Scale

Source: Integrated Design Studio, 2007

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NORTH

Figure IV-B-2
Viewpoint Location Map

Public Views and Scenic Vistas

Throughout the Town, there are numerous places where views of the Project site are publicly accessible. Several locations were chosen to represent the views that could potentially be affected by the development of the Project. These views are depicted as Views 1 through 20 in Figures IV.B-3 through IV.B-12 and are identified in Figure IV.B-2.

The Village at Mammoth (Views 1 and 2)

The view towards the Project site from The Village at Mammoth, north of Main Street/Lake Mary Road along Minaret Road is shown in Views 1 and 2 in Figure IV.B-3. The vantages of Views 1 and 2 are identical, while View 1 was photographed during non-snow conditions and View 2 was photographed during snow conditions. As shown therein, existing commercial, retail, and hotel structures dominate the view from The Village at Mammoth towards the Project site during both the summer and winter seasons. The prominent features in Views 1 and 2 include the existing structures that comprise The Village at Mammoth to the east and south, Meridian Road, and low-rise retail structures interspersed with trees to the west.

Main Street and Minaret Road (Views 3 and 4)

The view towards the Project site from the intersection of Minaret Road and Main Street/Lake Mary Road is shown in Views 3 and 4 in Figure IV.B-4. This view corresponds to the North Village Viewpoint identified in the General Plan. The vantages of Views 3 and 4 are identical, while View 3 was photographed during non-snow conditions and View 4 was photographed during snow conditions. As shown therein, this view is dominated by an existing alpine forest on the Project site and mountains (the Sherwin Range) in the background. An existing low-rise commercial structure is visible in the foreground, at the southeast corner of Minaret Road and Main Street.

Main Street and Old Mammoth Road (Views 5 and 6)

The view towards the Project site from the intersection of Main Street and Old Mammoth Road is shown in Views 5 and 6 in Figure IV.B-5. This view corresponds to the Old Mammoth Road and SR 203 Viewpoint identified in the General Plan. The vantages of Views 5 and 6 are identical, while View 5 was photographed during non-snow conditions and View 6 was photographed during snow conditions. As shown therein, this view is characterized by existing low-rise retail development and associated parking. Existing trees dominate the background.

Town of Mammoth Lakes Office Parking Lot (Views 7 and 8)

The view towards the Project site from a parking lot located at the Town of Mammoth Lakes Offices is shown in Views 7 and 8 in Figure IV.B-6. The vantages of Views 7 and 8 are identical, while View 7 was photographed during non-snow conditions and View 8 was photographed during snow conditions.

As shown therein, this view is characterized by the existing parking lot and low-rise commercial structures, with the existing alpine forest and mountains in the background.

Meridian Boulevard and Minaret Road (Views 9 and 10)

The view towards the Project site from the intersection of Meridian Boulevard and Minaret Road is shown in Views 9 and 10 in Figure IV.B-7. This view corresponds to the Bell-Shaped Parcel Viewpoint identified in the General Plan. The vantages of Views 9 and 10 are identical, while View 9 was photographed during non-snow conditions and View 10 was photographed during snow conditions. As shown therein, this view is characterized by existing trees surrounding an existing golf course during non-snow conditions. During snow conditions, the existing trees dominate a gently sloped snow field in this view.

Mammoth Creek Park (Views 11 and 12)

The view towards the Project site from Mammoth Creek Park is shown in Views 11 and 12 in Figure IV.B-8. This view corresponds to the Mammoth Creek Viewpoint identified in the General Plan. The vantages of Views 11 and 12 are identical, while View 11 was photographed during non-snow conditions and View 12 was photographed during snow conditions. As shown therein, this view is characterized by existing low-rise structures and parking areas in the foreground and trees in the background during non-snow conditions. During snow conditions, the parking areas are blanketed with snow, which transforms the view into an alpine snow-field interspersed with trees.

Sherwin Creek Road (Views 13 and 14)

The view towards the Project site from Sherwin Creek Road is shown in Views 13 and 14 in Figure IV.B-9. The vantages of Views 13 and 14 are different due to access limitations during snow conditions. View 13 depicts non-snow conditions and View 14 depicts snow conditions. During non-snow conditions, shown in View 13, this view is dominated by a field of low-lying vegetation, with a grove of trees and mountains in the background. During snow conditions, shown in View 14, this view is dominated by a relatively flat snow field in the foreground, with a grove of trees and mountains in the background.

Lake Mary Road (Views 15 and 18)

The view towards the Project site from Lake Mary Road, just south of the tunnel, is shown in Views 15 and 18 in Figure IV.B-10. This view corresponds to the Lake Mary Road Viewpoint identified in the General Plan. The vantages of Views 15 and 18 are different due to access limitations during snow conditions. View 15 depicts non-snow conditions and View 18 depicts snow conditions (View 15 is located north of View 18). During non-snow conditions, shown in View 15, this view extends across the valley, with existing development dominating the foreground and dense alpine forests and mountains dominating the background. During snow conditions, a snow bank typically blocks much of this view, revealing only a portion of the existing development and the mountains in the background.

Lake Mary Road and Twin Lakes (Views 16 and 17)

Twin Lakes is part of the Lakes Basin, a group of five major lakes and numerous small lakes, located immediately south of Mammoth Mountain. The view towards the Project site from Lake Mary Road, north of Twin Lakes, is shown in Views 16 and 17 in Figure IV.B-11. This view corresponds to the Entrance to Lakes Area Viewpoint identified in the General Plan. The vantages of Views 16 and 17 are different due to access limitations during snow conditions. View 17 depicts non-snow conditions and View 16 depicts snow conditions (View 16 is located north of View 17). During non-snow conditions, shown in View 17, this view extends across the valley with existing development in the mid-ground, sparse alpine groves in the foreground, and dense alpine forests and mountains in the background. During snow conditions, a snow bank typically blocks much of the valley view; limited views of the existing development in the mid-ground, and alpine forests and mountains in the background are visible, but the foreground is not visible.

The Bridges (Views 19 and 20)

The view towards the Project site from the area known as "The Bridges," just east of Lake Mary Road, is shown in Views 19 and 20 in Figure IV.B-12. The vantages of Views 19 and 20 are identical, while View 19 was photographed during non-snow conditions and View 20 was photographed during snow conditions. During non-snow conditions, a residence and alpine forest dominate the foreground, existing development dominates the mid-ground, and alpine forest and mountains dominate the background. During snow conditions, a snow bank typically blocks some of this view, revealing a portion of the existing development and the alpine forest and mountains in the background.

Shading/Shadows

The issue of shade and shadow addresses the blockage of direct sunlight by on-site buildings, which affect adjacent properties. Shading is an important environmental issue because it may impact the users or occupants of certain land uses, including routinely useable outdoor spaces associated with residential, recreational, or institutional (e.g., schools, convalescent homes) land uses; commercial uses such as pedestrian-oriented outdoor spaces or restaurants with outdoor eating areas; nurseries; and existing solar collectors.[1]

Shadow lengths are dependent on the height and size of the building from which it is cast and the angle of the sun. The angle of the sun varies with respect to the rotation of the earth (i.e., time of day) and elliptical orbit (i.e., change in seasons). The longest shadows are cast during the winter months and the shortest shadows are cast during the summer months.

[1] *City of Los Angeles, Department of Environmental Affairs, Draft Los Angeles CEQA Thresholds Guide, 1998.*

Winter and Summer Solstice

"Solstice" is defined as either of the two points on the ecliptic (i.e., the path of the earth around the sun) that lie midway between the equinoxes (separated from them by an angular distance of 90°). At the solstices, the sun's apparent position on the celestial sphere reaches its greatest distance above or below the celestial equator, about 23 1/2° of the arc. At winter solstice, about December 21, the sun is overhead at noon at the Tropic of Capricorn; this marks the beginning of winter in the Northern Hemisphere. At the time of summer solstice, about June 21, the sun is directly overhead at noon at the Tropic of Cancer. In the Northern Hemisphere, the longest day and shortest night of the year occur on this date, marking the beginning of summer. Measuring shadow lengths for the winter and summer solstices represents the extremes of the shadow patterns that occur throughout the year. Shadows cast on the summer solstice are the shortest shadows during the year, becoming progressively longer until winter solstice when the shadows are the longest they are all year. Shadows are shown for winter solstice, cast from 9:00 a.m. to 3:00 p.m., and for summer solstice, cast from 9:00 a.m. to 5:00 p.m.

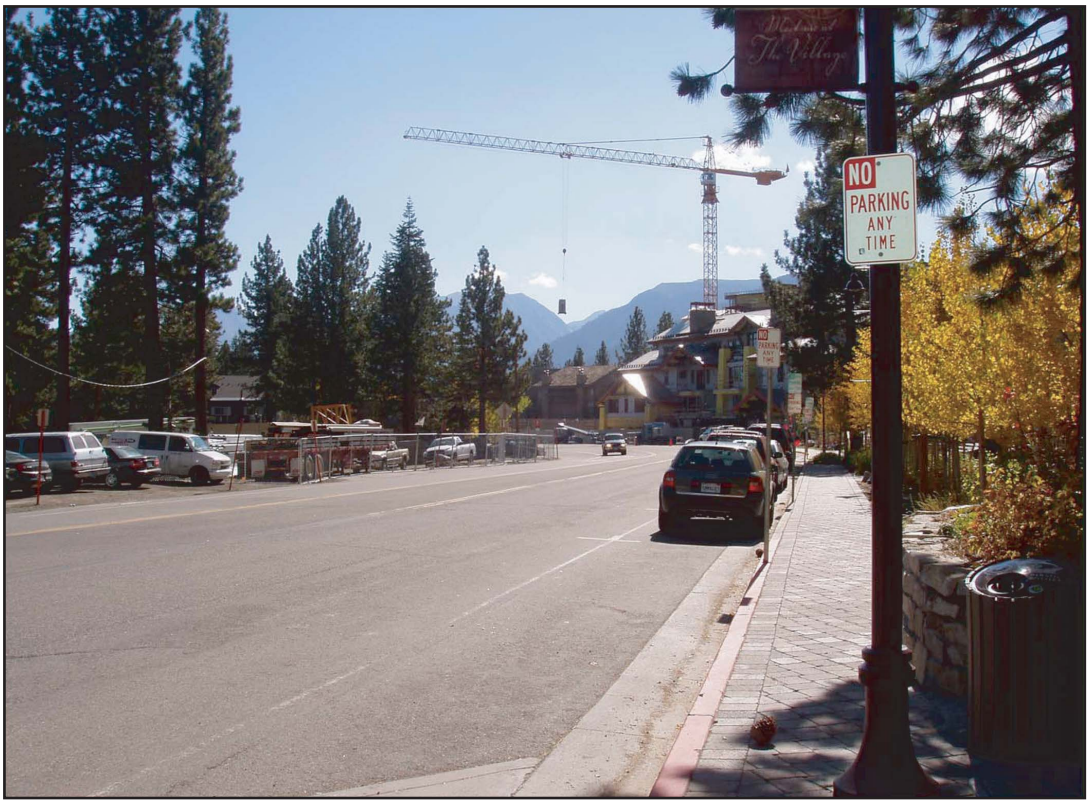
Autumn and Spring Equinox[2]

At the time of the autumn equinox, near September 22, and the spring equinox, near March 21, night and day are nearly the same length and the sun crosses the celestial equator moving southward (in the northern hemisphere). The autumnal equinox marks the first day of the season of autumn and the spring equinox marks the first day of the season of spring. Shadows are shown for the autumn/spring equinox, cast from 8:00 a.m. to 4:00 p.m.

Assumptions

Topography was incorporated as one of the components in the following analysis as the changes in elevation in the area of the Project site are considerable. The heights of the proposed buildings were based on available architectural diagrams. The topography, dimensions, setbacks, and placement of existing buildings were estimated based on the existing and proposed site plans.

[2] *Please note that the existing and proposed equinox shadows depicted in this section are for informational purposes only.*



View 1: Without snow, view from the Village at Mammoth, along Minaret Road, towards the project site.

View 2: With snow, view from the Village at Mammoth, along Minaret Road, towards the project site.

Source: Integrated Design Studio, May 2006.

View 3: Without snow, view from the northeast corner of Main Street and Minaret Road towards the project site. This view corresponds to the North Village Viewpoint indentified in the General Plan.

View 4: With snow, view from the northeast corner of Main Street and Minaret Road towards the project site. This view corresponds to the North Village Viewpoint indentified in the General Plan.

Source: Integrated Design Studio, May 2006.

View 5: Without snow, view from the northeast corner of the Main Street and Old Mammoth Road towards the project site. This view corresponds to the Old Mammoth Road and SR 203 Viewpoint identified in the General Plan.

View 6: With snow, view from the northeast corner of the Main Street and Old Mammoth Road towards the project site. This view corresponds to the Old Mammoth Road and SR 203 Viewpoint identified in the General Plan.

Source: Integrated Design Studio, May 2006.

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Figure IV.B-5
View from Main Street
and Old Mammoth Road

View 7: Without snow, view from the parking lot of a shopping center located along the south side of Meridian Boulevard, east of Old Mammoth Road, towards the project site.

View 8: With snow, view from the parking lot of a shopping center located along the south side of Meridian Boulevard, east of Old Mammoth Road, towards the project site.

Source: Integrated Design Studio, May 2006.

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Environmental Planning and Research

Figure IV.B-6
View from the
Town of Mammoth Lakes Parking Lot

View 9: Without snow, view from the southeast corner of Meridian Boulevard and Minaret Road towards the project site.

View 10: With snow, view from the southeast corner of Meridian Boulevard and Minaret Road towards the project site.

Source: Integrated Design Studio, May 2006.

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Environmental Planning and Research

Figure IV.B-7
View from Meridian Boulevard and Minaret Road

View 11: Without snow, view from Mammoth Creek Park, south of Old Mammoth Road, towards the project site.

View 12: With snow, view from Mammoth Creek Park, south of Old Mammoth Road, towards the project site.

Source: Integrated Design Studio, May 2006.

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Figure IV.B-8
View from Mammoth Creek Park

View 13: Without snow, view from a ridge along Sherwin Creek Road towards the project site.

View 14: With snow, view from a ridge along Sherwin Creek Road towards the project site.

Source: Integrated Design Studio, May 2006.

View 15: Without snow, view from Lake Mary Road, near the entrance to Twin Lakes, towards the project site.

View 18: With snow, view from Lake Mary Road, south of the tunnel, towards the project site.

Source: Integrated Design Studio, May 2006.

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Figure IV.B-10
View from Lake Mary Road
South of the Tunnel

View 17: Without snow, view from Lake Mary Road, south of the tunnel, towards the project site.

View 16: With snow, view from Lake Mary Road, near the entrance to Twin Lakes, towards the project site.

Source: Integrated Design Studio, May 2006.

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Figure IV.B-11
View from Lake Mary Road
and Twin Lakes

View 19: Without snow, view from the Bridges area towards the project site.

View 20: With snow, view from the Bridges area towards the project site.

Source: Integrated Design Studio, May 2006.

Existing Shadow-Sensitive Uses and Shadow Patterns

The area around the Project site was surveyed for shadow sensitive uses in April 2006. There are adjacent shadow-sensitive uses surrounding the Project site, including, but not limited to, the Sierra Star Golf Course and nearby residences. Although the Sierra Star Golf Course is mostly used in the summer months, when there is no snow on the ground, it is used sparingly in the winter months for snowshoeing by local residents. The usable outdoor spaces associated with the nearby residences (e.g., yards, balconies, etc.) are routinely used in the summer months; however, these outdoor spaces are rarely used in the winter months. As there are currently no buildings on the Project site, there are no shadows currently being cast from buildings. However, on-site shadows are currently cast by existing trees.

ENVIRONMENTAL IMPACTS

Thresholds of Significance

In accordance with Appendix G to the State CEQA Guidelines, the Project could have a significant environmental impact if it would:

(a) Have a substantial adverse effect on a scenic vista;

(b) Substantially damage scenic resources, including, but not limited to trees, rock outcroppings, or historic buildings within a scenic highway;

(c) Significantly degrade the existing visual character or quality of the site and its surroundings; or

(d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

Although there are no adopted thresholds of significance for shadow impacts in the State CEQA Guidelines, the following threshold is used in this analysis:

- A Project impact would normally be considered significant if shadow-sensitive uses[3] would be shaded by Project-related structures for more than three hours between the hours of 9:00 a.m. and 3:00 p.m. Pacific Standard Time (between late October and early April), or for more than four hours between the hours of 9:00 a.m. and 5:00 p.m. Pacific Daylight Time (between early April and late October). [4]

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[3] *Shadow sensitive uses are facilities and operations sensitive to the effects of shading, including the following: routinely useable outdoor spaces associated with residential, recreational, or institutional (e.g., schools, convalescent homes) land uses; commercial uses such as pedestrian-oriented outdoor spaces or restaurants with outdoor eating areas; nurseries; and existing solar collectors.*

[4] *City of Los Angeles, Department of Environmental Affairs, Draft Los Angeles CEQA Thresholds Guide, 1998.*

Project Impacts and Mitigation Measures

Impact AES-1 Consistency with Policies (1987 Adopted General Plan)

As discussed above, several policies in the adopted General Plan are applicable to the Project with respect to visual resources. A consistency analysis of the Project with applicable policies contained within the adopted 1987 General Plan is presented in Table IV.B-1, Consistency with Adopted 1987 General Plan Applicable Aesthetics Policies.

Table IV.B-1
Consistency with 1987 Adopted General Plan Applicable Aesthetics Policies

Policy	Consistency Analysis
LAND USE AND PUBLIC FACILITY AND SERVICES ELEMENT	
Open Space Policies	
4. The unique physical and visual features of the Mammoth Lakes Community should be maintained by an open space program and Development Code criteria which preserves the unique alpine qualities of the Town and wildlife habitat, including major rock outcroppings, forest canopies and mixed-aged stands of trees.	**Consistent.** The Project would incorporate open space areas throughout the Project site. The Project would be located surrounding an existing golf course, which would serve to preserve open space in the vicinity of the area. Landscaping would incorporate trees and shrubs to revegetate disturbed areas, to preserve the unique alpine qualities of the Town and wildlife habitat.
7. The Town shall maximize the visual quality of designated passive open space areas by careful screening of those development areas which can be viewed from the open space areas and by the maximum retention of the forest canopy and understory through design review criteria in the Town's Development Code.	**Consistent.** The Project would organize residential uses into a series of clustered neighborhoods surrounded by the existing golf course and landscaped areas. The Project would provide for sensitive transitions between residential and other land uses through open space dedication and design.
8. The visual impact of active recreation areas should be minimized through cooperation with the U.S. Forest Service and other appropriate agencies in areas outside the Town's jurisdiction and through incentives in the Town's Development Code, for areas within the Town's jurisdiction. The Town shall encourage the Forest Service to permit active recreational uses, including ice skating rinks, golf courses and similar community recreational facilities when those facilities cannot reasonably be located on the private land base.	**Consistent.** The Project is a resort recreation center with multiple active recreational amenities. These include the Sierra Star golf course, recreational trails and walkways, individual pools, spas, and water play areas associated with resort hotels and hotels. The Project would incorporate open space areas throughout the Project site that would provide for sensitive transitions between active recreation areas through open space dedication and design.
PARKING AND TRANSPORTATION ELEMENT	
Parking	
1.20: Consider the visual impacts of parking lots during project review. Implement design standards to locate parking to the rear of buildings, utilize land forms to reduce the bulk of structures, or provide substantial screening of parking areas.	**Consistent.** The Project would provide underground parking facilities as required by the SSMP for the majority of the development. Design of the parking structures is to be consistent with the overall building design.

Table IV.B-1
Consistency with 1987 Adopted General Plan Applicable Aesthetics Policies

Policy	Consistency Analysis
Inter-Jurisdictional Coordination	
2.2: New roads and roadway improvements shall be located, designed, constructed, and maintained in a manner that prevents adverse impacts to air quality, water quality, and significant biological and scenic resources.	**Consistent.** The Project is consistent with the underlying concepts expressed in this policy related to protection of scenic resources. Landscape site work would be consistent with traditional approaches for the region, and would address current needs, codes, regulations and environmental considerations, and designed to enhance the user experience, safety, and enjoyment. All roadways would be landscaped consistent with other site landscaping. Landscaping plans would be reviewed by the Town for consistency with Design Guidelines.
2.4: New and replacement road lighting shall use fixtures and light sources that are shielded or constructed so that the source of illumination is not readily visible at a distance, and shall be energy efficient, without compromising traffic safety.	**Consistent**. Lighting fixtures would typically be mounted on poles at 15 feet - 24 feet height with efficient lamp types (metal halide, high-pressure sodium, or other white light source). Illumination levels would be highest at intersections and along roadways carrying most traffic. Fixtures would be of a cutoff type designed to shield the light source and reduce light spill and glare at adjacent buildings and outdoor areas. Fixtures and supporting poles would be placed in locations which minimize visual impact (for instance, where trees and other landscape elements create an appropriate vertical backdrop). Illumination levels along roadways would provide minimum requirement for safety and directional orientation and be consistent with local policies and zoning regulations concerning roadway illumination levels. Fixture locations would be staggered rather than formally arranged. The intent is to preserve the mountain rural character rather than creating an urban one. Fixtures must be clear of snow storage areas.
CONSERVATION AND OPEN SPACE ELEMENT	
Natural Vegetative Resources	
1. The Town shall preserve the resort-alpine character of Mammoth Lakes through the adoption of tree preservation standards which retain heritage trees and groves where reasonable, and retain to the maximum extent feasible, the forest canopy and forested character of the Town. Native tree species should be planted to help offset the loss of trees unavoidably removed during construction. (Parks and Recreation Element 1A-3).	**Consistent.** The Project design would create a scale, form, and mass suited to the resort-alpine character of the site and the adjacent land uses. Grading plans are not available for the Project at this point; however, as part of the approval process, the Town would review the grading plans to assess the removal of any trees. Landscaping would incorporate trees and shrubs to revegetate disturbed areas, to buffer or frame views to allow summertime shading of outdoor places, to allow transition in scale and to soften building massing, and to introduce decoration and color into outdoor use areas. Planting on the Project site would use native conifers, deciduous trees, and shrubs. Trees would be primarily coniferous but with an intermixing of deciduous trees species.

Table IV.B-1
Consistency with 1987 Adopted General Plan Applicable Aesthetics Policies

Policy	Consistency Analysis
Visual Resources and Community Design	
1. The Town shall adopt and enforce community design standards to help preserve and enhance the aesthetic and biological environment.	**Consistent.** The final Project design would be reviewed for consistency with the Town Design Guidelines prior to being approved by the Town.
2. These standards shall include design criteria to assure proposed developments are located, sited and designed to be subordinate to the pre-existing character of the site to the maximum extent possible.	**Consistent.** The Project would organize the form and mass of a single building in relationship to the scale of neighboring buildings and in relationship to the size and use of adjacent open space. The Project would retain the natural contours of the site and provide for sensitive transitions between residential and other land uses through open space dedication and design and would preserve the existing character of the site.
4 The Town shall develop aesthetic controls to be applied to utility structures, road signs, traffic signals, lighting, overhead wires and utility poles.	**Consistent.** All electrical lines on the Project site would be under-grounded. The Project would minimize the visual impacts of any aboveground utility structures and equipment by locating equipment enclosures and storage containers in areas of low visibility, away from major public walks and streets and building entrances to the extent practical or locating in landscaped areas where shrub planting can screen them. The Project would provide signage that is clear, understandable and attractive but which also creates a memorable environment and sense of place. The signage would reflect the character of the Project with regard to materials, form and use. The lighting needs at the Project site would vary according to the type and intensity of use, but would address the particular needs of outdoor spaces and activities: safety, security, vehicular and pedestrian movement, retailing, signage, etc. Excessive illumination would be avoided and lighting would be designed and placed that minimizes glare and reflection and to maintain 'dark skies'. The Project design would be reviewed for consistency with the Town Design Guidelines.

Table IV.B-1
Consistency with 1987 Adopted General Plan Applicable Aesthetics Policies

Policy	Consistency Analysis
6 Primary Scenic Areas and Scenic Resources shall be protected through design criteria and incentives and disincentives in the Town Development Code including: a) location of structures, or modification of building height and bulk, to reduce impact to views of primary scenic areas and resources. b) control of development on prominent ridgelines, bluffs and exposed hillsides, c) use of building materials, and colors which blend rather than contrast with the surrounding visual resources, d) limiting removal of vegetation, particularly mature trees, e) locating sensitive visual, biological and geological resource areas within Special Conservation Planning districts.	**Inconsistent.** The Project would not be consistent with the Town's design criteria due to the 200-foot height of the tower building in Area 5A for purposes of attracting a hotel complex, which would exceed the Town's current height limit. The location of the proposed structures, bulk/massing, use of building materials, colors, and landscaping would be consistent with the Town Development Code. Specific details regarding these features, as proposed with the development of the Project, are provided below and in Section III, of this Draft EIR. With respect to the location of structures to avoid obstruction of views of primary scenic areas and resources, as further discussed below, the development of the Project would result in significant impacts from three viewpoints identified as Major View Corridors or Vistas in the General Plan (Views 9, 10, 15, 18, and 16 [during non-snow conditions]).. The Project would not develop any structures on prominent ridgelines, bluffs, or exposed hillsides.
7. Preserve the important scenic vistas which occur along Old Mammoth Road, Meridian Boulevard and other defined areas by retaining sufficient minimum building setbacks and adoption of viewshed protection criteria and requirements in the Town Development Code.	**Inconsistent.** The Project would result in a significant impact on the Meridian Boulevard and Minaret Road (Views 9 and 10) viewpoint (see detailed discussion below under Impact AES-2 Public Views and Scenic Vistas). However, no scenic vistas are available from this viewpoint. The proposed structures would comply with minimum building setback requirements and this impact would be less than significant.
PARKS AND RECREATION ELEMENT	
6. Primary Scenic Areas and Scenic Resources shall be protected through design criteria and incentives and disincentives in the Town Development Code including: a) location of structures, or modification of building height and bulk, to reduce impact to views of primary scenic areas and resources, b) control of development on prominent ridgelines, bluffs and exposed hillsides, c) use of building materials, and colors which blend rather than contrast with the surrounding visual resources, d) limiting removal of vegetation, particularly mature trees, e) locating sensitive visual, biological and geological resource areas within Special Conservation Planning districts.	**Inconsistent.** As part of the approval process for individual developments to be built under the SSMP, the Town would review the final proposed location of the proposed structures, bulk/massing, use of building materials, colors, and landscaping to ensure consistency with the Town Development Code. The hotel would be in excess of the Town's current height limit. With respect to the location of structures to avoid obstruction of views of primary scenic areas and resources, as further discussed below, the development of the Project would result in significant impacts to Major View Corridors or Vistas in the General Plan (Views 9, 10, 15, 18, and 16 [during non-snow conditions]). The Project would not develop any structures on prominent ridgelines, bluffs, or exposed hillsides.

As indicated in Table IV.B-1 above, the Project would be generally consistent with the applicable policies associated with aesthetics in the adopted 1987 General Plan with the exception of the height of the tower building in Area 5A and the alteration of views from the identified viewpoints. With respect to the view corridors, the development of the Project would result in significant impacts from three viewpoints identified as Major View Corridors or Vistas in the 1987 General Plan. However, the development of the Project would not substantially obstruct views of the surrounding mountains. Therefore, impacts relating to consistency with the existing 1987 General Plan would be ***less than significant*** and no mitigation measures are required.

Recommended mitigation measures for the height of the tower and the alteration of views are discussed in this section under Impact AES-2.

Impact AES-2 Public Views and Scenic Vistas

The following discussion provides a comparison of "before" views and "after" views associated with the Project. Photo simulations were prepared depicting views from ten publicly accessible viewpoints in the Project vicinity. A total of 20 photo simulations depicting views after the Project is constructed are presented below. The locations from which the view photographs were taken and the direction of each view are indicted on Figure IV.B-2. The "before" views associated with each simulation are presented in Figures IV.B-3 through IV.B-12, and are described above. The "after" views were produced by simulating what the Project is expected to look like after construction is completed using computer modeling, photographs, and Project plans. The after views are shown in Figure IV.B-13 through Figure IV.B-22.

The Village at Mammoth (Views 1 and 2)

The most prominent Project feature that could potentially be viewed from The Village at Mammoth is the proposed tower building in Area 5A (also referred to as "Building 5A"). As shown in Figure IV.B-13, existing commercial, retail, and hotel structures obstruct the view from The Village at Mammoth towards the Project site during both the snow and non-snow conditions. Therefore, the view of the Project site from The Village at Mammoth would not be altered with the development of the Project and ***no impact*** would occur.

Main Street and Minaret Road (Views 3 and 4)

As shown in Figure IV.B-14, the proposed tower building in Area 5A extends beyond the tops of the trees and would be visible from the intersection of Minaret Road and Main Street/Lake Mary Road during both snow and non-snow conditions. The visibility of the proposed tower building represents an alteration of an existing viewshed and would result in a partial obstruction of public views of the Sherwin Range. However, public views would not be substantially obstructed and existing views of the Sherwin Range would be largely maintained. Therefore, the impact of the development of the Project on the view from the intersection of Minaret Road and Main Street/Lake Mary Road towards the Sherwin Range would be ***less than significant***.

Main Street and Old Mammoth Road (Views 5 and 6)

As shown in Figure IV.B-15, existing retail structures, trees, and topography obstruct the view of the Project and the tower building in Area 5A during both snow and non-snow conditions. Therefore, the view of the Project site from the intersection of Main Street and Old Mammoth Road would not be altered with the development of the Project and ***no impact*** would occur based on the massing shown.

Town of Mammoth Lakes Office Parking Lot (Views 7 and 8)

As shown in Figure IV.B-16, existing structures, trees, and topography obstruct the view of the Project and the tower building in Area 5A from this viewpoint during both snow and non-snow conditions. Therefore, the view of the Project site from the Town of Mammoth Lakes Office Parking Lot would not be altered with the development of the Project and ***no impact*** would occur.

Meridian Boulevard and Minaret Road (Views 9 and 10)

As shown in Figure IV.B-17, the Project (proposed buildings in Area 5A) would be visible from the intersection of Meridian Boulevard and Minaret Road during both snow and non-snow conditions. This vantage towards Mammoth Mountain and the Sherwin Range is identified in the General Plan. As shown in Figure IV.B-7, existing trees block direct views of the Sherwin Range. However, the development of the Project would result in a substantial alteration of existing views towards Mammoth Mountain from this location.

Although the development of the Project would substantially alter the existing visual character of the existing alpine view from this viewpoint, the architectural design of the proposed structures would be consistent with the Town's design guidelines and, thus, "soften" this potential visual impact. Nonetheless, due to the prominent visibility of the proposed structures and the identification of it as an important vantage in the 1987 General Plan, the development of the Project would result in a ***significant impact*** with respect to visual character during both snow and non-snow conditions at this viewpoint.

Mammoth Creek Park (Views 11 and 12)

As shown in Figure IV.B-18, existing retail structures, trees, and topography obstruct the view of the Project from this viewpoint during both snow and non-snow conditions. Therefore, the view of the Project site from the Mammoth Creek Park would not be altered with the development of the Project and ***no impact*** would occur.

Sherwin Creek Road (Views 13 and 14)

As shown in Figure IV.B-19, the proposed tower building in Area 5A would be barely visible above the trees from Sherwin Creek Road during non-snow and snow conditions due to distance, topography, and intervening trees. Considering the limited view of the proposed tower building in Area 5A during non-snow and snow conditions, the impact on the view of the Project site from Sherwin Creek Road would be ***less than significant***.

Lake Mary Road, South of Tunnel (View 15 and 18)

The existing view from Lake Mary Road is considered to be part of one of the Town's view corridors (see Figure IV.B-1). During snow conditions, this viewpoint would be in a different location due to access limitations. The closest accessible viewpoint to this view during snow conditions is at the location of View 18, which is northeast of View 15 just off Lake Mary Road. As shown in Figure IV.B-20, the Project would be visible from this viewpoint above the existing forest canopy in the Town during non-snow conditions. During snow conditions, the Project tower would be partially obstructed by intervening topography and trees. However, due to the prominence of the proposed buildings from this viewpoint and the importance of this viewshed, as set forth in the General Plan, the impact of the Project on Views 15 and 18 would be ***significant***.

Lake Mary Road and Twin Lakes (Views 16 and 17)

As shown in Figure IV.B-21, the proposed tower building in Area 5A would be visible from this viewpoint during non-snow conditions. Although the Project would be distant, it would be the highest feature above the tree canopy. Although the Project would be not obscure any views it would be noticeable; therefore, this impact would be ***significant***.

However, the proposed tower building in Area 5A would be barely visible from the intersection of Lake Mary Road and Twin Lakes during snow conditions. This view corresponds to the Entrance to Lakes Area Viewpoint identified in the General Plan. Although visible during snow conditions, the proposed tower building in Area 5A would be mostly obscured due to distance, trees, and topography. Therefore, the impact of the Project on the view from Lake Mary Road and Twin Lakes would be ***less than significant*** during snow conditions.

The Bridges (Views 19 and 20)

Similar to the view from Lake Mary Road, the view from The Bridges, just east of Lake Mary Road, is considered to be part of one of the Town's view corridors (see Figure IV.B-1). As shown in Figure IV.B-22, the proposed buildings in Area 5A would be visible from this viewpoint along Lake Mary Road during both snow and non-snow conditions. Although the proposed buildings would be somewhat less visible during snow conditions due to partial obstruction by snow banks, due to the prominence of the proposed buildings from this viewpoint and the importance of this viewshed, as set forth in the General Plan, the impact of the Project on this view would be ***significant***.

As previously stated, photo simulations depicting views after the Project is constructed are presented below. The "before" views associated with each simulation are presented in Figures IV.B-3 through IV.B-12, and are described above. The "after" views were produced by simulating what the Project is expected to look like after construction is completed using computer modeling, photographs, and Project plans. The after views are shown in Figure IV.B-13 through Figure IV.B-22. Please note that the building design shown in the photo simulations below is not reflective of the actual appearance of the

proposed development. The photo simulation are simply intended to demonstrate the bulk, mass, and height of possible structures in those locations.

Mitigation Measures AES-2a

Prior to the issuance of building permits, all structures and associated facilities on the Project site shall comply with the applicable standards of the Design Guidelines for the Town of Mammoth Lakes (July 2004), in accordance with Mammoth Lakes Municipal Code Section 17.32.120.

Mitigation Measures AES-2b

Prior to the issuance of grading permits, the Project applicant shall ensure to the satisfaction of the Town of Mammoth Lakes Community Development Department that no trees shall be removed during Project development for the sole purpose of improving views from the developed site.

Mitigation Measures AES-2a and 2b address the design of the Project and the potential removal of trees on the Project site. These measures would contribute to the overall aesthetic of the Project building and site characteristics and features. However, these mitigation measures would not reduce the visual impact of the tower building above the tree line at Views 2-3 and 9-10, nor eliminate the change to the views from Lake Mary Road and the Bridges. No mitigation measures exist that would reduce this impact to less than significant. Therefore, even with implementation of the Mitigation Measures AES-2a and 2b, this impact would remain ***significant and unavoidable.***

Impact AES-3 Scenic Resources within a State Scenic Highway

In the vicinity of the Town, State Highway 203 is an eligible State Scenic Highway (not officially designated) and U.S. Highway 395 is an officially designated State Scenic Highway.[5] Through the Town, State Highway 203 is known as Main Street. Visual impacts on State Highway 203 are included in the above discussion of impacts on public views along Main Street, which are represented in Views 3 through 6. As discussed above, the potential impact on views along Main Street at the intersection of Minaret Road and Main Street/Lake Mary Road would be ***less than significant*** with the development of the Project. No visual impact is anticipated at the intersection of Main Street and Old Mammoth Road. Overall, the proposed buildings would be barely visible or not visible along State Highway 203 (Main Street). With respect to U.S. Highway 395, the Project would not be visible from any vantage point along its route due to intervening topography and ***no impact*** would occur.[6]

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[5] *California Department of Transportation California Scenic Highway Mapping System, website: http:// http://www.dot.ca.gov/hq/LandArch/scenic_highways/index.htm, June 12, 2006.*

[6] *Site reconnaissance and observation noted by Scott Johnson, Graphics Director, CAJA, April 26, 2006.*

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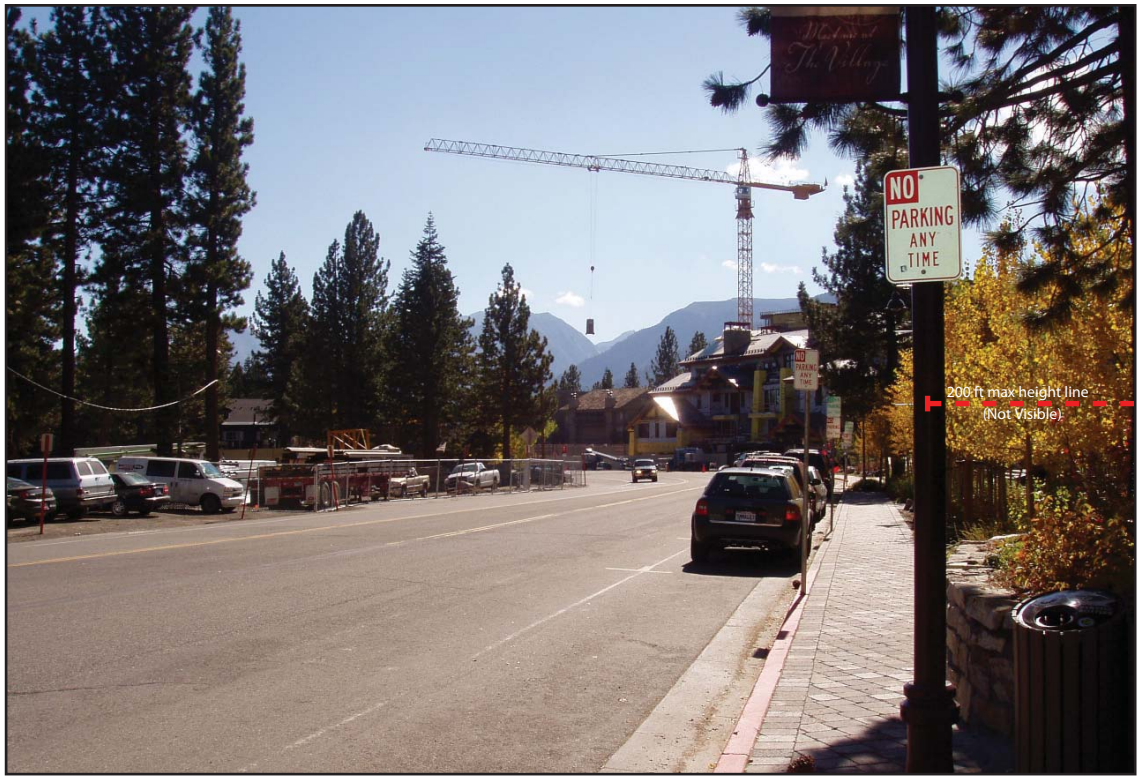
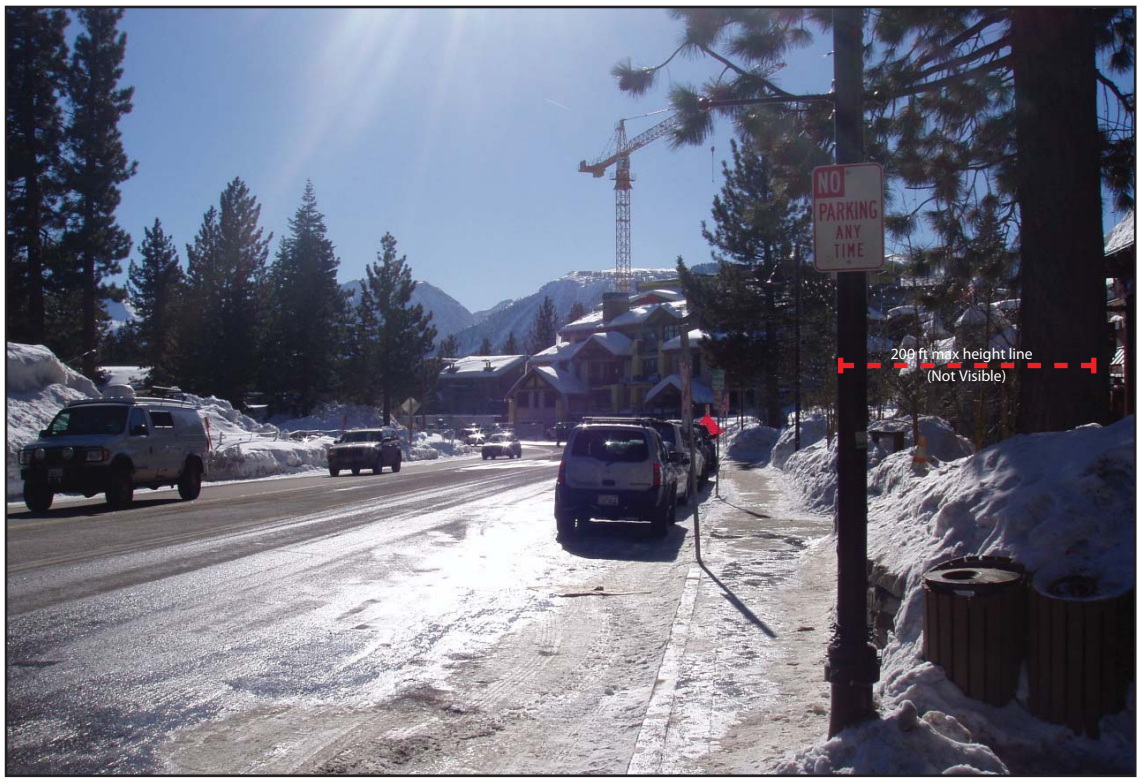


View 1: From the Village at Mammoth (Summer)



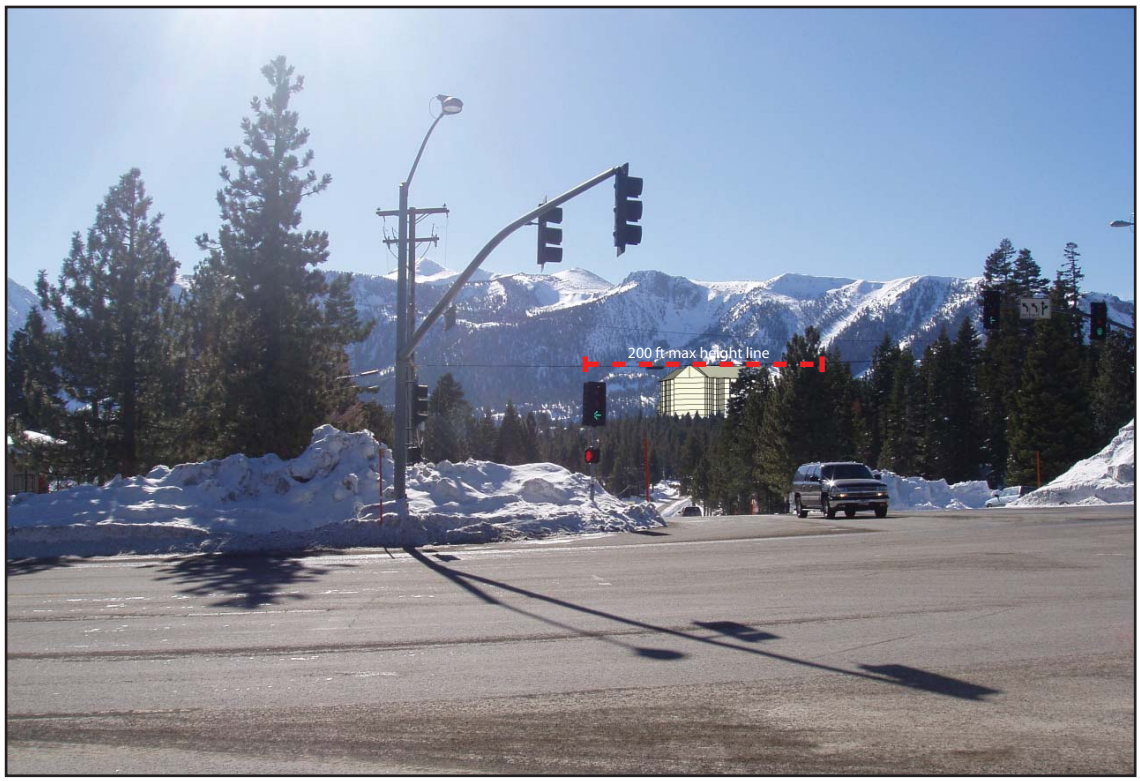
View 2: From the Village at Mammoth (Winter)

Source: Integrated Design Studio, 2007.

CHRISTOPHER A. JOSEPH & ASSOCIATES
Environmental Planning and Research

Figure IV.B-13
Views 1 & 2, From the
Village at Mammoth

View 3: From Main Street and Minaret (Summer)



View 4: From Main Street and Minaret (Winter)

Source: Integrated Design Studio, 2007.

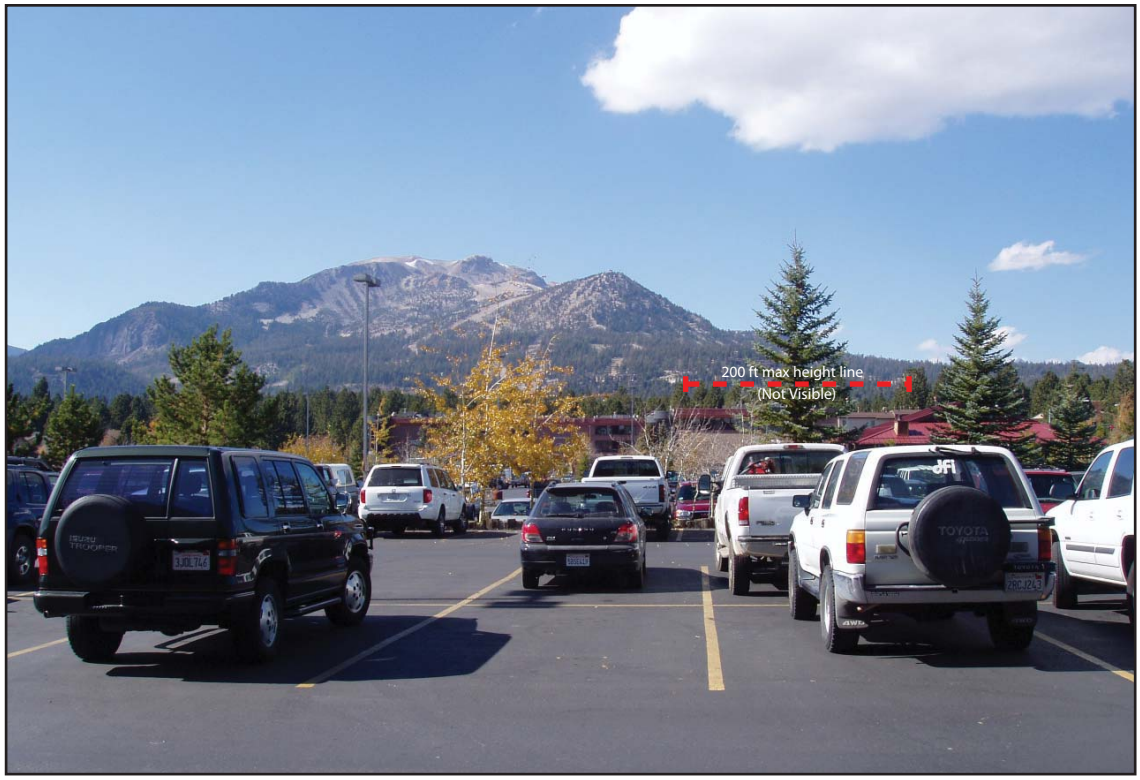
View 5: From Main Street and Old Mammoth Road (Summer)

View 6: From Main Street and Old Mammoth Road (Winter)

Source: Integrated Design Studio, 2007.

CHRISTOPHER A. JOSEPH & ASSOCIATES
Environmental Planning and Research

Figure IV.B-15
Views 5 & 6, From Main Street & Old Mammoth Road



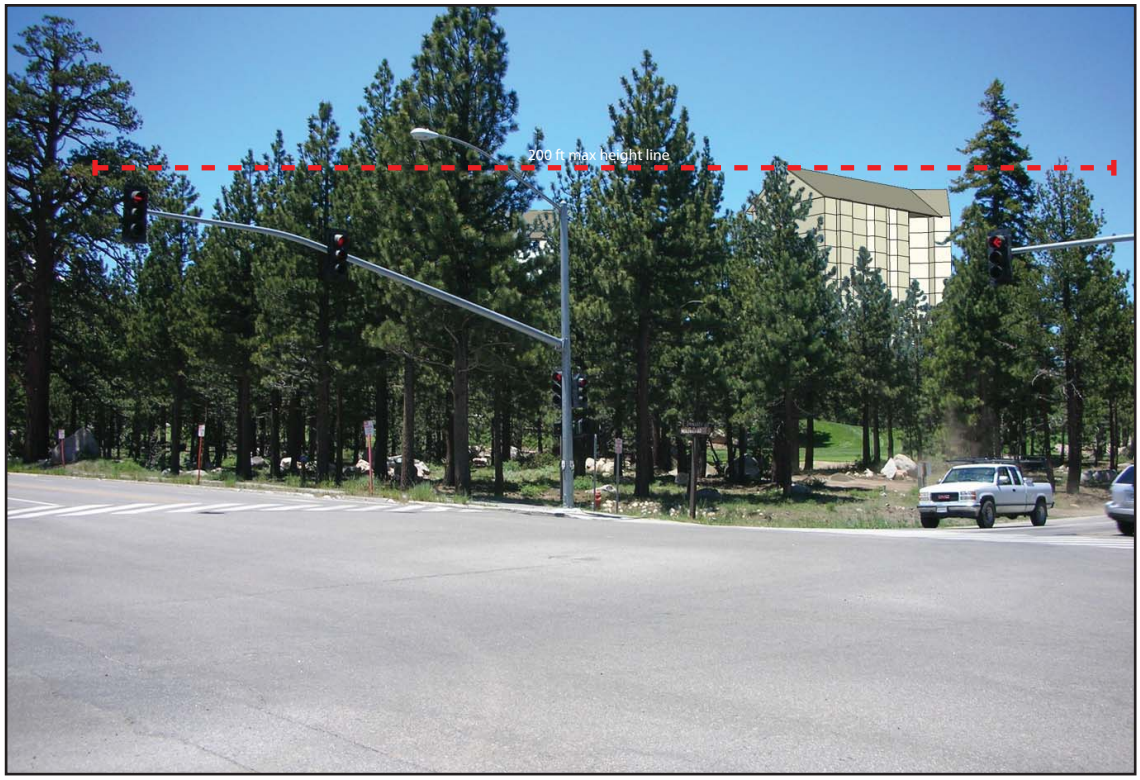
View 7: From Town of Mammoth Lakes Office Parking Lot (Summer)

View 8: From Town of Mammoth Lakes Office Parking Lot (Winter)

Source: Integrated Design Studio, 2007.

CHRISTOPHER A. JOSEPH & ASSOCIATES
Environmental Planning and Research

Figure IV.B-16
Views 7 & 8, From Town of Mammoth Lakes Office Parking Lot



View 9: From Meridian Boulevard and Minaret Road (Summer)

View 10: From Meridian Boulevard and Minaret Road (Winter)

Source: Integrated Design Studio, 2007.

CHRISTOPHER A. JOSEPH & ASSOCIATES
Environmental Planning and Research

Figure IV.B-17
Views 9 & 10, From Meridian Boulevard and Minaret Road

View 11: From Mammoth Creek Park (Summer)

View 12: From Mammoth Creek Park (Winter)

Source: Integrated Design Studio, 2007

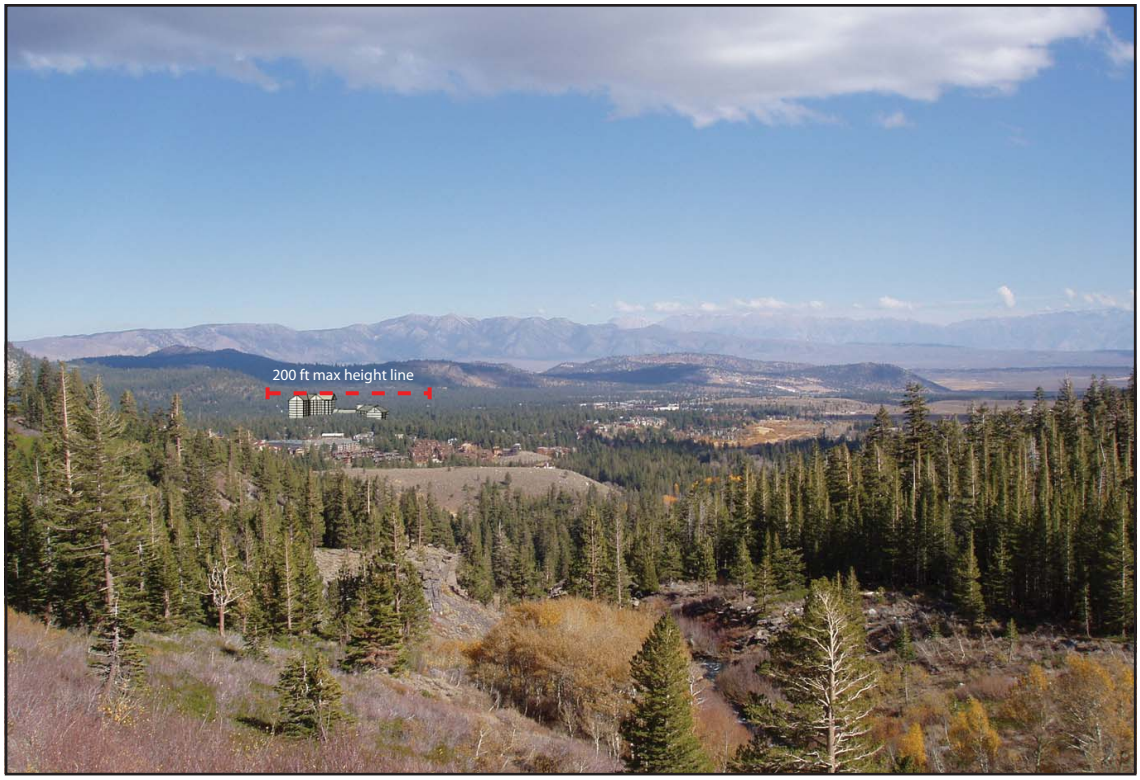
CHRISTOPHER A. JOSEPH & ASSOCIATES
Environmental Planning and Research

Figure IV.B-18
Views 11 & 12, From
Mammoth Creek Park

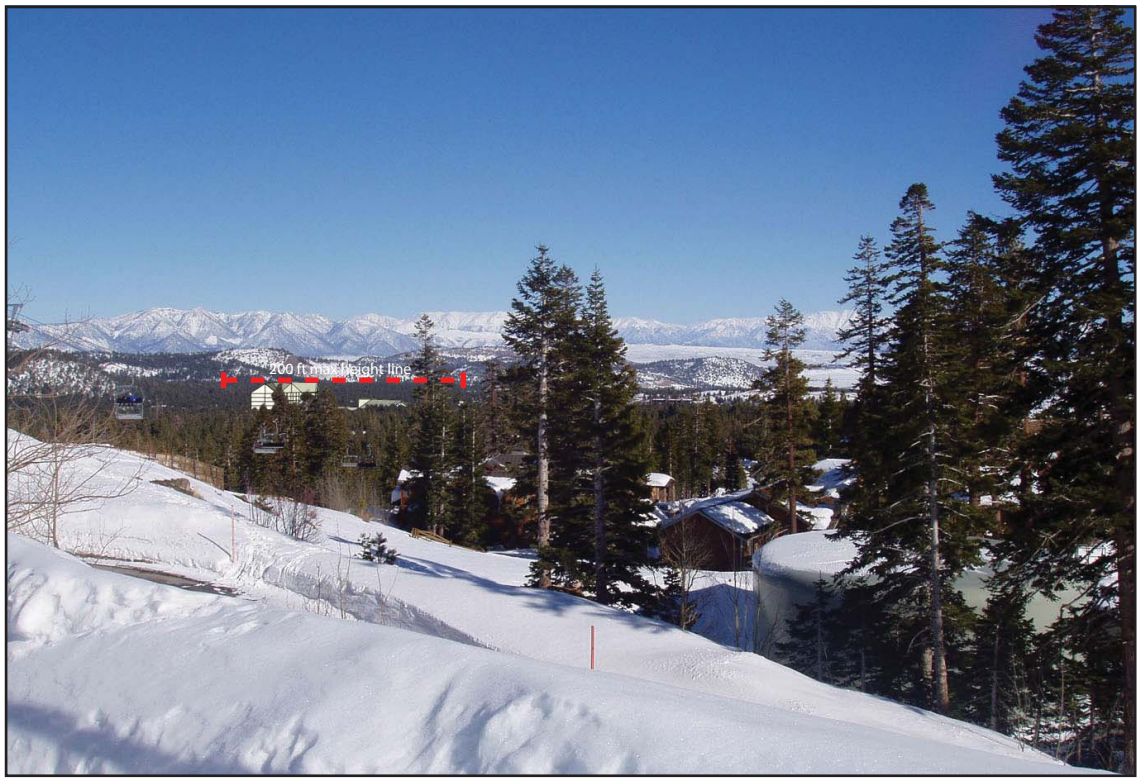
View 13: From Sherwin Creek Road (Summer)

View 14: From Sherwin Creek Road (Winter)

Source: Integrated Design Studio, 2007.



View 15: From Lake Mary Road, South of Tunnel (Summer)

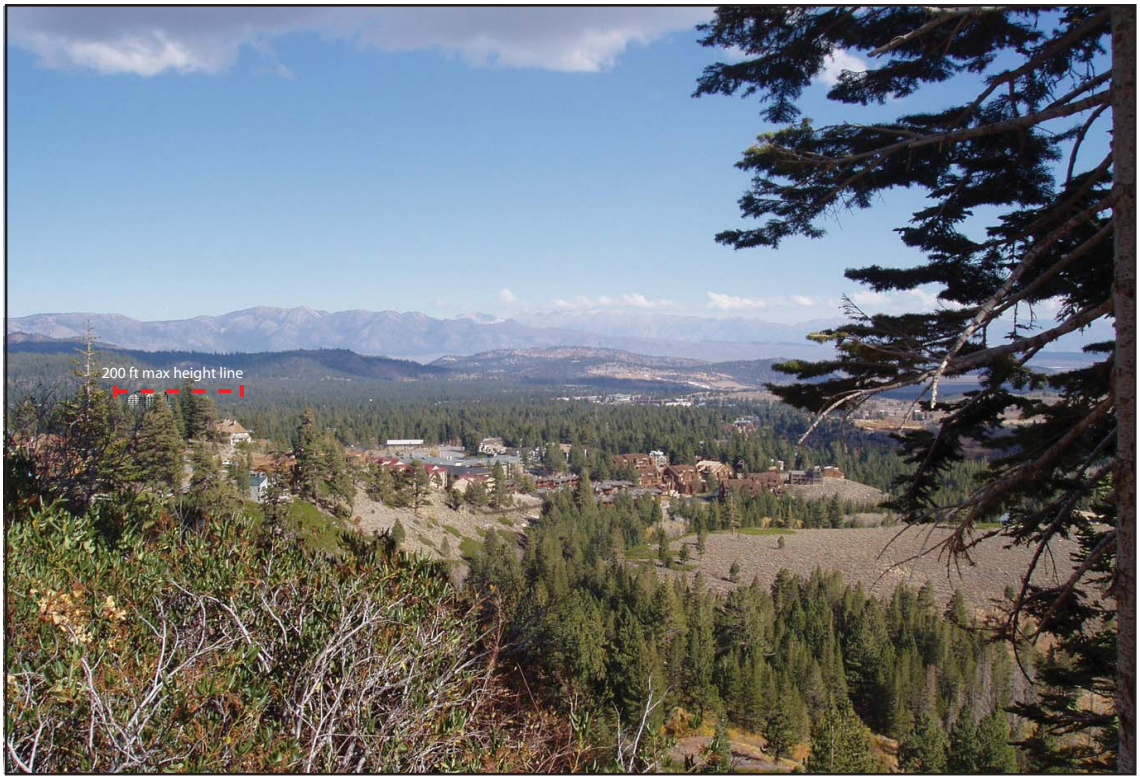


View 18: From Lake Mary Road, South of Tunnel (Winter)

Source: Integrated Design Studio, 2007.

CHRISTOPHER A. JOSEPH & ASSOCIATES
Environmental Planning and Research

Figure IV.B-20
Views 15 & 18, From Lake Mary Road, South of Tunnel



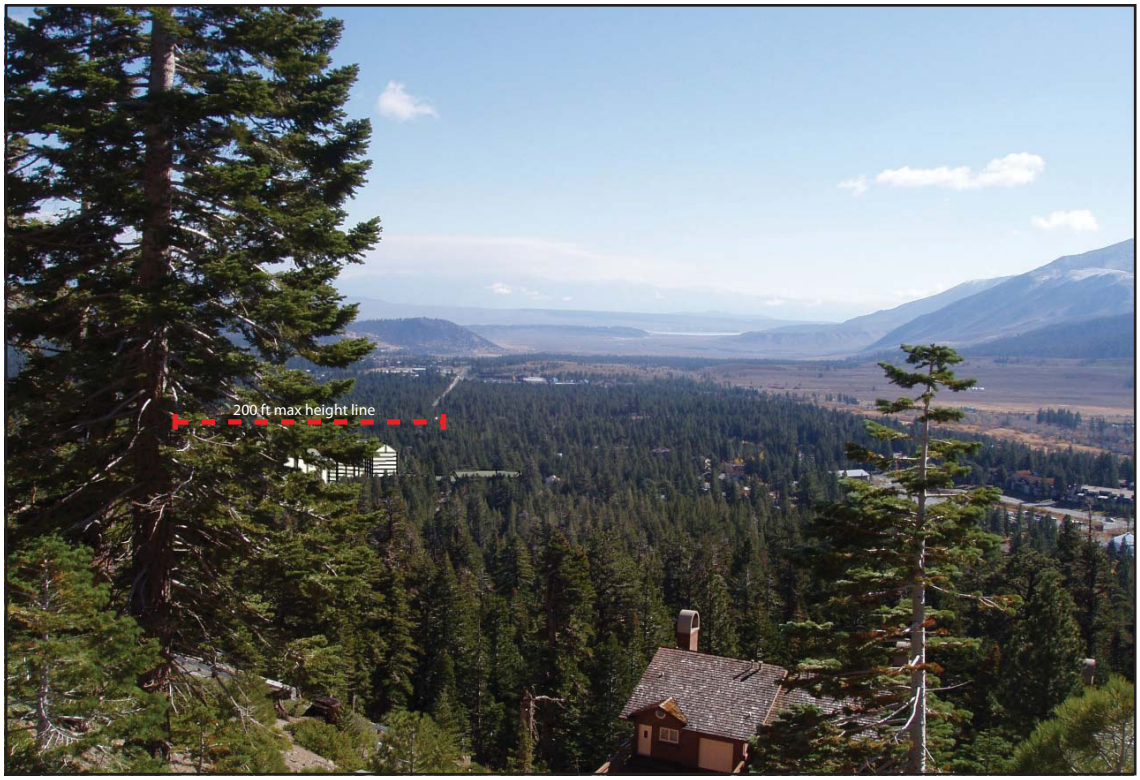
View 17: From Lake Mary Road and Twin Lakes (Summer)

View 16: From Lake Mary Road and Twin Lakes (Winter)

Source: Integrated Design Studio, 2007.

CHRISTOPHER A. JOSEPH & ASSOCIATES
Environmental Planning and Research

Figure IV.B-21
Views 16 & 17, From Lake Mary Road and Twin Lakes



View 19: From Bridges (Summer)

View 20: From Bridges (Winter)

Source: Integrated Design Studio, 2007.

CHRISTOPHER A. JOSEPH & ASSOCIATES
Environmental Planning and Research

Figure IV.B-22
Views 19 & 20, From Bridges

Impact AES-4 Visual Character and Design

Form and Mass

The form and mass of buildings developed on the Project site would retain a relationship to the scale of neighboring buildings and to the size and use of adjacent open space. A 200-foot maximum height is proposed in Area 5A for purposes of potentially attracting a hotel complex. This proposed SSMP building height limitations exceeds the LMP height limit of 65 feet and would constitute a substantial change. Building mass would be varied to create variety in the character of the building elevations. Pitched roofs would vary in height, direction, and mass with occasional vertical accents. Building ends would be stepped to preserve sunlight into important outdoor use areas.

Scale

The Project would consist of buildings of scale suited to the character of the site and adjacent land uses. However, a 200-foot maximum height is proposed in Area 5A for purposes of potentially attracting a hotel complex, which would exceed the LMP current height limit of 65 feet and would constitute a substantial change. Doors and windows would be of appropriate size, design, orientation and spacing and would be trimmed with materials and details appropriate to the climate and natural setting of the Eastern Sierra such as wood, wood-like materials, and natural stone. The ground floor of buildings would be scaled to human dimensions by the addition of gables, columns, arcades, cornices, porches, awnings, signage and other elements. Where appropriate, step eaves and cornice details would be incorporated into roof edges to give scale to the upper lines of walls.

Roof Form

The roofs would serve to define the scale of the Project buildings. Roofs would vary in height, direction and mass so that the rooflines would have the appearance of being discontinuous. Dominant roof pitches are to range from 4:12 to 12:12 (rise to run). Flatter roof slopes in limited areas would be permitted for specific design effect, functional requirements or snow management. Roof pitches greater than 12:12 would be allowable if part of a unique architectural treatment or feature element. Fascias would be in scale with the building. Towers or other vertical architectural projections would be square, round or octagonal in form or otherwise consistent with the architectural form of the structure. Skylights in the roof plane would be allowed if flat or in line with the roof plane. Roofing materials may be metal, asphalt shingle, flat concrete tile, slate, or shingle. Built-materials may be used on flat sections. Visible metal used for flashing, gutters, vents etc. would be non-reflective and painted to match the building. Where asphalt shingles are used on visually prominent roofs, the shingles would be a heavy grade architectural shingle. Chimneys would be compatible with the building design. Vent pipes would be architecturally screened or collected, if possible, into orderly clusters incorporated into chimney structures, or other architectural apparatuses. Mechanical equipment and elements such as video receivers would be concealed from view by architectural elements that complement the structure's design. All roof top

accoutrements would be painted a dark color and be non-reflective. When flat roof sections are used they would have a distinctive cornice or architectural feature to screen the flat portion. Dormer roofs would be desirable and may include gable, shed, eyebrow or hip roof forms. They may extend up from the exterior wall line of the building, extend forward to create a bay window effect, or be part of the roof form. Gable ends would be preferred over hip ends. Snow management devices and roof drainage systems would be integrated into the roof and building design.

Building Facades

A variety in alignment, materials, and colors would be encouraged in building facades. The façade design would take into consideration the building appearance on all sides. The visual alignment of a façade would vary by slight steps in the building walls, by openings cut in the walls, or by angles in surfaces. The composition of color and varying use of materials would provide vertical breaks in the wall. Extended and recessed balconies would add texture to the façades. Protruding balconies would have support details at the base of the balcony for structural support and architectural detail as well as overhead protecting roof or structure. Rails would be made of wood or of metal with a wood cap. Recessed balconies would appear as openings in a wall rather than as the total façade. The Project would incorporate design features to adequately deal with snow shedding and snowfall into exterior balconies. Architectural finished concrete would be used as appropriate to the building design.

Building Base

The Project would develop base treatments appropriate to the scale and design of the building to resolve grade transitions, to achieve a building to ground relationship, to provide a durable surface resisting weather impacts, and to highlight the pedestrian entrance locations. Buildings would step with natural grade and accommodate the conditions of the site. The base treatment is the transitional factor in the relationship between land and building. Appropriate materials would be used to provide proper building to ground relationships. Full height stone walls on building ground floors would be encouraged for buildings at prominent locations. Stone veneer would wrap around a visible building corner to provide a solid, natural appearance. Where practical, boulders would be incorporated into the building base giving the appearance of the building "growing" out of the surrounding environment.

Windows and Doors

The organization of windows and doors would generally be orderly rather than abstract and reflect the directness of design that is typical of mountain architecture. The Project would use a variety of window types; however, they would be typically rectangular and vertically oriented. Window trim is to be raised to create shadow and dimension and may feature special designs at the top casing or sill. Window trim on stone or plaster-coated buildings may be stone, wood, or same material as the wall. Bay windows are encouraged as design elements when appropriate to building design, use, and exterior composition. Doors would be recessed within walls to gain scale, weather protection and a sense of entrance/arrival.

Transoms may be repeated above windows as well as doors to add richness and scale to the building, as well as increase interior light levels.

Entrances, Porches, and Arcades

The Project would emphasize pedestrian level entrances to buildings or groupings of buildings. Porches would be slightly higher than adjacent walkways or streets. Passageways through or between buildings would have windows, special features and/or entrance doors on the sides. Ceilings would be well detailed, light in color and well lit. Walls would have trim, be well detailed, and be colorful. Arcades would allow a minimum of eight feet clear space between arcade columns and the adjacent building wall. Arcade columns would be adequately sized to be in scale with the building. Arcade roofs may be flat or sloped to reflect other roof forms on the building. The roof form and roof drainage would be designed to prevent snow shedding, icicle build-up or rainwater dripping over major points of entry into the arcade. Arcade lighting would be provided for safety.

Architectural Details

The Project would use architectural details that reflect local or regional forms and are consistent with the overall building design. The Project would give priority to the detail of door and window trim and building entrances as well as the eave lines of roofs and porch rail, balustrade, and columns. The Project would use brackets, struts and columns to support large roof overhangs and balconies extending outward from building walls. These would be well-shaped and emphasize the presence of connections to the building wall. Where appropriate, the Project would emphasize structural connections such as bolts, straps, pegs, etc., as opportunities for architectural detail.

Materials

The Project would create interesting building façades through the use of a diverse mix of materials. The building materials would be appropriate to the large scale and climatic extremes of the mountain region. Long-term durability, performance, and quality would be considered to determine which materials and finishes are appropriate to the prevailing climatic conditions at Mammoth. Pre-cast concrete, poured-in-place concrete and architectural finished concrete would be appropriate in special conditions where a building is distinctly separate from others and where suitable for the design intent. Exposed structural concrete or non-architectural concrete block buildings would not be acceptable. "Split-faced" or other architecturally finished concrete block would be considered under special conditions for retaining walls and exposed portions of a parking garage and/or foundation wall in locations where visibility is limited. Limited applications of plaster coat would be acceptable, in particular for use on upper levels. Horizontal lap siding, vertical board and batten, or shingle siding would be painted or stained. Fiber cement siding (such as "Hardiplank" or similar products) is discouraged on lower portions of building elevations. In general, metal or plastic siding materials would not be acceptable. Columns would be timber, log, metal, or stone clad. If metal is used, it must be well detailed. All columns would have base and top details

which exhibit good connections to other materials. The use of stone and rock cladding at a structure's base is encouraged to fix the building to the ground.

Colors

The Project would use complimentary building colors throughout the site to create an overall architectural unity while introducing other colors to express individuality and diversity within neighborhoods, projects, or building groupings. The Project would use a variety of colors drawn from the colors found in nature within the Mammoth Lakes region on buildings, window and door trims, eaves, window shutters, signage, and entrance areas to create vitality and would avoid repetition of similar colors that would create a monotone appearance. The consideration of neighboring building colors when using strong, deep trim colors on doors, windows, balcony railings, shutters, and structural details would be taken it account. Building colors would be presented on a color board showing primary material colors for approval before use. Roof colors would be muted rather than bright. All visible metal would be painted to minimize glare. Untreated and shiny metal surfaces would be avoided. Where building walls step to change direction, the wall color may change to emphasize the different façades. Color changes along a building facade would occur at inside, rather than outside corners. Where appropriate, wall colors may be vertically organized to express building modules or materials.

Structured or Underground Parking

The Project would provide underground parking facilities for the majority of the development. Surface parking for check in, tour bus, and delivery/service vehicles shall also be provided. Design of the parking structures would be consistent with the overall building design. The exterior and interior would incorporate the appropriate signage and lighting to enable convenient way finding and safety. The exit area would be properly lit to assist the vision of the driver leaving the garage. Placement of control gates would be coordinated with building and driveway design. The garage interiors would be well lit with fixtures that create a general light rather than point source glare. Exterior parking structure lighting would be designed to minimize glare and visible light sources by requiring light sources to be shielded and the light directed downward onto the structure and surrounding grounds. The signage would be appropriately sized, well-lit, logical, and clearly visible and would conform to the signage plan for the neighborhood.

Grading and Drainage

Grading would create natural-looking slopes that have diversity in gradient and profile where feasible. Round and feather tops, toes and edges of slopes to blend naturally with adjacent grades. Slope rounding may be limited or eliminated in locations where the priority is tree retention or Project improvements. All grading operations would be managed to avoid environmental damage to adjacent non-graded areas, to avoid water quality degradation in stream corridors, to avoid riparian vegetation, to protect existing trees, and to minimize impacts on nearby properties.

Terraced or battered retaining walls would be preferred. Retaining walls, material and color would maintain the natural setting and context. Where large vertical cuts or fills are required, the use of retaining walls would minimize the areas affected.

Amenities

The Project's outdoor use amenities would be located to take best advantage of south and southwest solar orientation between 10:00 a.m. and 4:00 p.m.

Landscaping

Landscape site work would be consistent with traditional approaches for the region, and would address current needs, codes, regulations and environmental considerations, and would enhance the user experience, safety, and enjoyment. The use of native plants that are indigenous to the Mammoth Lakes region is encouraged. Landscaping shall conform to the Town's adopted water-efficient landscape regulations.

The planted landscape on the Project site would incorporate trees and shrubs to revegetate disturbed areas, to buffer or frame views to allow summertime shading of outdoor places, to allow transition in scale and to soften building massing, and to introduce decoration and color into outdoor use areas. Planting on the Project site would use native conifers, deciduous trees, and shrubs. Trees would be primarily coniferous but with an intermixing of deciduous trees species. Trees would be grouped in informal masses rather than uniformly placed. Landscaping would be designed to be in scale with the surrounding public spaces and buildings. Tree canopies in pedestrian areas along roadways and in outdoor use areas would be high enough to avoid blocking of views of building lobbies, signage, entries, and must provide clearance for emergency vehicles. Shrubs would be used in some locations to screen service areas and to soften the appearance of graded banks. Shrubs can be used to provide a foliage mass with special fall color or wintertime berry effect. Lawn would be planted sparingly within and around outdoor use areas as a simple green cover and to provide casual relaxing spaces. Ground cover plants may be used on slopes too steep to mow. Meadow grasses and low growing native shrubs would be planted to create a naturalized understory under forest trees. Seasonal flowers would to be planted in high use areas. This includes plant beds in adjacent building entrances, flower boxes or pots on balcony rails and at windowsills, and in relationship to outdoor use areas. In general, plant materials would emphasize use of native plant species and low water requiring materials as recommended in the Town code. Artificial plants or lawn would be prohibited.

Walls, embankments, and other retaining structures would be evaluated to assure appropriateness in use of materials, details and construction techniques to adhere to historic or regional forms. Landscape walls would complement and extend the character of adjacent building bases, and the adjacent natural forms. Where possible, landscape walls would appear to grow out of natural forms such as rock outcrops; larger boulders can be used to anchor ends of stone walls; in many cases, stone and boulder faced embankments

are a more appropriate solution to achieving grade transition than vertical walls. Wall caps should extend one inch to one and a half inches beyond the wall surface to provide a shadow effect. Where appropriate, natural rock/boulders would be used to achieve grade transitions.

As much as practical, retaining systems would be or appear to be stacked rock. Boulders would be placed as prominent features of the site and landscape design and to reflect the pattern of large random boulders and clusters of boulders that occur naturally throughout Mammoth Lakes. Boulders would appear to be from the area. Where appropriate to the design, they would be as large as can be moved. Boulders would be placed in landscape areas and/or water features. Boulders would be incorporated adjacent to buildings, adjacent to and almost intruding into walkways, and as elements incorporated into low stone walls. Where practical, the appearance that the boulders were present and that the buildings and landscape had to be built around them would be created. In some places, a number of boulders would be clustered together to create a rock outcrop. The boulders used must have fairly flat planes so that they nest together. A group of round boulders that do not relate would not be stacked up together. Boulders would be set into the ground to blend with grades. In general, about one-third of a boulder would be buried. Boulders would not be perched directly on a finished surface. Stone and boulders would be placed in such a way as to create a natural appearance and would be clustered in some places, singular in others. Boulders would vary in size and placement to avoid uniformity. Boulders would be handled in a manner that would avoid machine scarring of the natural surfaces.

Utilities

The Project would minimize the visual impacts of aboveground utility structures and equipment including transformers, vents, condensers, fans, etc. The Project would minimize the visibility of exterior service and storage areas. The Project would locate equipment enclosures and storage containers in areas of low visibility, away from major public walks and streets and building entrances to the extent practical. Where possible, the Project would locate utility structures in landscape areas where shrub planting can screen them. The Project would use landscape materials, berms and tree planting, to visually screen exterior service areas, ramps, docks, etc. Painting of utility enclosures in colors compatible with the surrounding landscape palette would be encouraged when permitted by utility companies. Where size of structure and location warrant, service areas and utility structures would be enclosed behind walls, fences, or screens. The enclosure material would be consistent with adjacent buildings in materials, detailing, and color.

Visual Character Summary

As detailed in the preceding discussion, the Project would be designed to complement the existing alpine architectural character of nearby development and throughout the Town. Therefore, the Project would not degrade the existing character or quality of the Project site and its surroundings, and the associated impact would be ***less than significant*** and no mitigation measures are required.

Impact AES-5 Signage

The Project would provide signage that is clear, understandable and attractive but which also creates a memorable environment and sense of place. The signage would reflect the character of the Project with regard to materials, form and use. A master sign plan would be prepared that would allow an implementation of a comprehensive signage program. Signage form and quality would relate directly to its purpose, context and location. Signage would inform and direct, but in a manner and style which creates a memorable impression. As such, signage would provide an opportunity to introduce architectural, whimsical, historical and/or sculptural character.

The Project would create a system of sign types that facilitate specific activities within public areas. Signage would primarily be used to communicate traffic and parking regulations. Regulatory signs would be standardized, yet be given unique character and identification within the Project by sign shape, graphic style, color or materials. Regulatory signs would be minimized and would be sized, mounted and placed with care to limit visual intrusion. Directional/identification signage would primarily be used to orient and direct visitors both in vehicles, on foot, or on bicycle. Directional/identification signage would be large enough to make information legible and to facilitate decision making (particularly from a car). Sign materials may vary considerably but should be consistent with regional character, the local neighborhood, and nearby architectural elements. Where possible, directional/identification signs would be visually integrated within the landscape context.

The Project would encourage attractive, appropriate tasteful signage for commercial/retail identification. Signs would not be positioned so as to obscure any important architectural details. Monument signs may be employed for large commercial uses such as hotels. Monument signs would be integrated within the landscape and employ the use of materials appropriate to a mountain location. Projecting signs perpendicular to building faces would be encouraged for retail uses. These would be positioned along the first floor façade at a level which allows good visibility from pedestrian areas but high enough to allow site clearance where required (eight feet minimum clearance). Projecting signs would be placed to emphasize special shapes, details or projections that characterize a particular façade, to draw attention to shop entrances or to emphasize window displays. Signs should be supported by brackets, which can be decorative as well. Each retail business would be allowed a single projecting sign. Window signs would not obscure views into the business and would only be approved when they enhance the storefront. Flush mounted signs, when used, would be positioned within architectural features, such as transom panels above doorways, etc. Signs may be located on awnings or canopies when they are part of the building facade.

Therefore, the design of Project signage would be consistent with the Town's Design Guidelines, and the associated impact would be ***less than significant***.

Mitigation Measure AES-5

Prior to the issuance of building permits, all buildings containing three or more separate businesses shall prepare a Master Sign Plan, in accordance with the Mammoth Lakes Municipal Code Chapter 17.34 and 17.40.

Impact AES-6 Light and Glare

The lighting needs at the Project site would vary according to the type and intensity of use. Varying illumination levels would be developed which address the particular needs of outdoor spaces and activities: safety, security, vehicular and pedestrian movement, retailing, signage, etc. Excessive illumination would be avoided and lighting would be designed and placed that minimizes glare and reflection and light fixtures would be required than shelf the light source to direct light downward onto the structure and surrounding grounds to maintain "dark skies."

Lighting fixtures focused on streets and roadways would typically be mounted on poles at 15 to 24 feet in height with efficient lamp types (metal halide, high-pressure sodium, or other white light source). Illumination levels would be highest at intersections and along roadways carrying most traffic. Fixtures would be of a cutoff type design to reduce light spill and glare at adjacent buildings and outdoor areas. Fixtures and supporting poles would be placed in locations which minimize visual impact (for instance, where trees and other landscape elements create an appropriate vertical backdrop). Illumination levels along roadways would provide minimum requirement for safety and directional orientation and be consistent with local policies and zoning regulations concerning roadway illumination levels. Fixture locations would be staggered rather than formally arranged.

Lighting fixtures focused on drop-off parking, transit stops, and service areas would typically be mounted on poles at 15 to 20 feet in height or on building walls where appropriate. Metal halide, high-pressure sodium, or other efficient white lamp sources would be used. Illumination levels would be high enough to allow safety for vehicular and pedestrian circulation and service activities. Fixtures would be of cutoff design to eliminate spill and glare into adjacent areas. Where possible, particularly in parking areas, fixtures would be within landscaped areas. Light fixtures would be decorative as well as functional with detail and ornamentation that complements architectural styles and elements.

Lighting fixtures focused on heavily traveled pedestrian areas, walkways, outdoor use areas would typically be mounted on poles, building walls or other locations. Bollard lights along walkways would be permitted if provisions for snow melt or snow removal is employed. Color corrected metal halide, high-pressure sodium, fluorescent or incandescent light sources would be encouraged. Mercury vapor and low-pressure sodium sources would not be permitted. Illumination levels would be high enough to facilitate safe pedestrian travel, directional orientation and safety but not to create a bright, overly lit pedestrian environment. Use of cut-off lighting fixtures (i.e., flat glass lens that eliminates or minimizes direct glare with no upward throw of light) would be used to prevent glare and light spill. Emphasis

would be placed on creating higher illumination levels at building entrances, stairs, ramps, major pedestrian spaces, decision points, etc. General lighting would not overwhelm other secondary light sources used for signage, etc. Light fixtures would be decorative as well as functional with detail and ornamentation, while complementing architectural styles and elements.

Lighting fixtures focused on less traveled pedestrian paths, trails, and parks would be mounted on poles, bollards, tree trunks, etc., at heights between 3 feet and 15 feet. Light sources may be high-pressure sodium, color corrected metal halide, fluorescent and incandescent. Low voltage fixtures may be used when appropriate for the intended uses. General lighting and illumination levels would be subdued. Lights should serve primarily as directional cues and used for safety at stairs, ramps and other areas that require visibility. Cut off lighting fixtures would be used to prevent glare spill-off.

Accent, special purpose, and decorative lighting fixtures would be mounted on buildings, poles, or ground locations at heights as required. High-pressure sodium, metal halide, incandescent, etc. would be used. Decorative lighting in trees would be appropriate for seasonal displays. Illumination of signs, building elements, landscape features, fountains or other significant elements is appropriate for special lighting effect. Fixtures, especially freestanding at ground level or installed in the ground, would be shielded to prevent glare and located in landscaped areas where the fixture is not a hazard to pedestrians.

Lighting fixtures, typically incandescent, quartz or fluorescent, would be used for illuminating individual signs. Fixtures should be aimed and shielded to prevent glare. Neon lighting is discouraged as display lighting or signage illumination. Signage would be lit by external sources rather than by internally lit signs. Light fixtures would be unobtrusive and detailed to blend with and complement architectural detailing.

The Project would create opportunities for special lighting related to single events, seasonal displays, and ceremonial functions. Adequate weatherproof outdoor electrical receptacles in outdoor use areas from which power for lighting and sound may be pulled would be provided. In addition, adequate weatherproof outdoor electrical receptacles adjacent to specific trees, structures or other outdoor elements which may be lit for seasonal and holiday display would be provided.

Therefore, the Project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area, and the associated impact would be ***less than significant***.

Mitigation Measure AES-6

Prior to occupancy, all lighting on the Project site shall comply with the applicable requirements of the Town's Outdoor Lighting Ordinance, in accordance with Mammoth Lakes Municipal Code Chapter 17.34.

Impact AES-7 Shading/Shadows

Summer Solstice

Figure IV.B-23 illustrates the summer solstice shadows at 9:00 a.m., 12:00 p.m., and 5:00 p.m. The morning summer solstice shadows are generally cast towards the northwest, then shrink as they move overhead and extend towards the east in the afternoon. As shown in Figures IV.B-23, morning shadows at the southwestern portion of the Project (Areas 5B/5C/5D and 7) for the 9:00 a.m. shadow would cast onto the Sierra Star Golf Course; however, this shadow would be cast for less than three hours. The afternoon shadows would be cast onto the existing trees and would not cast directly onto the Sierra Star Golf Course. Therefore, as summer solstice shadows would not cast onto any shadow-sensitive uses in the Project vicinity, summer solstice shadow impacts would be ***less than significant***.

Winter Solstice

Figure IV.B-24 illustrates the winter solstice shadows at 9:00 a.m., 12:00 p.m., and 3:00 p.m. The morning winter solstice shadows are generally cast towards the northwest in the morning, then shrink as they move overhead, and extend towards the northeast in the afternoon.

As shown in Figure IV.B-24, the Project's winter solstice shadows would cast onto portions of the Sierra Star Golf Course in the morning and throughout the afternoon. Although the Sierra Star Golf Course is mostly used in the summer months when there is no snow on the ground, it is used sparingly in the winter months for snowshoeing by local residents. As the Sierra Star Golf Course is only used sparingly in the winter months, it is not considered to be a "routinely usable outdoor space" and thus is not considered to be a shadow-sensitive use in the winter season.

Similarly, the Project's winter solstice shadows would cast onto nearby residences. However, the usable outdoor spaces associated with the nearby residences (e.g., yards, balconies, etc.) are rarely used in the winter months. Therefore, as winter solstice shadows would not cast onto any shadow-sensitive uses in the Project vicinity, winter solstice shadow impacts would be ***less than significant***.

Autumn and Spring Equinox Shadows

Figure IV.B-25 illustrates the equinox shadows at 8:00 a.m., 12:00 p.m., and 4:00 p.m. The morning equinox shadows are generally cast towards the west in the morning, then shrink as they move overhead, and extend towards the east in the afternoon.

As shown in Figure IV.B-25, the Project's equinox shadows would cast onto portions of the Sierra Star Golf Course in the morning and throughout the afternoon. Similarly, the Project's winter solstice shadows would cast onto nearby residences. However, as stated previously, the equinox shadows depicted in Figures IV.B-25 are for informational purposes only. There are no established thresholds of significance for equinox shadows.

Source: The Town of Mammoth Lakes, IDS, CAJA 2006.

CHRISTOPHER A. JOSEPH & ASSOCIATES
Environmental Planning and Research

NORTH

Figure IV.B-23
Summer Solstice Shading
9:00 AM - 1:00 PM - 5:00 PM
Pacific Daylight Time

Source: The Town of Mammoth Lakes, IDS, CAJA 2006.

CHRISTOPHER A. JOSEPH & ASSOCIATES
Environmental Planning and Research

NORTH

Figure IV.B-24
Winter Solstice Shading
9:00 AM - 12:00 PM - 3:00 PM
Pacific Standard Time

Source: The Town of Mammoth Lakes, IDS, CAJA 2006.

CHRISTOPHER A. JOSEPH & ASSOCIATES
Environmental Planning and Research

NORTH

Figure IV.B-25
Equinox Shading
9:00 AM - 1:00 PM - 5:00 PM
Pacific Standard Time

CUMULATIVE IMPACTS

Impact AES-8

There are 49 related projects in the vicinity of the Project (see Figure II-9). Related projects that are close enough to the Project site to have a direct cumulative visual quality impact in combination with the Project include, but are not limited to, Related Project Numbers 4, 5, 8, 11, 12, 17, 18, 21, 28, 32, and 33 (see Table II-1). The effect of the Project combined with the related projects would be further alteration of existing views of Mammoth Mountain, the Sherwin Range, and other scenic resources identified in the 1987 General Plan. Therefore, the cumulative impacts would be considered significant. Because the Project would account for approximately 228 acres of the new development within the Town, the Project's incremental contribution to the significant cumulative impact would be ***significant and unavoidable***.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Project-specific impacts with respect to scenic resources and existing visual character following implementation of the recommended mitigation measures would be significant and unavoidable. In addition, the Project's incremental contribution to cumulative impacts would remain ***significant and unavoidable.***

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IV. ENVIRONMENTAL IMPACT ANALYSIS
C. AIR QUALITY

INTRODUCTION

This section describes the expected emission of air pollutants generated during the construction and operational phases of the Project and has been prepared in accordance with the Great Basin Unified Air Pollution Control District (GBUAPCD) air quality standards.

Overall Regulatory Setting

The Federal Clean Air Act (Federal CCA) governs air quality in the United States and is administered by the United States Environmental Protection Agency (U.S. EPA). In addition to being subject to federal requirements, air quality in California is also governed by more stringent regulations under the California Clean Air Act (California CAA), which is administered by the California Air Resources Board (CARB) at the State level and by the Air Quality Management Districts at the regional and local levels. The Mammoth Lakes area is located within the Great Basin Valley Air Basin (GBVAB), under the jurisdiction of the GBUAPCD.

National and State Ambient Air Quality Standards

As required by the Federal CAA, the National Ambient Air Quality Standards (NAAQS) have been established for six major air pollutants: carbon monoxide (CO), nitrogen oxides (NO_x), ozone (O_3), respirable particulate matter (PM_{10}), fine particulate matter ($PM_{2.5}$), sulfur oxides (SO_2), and lead. The California Ambient Air Quality Standards (CAAQS) apply to these same six criteria and also address sulfate (SO_4^{2-}), hydrogen sulfide (H_2S), and vinyl chloride (C_2H_3Cl). The CCAA standards are more stringent than the Federal standards and, in the case of PM_{10} and SO_2, far more stringent. Both Federal and State standards are summarized in Table IV.C-1. Federal and State standards for these pollutants establish upper limits that protect all segments of the population, including those most susceptible to the pollutants' adverse effects (e.g., children, the elderly, people weak from illness or disease, or persons doing heavy work or exercise). The U.S. EPA develops and is responsible for updating the National Ambient Air Quality Standards, and the CARB is responsible for establishing the California Ambient Air Quality Standards.

Table IV.C-1
Federal and State Ambient Air Quality Standards

Pollutant	Averaging Time	California Standard[a]	Federal Standard[b]
Ozone	1-hour	0.09 ppm	0.12 ppm
	8-hour	—	0.08 ppm
Carbon Monoxide (CO)	1-hour	20.00 ppm	35.00 ppm
	8-hour	9.00 ppm	9.00 ppm
Nitrogen Dioxide (NO_2)	1-hour	0.25 ppm	—
	Annual Average	—	0.053 ppm
Sulfur Dioxide (SO_2)	1-hour	0.25 ppm	—
	3-hour	—	0.5 ppm
	24-hour	0.04 ppm	0.14 ppm
	Annual Average	—	0.03 ppm
Particulate Matter (PM_{10})	24-hour	50 µg/m^3	150 µg/m^3
	Annual Geometric Mean	20 µg/m^3	—
	Annual Arithmetic Mean	—	50 µg/m^3
Fine Particulate Matter ($PM_{2.5}$)	24-hour	—	65 µg/m^3
	Annual Arithmetic Mean	12µg/m^3	15 µg/m^3
Lead (Pb)	30-day Average	1.5 µg/m^3	—
	Calendar Quarter	—	1.5 µg/m^3

Source: Summarized by CAJA from *BAAQMD CEQA Guidelines*, 1996, revised 1999.
Notes:
ppm = parts per million by volume
µg/m^3 = micrograms per cubic meter
— = no standard exists for this category
a. California standards for ozone, CO, NO_2, SO_2, and PM_{10} are values that are not to be exceeded.
b. Federal standards other than for ozone, particulates, and those based on annual averages are not to be exceeded more than once a year. The 1-hour ozone standard is attained if, during the most recent three-year period, the average number of days per year with maximum hourly concentrations above the standard is equal to or less than one. The 8-hour ozone standard is attained when the three-year average of the fourth highest daily concentrations is 0.08 ppm or less. The 24-hour PM_{10} standard is attained when the three-year average of the 99th percentile of the monitored concentrations is less than 150 µg/m^3. The 24-hour $PM_{2.5}$ standard is attained when the three-year average of 98th percentile is less than 65 µg/m^3.

The Federal and State standards shown in Table IV.C-1 provide acceptable concentrations for specific air contaminants in order to protect sensitive receptors from adverse effects. The health effects associated with each of the criteria air pollutants listed above are shown in Table IV.C-2.

Table IV.C-2
Health Effects Summary of the Major Criteria Air Pollutants

Air Pollutant	Adverse Effects
Ozone	Eye irritation Respiratory function impairment
Carbon Monoxide	Impairment of oxygen transport in the blood stream Aggravation of cardiovascular disease Impairment of central nervous system function Fatigue, headache, confusion, dizziness Fatal in the case of very high concentrations in enclosed places
Nitrogen Dioxide	Risk of acute and chronic respiratory illness
Sulfur Dioxide	Aggravation of chronic obstruction lung disease Increased risk of acute and chronic respiratory illness
Lead	Impairment of blood functions and nerve constriction Behavioral and learning problems in children
Particulate Matter	May be inhaled and lodge in and irritate the lungs Increased risk of chronic respiratory disease with long exposure Altered lung function in children May produce acute illness with sulfur dioxide
Source: BAAQMD, 1999.	

ENVIRONMENTAL SETTING

Climate

The Project site is located in Mono County. The climate of Mono County is dry with clear skies, excellent visibility, hot summers, and wide fluctuations in daily temperatures. The average minimum temperature is in the upper 20s (degrees Fahrenheit), while the average maximum temperature is in the mid- to high 50s. Most of the precipitation in this area, approximately 70 percent, occurs between November and February. Spring is the windiest season, with fast-moving northerly weather fronts. During the day, southerly winds result from the strong solar heating of the mountain slopes, causing upslope circulation. Summer winds are northerly at night as a result of cool air draining off the mountainsides. The mean annual wind speed in Mammoth Lakes is less than 11 miles per hour (mph). Mean annual wind speeds just outside of Mammoth Lakes at elevations of 8,900 ft. and 7,800 ft. above sea level are 21.7 and 11.5 mph, respectively.[1]

Air Quality Monitoring Data

Air quality in Mammoth Lakes is monitored by the GBUAPCD located in Bishop, California. This air basin consists of Inyo, Mono, and Alpine Counties. Spot monitoring conducted by CARB for this area in 1972 identified particulates as the most probable air quality problem for the basin. As a result, particulate

[1] *Town of Mammoth Lakes, Lodestar Master Plan FEIR, Section 4.7, Air Quality, February 1991, p. 4.7-1.*

monitoring stations were set up to monitor PM_{10} in the air basin. Currently, there are 12 monitoring sites in the GBVAB. Data reported for the years 2003 to 2005 are summarized in Table IV.C-3.

Table IV.C-3
PM_{10} and $PM_{2.5}$ Concentrations in the Mammoth Lakes Region

	24-Hour Maximum Concentration		Annual Average Concentration		Days Above National/State Standard	
	$PM_{2.5}$	PM_{10}	$PM_{2.5}$	PM_{10}	$PM_{2.5}$	PM_{10}
Regulatory Standards						
California Standard	N/A	50	12	20		
National Standard	65	150	15	50		
Monitoring Data						
Mammoth Lakes-Gateway HC Monitoring Station						
2003	34	74	N/A	N/A	0	0/1
2004	27	86	N/A	24.1	0	0/3
2005	27	85	N/A	N/A	0	0/5

Source: CARB, 2006.
All concentrations in $\mu g/m^3$ = micrograms per cubic meter
N/A = there was insufficient (or no) data available to determine the value

Table IV.C-4 presents CO and ozone monitoring data from the Mammoth Lakes Gateway Home Center monitoring station. Data from 1986-1988 were the most recent data available for this monitoring station. Table IV.C-4 indicates that from 1986 to 1988, the Gateway Home (Rite Aid) Center monitoring station did not report any violations of the California or National Ambient Air Quality Standards for CO or violations of the National Ambient Air Quality Standards for ozone. The monitoring station did, however, report three days in exceedance of the California standard for ozone in 1986, four days in exceedance of the California ozone standard in 1987, and five days in exceedance of the California ozone standard for 1988. In addition, the maximum eight-hour CO concentration measured at the Mammoth Lakes monitoring station varied from 5.7 ppm in 1994 to 2.5 ppm in 2001. The maximum O^3 concentration at the Mammoth Lakes monitoring station also varied yearly, from 0.15 ppm in 1992 to 0.08 ppm in 1998. Exceedances of the ozone standard have occurred predominantly at night. In addition, the 2001 CARB transport review found that the San Joaquin Valley was the major contributor to the Mammoth Lakes ozone standard exceedances.[2]

[2] *Town of Mammoth Lakes, General Plan Update EIR, October 2005, p. 4-23.*

Table IV.C-4
Ambient Air Quality Ozone and CO Standards and
Monitoring Data Near the Project Area

	Ozone		CO	
Regulatory Standards	**1-hour (ppm)**	**8-hour (ppm)**	**1-hour (ppm)**	**8-hour (ppm)**
California Ambient Air Quality Standard	0.09	N/A	20.0	9.0
National Ambient Air Quality Standard	0.12	0.08	35.0	9.0
Monitoring Data				
1986: Gateway Home Center	0.10	N/A	9.0	4.6
1987: Gateway Home Center	0.10	N/A	9.0	6.4
1988: Gateway Home Center	0.10	N/A	11.0	6.0

Notes:
ppm = parts per million
N/A = not available or not applicable
Source: Lodestar Master Plan FEIR, p, 4.7-7.

Attainment Status

Effective January 23, 2005, the Mono County portion of the GBVAB has a nonattainment designation for O_3 (State standard only). All of the GBVAB is designated in nonattainment of the federal PM_{10} standard. The Mammoth Lakes area and Mono County are considered in attainment of all other Federal and State standards. Although Mono County is categorized as nonattainment of the State O_3 standard, there is no ozone implementation plan for attaining the ozone standard in Mono County, nor is one required as outlined in the 2001 CARB Ozone transport review. Instead, the document states "Transport from the central portion of the (San Joaquin) Valley is responsible for ozone violations in Mammoth Lakes."[3]

A Draft Air Quality Management Plan (AQMP) for the Town of Mammoth Lakes was released on January 19, 1990. The Plan identified PM_{10} sources and mitigation that could be instituted to attain the National Ambient Air Quality Standards. The Plan, prepared by GBAPCD, is required under the CAA and will become part of the State Implementation Plan to attain Federal standards. The Plan identifies exceedances of the PM_{10} standard that occur predominantly in the winter due to increased emissions from wood stoves, fire places, and traffic related road dust and cinders. This change is also fueled largely by the influx of visitors to the Mammoth Lakes area during ski season. The combination of periods of meteorological stagnation and peak periods at the ski resorts result in violations of PM_{10} standards. The Plan includes a control strategy to satisfy the Federal CAA requirement by demonstrating how the Mammoth Lakes area will meet and maintain the National Ambient Air Quality standards for PM_{10}.

Sensitive Receptors

Land uses such as primary and secondary schools, hospitals, and convalescent homes are considered to be sensitive receptors to poor air quality because the very young, the old, and the infirm are more susceptible

[3] *Town of Mammoth Lakes, General Plan Update EIR, October 2005, p. 4-23.*

to respiratory infections and other air quality-related health problems than the general public. Residential uses are considered sensitive because people in residential areas are often at home for extended periods of time, so they could be exposed to pollutants for extended periods. Recreational areas are considered moderately sensitive to poor air quality because vigorous exercise associated with recreation places a high demand on the human respiratory function. The nearest sensitive receptors to the Project are residential uses located on both sides of Minaret Road, adjacent to the project site. In the future, there will also be sensitive residential uses located on adjacent portions of the Project site, since portions of the site are already built and may be occupied while adjacent portions of the site are undergoing construction.

ENVIRONMENTAL IMPACTS

Thresholds of Significance

In accordance with Appendix G to the CEQA Guidelines, the Project would have a significant environmental impact on air quality if it would:

(a) Conflict with or obstruct implementation of the applicable air quality plan;

(b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation;

(c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);

(d) Expose sensitive receptors to substantial pollutant concentrations; or

(e) Create objectionable odors affecting a substantial number of people.

Project Impacts and Mitigation Measures

Impact AQ-1 Construction/Demolition Impacts

Foreseeable construction activities for the Project would include site preparation, grading, placement of utilities and other infrastructure, placement of foundations for structures, and fabrication of structures across the entire 228.8-acre Project area. Construction activities typically require the use of heavy trucks, excavating and grading equipment, concrete breakers, concrete mixers, and other mobile and stationary construction equipment. Per the Project applicant, grading equipment for the Project would include a rubber tire loader, an excavator, a mini excavator or bobcat, a compactor or roller, a water truck and two dump trucks.[4] Emissions during grading and construction would be caused by material handling, traffic

[4] *Project information provided by the Applicant March 27, 2006.*

on unpaved or unimproved surfaces, use of paving materials and architectural coatings, exhaust from construction worker vehicle trips, and exhaust from diesel-powered construction equipment.

Heavy construction activity on dry soil exposed during construction phases between 2009 and 2012 could cause emissions of dust (usually monitored as PM_{10}). Reactive organic gases (ROGs), NO_x, CO, and additional particulate matter emissions also would be created from the combustion of diesel fuel by heavy equipment and construction worker vehicles. Throughout the construction phases, construction-related emissions would vary day-to-day depending on the specific construction phase.

Construction-related activities associated with the Project would result in dust and equipment exhaust emissions that could, at times, contribute to nuisances to adjacent residential uses located on both sides of Minaret Road. In addition, the Project would be developed in separate phases, so there may be portions of the site that are built and occupied by residents while adjacent portions of the site are undergoing construction.

Construction projects using typical grading and construction equipment, such as dump trucks, scrapers, bulldozers, compactors, front-end loaders, fork lifts, and cranes which temporarily emit precursors of ozone (e.g., ROGs or NO_x), are already included in the emission inventories of State- and Federally-required air plans and would not have a significant impact on the attainment and maintenance of ozone ambient air quality standards. However, unless particulate emissions are reduced by implementation of feasible control measures, impacts caused by these emissions would be potentially significant. As a result, construction activities in each of the five development areas that comprise the Project area would result in potentially ***significant*** air quality impacts.

Mitigation Measure AQ-1

The Project applicant shall require that the following practices be implemented by including them in the contractor construction documents to reduce the emissions of pollutants generated by heavy-duty diesel-powered equipment operating at the project site throughout the project construction phases:

a. Water all construction areas at least twice daily;

b. Cover all trucks hauling soil, sand, and other loose materials;

c. Apply clean gravel, water, or non-toxic soil stabilizers on all unpaved access roads, parking areas and staging areas at constructions sites;

d. Remove excess soils from paved access roads, parking areas and staging areas at construction sites;

e. Sweep streets daily (with mechanical sweepers) if visible soil material is carried onto adjacent public streets;

f. Hydroseed or apply non-toxic soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more);

g. Enclose, cover, water twice daily, or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.);

h. Limit traffic speeds on unpaved roads to 15 miles per hour;

i. Install gravelbags, cobble entrys, or other Best Management Practices (BMPs) erosion control measures to prevent silt runoff to public roadways;

j. Replant vegetation in disturbed areas as soon as possible;

k. Install wheel washers for all exiting trucks or wash off the tires or tracks of all trucks and equipment leaving the construction site;

l. Install wind breaks at the windward sides of the construction areas;

m. Suspend excavation and grading activities when wind (as instantaneous gusts) exceeds 25 miles per hour;

n. The idling of all construction equipment shall not exceed five minutes;

o. Limit the hours of operation of heavy duty equipment and/or the amount of equipment in use;

p. All equipment shall be properly tuned and maintained in accordance with the manufacturer's specifications;

q. When feasible, alternative fueled or electrical construction equipment shall be used for the project site;

r. Use the minimum practical engine size for construction equipment; and

s. Gasoline-powered equipment shall be equipped with catalytic converters, where feasible.

Impact AQ-2 Operational Emissions

Operational emissions generated by both stationary and mobile sources would result from normal day-to-day activities on the Project site after occupation. Stationary area source emissions would be generated by the consumption of natural gas for space and water heating devices, cooking appliances, and fireplaces, the operation of landscape maintenance equipment, the use of consumer products, and the application of architectural coatings (paints). Mobile emissions would be generated by the motor vehicles traveling to and from the Project site. In accordance with the EIR for the Draft General Plan (2005) mitigation measure 1.7.B.b.3, no solid fuel burning appliances (fireplaces) other than EPA Phase II certified wood burning and pellet stoves would be permitted within the proposed residential units. According to the Traffic Impact Analysis for the Project, potential vehicle trips to and from the Project site would be reduced through several design and location features. Vehicle trips generated by some

Project employees would be eliminated by providing affordable housing units within the Project site for these people. Some vehicle trips for site visitors would be eliminated by the future transit line that would service this development area as well as the gondola that may be constructed from Area 5 to the Little Eagle ski area. According to the Traffic Impact Analysis, the potential employee trip generation was reduced by 20 percent, the portion of vehicle trips that would be diverted to transit is 14 percent, and the gondola would reduce the n umber of peak hour vehicle trips for the Project by approximately 30 percent.

The Mammoth Lakes portion of the GBVAB is designated as nonattainment for O_3 (State standard only) and as a nonattainment area for PM_{10} (State and Federal standards). As discussed previously, however, the O_3 impact in Mammoth Lakes is primarily the result of pollution generated in the San Joaquin Valley, transported by air currents and winds over the Sierra Nevada and is not a condition substantially generated by activities and sources in the Town. In fact, exceedances of the O_3 standard would likely occur without any contribution of emissions of O_3 precursors (nitrogen oxides and hydrocarbons) from Town activity.[5] In the absence of any quantifiable thresholds of significance from the GBUAPCD, as well as the demonstrated condition in which local O_3 levels are created by emissions generated outside the Town, the increase in O_3 precursor emissions as a result of implementation of the Project would not substantially contribute to the exceedances of the State O_3 standard.

According to the AQMP, particulate matter that causes PM_{10} violations consists primarily of road dust and soot from wood combustion. In other words, tailpipe emissions from heavy-duty diesel engines constitute a minor or negligible component of PM_{10} impacts in the Mammoth Lakes area.[6] In addition, motor vehicle emissions such as those used in snow-removal equipment have been greatly reduced since the AQMP analysis was completed because State and Federal programs now require the use of low-sulfur diesel fuel as of 2006. When fully implemented in 2010, heavy duty on road diesel engines will be up to 95 percent cleaner than today's models. As a result, CARB estimates a 90 percent reduction in particulate emissions for new on- and off-road engines.

Therefore, particulate matter along roadways, or road dust, would constitute the primary source of fugitive dust emissions associated with the Project. The Project would increase vehicular traffic in the Town of Mammoth Lakes by a total of 7,350 vehicle miles traveled (VMT) per day. Although this represents a reduction in total VMT from the previously approved 1991 Lodestar Master Plan, this would still increase annual PM_{10} emissions by less than seven percent in an area that is already in non-attainment for PM_{10}. This would be considered a ***significant*** impact.

In addition, fireplace use constitutes a secondary source of particulate emissions. The Project would contribute to annual PM_{10} emissions from residential fireplace use. The Lodestar Master Plan EIR estimates that emissions of PM_{10} from fireplaces and wood burning stoves would increase by

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[5] *Town of Mammoth Lakes, General Plan Update EIR, October 2005, p. 4-36.*

[6] *Town of Mammoth Lakes, General Plan Update EIR, October 2005, p. 4-37.*

approximately 18 percent above the 1991 annual emissions from residential wood combustion.[7] However, emissions from wood burning stoves or fireplaces would be expected to decrease from 1991 levels with implementation of the Project because of the prohibition of non-EPA II rated wood burning appliances in multifamily dwellings (per Section 8.30.030 of the Municipal Code), the mandatory curtailment of solid fuel combustion on poor air quality days being implemented by the APCD (Section 8.30.090 of the Municipal Code), and the ongoing non-EPA II rated wood burning stove replacement program (Section 8.30.050 of the Municipal Code). According to the AQMP, residential units must also be limited to one wood burning appliance per unit of an EPA Phase II-certified level, each hotel may have only one fireplace in the lobby or other common area (no other solid fuel appliances are allowed), and all structures shall have high-efficiency central heat. The AQMP has also imposed a solid fuel burn ban on poor air quality days. As a result of all of the above, particulate emissions generated by wood combustion from the Project would not substantially contribute to Federal and State PM_{10} violations.

Mitigation Measure AQ-2

The Project applicant shall require the following implementation measures to reduce PM_{10} operational emissions:

a. The Project shall include a transportation demand management program to reduce overall VMTs, in order to demonstrate compliance with the Federal PM_{10} standard of 150 µg/m.[3] The program shall include, but not be limited to, circulation system improvements, shuttles to and from parking areas, and the location of facilities to encourage pedestrian circulation.

b. The Project shall be linked to existing developed areas through existing road networks, public transit systems, open space systems, and bicycle and pedestrian systems.

c. The Project shall implement trip reduction measures particularly during PM peak traffic hours to disperse trips between parking areas and mountain portals to and from the ski area.

d. Multi-family developments within the Project area shall be required to pay the street sweeping fee.

e. Residential condominium units shall enter into a transit fee agreement with the Town consistent with the Town's established Transit Fee Agreement Program.

f. No solid fuel burning appliances, other than EPA Phase III-certified wood burning and pellet stoves, shall be permitted within multi-family and lodging developments.

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[7] *Town of Mammoth Lakes, Lodestar Master Plan FEIR, Section 4.7, Air Quality, February 1991, p. 4.7-14*

Local CO Concentrations

Traffic-congested roadways and intersections have the potential to generate localized high levels of CO. By generating additional traffic, the Project could potentially cause exceedances of the 1-hour or 8-hour Federal or State CO standards. These conditions would only occur during worst-case atmospheric conditions when temperatures are very low and there is little to no wind speed. Although the Mammoth Lakes Gateway Home Center monitoring station has not recorded any exceedances of the State or Federal CO standards, elevated CO concentrations due to heavy traffic volumes and congestion at specific intersections or roadway segments are generally localized and can lead to high levels of CO, or "hot spots." For this reason, CO modeling was performed in the Project area for intersections or roadway segments currently operating at LOS D, E, or F that would be affected by Project traffic, or for intersections that would decline to LOS D, E, or F as a result of the Project. Therefore, CO modeling was performed for the following four roadway intersections based on the Saturday peak traffic hour:

- Mountain Boulevard/Main Street (LOS D in 2014 with cumulative development);
- Minaret Road/Old Mammoth Road (LOS F in 2014 with cumulative development);
- Minaret Road/Meridian Boulevard (LOS D in 2014 with cumulative development); and
- Minaret Road/Lake Mary Road-Main Street (LOS D in 2014 with cumulative development).

For this analysis, CO concentrations were calculated based on a simplified CALINE4 screening procedure to determine if the Project would cause any exceedances of the State and Federal CO standards. The national 1-hour ambient air quality standard is 35.0 ppm and the State 1-hour ambient air quality standard is 20.0 ppm. The 8-hour national and state ambient air quality standard is 9.0 ppm. This methodology assumes worst-case conditions (i.e., wind direction is parallel to the primary roadway, 90° to the secondary road; wind speed of less than one meter per second; and a high level of atmospheric stability or lack of change) and provides a screening of maximum, worst-case CO concentrations. Maximum CO concentrations were calculated for peak-hour traffic volumes at the intersections noted above under existing conditions, existing plus Project conditions, and cumulative conditions. Results are presented in Table IV.C-5 and Table IV.C-6.

Table IV.C-5
Summary of Localized CO Analysis (1-hour) for the Project

Intersection	1-Hour CO Concentrations (ppm)		
	Existing 2004	Existing Plus Project	Cumulative w/Project (2014)
Mountain Boulevard/Main Street	10.6	10.3	11.1
Minaret Road/Old Mammoth Road	10.4	10.2	10.3
Minaret Road/Meridian Boulevard	10.7	10.4	10.5
Minaret Road/Lake Mary Road-Main Street	11.3	10.8	10.9
1-Hour Ambient Air Quality Standard	**20.0**	**20.0**	**20.0**

Notes: *Concentrations are based on CALINE4 outputs that are adjusted with anticipated background CO concentrations of 1.4 ppm (1-hr).*
Source: Christopher A Joseph & Associates, 2006.

The year 2014 was used as the date for CO emission analysis under cumulative conditions, which includes all future growth assumed in Section IV.M **(**Traffic/Circulation) of this Draft EIR. In some cases, future or cumulative CO emissions are lower than existing CO levels because vehicles are projected to improve in efficiency in the future and reduce CO emissions. Traffic conditions may also improve in the future at some intersections because of traffic improvement measures, thus reducing concentrated CO emissions. Based on the CALINE4 computer-modeling results (Table IV.C-5 and Table IV.C-6.), local CO concentrations would not exceed state or national ambient air quality standards. Therefore, emissions of CO associated with the Project would not result in a significant CO air quality impact.

Table IV.C-6
Summary of Localized CO Analysis (8-hour) for the Project

Intersection	8-Hour CO Concentrations (ppm)		
	Existing 2004	Existing Plus Project	Cumulative w/Project (2014)
Mountain Boulevard/Main Street	7.3	7.1	7.4
Minaret Road/Old Mammoth Road	7.1	7.1	7.1
Old Mammoth Road/Main Street	7.4	7.2	7.2
Minaret Road/Meridian Boulevard	7.3	7.2	7.2
Minaret Road/Lake Mary Road-Main Street	7.6	7.3	7.4
8-Hour Ambient Air Quality Standard	**9.0**	**9.0**	**9.0**

Source: Christopher A Joseph & Associates, 2006.
Notes: Concentrations are based on CALINE4 outputs that are adjusted with anticipated background CO concentrations of 1.0 pm (8-hr).

Odors

Construction activities could generate airborne odors associated with the operation of construction vehicles (e.g., diesel exhaust) and the application of architectural coatings. However, these emissions would occur during daytime hours only for limited periods and would be restricted to the immediate vicinity of the construction site and activity. The wind would also tend to disperse odors, and such activities would not affect a substantial number of people or cause a significant impact.

Typical operational uses that may result in significant odor impacts include wastewater treatment plants, sanitary landfills, transfer stations, composting facilities, petroleum refineries, asphalt batch plants, chemical manufacturing, fiberglass manufacturing, painting/coating operations, rendering plants, and coffee roasters. None of these types of uses are proposed in the Project area; therefore, creation of objectionable odors would not be a likely impact of the Project.

CUMULATIVE IMPACTS

Impact AQ-3

The APCD does not have numerical thresholds to determine whether the Project would result in a cumulatively considerable net increase of PM_{10} or 0_3 precursors. However, as discussed above, 0_3 impacts are primarily the result of pollution generated in the San Joaquin Valley. Thus, an increase of 0_3 precursor emissions as a result of the Project would not substantially contribute to the exceedances of the State 0_3 standard.

According to the Town of Mammoth Lakes General Plan Update EIR, the increase in PM_{10} emissions would be considered cumulatively considerable even without development of the Project.[8] In addition, the increase in PM_{10} emissions as a result of the Project would be considered a significant impact. However, implementation of Mitigation Measure AQ-2 would reduce Project PM_{10} emissions to a less-than-significant level. Therefore, implementation of these measures would also reduce the Project's cumulative impact on air quality to a ***less-than-significant*** level.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Construction Impacts

As stated above, implementation of construction mitigation measures would reduce construction-related air quality impacts to a ***less-than-significant*** level.

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[8] *Town of Mammoth Lakes, General Plan Update EIR, October 2005, p. 4-41.*

Operational Impacts

Implementation of the mitigation measures described above would ensure that operational emissions from the Project would be reduced to a ***less-than-significant*** level.

Cumulative Impacts

The recommended Project operational mitigation measures would also reduce the cumulative emissions associated with the Project to a ***less-than-significant*** level.

IV. ENVIRONMENTAL IMPACT ANALYSIS
D. BIOLOGICAL RESOURCES

INTRODUCTION

This section of the Draft Environmental Impact Report (Draft EIR) provides a description of the biological and wetland resources on the project site, information on regulations that serve to protect sensitive resources, an assessment of the potential impacts of the Project, and recommended measures to mitigate potentially significant impacts on sensitive resources. Various technical reports were reviewed and prepared to analyze the potential biological resources impacts associated with the Project. These technical reports are summarized in the section below and are included in Appendix D of this Draft EIR.

BACKGROUND AND METHODS

An assessment of biological resources within the Project site was conducted by the Project biologist, WRA Environmental Consultants (WRA) in order to complete a *Biological Assessment Report* for the Project site. This biological assessment involved a site visit and the review of previous studies conducted by the applicant's biological and wetland consultants, including 2006 permit applications prepared by the applicant for the United States Army Corps of Engineers (Corps), Regional Water Quality Control Board (RWQCB), and California Department of Fish and Game (CDFG); aerial photographs; United States Geological Survey (USGS) topographic maps; current California Natural Diversity Database (CNDDB) records; and the California Native Plant Society (CNPS) on-line inventory. The Soil Survey of Mono County, California [United States Department of Agriculture (USDA)] was also examined to determine if any unique soil types that could support sensitive plant communities and/or aquatic features could be present in the Project site. The following provides a list of the past studies which were reviewed by WRA during their biological site assessment.

- *Final Environmental Impact Report for Lodestar at Mammoth* – Volume I-III, prepared by EIP Associates, February 1991
- *Update to the Biotic Resources Report for the Sierra Star Master Plan*, prepared by Resource Concepts, Inc. (RCI), February 17, 2003
- *Addendum to the report entitled Updated to the Biotic Resources Report for the Sierra Star Master Plan*, prepared by RCI, February 28, 2003
- *Sierra Star Property Wetland Delineation Report*, prepared by RCI, August 2004
- *Lake and Streambed Alteration Notification*, prepared by RCI, February 13, 2006
- *Water Quality Certification Application*, prepared by RCI, February 14, 2006
- *Army Corps of Engineers Notification of Work*, prepared by RCI, February 14, 2006
- *Intrawest Sierra Star Wetland Delineation Report*, prepared by RCI, July 17, 2006

Past reconnaissance surveys of the Project site were conducted by EIP Associates in 1990 for the Biotic Resources Survey for the *Final Environmental Impact Report for Lodestar at Mammoth*, which included a wildlife survey on June 16 through 18, 1990 and a botany survey on June 26 through 27, 1990. During these surveys, the site was examined on foot by a wildlife biologist and botanist to gather information on the type and extent of habitats and to identify as many plant and wildlife species as possible. More recently, an update to the Biotic Resources Survey for the *Final Environmental Impact Report for Lodestar at Mammoth* was prepared by RCI for the Sierra Star Master Plan on February 17, 2003. This report provided results of a 2003 CNDDB database search for species with potential to occur within the Project site, but was not based upon a recent site visit that verified current site conditions.

The *Biological Assessment Report* prepared by WRA provides general information on the potential presence of sensitive species or habitats. A site visit was conducted by WRA biologists on July 26 and 27, 2006, to determine (1) plant communities present within the Project site, (2) if existing conditions provided suitable habitat for any special status plant or wildlife species, and (3) if sensitive habitats were present. The biological assessment is not necessarily an official protocol-level survey for listed species that may be required for project approval by local, state, or federal agencies. However, specific findings on the occurrence of any species or the presence of sensitive habitats may require that protocol surveys be conducted. The biological assessment was based on information available at the time of the study and on conditions that were observed on the Project Site at the time of the study. The methods of study employed by WRA during the biological assessment of the Project site are outlined below.

Vegetation Communities

Vegetation communities are classified based on existing descriptions presented in the *Preliminary Descriptions of the Terrestrial Natural Communities of California*.[1] However, in some cases it is necessary to identify variants of plant community types or to describe non-vegetated areas that are not described in the literature.

Special Status Species

Literature Review

Potential occurrence of special status species on the Project site was evaluated by first determining which special status species have potential to occur in the vicinity of the Project site through a literature and database search. Database searches for known occurrences of special status species included the Old Mammoth 7.5 minute USGS quadrangle and the eight surrounding USGS quadrangles. The following sources were reviewed to determine which special status plant and wildlife species have been documented to occur in the vicinity of the Project site:

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[1] *Holland, R. F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. Prepared for the California Department of Fish and Game, Sacramento, California*

1. California Natural Diversity Database records (CNDDB)[2]
2. United States Fish and Wildlife Service (USFWS) Quadrangle Species Lists[3]
3. CNPS Electronic Inventory records[4]
4. CDFG publication "California's Wildlife, Volumes I-III"[5]
5. CDFG publication "Amphibians and Reptile Species of Special Concern in California"[6]

Species Assessment

A species assessment was conducted by evaluating the suitability of habitats within the Project site for those species recorded within the vicinity of the site. A site visit was conducted to evaluate habitat suitability and to determine the potential for the Project to impact special status plant and wildlife species. Potential for special status species to occur in the Project site was then evaluated according to the following criteria:

(1) **Not Present**. Habitat on and adjacent to the site is clearly unsuitable for the species requirements (foraging, breeding, cover, substrate, elevation, hydrology, plant community, site history, disturbance regime).

(2) **Unlikely**. Few of the habitat components meeting the species requirements are present, and/or the majority of habitat on and adjacent to the site is unsuitable or of very poor quality. The species is not likely to be found on the site.

(3) **Moderate Potential**. Some of the habitat components meeting the species requirements are present, and/or only some of the habitat on or adjacent to the site is unsuitable. The species has a moderate probability of being found on the site.

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2 *California Department of Fish and Game. 2006. Natural Diversity Database, Wildlife and Habitat Data Analysis Branch. Sacramento.*

3 *United States Fish and Wildlife Service (USFWS). 2006. Unofficial Species Lists, Sacramento Fish and Wildlife Service. Sacramento. June 5.*

4 *California Native Plant Society. 2006. Electronic Inventory of Rare and Endangered Vascular Plants of California. California Native Plant Society, Sacramento, California.*

5 *Zeiner, D. C., W. F. Laudenslayer, Jr., K. E. Mayer, and M. White. 1990. California's Wildlife, Volume I-III: Amphibians and Reptiles, Birds, Mammals. California Statewide Wildlife Habitat Relationships System, California Department of Fish and Game, Sacramento.*

6 *Jennings, Mark R. 2004. An Annotated Check List of Amphibians and Reptile Species of California and Adjacent Waters. Third, revised edition. California Department of Fish and Game.*

(4) **High Potential**. All of the habitat components meeting the species requirements are present and/or most of the habitat on or adjacent to the site is highly suitable. The species has a high probability of being found on the site.

(5) **Present**. Species is observed on the site or has been recorded (i.e., CNDDB and other reports) on the site recently.

Appendix D of the WRA *Biological Assessment Report* (included in Appendix D to this Draft EIR) presents the special status plant and wildlife species with a potential to occur within the Project site, their habitat requirements, and a rating of potential for occurrence. .

Sensitive Natural Communities and Jurisdictional Resources

Plant communities identified within the Project site were evaluated to determine if they are considered sensitive under federal or state regulations or policies. Special methods used to determine potential jurisdiction under these regulations and policies are given below.

Riparian Habitat

A review of aerial photographs and site photographs, and an on-site inspection of drainages and aquatic features was conducted to determine if the banks of drainages, streams, and other aquatic features within the Project site supported hydrophytic or stream-dependent woody plant species (riparian species). In addition, CDFG, RWQCB, and Corps application packages were reviewed to determine whether riparian habitat was noted during studies conducted by RCI.

Wetlands and Waters of the United States

The presence and extent of wetland and waters on the site were inferred by reviewing the 2004 and 2006 wetland delineation reports and application materials prepared for submission to the Corps, RWQCB, and CDFG by RCI during February 2006; however, these materials did not encompass all portions of the Project Site. On July 27, 2006, a Section 404 jurisdictional wetland delineation was performed by biologists from WRA and Christopher Joseph & Associates (CAJA) within the Project Area. The purpose of this study was to (1) confirm the determinations made in previous reports and/or permit materials regarding jurisdictional features on-site, and (2) to determine if any additional wetlands or "waters" potentially subject to jurisdiction by the Corps, RWQCB, or CDFG were present. The delineation was based on methods contained in the Corps Manual (Environmental Laboratory 1987). The Project Site was evaluated for the presence of wetland indicators including dominance by hydrophytic plant species, presence of hydric soils, and presence of wetland hydrology.

ENVIRONMENTAL SETTING

The Project site is located in the Town of Mammoth Lakes (Town), Mono County, California. The Town is located on the eastern slopes of the Sierra Nevada at an elevation of approximately 7,900 feet above sea level within Section 34, Township 3 South, Range 27 East. The Town's located approximately 168 miles south of Reno, Nevada, and approximately 310 miles north of Los Angeles, California. Neighboring communities of the Town include June Lake to the northwest, Benton to the east, and Tom's Place to the southeast (refer to Figure II-1 and Figure II-2). Regional access is provided by US Highway 395 and California State Highway 203. Major arterials which provide access to the site include Minaret Road to the north and south, Main Street to the north, Joaquin Road to the east, Meridian Boulevard to the south, and Lake Mary Road to the west.

Vegetation Communities

Jeffrey pine-fir forest is the dominant plant community within and surrounding the Project site (Figure IV.D-1). Jeffrey pine-fir forest is not identified as sensitive in local or regional plans, policies, regulations, or by the CDFG. Developed features such as roads, parking lots and structures are also present in portions of the Jeffrey pine-fir forest on the Project site. The forest canopy of this vegetation community consists of Jeffrey pine (*Pinus jeffreyi*), red fir (*Abies magnifica*), white fir (*Abies concolor*), lodgepole pine (*Pinus contorta*) and ponderosa pine (*Pinus ponderosa*). Common understory plants are comprised of montane chaparral species, including Great Basin sagebrush (*Artemesia tridentata*), tobacco brush (*Ceanothus velutinus*), greenleaf manzanita (*Arctostaphylos patula*), creeping snowberry (*Symphoricarpos mollis*), and wax currant (*Ribes cereum*). The drainages contain herbaceous plants such as mugwort (*Artemisia vulgaris*), mule ears (*Wyethia mollis*), sedges (*Carex* spp.), and yarrow (*Achillea millefolium*). This plant community has an open understory, well-drained soils and is replaced by subalpine coniferous forest and lodgepole pine forest at its upper elevation limit.

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Source: WRA Environmental Consultants, August 2006.

CHRISTOPHER A. JOSEPH & ASSOCIATES
Environmental Planning and Research

Figure IV.D-1
Vegetation Map

Wildlife

Despite development of the adjacent lands, the site likely continues to provide suitable habitat for common mammal, bird, reptile and other wildlife species such as mule deer, chipmunks, deer mice, and woodpeckers.

The Jeffrey pine-fir forest has low structural diversity, resulting in relatively low animal species and numbers occupying this habitat; however, the pine seeds, bark and foliage are a valuable food source for many wildlife species, and pines also provide vital nesting habitat for many common bird species.[7]

Special Status Species

Plants

Based upon a review of the resources and databases available, as outlined in the Background and Methods discussion above, 31 special status plant species have been documented in the general vicinity of the Project site. Appendix D of the *Biological Assessment Report* (included in Appendix D to this Draft EIR) summarizes the potential for occurrence for these plant species in the Project site. WRA and CAJA conducted a protocol-level rare plant survey on July 26, 2006, which captured peak blooming periods of all special status plant species with potential to occur within the Project site. Plant species were identified to the level necessary to determine if they were rare or not; however, no special status species were found in the Project site. A list of observed species is provided in Appendix B of the *Biological Assessment Report* (included in Appendix D to this Draft EIR).

Wildlife

Eighty-one special status species of wildlife have been recorded in the vicinity of the Project site. Appendix D of the *Biological Assessment Report* (included in Appendix D to this Draft EIR) summarizes the potential for occurrence for these species. Of these species, 20 species are not likely to ever be present, 57 wildlife species are unlikely to occur, and ten species have a moderate potential. One species has a high potential for occurrence, Yuma myotis (*Myotis yumanensis*).

Many of the species were considered unlikely to occur because the Project site is surrounded by development and contains an existing golf course. The species with a high or moderate potential for occurrence are discussed below.

High Potential

Yuma myotis (*Myotis yumanensis*). Western Bat Working Group (WBWG) Low-Medium Priority. This bat species is known for its ability to survive in urbanized environments. It is also found in heavily

[7] *Final EIR Volumes I, II, III, Lodestar at Mammoth, EIP, Town of Mammoth Lakes, CA, February 1991.*

forested settings. Day roosts are found in buildings, trees, mines, caves, bridges and rock crevices. Night roosts are associated with man-made structures. This species may forage over the waters of the ponds and nearby grassland habitat. Suitable roosting and foraging habitat is available on site.

Moderate Potential

Long-eared myotis (*Myotis evotis*). WBWG Medium Priority. Long-eared myotis is a bat species that primarily inhabits coniferous forest and woodland, including juniper, ponderosa pine, and spruce-fir. It typically forages over rivers, streams, and ponds within the forest-woodland environment. During summer, it roosts in a wide variety of structures, including cavities in snags, under loose bark, stumps, buildings, rock crevices, caves and abandoned mines. During winter, it typically hibernates primarily in caves and abandoned mines. Suitable foraging habitat is available on site.

Fringed myotis (*Myotis thysanodes*). Western Bat Working Group (WBWG) High Priority. This bat species has been found in hot desert scrubland, grassland, xeric woodland, sage-grass steppe, mesic old-growth forest, and multi-aged subalpine coniferous and mixed-deciduous forest. Xeric woodlands (oak and pinyon-juniper) appear to be the most commonly used. Where available, caves, buildings, underground mines, rock crevices in cliff faces and bridges are used for maternity and night roosts, while hibernation has only been documented in buildings and underground mines. Tree-roosting has also been documented in Oregon, New Mexico, and California. Suitable roosting and foraging habitat is available on site.

Long-legged myotis (*Myotis volans*). Western Bat Working Group (WBWG) High Priority. Habitat of the long-legged myotis is primarily coniferous forests, but the species also occurs seasonally in riparian and desert habitats. They establish roosts in trees, rock crevices, fissures in stream banks, and buildings. Caves and mines are not used in the day, but *M. volans* can be captured there at night.[8] Suitable roosting and foraging habitat is available on site.

California Gull (*Larus californicus*). CDFG Species of Special Concern. California Gulls live in areas that contain lakes, marshes, and along the seacoast. They also reside on offshore islands, near rivers, agricultural land, and garbage dumps. When breeding, they often construct their nests near shrubs by bodies of water. Suitable roosting and foraging habitat is available on site.

Vaux's Swift (*Chaetura vauxi*). CDFG Species of Special Concern, Vaux's Swifts generally can be found in old-growth forests consisting of coniferous and deciduous vegetation. Very important to swifts' nesting grounds are large, hollow trees that are either dead or alive (Bull, Collins 1993).[9] During the breeding season, Vaux's Swifts occupy forests of coast redwood and Douglas firs. They forage for food in

[8] *Van Zyll de Jong, C. 1985. Handbook of Canadian Mammals. Ottawa: National Museums of Canada.*

[9] *Bull, E., C. Collins. 1993. Vaux's Swift. The Birds of North America, No. 77: 1-12.*

naturally occurring openings in the forest and along streams as well as high above the tree-tops. Suitable roosting and foraging habitat is available on site.

Lewis' Woodpecker (*Melanerpes lewis*). USFWS Bird of Conservation Concern (BCC). Lewis' Woodpeckers prefer logged or burned out areas. They prefer old growth woodlands rather than dense forest. In winter they choose oak woodland or commercial orchards such as almond and walnut and pecan trees (Winkler et al. 1995).[10] Suitable roosting and foraging habitat is available on site.

White-headed Woodpecker (*Picoides albolarvatus*). USFWS BCC. White-headed Woodpecker requires mature ponderosa pine stands. They have also been found in ornamental gardens, mixed ponderosa pine/Douglas fir forest, Douglas fir forest, Engelmann spruce/lodgepole pine forest and black cottonwoods. Suitable roosting and foraging habitat is available on site.

Olive-sided Flycatcher (*Contopus cooperi*). USFWS BCC. This species historically used recently burned areas, but now that most fires are suppressed, it often takes advantage of areas that have been logged, as well as other clearings and edges, which are superficially similar to post-fire stands.

Willow Flycatcher (*Empidonax traillii adastus*). State Endangered. Found in willow thickets and other brushy areas near streams, marshes, or other wetlands, and in clear-cuts and other open areas with nearby trees or brush. May forage and nest in the Project Site.

Southwestern Willow Flycatcher (*Empidonax traillii extimus*). Federal Endangered. Breeds in California from the Mexican border north to Independence in the Owens Valley, the South Fork Kern River, and the Santa Ynez River in Santa Barbara County. May forage and nest in the Project Site.

Sensitive Natural Communities

Riparian Habitat

Drainages or aquatic features within the Project Site did not support hydrophytic or stream-dependent woody plant species (riparian species). In addition, the presence of riparian habitat was not noted during past biological studies.

Jurisdictional Resources

The U.S. Army Corps of Engineers (Corps) regulates "waters of the United States" under Section 404 of the Clean Water Act (CWA). Such "waters" include a variety of features including streams, wetlands, and impoundments. Based on the initial review of available literature and photographs the analysis of the Project site focused on three types of features; wetlands, other waters, and riparian habitat.

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[10] *Winkler, H., D. Christie, D. Nurney. 1995. Woodpeckers A Guide To The Woodpeckers Of The World. New York: Houghton Mifflin Company.*

Other "Waters of the United States" and "Waters of the State"

Two unnamed streams were observed in the Project Site, identified on Figure IV.D-1 as Drainage A and Drainage B. Drainage A is a hydrologically isolated, remnant channel that may have been connected to the stormwater system. This feature did not exhibit any connection to a Water of the U.S. and did not contain well-defined bed and bank topography, nor exhibit signs of recent flow, such as sediment deposits or scour. Accumulation of pine cones and leaf litter also indicated that the feature did not convey water during the recent spring runoff resulting from snow melt.

Drainage B is an ephemeral stream that flows between two golf course fairways. The channel is intermittently open and culverted under the golf course, discharging into a subsurface stormwater system that eventually flows into Mammoth Creek. The channel has flowing water only during and for a short duration following precipitation events in a typical year; runoff from rainfall and snow melt is the primary source of hydrology. The streambed is located above the water table year-round; therefore, groundwater is not a primary source of water for stream flow. This feature meets the definition of "waters of the U.S." and "waters of the State", as it is inundated for sufficient duration and depth to exclude growth of hydrophytic vegetation, convey water, and is defined by the presence of an ordinary high water (OHW) mark. All areas that are below or contained by an OHW mark are considered to be "waters of the United States" and "waters of the State".

Wetlands

In addition to the drainages described in the previous section, one potential jurisdictional wetland feature was observed just south of Minaret Road (Figure IV.D-1). This feature appeared to be sustained by groundwater seepage that surfaces near the base of an earthen dam impounding a constructed pond. This area supported a predominance of hydrophytic vegetation, including wetland-classified northern willow herb (*Epilobium ciliatum*) and fireweed (*Epilobium angustifolium*). Sampled soil was determined to be hydric, as it exhibited a low chroma matrix and was distinct from soils observed in an adjacent upland area. Direct evidence of hydrology was also observed in the form of sediment deposits, a well defined drainage pattern within the wetland, and algal mats on the soil surface. The wetland drained into a two foot-wide channel that entered a culvert, flowed under a newly constructed road, and eventually entered a stormwater ditch off-site. The wetland and associated channel did not exhibit a hydrologic connection to a jurisdictional "water of the U.S.", however, it did eventually flow into the stormwater system along Minaret Road. The jurisdictional status of this wetland would need to be verified by the Corps.

Regulatory Framework

Special Status Species

Special status species include those plants and wildlife species that have been formally listed, are proposed as endangered or threatened, or are candidates for such listing under the federal Endangered Species Act (ESA) or California Endangered Species Act (CESA). These Acts afford protection to both

listed and proposed species. In addition, CDFG Species of Special Concern, which are species that face extirpation in California if current population and habitat trends continue, are considered special status species. CDFG also recognizes species that are considered sensitive by other organizations, such as the Western Bat Working Group Priority Species and USFWS Birds of Conservation Concern, in the CNDDB; although these species generally have no special legal status, they are given special consideration under CEQA. In addition to regulations for special status species, most birds in the United States, including non-status species, are protected by the Migratory Bird Treaty Act of 1918. Under this legislation, destroying active nests, eggs, and young is illegal. Plant species on CNPS Lists 1 and 2 are also considered special status plant species. Impacts to these species are considered significant according to the CEQA. CNPS List 3 and 4 plants have little or no protection under CEQA, but are included in this analysis for completeness. (The assessment may also include species of local concern as indicated by the USFWS list for the quadrangle/county, or as designated by a Town or county).

Sensitive Plant Communities and Aquatic Features

Sensitive habitats include habitats that fulfill special functions or have special values, such as wetlands, streams, and riparian habitat. These habitats are regulated under federal regulations (such as the CWA), state regulations (such as the Porter-Cologne Act, the CDFG Streambed Alteration Program, or CEQA), or local ordinances or policies (such as town or county Tree Ordinances, Special Habitat Management Areas or General Plan Special Land Use areas).

Waters of the United States

The Corps regulates "Waters of the United States" under Section 404 of the CWA. "Waters of the U.S." are defined broadly as waters susceptible to use in commerce, including interstate waters and wetlands, all other waters (e.g., intrastate waterbodies, including wetlands), and their tributaries (33 CFR 328.3). Potential wetland areas, according to the three criteria used to delineate wetlands stated in the Corps of Engineers Wetlands Delineation Manual (1987), are identified by the presence of (1) hydrophytic vegetation, (2) hydric soils, and (3) wetland hydrology. Areas that are inundated for sufficient duration and depth to exclude growth of hydrophytic vegetation are subject to Section 404 jurisdiction as "other waters" and are often characterized by an ordinary high water line (OHW). Other waters, for example, generally include lakes, rivers, and streams. The placement of fill material into "Waters of the U.S.", including wetlands, generally requires an individual or NWP from the Corps under Section 404 of the CWA.

Waters of the State

"Waters of the State" are defined by the Porter-Cologne Act as "any surface water or groundwater, including saline waters, within the boundaries of the state." The RWQCB protects all waters in its regulatory scope, but has special responsibility for isolated wetlands and headwaters. These waterbodies have high resource value, are vulnerable to filling, and are not systematically protected by other programs. RWQCB jurisdiction includes "isolated" wetlands and waters that may not be regulated by the

Corps under Section 404. "Waters of the State" are regulated by the RWQCB under the State Water Quality Certification Program which regulates discharges of fill and dredged material under Section 401 of the CWA and the Porter-Cologne Water Quality Control Act. Projects that require a Corps permit, or fall under other federal jurisdiction, and have the potential to impact "Waters of the State," are required to comply with the terms of the Water Quality Certification determination. If a proposed project does not require a federal permit, but does involve dredge or fill activities that may result in a discharge to "Waters of the State," the RWQCB has the option to regulate the dredge and fill activities under its state authority in the form of Waste Discharge Requirements or Certification of Waste Discharge Requirements.

Streams, Lakes, and Riparian Habitat

Streams and lakes, as habitat for fish and wildlife species, are subject to jurisdiction by the CDFG under Sections 1600-1616 of the State Fish and Game Code. Alterations to or work within or adjacent to streambeds or lakes generally require a 1602 Lake and Streambed Alteration Agreement. The term stream, which includes creeks and rivers, is defined in the California Code of Regulations (CCR) as follows: "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation" (14 CCR 1.72). In addition, the term stream can include ephemeral streams, dry washes, watercourses with subsurface flows, canals, aqueducts, irrigation ditches, and other means of water conveyance if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife.[11] Riparian is defined as, "on, or pertaining to, the banks of a stream;" therefore, riparian vegetation is defined as, "vegetation which occurs in and/or adjacent to a stream and is dependent on, and occurs because of, the stream itself."[12] Removal of riparian vegetation also requires a Section 1602 Lake and Streambed Alteration Agreement from CDFG.

Sensitive Plant Communities

Sensitive plant communities include habitats that fulfill special functions or have special values. Natural communities considered sensitive are those identified in local or regional plans, policies, regulations, or by the CDFG. CDFG ranks sensitive communities as "threatened" or "very threatened" and keeps records of their occurrences in its Natural Diversity Database. Sensitive plant communities are also identified by CDFG on their List of California Natural Communities Recognized by the CNDDB. Impacts to sensitive natural communities identified in local or regional plans, policies, regulations or by the CDFG or USFWS must be considered and evaluated under the CEQA (CCR: Title 14, Div. 6, Chap. 3, Appendix G).

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[11] *California Department of Fish and Game. Environmental Services Division (ESD). 1994. A Field Guide to Lake and Streambed Alteration Agreements, Sections 1600-1607, California Fish and Game Code.*

[12] *California Department of Fish and Game. Environmental Services Division (ESD). 1994. A Field Guide to Lake and Streambed Alteration Agreements, Sections 1600-1607, California Fish and Game Code.*

Some plant communities contain trees which are considered "sensitive" if they meet the local jurisdiction's requirement of a "heritage tree" or other protected tree as specified in an ordinance or municipal code. The municipal code for the Town of Mammoth lakes includes zoning requirements for development in residential, commercial, and special use zones (which includes resorts) regarding the protection and/or replacement of certain trees. Under the Town's municipal code, the "resort" zone performance and environmental standards "shall be not less than those specified for similar uses in the residential or commercial zones" (17.28.250). The municipal code (Section 17) for residential and commercial zones states that existing trees and vegetation shall be preserved to the maximum extent possible and that no live trees over six inches in diameter shall be removed without prior approval of the planning director.

ENVIRONMENTAL IMPACTS

Thresholds of Significance

In accordance with Appendix G of the CEQA Guidelines, the Project could have a significant environmental impact on biological resources if it would:

(a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;

(b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;

(c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;

(d) Interfere substantially with the movement of any native resident or migratory fish and wildlife species or with established native resident or migratory wildlife corridors, or impede the use of a native wildlife nursery site;

(e) Conflict with an local polices or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or

(f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Project Details

The Project proposes to develop approximately 40 acres within the existing Lodestar Master Plan Area. The Project will provide overnight accommodations, residences, and commercial facilities to the users of the Sierra Star Golf Course, residents of the Town, and visiting recreationists. The Project will contain multi and single-family residences, restaurants, retail stores, and affordable housing sites. A two-lane paved road will be constructed between Minaret Road and Main Street (State Highway 203), providing the primary access to the development. Several smaller roads will be constructed to access the individual building sites. The Project will require the culverting of portions of two existing drainages for road crossings and location of residential and commercial facilities.

The Project is to be completed in three phases. Phase 1 will include construction of Grove Road and Woodwinds Road (under the previously approved Lodestar Project), the main north/south roadway connecting Minaret Road and Main Street.[13] Phase 1 is to be completed during the 2006 construction season. Phase 2 will include an affordable housing area, associated roads and parking located east of Fairway 8 and will be completed during the 2007 construction season. Phase 3 will include commercial and residential housing located west of Grove Road and will be completed during the 2008 construction season. No detailed development plans have yet been created for Phases 2 and 3.

Meridian Boulevard borders the golf course to the south, Main Street to the north, and residential developments lie along the east and west borders. Minaret Road bisects the golf course. The proposed development in the golf course would be comprised of residential housing and a resort hotel, accommodating 1,251 residential and hotel units.

Project Impacts and Mitigation Measures

The impacts of the Project on biological resources are grouped below into major categories of impacts. The actual impact and its anticipated location on the Project site is described in detail within each major category below.

Impact BIO-1 Special-Status Species

Based on the Biological Assessment Report conducted by WRA, eleven special status wildlife species have a moderate or high potential to occur within the Project site and these species or their potential habitat may be impacted by the Project. No special status plants are present on-site. Recommended applicable sensitive species surveys and mitigation measures are outlined below.

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[13] *The applicant has received a Section 1602 Lake and Streambed Alteration Notification to the CDFG, is consulting with California RWQCB (Lahontan Region) for a Section 401 Water Quality Certification, and has submitted a notification of work to the Corps for impacts to two drainages from the construction of Grove Road.*

Suitable roost habitat is present for four special status bat species: long-eared myotis, long-legged myotis, fringed myotis and Yuma myotis. Potential roost habitat within the Project site includes any mature (greater than 25-inch diameter at breast height) tree stand and any large snags or felled trees. The project may result in a ***significant*** impact to bats or their roosts; however, implementation of Mitigation Measure BIO-1 below would reduce these potential impacts to a less-than-significant level. Subsequent permitting processes with resource agencies could result in additional mitigation beyond that required by the Town in the CEQA process. Any additional mitigation required by these agencies would be incorporated as a condition of their permit authorization.

Mitigation Measure BIO-1a

To avoid impacting breeding or hibernating bats, tree and snag removal shall occur in September and October, after the bat breeding season and before the bat hibernation season. If snag and tree removal is to take place outside of this time frame, a pre-construction bat survey should be conducted. If no roosting bats are found during the survey, no further mitigation would be required. If bats are detected, a 50-foot buffer exclusion zone should be established around each occupied snag or tree until the roosting activities have ceased.

Since raptors and other birds may potentially nest within the trees and shrubs that occur in and adjacent to the Project site, there is a potential for construction-related impacts to nesting birds. Snags are also an important habitat requirement for cavity nesting bird species. Disturbance that results in the abandonment of an active nest is considered a significant impact. However, implementation of Mitigation Measure BIO-1b below would reduce these potential impacts to a less than significant level. Subsequent permitting processes with resource agencies could result in additional mitigation beyond that required by the Town in the CEQA process. Any additional mitigation required by these agencies would be incorporated as a condition of their permit authorization.

Mitigation Measure BIO-1b

To avoid impacting nesting birds and/or raptors, **one** of the following must be implemented:

- Conduct vegetation removal and other ground disturbance activities associated with construction during September through March, when birds are not nesting;

- OR -

- Conduct pre-construction surveys for nesting birds if construction is to take place during the nesting season. A qualified wildlife biologist shall conduct a pre-construction raptor survey no more than 30 days prior to initiation of grading to provide confirmation on presence or absence of active nests in the vicinity (at least 300 feet around the project site). If active nests are encountered, species-specific measures shall be prepared by a qualified biologist in consultation with the CDFG and implemented to prevent abandonment of the active nest. At a minimum,

grading in the vicinity of the nest shall be deferred until the young birds have fledged. A minimum exclusion buffer of 25 feet is required by CDFG for songbird nests, and 200 to 500 feet for raptor nests, depending on the species and location. The perimeter of the nest-setback zone shall be fenced or adequately demarcated with staked flagging at 20-foot intervals, and construction personnel restricted from the area. A survey report by the qualified biologist verifying that the young have fledged shall be submitted to the Town prior to initiation of grading in the nest-setback zone.

Impact BIO-2 Sensitive Natural Communities

No riparian vegetation or other sensitive communities exists within or adjacent to the Project site. Potential jurisdictional wetlands and waters are present on-site which are considered sensitive; however, these are addressed under "Impact 3: Jurisdictional Resources" below. While the Jeffrey pine-fir forest plant community present on-site is not considered sensitive, it contains many trees that would meet the minimum size (6 inches in diameter) to require approval from the Town prior to removal; impacts to these trees are addressed under "Impact 5: Conformance with Town Policies and Ordinances" below.

Impact BIO-3 Jurisdictional Resources

Based on a peer review of the 2006 RCI Wetland Delineation Report and a jurisdictional delineation of the remainder of the project site by WRA and CAJA on July 27, 2006, potentially jurisdictional wetland and waters features may be impacted by the project. The drainage features identified within the Project site appear to be ephemeral; however, these features are considered potentially jurisdictional by the Corps, RWQCB and CDFG. Impacts to portions of ephemeral drainages A and B from Grove Road are being permitted separately under the Lodestar Master Plan project; however, impacts to the remaining portions of these drainages may also occur under the Project requiring additional regulatory permits. In addition, the mapped wetland is also considered potentially jurisdictional by the Corps and RWQCB and may also be impacted by the Project. These impacts may be considered ***significant***; however, implementation of Mitigation Measure BIO-3 below would reduce these potential impacts to a less-than-significant level. Subsequent permitting processes with resource agencies could result in additional mitigation beyond that required by the Town in the CEQA process. Any additional mitigation required by these agencies would be incorporated as a condition of their permit authorization.

Mitigation Measure BIO-3

A formal jurisdictional delineation report shall be submitted to and verified by the Corps. The Project should be reconfigured to avoid impacts to potentially jurisdictional features to the maximum extent feasible. If avoidance is not feasible, permit applications shall be submitted to the Corps, RWQCB and

CDFG[14] for impacts to these features. Mitigation measures associated with permit applications may include impact minimization measures such as increased culvert sizes, bridging and seasonal work restrictions, and possibly habitat compensation measures such as the restoration or creation of similar habitat in the vicinity. A Pre-Construction Notification shall be submitted to the Corps (if using NWP 39, or as required by other NWPs), including a mitigation plan to compensate for the loss of waters of the U.S. Impacts to potentially jurisdictional features shall not occur until the permits are received from the appropriate regulatory agencies, or correspondence is received from the agencies indicating that a permit is not required.

Impact BIO-4 Wildlife Movement and Habitat Connectivity

The Project is unlikely to disrupt wildlife movement and will not impede the use of native wildlife nursery sites or migration corridors. Given that the Project site already consists of developed and/or disturbed habitats, and is nearly surrounded by residential or resort developments and busy Town streets, it is unlikely that the Project site is important for wildlife movement or nursery use. In addition, no major migratory routes for mule deer or other important migratory animals in the region, occurs within the Urban Growth Boundary (UGB) which entirely encompasses the Project site.[15] Therefore, no significant impacts to wildlife movement, migration corridors, or nursery sites will occur from the Project and no mitigation measures are required.

Impact BIO-5 Conformance with Town Policies and Ordinances

Proposed development would conflict with the intent of some policies of the Town's Municipal Code regarding tree removal. The Jeffrey pine-fir forest plant community present on-site contains many trees that would meet the minimum size (six inches in diameter) to require approval from the Town prior to removal. The Project should be designed to conform with the municipal code such that existing trees and vegetation are preserved to the maximum extent possible. The removal of live trees over six inches in diameter may result in ***significant*** impacts; however, the implementation of Mitigation Measure BIO-5 below would reduce this impact to less than significant.

Mitigation Measure BIO-5

Prior to the removal of any trees greater than six inches in diameter, a final analysis of the value of trees removed shall be prepared by a licensed forester or arborist. Prior to removal of any trees greater than six inches in diameter a development permit or a tree removal permit must be approved by the Town. Said

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[14] *A CDFG 1600 Streambed Alteration Agreement would only apply to impacts to the drainages, not to the wetland feature.*

[15] *Draft Program EIR Town of Mammoth Lakes 2005 General Plan Update, Environscientists, Inc., Mammoth Lakes, CA, February 2005*

tree replacement shall be within the project area, or off-site; as may be approved by the Community Development Director.

Impact BIO-6 Conformance with Adopted Habitat Conservation Plans, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

No Habitat Conservation Plans, Natural Community Conservation Plans or other local or regional plans have been adopted within the Town's Urban Growth Boundary (UGB) which encompasses the site[16]; therefore, ***no impacts*** are anticipated and no mitigation is considered necessary.

CUMULATIVE IMPACTS

Impact BIO-7

Based on a review of the related projects in the vicinity of the Project site (Table II-1) and aerial photographs, few of these projects are likely to have significant impacts to biological resources due to their small size or location in existing developed areas. With respect to the biological impacts identified under the Project described above, related projects in the area also have the potential to impact nesting birds, bats, waters of the U.S. and State, and protected trees. However, with the measures proposed to mitigate these impacts under the Project, and given the small size of the related projects as compared to the Project, these impacts are not anticipated to be cumulatively considerable or significantly adverse when evaluated with other related projects in the vicinity.

The cumulative impacts discussion under Population & Housing (Section IV.K) notes that the Project, when considered with other related residential projects in the area, would result in an estimated permanent population increase of 8,630 persons. This increase represents 74 percent of the Town's forecasted growth of 11,600 permanent residents for the Town.[17] The Town's Draft General Plan Update EIR acknowledges that the anticipated population increase may have significant impacts upon special status species within the adjacent Inyo National Forest, and it is anticipated that the final General Plan Update, when adopted, will include policies requiring the Town to work closely with agencies, including the Inyo National Forest, to ensure that the regional natural ecosystem is maintained.

The Inyo National Forest is one of the ten most visited units in the Forest Service, and visitation to the Inyo National Forest and adjacent areas has been growing consistently over the past several years and is expected to grow at similar levels over the next 20 years.[18] The cumulative population growth from the

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[16] *Draft Program EIR Town of Mammoth Lakes 2005 General Plan Update, Environscientists, Inc., Mammoth Lakes, CA, February 2005*

[17] *Town of Mammoth Lakes. 2005. General Plan Update. SCH No. 2003042155. October 2005.*

[18] *Federal Highway Administration and Federal Transit Administration. Field Report – Inyo and Humboldt-Toiyabe National Forests Eastern Sierra Expanded Transit System.*

Project and related residential projects of nearly 8,630 persons, and their potential impact to natural resources in the Inyo National Forest, is relatively insignificant compared to the impacts from the approximately 130,000 to 150,000 summer visitors and 1.3 million winter visitors to the Town.[19] However, while only 8.3 percent of the Forest's visitors are regional residents (from the 93546 and 93514 zip codes), regional residents account for nearly 25 percent of visitor frequency (regional residents had a visitor frequency of 124 as compared to 380 for other visitors).[20] The primary activities of forest users are viewing natural features, relaxing, hiking, walking, downhill skiing/snowboarding, cross country skiing, camping, and fishing[21]. Although many of these activities have generally low impacts on natural resources, particularly when conducted in accordance with existing Forest Service management controls (such as well-planned and maintained trails, camping area restrictions, limited wilderness area permits, and ski area capacity limits[22]), a cumulative increase in these activities from additional frequent resident visitors may have an adverse impact on sensitive resources from excessive use, possibly resulting in erosion, habitat degradation, and wildlife habituation and disturbance.

Increased visitor use and the associated management of natural resources within the Inyo National Forest are being addressed by the U.S. Forest Service through planning efforts including the *USFS Trail and Commercial Pack Stock Management in the Ansel Adams and John Muir Wildernesses FEIS* and the *Inyo National Forest Winter Needs Assessment* conducted in collaboration with the Town in 2003 and 2004. In addition, the Inyo National Forest will need to update its Forest Land and Resource Management Plan, as it is nearly 20 years old and out-of-date[23], in accordance with the *Sierra Nevada Forest Plan Amendment (SNFPA).* The SNFPA gives management direction to all forests to address problems of (1) old forest ecosystems and associated species, (2) aquatic, riparian, and meadow ecosystems, (3) fire and fuels, (4) noxious weeds, and (5) lower westside hardwood forests.[24] The SNFPA requires an assessment of existing environmental conditions and identification of management options at various geographic, jurisdictional, and temporal scales, and the implementation of adaptive management procedures to adjust the management direction for future events, changing knowledge, or dynamic social views.[25]

Impacts to natural resources within the Inyo National Forest from recreational use are expected to increase due to the Town's cumulative population increase from the project and other regional residential

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[19] *Federal Highway Administration and Federal Transit Administration. Field Report – Inyo and Humboldt-Toiyabe National Forests Eastern Sierra Expanded Transit System.*

[20] *Inyo National Forest. 2003. National Visitor Use Monitoring Results, Inyo National Forest. USDA Forest Service, Region 5. August 2003.*

[21] *Federal Highway Administration and Federal Transit Administration. Field Report – Inyo and Humboldt-Toiyabe National Forests Eastern Sierra Expanded Transit System.*

[22] *Personal Communication: Mike Schlafmann, U.S. Forest Service. July 5, 2006.*

[23] *Ibid.*

[24] *U.S. Forest Service. 2001. Sierra Nevada Forest Plan Amendment, Final EIS. U.S. Department of Agriculture, Forest Service, Pacific Southwest Region. January 2001.*

[25] *Ibid.*

projects, and these impacts may be considered cumulatively considerable or significantly adverse; however, identification and quantification of such impacts would be speculative under the current analysis. Potential impacts to sensitive natural resources within the Inyo National Forest should be evaluated as part of the Forest's Land and Resource Management Plan Update, which will identify and assess existing conditions with respect to recreational areas in accordance with the SNFPA. The SNFPA identifies bird watching, hiking/backpacking, downhill skiing and primitive camping as some of the fastest growing outdoor recreational activities in the U.S., and projects an over 100 percent increase in downhill skiing and an over 250 percent increase in snowmobiling for the Pacific coast region through 2050.[26] Therefore, it is reasonable to assume that much of the recreational Forest uses from the cumulative population growth in the area will revolve around these increasingly popular outdoor activities.

In addition, compliance of the project, and other development in the Town, with existing and anticipated future General Plan Update policies requiring the Town to work closely with regional agencies to ensure that the regional natural ecosystem is maintained, will address potential cumulatively considerable or significantly adverse impacts to sensitive natural resources.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Biological resource impacts would be ***less than significant*** after implementation of the mitigation measures.

[26] *U.S. Forest Service. 2001. Sierra Nevada Forest Plan Amendment, Final EIS. U.S. Department of Agriculture, Forest Service, Pacific Southwest Region. January 2001.*

IV. ENVIRONMENTAL IMPACT ANALYSIS
E. CULTURAL RESOURCES

INTRODUCTION

The information and analysis in this section is based primarily on the following reports, which are included in Appendix E of this Draft EIR:

- Cultural Resources Study for the Sierra Star Master Plan, Mammoth Lakes, Mono County, California, prepared by SWCA Environmental Consultants, May 2006 (i.e., "Cultural Resources Study").
- Review of SWCA's Proposal to Perform Cultural Resources Services for the Sierra Star Master Plan, prepared by Trans-Sierran Archaeological Research, November 7, 2005 (i.e., "Review of SWCA Proposal").
- Sierra Star Historic Site Evaluation, prepared by Trans-Sierran Archaeological Research, July 8, 2004 (i.e., "Historic Evaluation").

ENVIRONMENTAL SETTING

Literature Review and Records Search

As part of the Cultural Resources Study included in Appendix E to this Draft EIR, SWCA conducted a review of pertinent literature and cultural resources research addressing the Project site and immediate vicinity. This review included a search of the California Historical Resources Information System (CHRIS) records housed at the Eastern Information Center (EIC) at the University of California, Riverside. This records search was intended to find all cultural resources studies, previously recorded historic sites, and previously recorded prehistoric archaeological sites filed with the EIC for the Project site and a 0.5-mile radius surrounding the Project site. EIC sources reviewed included:

- The EIC's historical resources files (site records).
- National Register of Historic Places (NRHP) (Office of Archaeology and Historic Preservation 1997).
- California State Historic Resources Inventory.
- California Points of Historical Interest (California Department of Parks and Recreation 1992).
- California Historical Landmarks (California Department of Parks and Recreation 1990).
- USGS Quadrangles: Old Mammoth, CA 1994 (7.5 minute).
- GeoFinder Historical Resource Database.

Literature Review and Records Search Results

Prior to the Cultural Resources Study prepared by SWCA for the Project, a total of 14 cultural resource studies were previously conducted within 0.5 mile of the Project site, several of which included a portion of the Project site. The entire Project site has been previously surveyed and tested for cultural resources and has undergone large-scale data recovery excavations.

The literature review and CHRIS records search conducted by SWCA as part of the Cultural Resources Study revealed 15 previously recorded cultural resources located within 0.5 mile of the Project site. Of these 15 previously recorded cultural resources, the records and literature search indicated that two are located within the Project site and 13 are located within approximately 0.5 mile of the site. Twelve of the previously recorded cultural resources identified are prehistoric; two resources are from the historic period. The two historic resources consisted of a historic trash scatter and a cabin site. The high frequency of prehistoric sites present within the study area suggests that the area was intensively used and occupied by prehistoric inhabitants. Although a variety of activities are represented at several of these sites, it appears that lithic tool manufacture (biface production in particular) was the primary focus at the sites in the immediate area. All of the prehistoric sites are described as lithic artifact scatters consisting primarily of obsidian chipping waste with few associated tools.

Each of the 15 previously recorded cultural resources identified through the literature review and records search is discussed separately below.

CA-MNO-529 (P26-000529)

As summarized in the Cultural Resources Study, Site CA-MNO-529 was originally recorded by Taylor in 1980 as a temporary campsite located along Meridian Boulevard. No features were observed but one metate, one Cottonwood point, and many obsidian flakes were documented. Previous construction of condominiums and paved roads on private land may have destroyed the western end of this site.

The Review of SWCA Proposal prepared by Trans-Sierran further confirmed that CA-MNO-529 is a very large site that had been primarily a stone-working camp, occupied intermittently over a period of approximately 5,000 years. Although CA-MNO-529 was officially determined eligible for the NRHP, previous investigations conducted to mitigate effects when the site was exchanged out of federal ownership effectively exhausted the data potential of the site. Further protection or preservation was considered unnecessary (Basgall 1983:166-167). The mitigation conducted also meets CEQA mitigation requirements (California Public Resources Code Section 21083.2[d]). As such, no further work is recommended for this site, regardless of development planned as part of the Project.

Location

The northernmost portion of Site CA-MNO-529 is located within portions of Areas 5A and 7, within the Project site.

CA-MNO-714 (P26-000714)

As summarized in the Cultural Resources Study, Site CA-MNO-714 was initially recorded by Derby and Rockwell in 1975 as a lithic artifact scatter with several features. Several large metates in granite boulders and a bedrock mortar were documented within the approximately four-acre site. Throughout the area, many scattered obsidian flakes and tools were also found. In 1979, Bettinger updated records for Site CA-MNO-714, describing it as a lithic artifact scatter with bedrock mortars and metates. Six boulders with milling features were recorded: two features comprised a combination of mortars and metates and four features were single metates. The same types of artifacts were noted: flakes, debitage, unifaces, and cores.

Location

Site CA-MNO-714 is located outside of the Project site.

CA-MNO-1529 (P26-001529)

As summarized in the Cultural Resources Study, Site CA-MNO-1529 was originally recorded by Taylor in 1981 as a lithic artifact scatter and milling station located adjacent to an ephemeral stream. Four bedrock mortars were documented on the side of a single granite boulder. Black obsidian flakes were noted but not collected.

Location

Site CA-MNO-1529 is located outside of the Project site.

CA-MNO-2480 (P26-002480)

As summarized in the Cultural Resources Study, Site CA-MNO-2480 was originally recorded by Burton in 1989 as a dense lithic artifact scatter located along an ephemeral drainage. The site consisted of more than 100 obsidian flakes in an area of approximately 24,200 square meters.

Location

Site CA-MNO-2480 is bisected by Minaret Road and is located outside the Project site.

CA-MNO-2481 (P26-002481)

As summarized in the Cultural Resources Study, Site CA-MNO-2481 was originally recorded by Burton in 1989 as a dense lithic artifact scatter in a cut bank consisting of more than 100 obsidian flakes. This site, approximately 1,400 square meters in area, was characterized by lithic production waste of Casa Diablo and Mono Glass Mountain obsidian. In the densest portion of the site, a one square meter surface

sample area contained five complete flakes (two with cortex), eight flake fragments, and one piece of black Casa Diablo obsidian debris (Burton 1989).

Location

Site CA-MNO-2481 is located alongside a road and tennis court to the north of the Project site.

CA-MNO-2482 (P26-002482)

As summarized in the Cultural Resources Study, Site CA-MNO-2482 was originally recorded by Burton in 1989 as two lithic artifact scatters in a clearing within a forested area. One of the scatters (Locus 1) was focused around a cluster of granite boulders, and the other (Locus 2) was located approximately 30 meters north of a small drainage. Locus 1 was excavated to a depth of 50 centimeters (cm), and 52 flakes were recovered. Locus 2 was also excavated to 50 cm, and 50 flakes were recovered. The majority of the flakes appeared to be of Casa Diablo obsidian (Burton 1990b). Site CA-MNO-2482 was subjected to a testing program in 1990 (Burton 1990b) and was recommended to be considered significant under CEQA criteria. This site was subsequently destroyed by the construction of the Minaret Road extension. In 1991, Kautz revisited the site. Two shovel test pits were excavated revealing a small numbers of flakes. This site was considered ineligible for NRHP inclusion due to the degree of disturbance and resulting loss of resource integrity.

Location

Site CA-MNO-2482 is located outside of the Project site.

CA-MNO-2485 (P26-002485)

As summarized in the Cultural Resources Study, Site CA-MNO-2485 was originally recorded by Burton in 1989 as a surface lithic artifact scatter consisting of 25 flakes and 1 biface fragment in an area of approximately 5,400 square meters (Burton 1990a). The site was subsequently subjected to a testing program in 1991 (Kautz 1991), which consisted of the excavation of five shovel tests and a single one square meter test unit. The unit was excavated to a maximum depth of 80 cm; more than 1,000 artifacts were recovered, including several tools. Although a large number of artifacts were recovered and no special studies or in-depth analyses were conducted, the site was recommended as not significant according to CEQA criteria (Kautz 1991).

The Review of SWCA Proposal prepared by Trans-Sierran further noted that although Site CA-MNO-2485 was tested using the guidelines in CARIDAP:SLS and was recommended as not significant (Kautz 1991), neither obsidian hydration analysis nor debitage technological analysis was conducted on the material recovered in the initial testing. Without temporal and functional information, the presence of any intact cultural deposits is unknown, and, as such, it is unknown whether the site would meet CEQA criteria for historic resources. In addition, Kaitz (1991) inferred that the site was related to hunting based

on the presence of bifaces and flakes, as well as the site's location near ephemeral drainages where large granite outcrops could have been used as hunting blinds. This would make the site rare within the Mammoth Lakes area, where the majority of sites are related to the manufacture of obsidian bifaces for trade. Therefore, Site CA-MNO-2485 may meet CEQA criterion D as an example of a rare site type with potential to provide information important to prehistory.

Location

Site CA-MNO-2485 is presently located under an existing golf course outside of the Project site.

CA-MNO-2486 (P26-002486)

As summarized in the Cultural Resources Study, Site CA-MNO-2486 was originally recorded by Burton in 1989 as a small surface lithic artifact scatter consisting of 100 obsidian flakes in an area of approximately 75 square meters located at the intersection of two unpaved roads. Burton reported that the site was only visible in areas disturbed by the road; the surrounding undisturbed areas were heavily forested at the time of documentation (Burton 1990a). A portion of the site was subsequently subjected to a testing program, which consisted of the excavation of two shallow shovel test pits near one of the unpaved roads (Kautz 1991). The shovel test excavations recovered 58 artifacts. Kautz recommended that the site was not significant; however, the testing was limited to a disturbed area near the road, and the excavations only extended to a depth of 20 cm. The Cultural Resources Study concluded that the site boundaries, as well as the nature and extent of the subsurface deposit, appear not to have been completely defined.

The Review of SWCA Proposal prepared by Trans-Sierran further noted that, like Site CA-MNO-2485, although Site CA-MNO-2486 was tested using the guidelines in CARIDAP:SLS and was recommended as not significant (Kautz 1991), neither obsidian hydration analysis nor debitage technological analysis was conducted on the material recovered in the initial testing. Without temporal and functional information, the presence of any intact cultural deposits is unknown, and, as such, it is unknown whether the site would meet CEQA criteria for historic resources. In addition, Kaitz (1991) inferred that the site was related to hunting based on the presence of bifaces and flakes, as well as the site's location near ephemeral drainages where large granite outcrops could have been used as hunting blinds. This would make the site rare within the Mammoth Lakes area, where the majority of sites are related to the manufacture of obsidian bifaces for trade. Therefore, like Site CA-MNO-2485, Site CA-MNO-2486 may meet CEQA criterion D as an example of a rare site type with potential to provide information important to prehistory.

Location

Site CA-MNO-2486 is located in a strip of trees within an existing golf course outside of the Project site.

CA-MNO-2487 (P26-002487)

As summarized in the Cultural Resources Study, prehistoric site CA-MNO-2487 was originally recorded by Burton in 1989 as a dense lithic scatter. A reconnaissance survey revealed obsidian flake scatters over an area of roughly 2.5 acres; no artifacts were collected (Burton 1989). Kautz revisited the site in 1991 and noted four major flake concentrations. Three shovel test pits and a single one square meter test unit were excavated, revealing a Stage III or IV biface and the base of a mahogany obsidian Stage III or IV biface. Site CA-MNO-2487 was recommended not eligible for NRHP inclusion due to the site's similarity to other nearby sites and lack of assemblage diversity. Site CA-MNO-2487 was subsequently subjected to a large-scale testing program in 2004, the results of which ultimately captured the research potential of the site and were sufficient to fulfill CEQA mitigation requirements (Burton 2004b).

The Review of SWCA Proposal prepared by Trans-Sierran further confirmed that CA-MNO-2487 had been found to be a workshop site common in the Mammoth Lakes area and well-documented in the Long-Valley region. The data previously recovered would fulfill CEQA mitigation requirements (California Public Resources Code Section 21083.2[d]) and no further archaeological work would be recommended for this site.

Location

Site CA-MNO-2487 is almost entirely located within the Project site.

CA-MNO-2720 (P26-002720)

As summarized in the Cultural Resources Study, prehistoric site CA-MNO-2720 was originally recorded by Botti in 1991 as a small lithic artifact scatter of obsidian debitage in a forest clearing. Approximately 118 square meters in area, the site was informally probed, revealing 19 obsidian flakes and 5 unidentifiable fragments; no artifacts were collected. This site was highly impacted due to disturbance associated with vehicular traffic.

Location

Site CA-MNO-2720 is located adjacent to Minaret Road outside of the Project site.

CA-MNO-3497 (P26-003497)

As summarized in the Cultural Resources Study, prehistoric site CA-MNO-3497 was originally recorded by Hall in 2001 during an intensive pedestrian survey. This 242 square meter site is recorded as a small lithic artifact scatter of obsidian flakes and debitage. Additionally, one obsidian flake tool was also recovered. The entire site has been disturbed by road and culvert construction.

Location

Site CA-MNO-3497 is located outside of the Project site.

CA-MNO-3749H (P26-003749)

As summarized in the Cultural Resources Study, Site CA-MNO-3749H[1] was originally recorded by Burton in 2003 as a very small and sparse lithic scatter observed in the immediate vicinity of a fire hydrant adjacent to Meridian Boulevard. The site is approximately 5 meters in diameter. Burton (2003) suggested that this site might represent a single-use, short-term flaking episode; however, the flakes might have been brought to the surface when the hydrant was excavated.

Location

Site CA-MNO-3749H is located outside of the Project site.

CA-MNO-3834 (P26-003575 / P26-004357)

As summarized in the Cultural Resources Study, historic archaeological site CA-MNO-3834, a small surface scatter of historic-period trash, predominantly cans and glass, was originally recorded by Kautz in 1991 and assigned the primary number P26-003575.[2] A shallow depression 12 meters to the east of the trash was recorded as possibly associated with the scatter. A variety of historic artifacts were noted, including hole-in-top cans, ceramic fragments, multiple colored glass fragments, whiskey bottle remnants, and a metal bucket. The site's location within a forested area suggested the site might have been related to logging. The total area of the site was estimated to be approximately 50 square meters and sun-colored amethyst glass suggested a date c. 1900.

In 2001, Early visited this site and recorded it as a new site. Early recorded the site as a 25 foot by 60 foot by 1 foot historic trash scatter site located approximately 100 feet east of Sierra Star Parkway. An 8-foot diameter depression was noted at the southern end of the trash scatter. The cultural constituents described by Early were very similar to those noted by Kautz. Early apparently revisited the site in 2004; he notes on the site record dated June 25, 2004 that the site had been excavated since his September 2001 visit. Upon receipt of this site record, the EIC assigned the resource a new number: CA-MNO-3834 (P26-004357).

On June 30, 2004, the same site was tested by Trans-Sierran Archaeological Research, to evaluate whether P26-003575 met CEQA criteria for a significant archaeological resource. The results of this

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[1] *Typically the "H" added to a trinomial denotes a historic period site; however, site CA-MNO-3749H is a prehistoric lithic artifact scatter lacking historic constituents. The "H" in the trinomial is apparently a mistake.*

[2] *The site was originally given only a primary number, rather than a permanent trinomial, because the site record lacked a site map.*

testing, compiled into the Historic Evaluation included as Appendix E to this Draft EIR, included re-location of the site, detailed recording of all artifacts, surface scrapes, mapping, photographs, and excavation of three backhoe pits.

The Historic Evaluation found the site's location to have been disturbed by a percolation test pit, reported to have been excavated in October 2003. Only a few artifacts were visible on the ground surface. Therefore, the site location was verified by the presence of the shallow depression, which matched photographs in the original site record. A metal detector was used to relocate the can scatter, which had been buried by a few inches of loose sediments, likely generated by the percolation test. No other metal artifacts were observed. Using a global positioning system (GPS), it was determined that the site had originally been mis-plotted by slightly more than 200 meters, likely attributable to the relatively level terrain and forest vegetation which provide few distinctive topographic features.

The area of the can scatter was scraped with a trowel to uncover all of the artifacts. The depression was also scraped to mineral soil (less than an inch or two deep), but no artifacts were found there. Glass, ceramic, and metal artifacts were recovered during the scraping at the can scatter. Glass included 10 fragments of window glass, a small clear glass vial, six fragments from at least two extract bottles, 17 fragments from an aqua glass canning jar, 14 fragments of a honey-colored embossed whiskey/beer bottle, and 18 fragments of a turned-pink jar with the base mark of the Diamond Glass Company, PA, used after 1924. Ceramics included two blue-on-white porcelain potential saucer fragments and two plain white porcelain fragments. Metal included a potential bucket fragment with brass rivets, a small metal band, eight rectangular meat cans or meat can tops, 37 complete or nearly complete hole-in-cap food cans, three fragmentary sanitary seal food cans, eight can lids/tops, and 143 miscellaneous can fragments.

To determine whether any subsurface cultural material was present, three backhoe pits were excavated. One pit, 3 m by 3.5 m by 50 cm deep, was located within the artifact scatter and overlapping the previous percolation test pit. Only a few artifacts were encountered, all apparently from disturbed contexts near the surface. The artifacts recovered from Test Pit A were similar to those already recovered. Glass artifacts included a clear extract bottle neck, three aqua canning jar fragments, and five honey-colored whiskey or beer bottle fragments. Ceramics recovered included five plain white ware potential bowl fragments and one plain porcelain fragment. Metal artifacts included a small metal band, a sardine can, nine complete or nearly complete hole-in-cap food cans, two can tops, and a lithographed friction can lid.

Test Pit B was 1 m by 1 m by 50 cm deep; it was placed where there was some evidence of fresh disturbance, interpreted as a possible bottle-collector's excavation. No artifacts were found in Test Pit B. Test Pit C, excavated within the shallow depression, was 2 m by 3 m by 90 cm deep. Wood chunks were encountered, some of them burned, but none of them culturally modified; the depression was clearly where a tree stump had partially burned and rotted.

The artifacts at the site all appear to be household trash, representing a one-time dumping event sometime between 1910 and the 1930s. The glass that was originally recorded as sun-colored amethyst was actually

determined to be "turned-pink" glass, which dates to between 1915 and 1930. Other dated artifacts included a jar with a post-1924 base mark, a key-opened sardine can (post 1916), clear glass (generally post 1930), honey-colored glass (1910-1930), hole-in-cap cans (1810-1930s), and sanitary seal cans (in general use circa 1922).

Fragments of window glass and decorated ceramics indicate household refuse, rather than trash left by campers. In addition, milk cans are one of the most ubiquitous artifacts at temporary campsites, and no milk cans were found at Site P6-003575. The source of the trash was not conclusively determined; however, it was likely from a residence in the local area. While there were no recorded historic sites with 0.5 mile of the site, the village of "Old Mammoth," which dates as early as 1915, is located 0.75 mile south, and the 1920s to 1937 Town of Mammoth is located 1.0 mile southeast. Casual dumping of household trash was very common in rural areas up until the 1960s. Often trash would be dumped during other outdoor activities, such as woodcutting.

The Historic Evaluation determined that Site P26-003575 does not meet the CEQA criteria for a significant or important archaeological site as it is not at least 100 years old, associated with major events or persons in California history, nor is it unique. The Historic Evaluation did not recommend further archaeological work for Site P26-003575. The Historic Evaluation did not include the newer number (CA-MNO-3834 [P26-004357]) for P26-003575, as it had not yet been assigned by the EIC.

Location

Although the EIC currently shows two separate site locations on its master site map and maintains the records for P26-003575 and CA-MNO-3834 (P26-004357) separately, it appears that both identifiers refer to the same resource. The location plotted by Burton (in the Historic Evaluation included as Appendix E to this Draft EIR), which was based on GPS data, has been used for the purposes of the current study. Site CA-MNO-3834 (P26-003575/P26-004357) is located outside of the Project site.

P26-3728

As summarized in the Cultural Resources Study, Site P26-3728 is a historic cabin, which was constructed in 1928 by Walter Emmet Hayden, Vincent Ruh, Jack Greth, and Norvil Aigner. Building additions and usage of this cabin was discontinued in 1940 for the duration of the war. Five years later, a kitchen, bathroom, and bunkroom were added. This cabin remains standing, and with the help of the Historical Society, a museum was started here. Today, the cabin is filled with memorabilia of Mammoth Lakes before there were paved roads and electricity (Mammoth Lakes 2006).

Location

Site P26-3728 is located outside of the Project site.

Native American Consultation SB-18 Tribal Consultation

Pursuant to Government Code §65352.3 and Senate Bill (SB) 18, the Town of Mammoth Lakes (Town) contacted the California Native American Heritage Commission (NAHC) on April 6, 2006 to request a Tribal Consultation List with contact information for the tribes identified by the NAHC as having traditional lands or cultural resources within the Project vicinity.

The NAHC responded on April 13, 2006, with a list of four tribal entities:

- Benton Paiute Reservation;
- Bridgeport Paiute Indian Colony;
- Mono Lake Indian Community; and
- Walker River Reservation.

The Town sent consultation letters to each of the four NAHC-listed tribal entities on April 28, 2006, inviting each group to consult with them directly regarding the potential for the presence of Native American cultural resources that may be impacted by the Project. No responses have been received to date.

Sacred Lands File Search

As part of the Cultural Resources Study included in Appendix E to this Draft EIR, SWCA contacted the NAHC on April 19, 2006, requesting identification of any areas or geographic features in the Project Site that are listed within the NAHC's Sacred Lands File. SWCA also requested that the NAHC provide a list of Native American groups or individuals listed by the NAHC for Mono County who may have more information on traditional cultural properties within or adjacent to the Project site.

The NAHC responded on May 25, 2006, stating that their records search failed to indicate the presence of Native American cultural resources in the immediate Project area but that the individuals identified on the provided list should also be contacted regarding sacred lands or traditional cultural properties within the Project area.

ENVIRONMENTAL IMPACTS

Thresholds of Significance

Based on Appendix G of the CEQA *Guidelines*, a project would have a significant impact on cultural resources if the project would:

(a) Cause a substantial adverse change in the significance of an historical resource as defined in Section 15064.5;

(b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5;

(c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or

(d) Disturb any human remains, including those interred outside of formal cemeteries.

For purposes of CEQA, to determine whether cultural resources could be significantly affected, the significance of the resource itself must first be determined. Section 15065 of the CEQA *Guidelines* mandates a finding of significance if a project would eliminate important examples of major periods of California history or prehistory.

In addition, pursuant to Section 15064.5 of the CEQA *Guidelines*, a project could have a significant effect on the environment if it "may cause a substantial adverse change in the significance of an historical resource." A "substantial adverse change" means "physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource is impaired." Material impairment means altering "…in an adverse manner those characteristics of an historical resource that convey its historical significance and its eligibility for inclusion in the California Register of Historical Resources." Impacts to those cultural resources not determined to be significant according to the significance criteria described above are not considered significant for the purposes of CEQA.

Historical Architectural Resources

Pursuant to Section 15064.5 of the CEQA *Guidelines*, a historical resource (including both built environment and prehistoric archaeological resources) is presumed significant if the structure is listed on the California Register of Historical Resources (CRHR) or has been determined to be eligible for listing by the State Historical Resources Commission. A historical resource may also be considered significant if the lead agency determines, based on substantial evidence, that the resource meets the criteria for inclusion in the CRHR. The criteria are as follows:

1. The resource is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;

2. The resource is associated with lives of persons important in our past;

3. The resource embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

4. The resource has yielded, or may be likely to yield, information important in prehistory or history.

Archaeological Resources

Pursuant to Section 15064.5 of the CEQA *Guidelines*, archaeological resources, not otherwise determined to be historical resources, may be significant if they are unique. Pursuant to Public Resources Code Section 21083.2, a unique archaeological resource is defined as an archaeological artifact, object, or site about which it can be clearly demonstrated that without merely adding to the current body of knowledge, there is a high probability that it meets one of the following criteria:

1. The resource contains information needed to answer important scientific questions and there is a demonstrable public interest in that information;

2. The resource has a special and particular quality, such as being the oldest of its type or the best available example of its type; or

3. The resource is directly associated with a scientifically recognized important prehistoric or historic event or person.

A non-unique archaeological resource means an archaeological artifact, object, or site that does not meet the above criteria. Non-unique archaeological resources receive no further consideration under CEQA.

Human Remains

According to Section 15064.5 of the CEQA *Guidelines*, all human remains are a significant resource. Section 15064.5 of the CEQA *Guidelines* also assigns special importance to human remains and specifies procedures to be used when Native American remains are discovered. These procedures are spelled out under Public Resources Code Section 5097.

Paleontological Resources

According to Appendix G of the CEQA *Guidelines*, a project could have a significant effect if it would directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

Project Impacts and Mitigation Measures

The Project would require grading of the topographic features of the Project site to the extent necessary for siting of buildings, utility extensions, roads, pedestrian areas, water features, and golf course areas.

As such, the Project may have the potential to impact cultural resources (including historical, archaeological, and paleontological resources, as well as human remains) that are either known to exist within the Project site or have potential to be buried within the site. Following is a discussion of potential Project impacts to known and unknown cultural resources.

Impact CULT-1 Impacts to Known Cultural Resources

As discussed in the "Environmental Setting" above, the Project site and immediate vicinity have been subjected to multiple cultural resources studies over the past 35 years, including several studies within the past five years. The entire Project site has been previously surveyed for cultural resources. A total of 15 previously recorded cultural resources were identified within approximately 0.5 mile of the Project site. Of these 15 previously recorded cultural resources, two known resources, CA-MNO-529 (P26-000529) and CA-MNO-2487 (P26-002487), are located within the Project site. Following is a discussion of the Project's impacts with respect to these two known previously recorded cultural resources.

CA-MNO-529 (P26-000529)

The northernmost portion of prehistoric archaeological site CA-MNO-529 (P26-000529) lies within portions of Areas 5A and 7 within the Project site. Site CA-MNO-529 was previously determined to be eligible for NRHP inclusion; however, as discussed in the Cultural Resources Study as well as the Review of SWCA Proposal included in Appendix E to this Draft EIR, data recovery excavations conducted at the site were considered to have exhausted the research potential of the site (Basgall 1983). The site is not considered to constitute a unique archaeological resource under CEQA. As such, any Project-related impacts to Site CA-MNO-529 would be considered ***less than significant*** under CEQA.

CA-MNO-2487 (P26-002487)

The westernmost portion of prehistoric archaeological site CA-MNO-2487 presently lies under an existing golf course, but the majority of the site area lies within Area 5B/5C/5D within the Project site. Site CA-MNO-2487 was tested in 1991 and was subsequently recommended not eligible for NRHP inclusion (Kautz 1991). In 2004, Site CA-MNO-2487 was subjected to a large-scale testing program. The results of this testing program ultimately captured the research potential of the site and were sufficient to fulfill CEQA mitigation requirements (Burton 2004b). The site is not considered to constitute a unique archaeological resource under CEQA. As such, any Project-related impacts to Site CA-MNO-529 would be considered ***less than significant*** under CEQA.

Thus, the Project would result in ***less-than-significant*** impacts to the two previously recorded cultural resources located within the Project site. The remaining 13 resources within a 0.5 mile radius identified through the literature review and records search lie outside of the Project site and, thus, would not be affected by the Project.

Impact CULT-2 Impacts to Unknown Cultural Resources

The Project area is sensitive for prehistoric and historic archaeological resources, and human remains. Buried (previously unrecorded) prehistoric and historic archaeological deposits may be present within the Project site. In addition, previously unidentified features and/or diagnostic artifacts within previously recorded sites may be present within the Project site. Ground-disturbing construction associated with the Project has the potential to result in ***significant*** impacts to unrecorded buried archaeological deposits. As such, mitigation measures are recommended below that would reduce any such impacts to unknown cultural resources a less-than-significant level.

As the Project area is sensitive for buried prehistoric and historic archaeological resources, and ground-disturbing construction associated with the Project has the potential to result in ***significant*** impacts to such unknown cultural resources, the following mitigation measures are recommended to reduce Project-related impacts to a less-than-significant level under CEQA.

Mitigation Measure CULT-2a

A Mitigation Monitoring and Reporting Plan (MMRP) shall be prepared by a qualified archaeologist prior to Project construction. The MMRP shall outline the protocol for notification, temporary protection, documentation, and evaluation of previously unrecorded cultural resources encountered during construction, as well as mitigation of Project-related impacts to any such resources that are considered significant under CEQA, and the curation of any artifacts or samples collected in the field. The MMRP shall include a sample data recovery plan and a curation agreement. This document shall be completed prior to commencement of any ground-disturbing activity associated with the Project site (including clearing, brushing, grubbing, vegetation removal, disking, grading, trenching, excavation, and/or boring).

Mitigation Measure CULT-2b

A qualified archaeologist shall monitor all initial ground-disturbing grading and excavation activity in native soils. (Construction work within stockpile material does not require monitoring.) The construction monitor shall be supplied with maps and site records for the previously recorded cultural resources within the Project site, so that she/he can distinguish new resources from those that have been previously recorded and evaluated. The monitor shall prepare a daily monitoring log recording the type of work monitored, soil conditions, discoveries, and general observations.

Mitigation Measure CULT-2c

Previously unknown cultural resources identified during Project construction shall be protected through temporary redirection of work and possibly other methods such as fencing (to be outlined in the MMRP) until formally evaluated for significance under CEQA. In the event that previously unrecorded cultural resources are exposed during construction, the monitor shall be empowered to temporarily halt construction in the immediate vicinity of the discovery while it is documented and evaluated for

significance. Construction activities may continue in other areas. If the discovery is evaluated as significant under CEQA, additional work such as data recovery excavation may be warranted to mitigate Project-related impacts to a ***less-than-significant*** level.

Mitigation Measure CULT-2d

Procedures of conduct following the discovery of human remains have been mandated by Health and Safety Code §7050.5, Public Resources Code §5097.98 and the California Code of Regulations §15064.5(e) (CEQA). According to the provisions in CEQA, if human remains are encountered at the site, all work in the immediate vicinity of the discovery shall cease and necessary steps to ensure the integrity of the immediate area shall be taken. The Mono County Coroner shall be notified immediately. The Coroner shall then determine whether the remains are Native American. Once the Coroner determines the remains are Native American, the Coroner shall notify the NAHC within 24 hours, who will, in turn, notify the person the NAHC identifies as the most likely descendent (MLD) of any human remains. Further actions shall be determined, in part, by the desires of the MLD. The MLD has 24 hours to make recommendations regarding the disposition of the remains following notification from the NAHC of the discovery. If the MLD does not make recommendations within 24 hours, the owner shall, with appropriate dignity, reinter the remains in an area of the property secure from further disturbance. Alternatively, if the owner does not accept the MLD's recommendations, the owner or the descendent may request mediation by the NAHC.

Mitigation Measure CULT-2e

A monitoring report shall be prepared upon completion of construction monitoring, summarizing the results of the monitoring effort. Site records for any newly recorded or updated cultural resources shall be appended to the monitoring report.

Mitigation Measure CULT-2f

Artifacts or samples collected during the course of construction monitoring and any testing or data recovery associated with newly discovered resources shall be curated in perpetuity in an appropriate facility upon completion of analysis and processing.

CUMULATIVE IMPACTS

Impact CULT-3

Implementation of the Project in combination with the related projects would result in the development of additional low- to high-density residential, commercial, institutional, public resort, and industrial land uses. Impacts to cultural resources (including historic, archaeological, and paleontological resources, as well as human remains) tend to be site-specific and are assessed on a site-by-site basis. The extent of the cultural resources (if any) that occur at the related project sites is generally unknown and, as such, it is not

known whether any of the related projects would result in significant impacts to cultural resources. However, similar to the Project, such determinations would be made on a case-by-case basis and, if necessary, the applicants of the related projects would be required to implement the appropriate mitigation measures. Furthermore, the analysis of the Project's impacts to cultural resources concluded that, through the implementation of the mitigation measure recommended below, Project-related impacts to cultural resources would be less than significant. Therefore, the Project would not contribute to any potential cumulative impacts, and cumulative impacts to cultural resources would be ***less than significant*** and no mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

With the implementation of the mitigation measures recommended above, the Project's impacts to cultural resources would be reduced to ***less-than-significant*** levels.

IV. ENVIRONMENTAL IMPACT ANALYSIS
F. GEOLOGY/SOILS

INTRODUCTION

The information and analysis in this section is based primarily on the following reports, which are included in Appendix F of this Draft EIR:

- Geologic Peer Review for the Sierra Star Master Plan EIR, prepared by Treadwell and Rollo, June 1, 2006
- Preliminary Geotechnical Investigation - Affordable Housing 4A, prepared by Sierra Geotechnical Services Inc., December 19, 2005
- Preliminary Geotechnical Investigation for The Grove – Area 8C, prepared by Sierra Geotechnical Services, November 9, 2005
- Geotechnical Investigation – Affordable Housing 4B, prepared by Sierra Geotechnical Services Inc., August 2, 2005
- Preliminary Geotechnical Investigation for Fairways 4 and 5 Bungalows, prepared by Sierra Geotechnical Services, October 19, 2004
- Updated Geotechnical Investigation for Fairway 16, prepared by Sierra Geotechnical Services, February 23, 2004

It should be noted that none of the above-listed reports cover the entirety of the Project site. However, together, they provide a general overview of the geologic and soil conditions within the Project area. As indicated in the mitigation measures portion of this section, site-focused geotechnical reports should be prepared prior to the commencement of construction activities for individual developments to be built within the Project site under the proposed Sierra Star Master Plan.

ENVIRONMENTAL SETTING

Regional Geology and Soils

The Project site is located at the southwestern edge of the Long Valley caldera near the eastern flank of the Sierra Nevada mountain range. A caldera is a large, usually circular depression at the summit of a volcano formed when magma is withdrawn or erupted from a shallow underground magma reservoir. The removal of large volumes of magma may result in loss of structural support for the overlying rock,

thereby leading to collapse of the ground and formation of a large depression.[1] The caldera is elongated in an east-west direction and was formed approximately 760,000 years ago. The high mountains around Mammoth Lakes constitute the caldera walls with the Glass Mountains forming the west and southwest walls and the Benton Range forming the east wall. Mammoth Mountain is a smaller dome on the rim of the caldera formed by repeated eruptions from vents on the southwest rim of the caldera 220,000 to 50,000 years ago. Bedrock below volcanic deposits in the Mammoth Lakes area is predominately Mesozoic granitic rock of the Sierra Nevada batholith. A batholith is a large emplacement of igneous intrusive (also called plutonic) rock that forms from cooled magma deep in the Earth's crust. Batholiths are almost always made mostly of felsic or intermediate rock-types, such as granite, quartz monzonite, or diorite.[2] The batholith is a series of intrusions that displaced overlying ancient sedimentary sea floor rocks during the Jurassic and Cretaceous Periods. During the past 3,000 years, Pleistocene glacial deposits (glacial till and outwash) have covered the Mesozoic bedrock and volcanic rocks throughout the area now occupied by the Town of Mammoth Lakes (Town).[3]

Soils beneath the Town are typically gravelly loams with low water capacity generally developed on glacial outwash south of Mary Lake Road and on glacial moraines to the north of Mary Lake Road. Soils are sensitive to disturbances by development and have a moderate to high erosion potential, depending on the steepness of the slope. Additionally, loose, unconsolidated colluvial deposits with a moderate to high erosion and landslide potential are located on the slopes of Mammoth Mountain and Mammoth Rock.[4]

Topographic Setting

The topography of the Mammoth Lakes area ranges from rolling alluvial plains at approximately 7,200 feet above mean sea level (msl) in Long Valley to approximately 11,053 feet above msl at the summit of Mammoth Mountain. Slope gradients range from relatively flat areas in Sherwin Meadow and Long Valley to slopes of 50 percent or greater on Mammoth Mountain.[5]

Volcanic Setting

The Mono Lake Long Valley area is volcanically active with over 30 known events occurring in the past 2,000 years. Most recently, in 1890, a phreatic type eruption (steam, water, mud and other gases, as a result of magma heating groundwater) occurred 35 miles north of the Town beneath the southern portion of Mono Lake. Another eruption in the area is likely to occur within the next thousand years.[6] The

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1 *United States Geological Survey, retrieved at http://volcanoes.usgs.gov/Products/Pglossary/caldera.html on May 8, 2006.*

2 *Retrieved at http://en.wikipedia.org/wiki/Batholith on May 8, 2006.*

3 *Revised Draft Program EIR – 2005 General Plan Update, October 2005.*

4 *Ibid.*

5 *Ibid.*

6 *Ibid.*

United States Geological Survey (USGS) estimates that eruptions at the Mono-Inyo Craters volcanic field have historically occurred at approximately 500-year intervals over the past 2,000 to 3,000 years.

High magnitude seismic activity in May 1980 (four magnitude 6 events over a two-day period) indicated a new phase of magmatic activity and heightened potential for volcanic activity in the area. Volcanologists interpreted the earthquakes, accompanying ground deformations, and an increase in activity at fumaroles as an indication of magma movement beneath the caldera. Frequent low magnitude seismic activity since that time indicates deep magmatic movement.

Carbon Dioxide

Following a period of earthquakes beneath Mammoth Mountain in 1989, magmatic gases (high levels of carbon dioxide in the soil) were determined to be killing approximately 120 acres of trees in certain portions of the caldera in 1990. Most notably, between 50 and 150 tons of carbon dioxide gas are emitted daily at the north end of Horseshoe Lake where approximately 30 acres of trees have been killed.[7] Additional areas of carbon dioxide discharge are scattered around Mammoth Mountain primarily outside of the Mammoth Mountain Ski Area. Winter closures are implemented in a few small areas within the Mammoth Mountain Ski Area where carbon dioxide concentrations are potentially dangerous. Areas of discharge are also located outside of the established trails of Tamarack Cross-Country Ski Center. There is no indication that the area of carbon dioxide discharge has increased since 1995.[8]

The source of the carbon dioxide is a large gas reservoir located deep underground related to long-term magmatic degassing beneath Mammoth Mountain. Because carbon dioxide is heavier than air, the USGS indicates that carbon dioxide gas can accumulate in snowbanks, depressions, and poorly ventilated enclosures, including structures, posing a potential danger to people. Concentrations are highly variable depending on wind and weather conditions. USGS scientists closely monitor the volcanic activity in the region in order to provide the public with reliable and timely warning of volcanic unrest within the Long Valley area.[9]

Site Geology and Soils

Soils in the vicinity of the Project site include topsoil, alluvium, undocumented fill, topsoil/colluvium, and glacial till deposits. The alluvium generally consists of loose, silty, very fine to coarse-grained sand and sand with silt, with abundant roots, rock fragments, cobbles, and boulders. Glacial till deposits were encountered below the alluvium, consisting of medium dense to dense, very fine to coarse sand and silty sand, with abundant gravels, cobbles, and boulders. The glacial till is denser at lower depths.

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[7] *Revised Draft Program EIR – 2005 General Plan Update, October 2005.*

[8] *Horseshoe Lake and Vicinity CO_2 Phenomenon, USDA Forest Service, January 28, 2000.*

[9] *Treadwell & Rollo, Third Party Geotechnical/Geological Review, Sierra Star Master Plan EIR, June 1, 2006.*

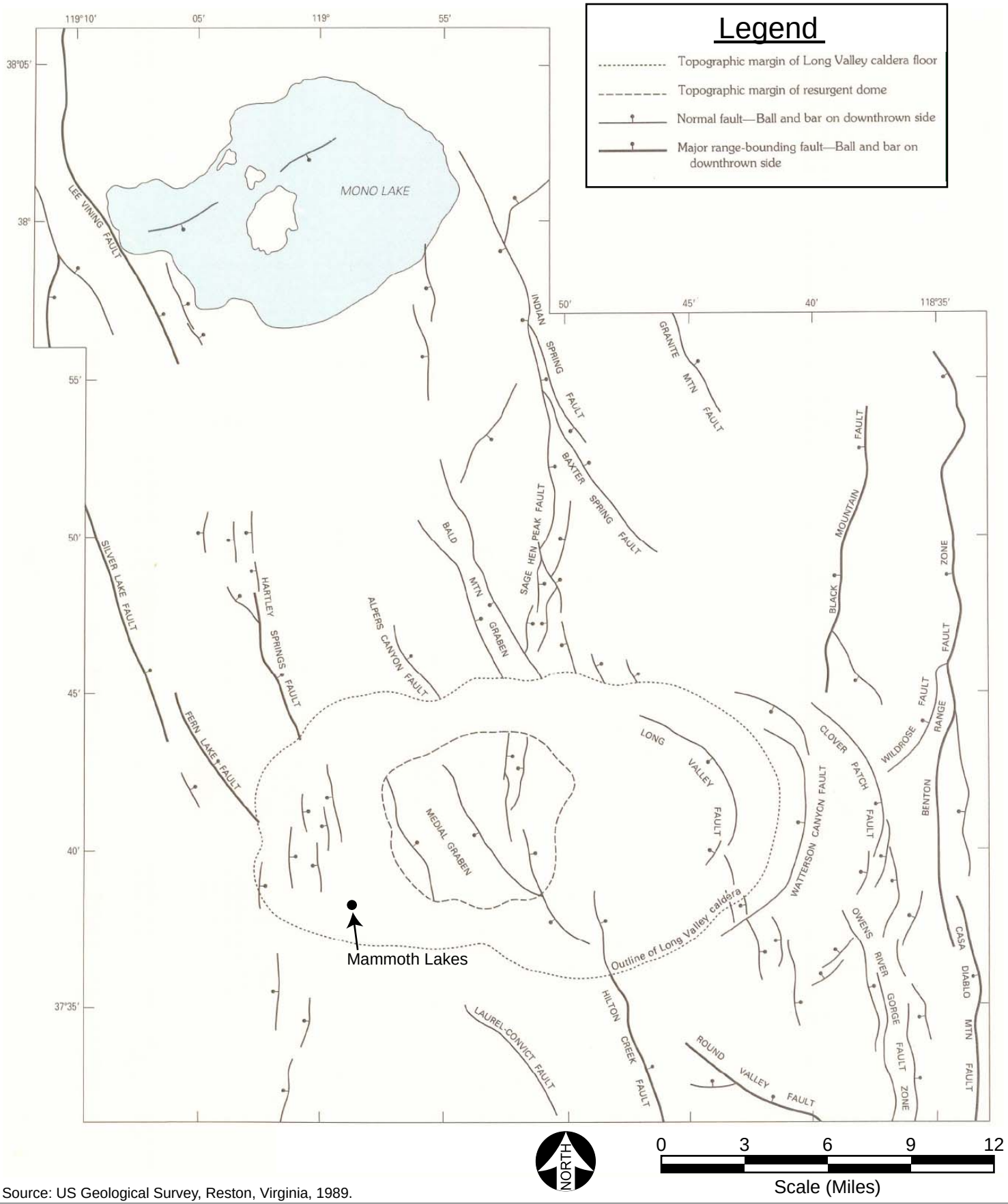
Groundwater

Neither the groundwater table nor groundwater seepage has been encountered during field investigations within the area of the Lodestar Master Plan. However, slight to moderate mottling of soils has been observed which indicates that seasonally high and temporarily perched groundwater from snowmelt can be anticipated within the area. Groundwater levels in Mammoth Lakes are known to fluctuate seasonally. Groundwater seepage could occur during excavations completed in the spring and early summer. Because the location of such conditions is difficult to determine, they are typically mitigated if and when they are encountered during construction. Additionally, subsurface materials that could retard groundwater flow were not encountered in the Lodestar Master Plan area.[10]

Seismicity and Seismic Hazards

Earthquakes in the Mammoth Lakes area are a result of both tectonic and magmatic activity. There are several active or potentially active fault zones within 60 miles of the Town. Faults that have been active in the last 200 years include the Mono Lake, June Lake, and Hilton Creek faults in the northern extension of the Sierra Nevada Boundary fault system and main trace of the Sierra Nevada fault and the Owens Valley fault in the southern extension of the Sierra Nevada Boundary fault system. Faults that have been active during the last two million years include the Bodie Hills, White Mountains, Death Valley Furnace Creek, and Saline Valley faults. Within the vicinity of the Town, Hilton Creek, Owens Valley, Hartley Springs, Laurel Convict, Long Valley Caldera, Mono Craters Caldera, Silver Lake, and Wheeler Crest faults as well as the Chalfant Valley Fractures have the potential to induce ground shaking within the Town. The location of these faults relative to the Town is noted in Table IV.F-1 and Figure IV.F-1.

[10] *Geotechnical Investigation – Affordable Housing 4B, prepared by Sierra Geotechnical Services Inc., August 2, 2005.*



Source: US Geological Survey, Reston, Virginia, 1989.

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Figure IV.F-1
Regional Seismicity Map

Table IV.F-1
Regional Faults and Seismicity

Fault Segment	Approximate Distance from Project Site (km)	Direction from Project Site	Maximum Magnitude
Hartley Springs	1.1	West	6.6
Hilton Creek	10	East	6.7
Round Valley	23	East	7.0
Mono Lake	34	North	6.6
Fish Slough	52	East	6.6
White Mountains	53	East	7.1
Robinson Creek	69	Northwest	6.4
Death Valley (N. of Cucamonga)	73	East	7.0
Owens Valley	73	Southeast	7.6
Birch Creek	79	Southeast	6.4
Deep Springs	94	East	6.6
Source: Treadwell & Rollo, 2006.			

Ground Motion

Ground motion is generated during an earthquake as two blocks of the Earth's crust slip past each other. In general, ground motion is greatest near the epicenter, increases with increasing magnitude, and decreases with increasing distance. However, the ground motion measured at a given site is influenced by a number of criteria, including depth of the epicenter, proximity to the projected or actual fault rupture, fault mechanism, duration of shaking, local geologic structure, source direction of the earthquake, underlying earth material, and topography.

Earthquake magnitude is a quantitative measure of the strength of an earthquake or the strain energy released by it, as determined by seismographic or geologic observations. Earthquake intensity is a qualitative measure of the effects a given earthquake has on people, structures or objects. Earthquake magnitude is measured on the Richter scale or as moment magnitude, and intensity is described by the Modified Mercalli intensity scale. A related form of measurement is peak ground acceleration, which is a measure of ground-shaking during an earthquake. Peak ground acceleration values are reported in units of gravity (g). At the Project site, the estimated peak horizontal ground acceleration with a 10 percent probability of exceedance in 100 years is 0.44g and the estimated peak horizontal ground acceleration

with a 10 percent probability of exceedance in 50 years is 0.35g.[11] Therefore, the potential for ground shaking in the Town and within the Project area is considered low.[12]

Structures founded on thick soft soil deposits are more likely to experience more destructive shaking, with higher amplitude and lower frequency, than structures founded on bedrock. In addition, thick soft soil deposits far distances from earthquake epicenters may result in seismic accelerations significantly greater than expected in bedrock.

Fault Rupture

The Project area is not located within either Earthquake Fault Zones or Alquist-Priolo Hazard Zones. The potential for fault rupture in the Town and within the Project area is considered to be low. [13]

Liquefaction and Settlement

Soil liquefaction results from loss of strength during cyclic loading, such as that imposed by earthquakes. When seismic ground-shaking occurs, the soil is subject to seismic shear stresses that may cause the soil to undergo deformations. If the soil undergoes virtually unlimited deformation without developing significant resistance, it is said to have liquefied. When soils consolidate during and following liquefaction, ground settlement occurs. Soils most susceptible to liquefaction are clean, loose, saturated, uniformly graded, fine-grained sands. Shallow groundwater is considered a factor as it creates the saturated condition of the soil. In the Town, there is potential for seismically induced liquefaction in areas with alluvium or moraine material and shallow groundwater.[14]

Lateral Spreading

Lateral spreading typically occurs as a form of horizontal displacement of relatively flat-lying alluvial material toward an open or "free" face such as an open body of water, channel, or excavation. Generally in soils, this movement is due to failure along a weak plane, and may often be associated with liquefaction. As cracks develop within the weakened material, blocks of soil displace laterally toward the open face. Cracking and lateral movement may gradually propagate away from the face as blocks continue to break free. Lateral spreading can occur within areas having potential for liquefaction. Therefore, in the Town, there is potential for lateral spreading during seismic events in areas with alluvium or moraine material and shallow groundwater that have the potential for liquefaction.

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[11] *Geotechnical Investigation – Affordable Housing 4B, prepared by Sierra Geotechnical Services Inc., August 2, 2005.*

[12] *Revised Draft Program EIR – 2005 General Plan Update, October 2005.*

[13] *Ibid.*

[14] *Ibid.*

Landslides, Avalanches, and Slope Instabilities

Avalanches can occur as a result of moderate to large earthquakes, which can cause rock and snow to move vertically and laterally downslope. These hazards typically affect structures which are located at the base of slopes or within close proximity to the area of flow.

Steep slopes, shallow soil development, excess water, and lack of shear strength in the area result in slope instabilities including landslides, earthslips, mudflows, and soil creeps. Seismic activity induces some landslides but most slides result from the weight of rain saturated soil and rock exceeding the shear strength of the underlying material. Additionally, the moraines south, west, and north of the Town contain irregular deposits of clay that are unstable on steep slopes. Other moraines east of and in the center of the Town are generally stable unless underlain by shallow groundwater or if steeper slopes, particularly those with substantial talus accumulations, are present.[15]

Expansive Soils

No expansive soils have been mapped or encountered in the Town.[16]

ENVIRONMENTAL IMPACTS

Thresholds of Significance

In accordance with Appendix G to the CEQA Guidelines, the Project could have a significant environmental impact if it would:

(a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

  (i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault.

  (ii) Strong seismic ground shaking.

  (iii) Seismic-related ground failure, including liquefaction.

  (iv) Landslides.

(b) Result in substantial soil erosion or the loss of topsoil.

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[15] *Revised Draft Program EIR – 2005 General Plan Update, October 2005.*

[16] *Ibid.*

(c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.

(d) Be located on expansive soil, as defined in Table 18-1-B of the California Building Code (2001), creating substantial risks to life or property.

(e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.

Project Impacts and Mitigation Measures

Impact GEO-1 Fault Rupture

As noted, the Project site is not located within either Earthquake Fault Zones or Alquist-Priolo Hazard Zones and the potential for fault rupture is considered to be low. Therefore, Project impacts related to fault rupture would be ***less than significant*** and no mitigation measures are required.

Impact GEO-2 Strong Seismic Ground Shaking

The Project site is located in a Seismic Zone 4 based on 1997 Uniform Building Code and 2001 California Building Code (CBC). During the service life of the Project, the site is likely to experience at least one earthquake that may produce potentially damaging ground shaking. As noted, the probabilistic seismic hazard analysis estimates peak horizontal ground acceleration with a 10 percent probability of exceedance in 100 years is 0.44g and the estimated peak horizontal ground acceleration with a 10 percent probability of exceedance in 50 years is 0.35g. However, the Project applicant would be required to design and construct the Project in conformance to the most recently adopted CBC design parameters as shown in Table IV.F-2.

Table IV.F-2
Seismic Design Parameters

Seismic Parameter	Recommended Value
Soil Profile Type	S_C
Seismic Zone Factor	0.4
Seismic Source Type	B
Near Source Factor N_a	1.3
Near Source Factor N_v	1.6
Seismic Coefficient C_a	0.52
Seismic Coefficient C_v	0.90
Source: Sierra Geotechnical Services, Inc., 2005.	

Conformance with current CBC requirements would reduce the potential for structures on the Project site to sustain damage during an earthquake event, and Project impacts related to ground shaking would be ***less than significant*** and no mitigation measures are required.

Impact GEO-3 Liquefaction

Up to 5.5 feet of alluvial deposits consisting of loose sand and silty sand is present at the site. In addition, perched water may develop at the site. During construction activities at the Project site, the upper 2 to 3 feet of loose alluvium would be excavated and removed from the site as it is considered unsuitable for reuse as structural fill. Permanent perimeter subsurface drains would be installed to intercept perched groundwater associated with snowmelts. Based on these anticipated site conditions, the potential for liquefaction to occur is considered very low due to the lack of groundwater and the presence of medium dense to dense nature bearing soil at the site.[17] However, in areas where loose alluvial soil is left in place and subsurface drainage is not added, a small potential for soil liquefaction still would exist. In order for liquefaction to occur at these locations, perched groundwater would need to saturate the loose sandy alluvial soil and a large earthquake would need to occur on a nearby portion of one of the active faults. In general, only critical structures or very important site improvements would need to still consider this potential hazard. Because the potential for liquefaction to occur at the site is considered low, the potential for ground failures associated with liquefaction (i.e., lateral spreading, post-liquefaction reconsolidation, and sand boils) is also considered low. Impacts would be ***significant***.

Mitigation Measure GEO-3a

Design level investigations shall evaluate the potential for soil liquefaction at locations where springs and other sources of water are present.

Mitigation Measure GEO-3b

The design level geotechnical report shall evaluate the potential for localized liquefaction including supplemental subsurface exploration, laboratory testing, engineering analysis, and development of additional mitigation measures if found to be necessary. Potential mitigation measures may include over-excavating and replacing loose or soft soils with engineered fill compacted to current compaction standards.

Mitigation Measure GEO-3c

Prepare site-specific geotechnical reports for individual developments to be built within the Project site prior to construction.

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[17] *Geotechnical Investigation – Fairway 16, prepared by Sierra Geotechnical Services Inc., February 23, 2004.*

Mitigation Measure GEO-3d

Implement all recommendations contained within these site-specific geotechnical reports, including those pertaining to site preparation, fill placement, and compaction; foundations; concrete slabs-on-grade; pavement design; lateral earth pressures and resistance; and surface drainage control.

Mitigation Measure GEO-3e

The final grading, drainage, and foundation plans and specifications shall be prepared and/or reviewed and approved by a Registered Geotechnical Engineer and Registered Engineering Geologist. In addition, upon completion of construction activities, the Project applicant shall provide a final statement indicating whether the work was performed in accordance with Project plans and specifications and with the recommendations of the Registered Geotechnical Engineer and Registered Engineering Geologist.

Impact GEO-4 Cyclic Densification

Cyclic soil densification is a phenomenon in which non-saturated, cohesionless soil is densified by earthquake vibrations, resulting in ground surface settlement. Cyclic densification should be considered a potential minor hazard at the Project site. During a major earthquake on a nearby portion of one of the active faults, strong ground shaking may cause the loose, unsaturated alluvial soil to densify and settle. It is estimated that up to ¼ inch of cyclic densification may occur at the site. This may result in the minor cracking of foundations and other surface improvements. However, these types of minor impacts are not considered to represent a substantial risk to life and property and therefore do not represent a significant impact under CEQA. Impacts would be ***less than significant*** and no mitigation measures are required.

Impact GEO-5 Landslides and Avalanches

The potential for rock falls or snow avalanches to occur on the Project site is considered low and no evidence of landslides has been observed.[18] Therefore, Project impacts related to landslides and avalanches would be ***less than significant*** and no mitigation measures are required.

Impact GEO-6 Volcanic Activity

A small to moderate volcanic eruption could occur somewhere along the Mono-Inyo Craters volcanic chain producing pyroclastic flows and surges as well as volcanic ash and pumice fallout that could ***significantly*** impact the Project site. However, the presence of the Project on the site would not increase the risk of such volcanic activity affecting either existing or proposed development in the vicinity of the

[18] *Geotechnical Investigation – Fairway 16, prepared by Sierra Geotechnical Services Inc., February 23, 2004.*

site. In addition, this risk is present throughout the Town and surrounding areas. Thus, Project impacts related to volcanic activity would be less than significant.

Mitigation Measure GEO-6

The Project applicant should prepare an emergency evacuation plan in consultation with the Town in order to provide for the orderly evacuation of the Project site in the event of either a major earthquake or incidents of increased volcanic activity.

Impact GEO-7 Carbon Monoxide

The Project site is not located in an area associated with high levels of carbon dioxide. Therefore, impacts would be ***less than significant*** and no mitigation measures are required.

Impact GEO-8 Soil Erosion/Loss of Topsoil

The Project site may be subject to soil erosion and loss of topsoil. Without proper implementation of erosion control measures during construction and operation of the Project, the site could sustain soil erosion and loss of topsoil. This would be considered a ***significant*** impact.

Mitigation Measure GEO-8

Permanent erosion control measures for construction identified in the Project's Storm Water Pollution Prevention Plan (SWPPP) per the requirements of the California State Water Resources Control Board (SWRCB) adopted in accordance with the General Construction Activity Storm Water Permit (GCASWP) shall be implemented. The required implementation of the Best Management Practices (BMPs) identified in the Project's SWPPP would ensure that Project construction activities within the SSMP area would not cause substantial erosion on- or off-site. Additionally, for post construction, erosion control measures designed to minimize soil loss from exposed areas of the Project site shall be determined in consultation with the Town's Department of Public Works.

Impact GEO-9 Geologic and Soil Instabilities

Moraine deposits in conjunction with the potential for shallow groundwater in the southwest portion of the Project area could result in slope instabilities. However, as noted, groundwater has not been encountered during subsurface exploration.[19] Therefore, Project impacts related to soil instabilities would be ***less than significant***.

[19] *Revised Draft Program EIR – 2005 General Plan Update, October 2005.*

Impact GEO-10 Expansive Soils

As noted, no expansive soils have been mapped or encountered in the Town. Therefore, Project impacts related to expansive soils would be ***less than significant*** and no mitigation measures are required.

Impact GEO-11 Septic Tanks or Alternative Waste Water Disposal Systems

No septic tanks or alternative waster water disposal systems are proposed as part of the Project. Therefore, Project impacts related to soils incapable of supporting these uses would be ***less than significant*** and no mitigation measures are required.

CUMULATIVE IMPACTS

Impact GEO-12

Geotechnical impacts related to future development in the Town would involve hazards associated with site-specific soil conditions, erosion, volcanic activity, and ground-shaking during earthquakes. The impacts on each site would be specific to that site and its users and would not be common or contribute to (or shared with, in an additive sense) the impacts on other sites. In addition, development on each site would be subject to uniform site development and construction standards that are designed to protect public safety. Therefore, cumulative geology and soil impacts would be ***less than significant*** and no mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Implementation of the mitigation measures listed above and compliance with applicable regulations would reduce all Project impacts related to geology and soils to a ***less-than-significant*** level.

IV. ENVIRONMENTAL IMPACT ANALYSIS
G. HAZARDS & HAZARDOUS MATERIALS

INTRODUCTION

Except where footnoted otherwise, this Section is based upon the analysis and conclusions of the following Phase I Environmental Site Assessments (ESAs), which are included in Appendix F (Geotechnical/Hazards Reports and Peer Review Comments) to this Draft EIR:

- Sierra Geotechnical Services, Inc., Phase I Environmental Site Assessment, Mammoth Green at Sierra Star Lot 1 of Tract 36-191 APNs: 33-330-32 and 33-330-34 2001 Lodestar Drive, Mammoth Lakes, Mono County, California, June 20, 2000;[1]

- Sierra Geotechnical Services, Inc., Phase I and Limited Phase II Environmental Site Assessment, La Sierra's Restaurant Site, Tax Assessor's Nos. 33-110-03 3789 Main Street, Mammoth Lakes, Mono County, California, March 19, 2004;[2] and

- Sierra Geotechnical Services, Inc., Phase I Environmental Site Assessment, Hillman Parcel – Old Lumber Site, Tax Assessor's Nos. 33-110-05 3721 Main Street, Mammoth Lakes, Mono County, California, December 5, 2005.[3]

ENVIRONMENTAL SETTING

Project Site

The Project site is located north of Meridian Boulevard and bisected by Minaret Road in the center of the Town of Mammoth Lakes (Town) in Mono County. The Project site is comprised of the following Assessor's Parcel Numbers (APN) and associated land use areas shown in parenthesis: 33-330-33 (Area 1D), 33-330-50 (Areas 2A, 2B/2C, 2D, 4A), 33-330-54 (Area 5), 33-330-55 (Areas 5B/5C/5D) and 33-330-25 (Area 7). The Project area is currently occupied with groves of alpine trees interspersed with an existing golf course and pockets of single-family and multi-family residences. The Sierra Star Golf

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[1] *This Phase I ESA was prepared for a property which includes Area 1D, part of the southwest portion of the Project site. Therefore, this Phase I ESA provides useful information with respect to potential hazards and hazardous materials that may be encountered within the south and west portions of the Project site.*

[2] *This Phase I ESA was prepared for the La Sierra's Restaurant Site, which is not part of the Project site but is located adjacent to the northern boundary of the Project site's Area 2D (located in the north portion of the Project site). Therefore, this Phase I ESA provides useful information with respect to potential hazards and hazardous materials that may be encountered within the north and east portions of the Project site.*

[3] *This Phase I ESA was prepared for the Old Lumber Site, which is not part of the Project site but is located north and wast of the Project site's Area 2D (located in the north portion of the Project site). Therefore, this Phase I ESA provides useful information with respect to potential hazards and hazardous materials that may be encountered within the north and east portions of the Project site.*

Course and the residential units were developed under the Lodestar Master Plan and are not located on the Project site itself. Based on a review of historical photographs of the Project area, all of the parcels that comprise the Project site were undeveloped as of 1978. Of these parcels, seven have remained undeveloped through the present, while Area 1D has been partially developed under the Lodestar Master Plan. Following is a description of existing uses on each of the parcels that comprise the Project site (see Figure III-1).

Area 1D

Area 1D currently contains eight residential units that have been built or are under construction since 2000. Area 1D and the surrounding area contain alpine forests intermixed with multi-family and single-family residences. Lodestar Drive, a north-south roadway, is located directly to the west of Area 1D and terminates near the northern boundary of Area 1D. A short emergency access roadway extends from the northern terminus of Lodestar Drive in an arc toward the northwest to intersect with Majestic Pines Drive. A small portion of Area 1D was used for heavy equipment parking and general maintenance operations during construction of the Sierra Star Golf Course, which involved oil changes and the storage of oil on-site in 55-gallon drums.[4]

Area 2A

Area 2A is currently undeveloped and contains a grove of alpine trees bordered on the west, east, and southeast by the existing golf course. Minaret Road delineates the southern boundary of Area 2A.

Area 2B/2C

Area 2B/2C is currently undeveloped and contains a grove of alpine trees bordered on the north, east, and west by the existing golf course.

Area 2D

Area 2D is currently undeveloped and contains a grove of alpine trees. North of Area 2D, there are existing commercial and multi-family residential land uses fronting Main Street.

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[4] *Sierra Geotechnical Services, Inc., Phase I Environmental Site Assessment, Mammoth Green at Sierra Star Lot 1 of Tract 36-191 APNs: 33-330-32 and 33-330-34 2001 Lodestar Drive, Mammoth Lakes, Mono County, California, June 20, 2000, p. 5.*

Area 4A

Area 4A is currently undeveloped and contains a grove of alpine trees flanked on the south and west by the existing golf course. Existing single and multi-family residences are located to the east of Area 4A, along Joaquin Road.

Area 5A

Area 5A is mostly undeveloped and contains a grove of alpine trees and Bear Lake to the southwest. Existing trees are interspersed throughout Area 5A. Sierra Star Parkway extends along the eastern boundary of Area 5A. The existing golf course flanks the southern boundary of Area 5A.

Area 5B/5C/5D

Area 5B/5C/5D is mostly undeveloped and contains a grove of trees flanked on the west, south, and northeast by the existing golf course. The grove of trees in Area 5B/5C/5D extends beyond its northwestern boundary.

Area 7

Area 7 is undeveloped and contains trees. Sierra Star Parkway extends along the eastern boundary.

Existing Surrounding Properties

The Project site is bounded to the east, south and west by Lodestar Master Plan single-family and multi-family residential developments that are either completed, under construction, or approved for construction. The northwest portion of the Project site is bordered by The Village at Mammoth resort area; the northern portion of the Project site is bordered by existing commercial businesses, which front Main Street/Lake Mary Road. There are no industrial activities within the properties surrounding the Project site.

Sensitive Receptors

Appendix G to the State CEQA Guidelines considers a significant impact to occur if a Project would emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. Furthermore, the following land uses are generally considered to be sensitive receptors with respect to air quality impacts: long-term health care facilities; rehabilitation centers; convalescent centers; retirement homes; residences; schools; playgrounds; child care centers; and athletic facilities.[5] For the purpose of this analysis, sensitive receptors with respect to

[5] *South Coast Air Quality Management District, Air Quality Analysis Guidance Handbook, July 1999, Fig 4-2.*

hazardous materials exposure would include existing residential uses located along both sides of Minaret Road adjacent to the Project site, and on-site residential uses proposed as part of the Project.

Topography

The Project site is located in the western portion of the Long Valley caldera near the eastern flank of the Sierra Nevada. Several historic and recent faults are located in the surrounding area; however, no faults have been mapped within the Town and the Project site is not located within a designated Alquist-Priolo Earthquake Fault Zone. The Project site's topographic elevation ranges from approximately 8,060 above mean sea level (msl) at the western edge of Area 1D to approximately 7,940 feet above msl at the northern corner of Area 2D, with a gentle slope toward the east.[6, 7]

Soils and Hydrology

Groundwater levels in the Mammoth Lakes area are known to fluctuate seasonally. Soils testing conducted in April of 1999 found perched groundwater approximately 3 to 4 feet below ground surface (bgs) at the Project site. Depth to permanent groundwater is estimated to range between approximately 30 feet bgs within Area 1D to approximately 100 feet bgs within Area 2D. The Project site is underlain entirely by glacial till from the Tioga Glacial event.[8, 9]

Project Site Reconnaissance

Site reconnaissance was conducted for Area 1D on several occasions during 1999 and 2000 as part of the Phase I ESA for Area 1D. During these visits, none of the following were observed:

- Odors, stains, or hazardous materials;
- Large quantities of any chemicals or paints other than that being used for construction;
- Underground storage tanks (UST) fill pipes or vent pipes;

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[6] *Sierra Geotechnical Services, Inc., Phase I and Limited Phase II Environmental Site Assessment, La Sierra's Restaurant Site, Tax Assessor's Nos. 33-110-03 3789 Main Street, Mammoth Lakes, Mono County, California, March 19, 2004, p. 5.*

[7] *Sierra Geotechnical Services, Inc., Phase I Environmental Site Assessment, Mammoth Green at Sierra Star Lot 1 of Tract 36-191 APNs: 33-330-32 and 33-330-34 2001 Lodestar Drive, Mammoth Lakes, Mono County, California, June 20, 2000, p. 2.*

[8] *Sierra Geotechnical Services, Inc., Phase I and Limited Phase II Environmental Site Assessment, La Sierra's Restaurant Site, Tax Assessor's Nos. 33-110-03 3789 Main Street, Mammoth Lakes, Mono County, California, March 19, 2004, p. 13.*

[9] *Sierra Geotechnical Services, Inc., Phase I Environmental Site Assessment, Mammoth Green at Sierra Star Lot 1 of Tract 36-191 APNs: 33-330-32 and 33-330-34 2001 Lodestar Drive, Mammoth Lakes, Mono County, California, June 20, 2000, p. 2.*

- Polychlorinated biphenyls (PCB)-containing transformers;
- Asbestos;
- Barrel drums;
- Long-term standing water, pits, ponds or lagoons; or
- Storm drains, septic systems, fill spouts or sumps.

Hazardous Material Sites within Surrounding Properties

The Phase I ESA prepared for Area 1D included a records search for properties of environmental concern within a 0.5 mile radius of Area 1D. Eight USGS and State water wells were identified within 0.5 mile radius; no other sites were denoted. Of the 83 unmappable sites, only four were determined to be within 0.5 mile of the Project site, all of which were determined to be USTs. These include one UST within the Summit Condominiums immediately south of the Project site, one UST within the Camp High Sierra Property west of the Project site, one UST within the Big Woods Homeowners Association northwest of the Project site at 1629 Majestic Pines Road, and one UST within the Lodestar Maintenance Facility northeast of the Project site at 5700 Minaret Road. None of these sites are considered to present environmental concerns to the development of Area 1D; furthermore, the UST within the Summit Condominiums has been properly closed and removed.

In addition to the Phase I ESA prepared for Area 1D, the Phase I ESA prepared for the development of the La Sierra's Restaurant Site at 3787 Main Street (adjacent to the Project site's Area 2D) included a comprehensive database search for hazardous materials sites that are listed on current federal, State, and local environmental regulatory agency databases pursuant to Government Code Section 65962.5. While the La Sierra's Restaurant Site is not located within the Project site, its adjacency to Area 2D provides a reasonable overview of listed hazardous materials sites within 0.5 mile of this portion of the Project site (Area 2D is located at the opposite side of the Project site from Area 1D).

Mappable Facilities

The Phase I ESA for the Old Lumber Site identified four sites with known environmental concerns within a 0.5-mile radius, discussed below.[10]

The Norco Service Center facility (EDR ID #S102434423 and #U001586937) is listed as a HAZNET and HIST UST site, and is also listed with the Leaking Underground Storage Tank Information System

[10] *Sierra Geotechnical Services, Inc., Phase I Environmental Site Assessment, Hilman Parcel – Old Lumber Site, Tax Assessor's Nos. 33-110-05 3721 Main Street, Mammoth Lakes, Mono County, California, December 5, 2005.*

(LUST) and with the Cortese Hazardous Waste and Substance Sites List (CORTESE). The service center is located at 3670 Main Street, approximately 565 feet northeast of the La Sierra's Restaurant Site (i.e., approximately 0.1 mile northeast of Area 2D). The site is currently permitted to handle waste and mixed oils. A gasoline leak was discovered in Spring 1996; the contaminated material was subsequently excavated and disposed of under purview of Mono County Environmental Health Department (MCEHD), which closed the case in October 1996. Therefore, the unauthorized release at the Norco Service Center is considered to be a de minimus environmental condition (DMEC) with no potential to affect activities on the Project site.

The former Exxon Mini-Mart (EDR ID #S1024299506), which was formerly an ARCO AM/PM Mini-Mart in addition to a former Texaco service station, was replaced by the existing Napa Auto Parts, is located at 3280 Main Street approximately 2,185 feet east of the La Sierra's Restaurant Site (i.e., approximately 0.5 mile east of Area 2D). Exxon Mini-Mart is listed as both a LUST and a CORTESE site. A diesel fuel leak into soil occurred at this site in 1992; the MCEHD closed the case after treatment in 1998. The Napa facility discovered a gasoline leak into soil in May 1992; the MCEHD closed the case in December 1993 after treatment was completed.

The former Mammoth Mobil Mo-Mart (EDR ID #S102554148), currently known as Center Street Shell, is listed as both a LUST and a CORTESE site. This site is located at 3275 Main Street approximately 2,505 feet east of the La Sierra's Restaurant Site (i.e., approximately 0.5 mile east of Area 2D). A diesel fuel leak into soils was discovered in 1987 and reported in 1994. A diesel fuel leak into groundwater was discovered and reported in 1997. Contamination is currently being monitored under purview of the Regional Water Quality Control Board (Lahontan Region) (RWQCB) and the Town of Mammoth Lakes.

The former Contel facility is located at 39 Pinecrest Avenue approximately 2,170 feet east of the corner of Main Street and Back Road and is listed as a UST, LUST, and CORTESE site. This facility subsequently became owned by GTE and is currently operated by Verizon. Diesel fuel was discovered in soil on February 1992. During tank removals contaminated soils were excavated and removed and MCEHD closed the case (Case #6B2600778T) per a closure letter dated October 16, 1996.

Unmappable (Orphan) Facilities

Of the 34 orphan facilities identified, four facilities with known reported environmental conditions were determined to be within a 0.5-mile radius, as discussed below.

The Village at Mammoth facility (EDR ID #S105694713) is listed as a LUST site. Recent construction operations for a new gondola lift station exposed two USTs and one sump that previously served a building demolished between 1972 and 1988 that had housed a Union 76 station, a Texaco station, and Caesar's Garage. The site is located at 6155 Minaret Road, approximately 1,445 feet northeast of and up-gradient from the La Sierra's Restaurant Site (i.e., approximately 0.25 mile northeast of Area 2D). Petroleum contaminated soils were discovered during removal of tanks between November 2001 and

January 2002. The contaminated soils were excavated and disposed of in compliance with MCEHD, and the site was closed in 2002. Therefore, this unauthorized release (which occurred prior to the current development for The Village at Mammoth) is considered to be a DMEC with no potential to affect activities on the Project site.

The Mammoth Lakes Old Town Yard facility (EDR ID #S101299020), listed as a LUST and a CORTESE site, is located at 140 Berner Street, approximately 1,465 feet northeast of and up-gradient from the La Sierra's Restaurant Site (i.e., approximately 0.25 mile northeast of Area 2D). The site was formerly utilized as a maintenance yard for the Town of Mammoth Lakes. A fuel leak into soils was reported in 1993; the contaminated soils were disposed of under the purview of the MCEHD, and the site was closed in 2001. Therefore, the unauthorized release at this facility is considered to be a DMEC with no potential to affect activities on the Project site.

Chevron #9-1861 "Mammoth Lakes Chevron" (EDR ID #S106116517) located at 3236 Main Street is listed as a LUST site. This site is located approximately 2,280 feet northeast of the La Sierra's Restaurant Site (i.e., approximately 0.5 mile northeast of Area 2D). The extent of contamination is currently being investigated under the purview of the RWQCB. At present, it is not known whether the aquifer has been affected by this contamination.

The Royal Pines Resort Facility is located at 3814 View Point Road approximately 405 feet northwest of the corner of Main Street and Back Road. A 500-gallon gasoline tank was removed from this facility in 1986. No unauthorized release of materials was detected at the time of removal. The site was closed as noted in the MCEHD closure letter dated December 22, 1994.

Asbestos-Containing Materials

Asbestos-containing materials (ACMs) are materials that contain asbestos, a naturally-occurring fibrous mineral that has been mined for its useful thermal properties and tensile strength. ACM is generally defined as either friable or non-friable. Friable ACM is defined as any material containing more than one percent asbestos. Friable ACM is more likely to produce airborne fibers than non-friable ACM, and can be crumpled, pulverized, or reduced to powder by hand pressure. Non-friable ACM is defined as any material containing one percent or less asbestos. Non-friable ACM cannot be crumpled, pulverized, or reduced to powder by hand pressure. When left intact and undisturbed, ACM do not pose a health risk to building occupants. Potential for human exposure only occurs when ACM becomes damaged to the extent that asbestos fibers become airborne and are inhaled. These airborne fibers are carcinogenic and can cause lung disease.

The principal federal government agencies regulating asbestos are the Occupational Safety and Health Administration (OSHA) and the United States Environmental Protection Agency (USEPA). The age of a building is directly related to its potential for containing elevated levels of ACMs. Generally, all untested materials are presumed to contain asbestos in buildings constructed prior to 1981. The USEPA

recommends a proactive in-place management program be implemented wherever undamaged ACMs are found in a building. The USEPA recommends that damaged ACMs be removed, repaired, encapsulated, or enclosed, and that all ACMs are removed prior to any demolition or major renovation activities.

As discussed previously, only one of the parcels that comprise the Project site contain existing structures. Area 1D contains eight units that have been built or are under construction since 2000. Due to the age of these structures, they do not have the potential to contain ACMs.

Lead-Based Paint

Lead-based paint (LBP), which can result in lead poisoning when consumed or inhaled, was widely used in the past to coat and decorate buildings. Lead poisoning can cause anemia and damage to the brain and nervous system, particularly in children. Like ACMs, LBP generally does not pose a health risk to building occupants when left undisturbed; however, deterioration, damage, or disturbance will result in hazardous exposure. In 1978, the use of LBP was federally banned by the Consumer Product Safety Commission. Therefore, only buildings built before 1978 are presumed to contain LBP, as well as buildings built shortly thereafter, as the phase-out of LBP was gradual.

As discussed above, only one of the parcels that comprise the Project site contain existing structures. The eight units within Area 1D were built in 2000; therefore, they do not have the potential to contain LBP.

Other Hazards

The Phase I ESA prepared for Area 1D included interviews with regulatory personnel regarding potential hazards at the Project site. The interviews concluded that there has been no known detection of unacceptable levels of radon in local water supply or extraction of radioactive elements in the Town. There have been incidents of tree-kills along the southern and western flanks of Mammoth Mountain and near Horseshoe Lake due to natural emissions of carbon dioxide from volcanic activity. The nearest PCB-containing transformer is located off-site in a garage structure south of the Project site.[11]

[11] *Sierra Geotechnical Services, Inc., Phase I Environmental Site Assessment, Mammoth Green at Sierra Star Lot 1 of Tract 36-191 APNs: 33-330-32 and 33-330-34 2001 Lodestar Drive, Mammoth Lakes, Mono County, California, June 20, 2000, p. 4.*

ENVIRONMENTAL IMPACTS

Thresholds of Significance

In accordance with Appendix G to the CEQA Guidelines, the Project could have a significant environmental impact if it would:

(a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

(b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

(c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

(d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment.

(e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles or a public airport or public use airport, result in a safety hazard for people residing or working in the project area.

(f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area.

(g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

(h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

As discussed in the Initial Study (see Appendix A), the Project would have no impact with respect to Thresholds (a), (b), (c), (e), (f), (g), and (h), listed above. As such, only further analysis of Threshold (d) is required to be provided below.

Project Impacts and Mitigation Measures

The Project consists of the following Development Areas: Area 1D is located in the southwestern portion of the site; Area 2A is located in the central portion of the site; Area 2B/2C is located adjacent to the

northern boundary of Area 2A; Area 2D is located north of Area 2B/2C; Area 4A is located in the northeastern portion of the site; Area 5A is located in the central-southern portion of the site; Area 5B/5C/5D is located adjacent to the northwestern boundary of Area 5A; and Area 7 is located adjacent to the southern boundary of Area 5A. The Project would involve buildout of a maximum of 1,220 dwelling units of which 763 are new dwelling units (including single-family residences, townhomes, condominiums, a resort hotel, and resort lodges), a maximum of 29,000 square feet of retail space, and a maximum of 50,000 square feet of conference center/commercial space.

Impact HAZ-1 Listed Hazardous Materials Sites

As discussed previously in this Section, Phase I ESAs were prepared for Area 1D, at the southwest portion of the Project site, the La Sierra's Restaurant Site, adjacent to Area 2D, at the northern portion of the Project site, and the Old Lumber Site at the corner of Main Street and Back Road. These Phase I ESAs included records searches for properties of environmental concern within a 0.5 mile radius of each respective site. Four USTs were identified within 0.5 mile of Area 1D; however, none of these sites were determined to present environmental concerns. Three sites of environmental concern were initially listed within 0.5 mile of the La Sierra's Restaurant Site (adjacent to Area 2D); an additional three orphan sites were also located within a 0.5 mile radius of the La Sierra's Restaurant Site. All of these sites had reached closure status by 2004, when the Phase I ESA was prepared for the La Sierra's Restaurant Site with the exception of the former Mammoth Mobil Mo-Mart (currently known as Center Street Shell), and the Mammoth Lakes Chevron. As of 2004, the Center Street Shell was involved in on-going monitoring in connection with 1987 and 1997 diesel leaks. With respect to the Mammoth Lakes Chevron, as of 2004, the site was still undergoing monitoring in connection with potential UST contamination.

Based on the location of the Mammoth Mobil Mo-Mart (which is currently the Center Street Shell) and the Mammoth Lakes Chevron sites, any potential contamination from either site would not be expected to affect any portion of the Project site, which is generally located to the west, and slightly up-slope from both listed hazardous material sites. The lack of any known hazardous materials sites up-gradient from the Project site indicates that the Project would have very little potential to be impacted by groundwater contamination from any surrounding listed hazardous materials sites. As such, impacts related to hazardous materials would be ***less than significant*** and no mitigation measures are required.

CUMULATIVE IMPACTS

Impact HAZ-2

Development of the Project in combination with the 49 related projects has the potential to increase the risk for accidental release of hazardous materials. Each of the 49 related projects would require evaluation for potential threats to public safety, including those associated with transport/use/disposal of hazardous materials, accidental release of hazardous materials into the environment, hazards to sensitive receptors (including schools), listed hazardous material sites, aircraft-related hazards, emergency

response, and wildland fire hazards. Because hazardous materials and risk of upset conditions are largely site-specific, this evaluation would occur on a case-by-case basis for each individual project affected, in conjunction with development proposals on these properties. Further, each related project would be required to follow local, State, and federal laws regarding hazardous materials and other hazards. Therefore, with full compliance with local, State, and federal laws pertaining to hazards and hazardous materials, cumulative impacts would be ***less than significant*** and no mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

The Project would have a ***less-than-significant*** impact with respect to hazards and hazardous materials.

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IV. ENVIRONMENTAL IMPACT ANALYSIS
H. HYDROLOGY AND WATER QUALITY

INTRODUCTION

This section of the Draft EIR provides a description of the surface water and groundwater resources on the Project site, information on regulations that serve to protect these resources, an assessment of the potential impacts of the Project on these resources, and recommended measures to mitigate potentially significant impacts on these resources. Various technical reports were reviewed and prepared to analyze the potential surface water and groundwater hydrology and water quality impacts associated with the Project. These technical reports are summarized in the section below and are included in Appendix G of this Draft EIR. Additional technical reports prepared to analyze the biological resources at the Project site were also utilized in the preparation of this section and are included in Appendix D of this Draft EIR.

BACKGROUND AND METHODS

The information and analysis in this section (except where footnoted otherwise or described below) is based on the following drainage reports prepared by CFA, Inc. for individual portions of the Project site:

- *Drainage Report for Solstice at Sierra Star*, May 2004 (revised August 2004)
- *Master Drainage Report for Sierra Star Areas 2 and 4 (Draft)*, July 2006
- *Final Drainage Report for The Woodwinds (Fairway 4/5) at Sierra Star*, August 26, 2005
- *Hydrology Report for The Cabins at Crooked Pines*, July 2003
- *Hydrology Report for Main Street Affordable Housing (Project #5)*, February 25, 2003
- *Drainage Report for Sierra Star Workforce Housing Project and Unit 2 Roadway*, August 11, 2005

These Drainage Reports, which are incorporated herein by this reference, are included as Appendix G to this Draft EIR. In addition, the following reports prepared for the evaluation of biological resources at the Project site were utilized in the preparation of this section and are included in Appendix D to this Draft EIR:

- *Update to the Biotic Resources Report for the Sierra Star Master Plan*, prepared by Resource Concepts, Inc. (RCI), February 17, 2003
- *Addendum to the report entitled Updated to the Biotic Resources Report for the Sierra Star Master Plan*, prepared by RCI, February 28, 2003

- *Sierra Star Property Wetland Delineation Report*, prepared by RCI, August 2004
- *Lake and Streambed Alteration Notification*, prepared by RCI, February 13, 2006
- *Water Quality Certification Application*, prepared by RCI, February 14, 2006
- *Army Corps of Engineers Notification of Work*, prepared by RCI, February 14, 2006
- *Intrawest Sierra Star Wetland Delineation Report*, prepared by RCI, July 17, 2006
- *Biological Assessment Report for Sierra Star Master Plan EIR*, prepared by WRA, August 2006

In addition, the *Town of Mammoth Lakes Storm Drain Master Plan Update (90% Draft)*, dated January 17, 2005, was utilized in the analysis of hydrologic and water quality impacts associated with the Project.

ENVIRONMENTAL SETTING

The Project site is located in the Town of Mammoth Lakes (Town), Mono County, California. The Town is located on the eastern slopes of the Sierra Nevada at an elevation of approximately 7,900 feet above sea level within Section 34, Township 3 South, Range 27 East. The Town is located approximately 168 miles south of Reno, Nevada, and approximately 310 miles north of Los Angeles, California. Neighboring communities of the Town include June Lake to the northwest, Benton to the east, and Tom's Place to the southeast (refer to Figure II-1 and Figure II-2). Regional access is provided by U.S. Highway 395 and California State Highway 203. Major arterials which provide access to the site include Minaret Road to the north and south, Main Street to the north, Joaquin Road to the east, Meridian Boulevard to the south, and Lake Mary Road to the west.

Surface Hydrology

Regional

The Town is located within the 71-square mile Mammoth Basin, a drainage area on the eastern slope of the Sierra Nevada that is tributary to the Great Basin, a large hydrologic/geographic region encompassing portions of California, Nevada, Utah, Idaho, and Oregon. Drainage to the Great Basin does not reach the ocean but instead evaporates or percolates to groundwater in a series of "sinks" or lakes.

The Mammoth Basin (Basin) delivers surface and groundwater to Mammoth Creek/Hot Creek, which is tributary to the Owens River. Mammoth Creek and Hot Creek are different names for the same stream with the division in nomenclature occurring where U.S. Highway 395 crosses the stream to the southeast of Town. The Owens River ultimately terminates at Owens Lake, a dry "sink"/evaporation basin located at the southern end of the Owens Valley, approximately 125 miles southeast of the Town. The watershed boundaries of the Mammoth Basin consist of the Mammoth Crest divide on the Sierra Nevada crest to the west and south, the Dry Creek drainage divide on the north, and the Convict Creek drainage divide on the

east. The general trend of the Basin is to the southeast, with elevations ranging from approximately 11,600 feet above sea level (asl) on the Mammoth Crest to the southwest of Town to approximately 7,000 feet asl at the confluence of Hot Creek and the Owens River to the southeast of Town. The total flow length of the Mammoth Creek/Hot Creek drainage is approximately 18 miles.[1]

The Mammoth Basin includes a system of lakes and interconnecting surface streams in its upper elevations, all of which are eventually tributary either by surface flow or underground flow to Mammoth Creek. Within or proximate to the Town, a total of five sub-watersheds are tributary to Mammoth Creek: the Lake Mary Basin, Old Mammoth, Murphy Gulch, Sherwin Creek, and Casa Diablo.[2]

Local

The Project site is located within the Murphy Gulch sub-watershed within the Town. This sub-watershed covers approximately 5,120 acres, of which the proposed Sierra Star Master Plan (SSMP) would encompass approximately 228 acres, with approximately 42 acres within the area covered by the proposed SSMP being proposed for new development. The SSMP area is generally located along the south-central boundary of the Murphy Gulch sub-watershed.

Several surface drainages cross the Project site, trending from west to east. With the development that has occurred both within the proposed SSMP area (under the existing Lodestar Master Plan [LMP]) and on surrounding properties, much of the stormwater runoff function that was formerly supplied by these surface drainages has been directed to the Town's storm drain system, which ultimately discharges to Mammoth Creek.

The SSMP area has been divided into a total of nine drainage areas for surface water runoff management purposes. These drainage areas also include several off-site areas that contribute runoff to the SSMP area. Due to the existing development of much of the proposed SSMP area, several stormwater drainage improvements and infrastructure already exist throughout the Project site. This drainage infrastructure is currently serving existing development both within and adjacent to the proposed SSMP area. As part of this drainage infrastructure, three small manmade surface water impoundments are located within the proposed SSMP area boundaries. These facilities serve both as stormwater detention basins and water hazards for the existing Sierra Star Golf Course. Existing stormwater infrastructure within the proposed SSMP area is tributary to the Town's storm drain system.

Groundwater Hydrology

The Mammoth Basin is located within the Long Valley Groundwater Basin. Groundwater hydrology within the Mammoth Basin generally mimics surface water hydrology, with the local and regional

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[1] *Town of Mammoth Lakes Storm Drain Master Plan Update (90% Draft), January 17, 2005, Page 2.*

[2] *Ibid, Page 5.*

groundwater table sloping generally to the southeast and contributing to baseflow in the Mammoth Creek/Hot Creek system. Perched groundwater exists sporadically at shallower depths than the regional water table and is dependent upon local soil conditions. Recharge of regional groundwater is dependent upon annual precipitation, which averages approximately 25 inches within the Town itself but ranges considerably across the surface watershed (from approximately 80 inches near the Sierra Nevada crest to less than 10 inches near the watershed's outlet to the Owens River). Throughout the Mammoth Basin, the bulk of precipitation occurs during the winter months and falls in the form of snow. As a result, groundwater recharge rates (as well as surface water streamflows) are greatest during the annual snowmelt which generally occurs between April and June, depending on the size of the snowpack. Groundwater is a key source of water supply for the Town (see Section IV.N, Utilities, of this Draft EIR for more detail). The portions of the Project site that are not currently covered with impervious surfaces (e.g., paving, structures, roadways) provide opportunities for groundwater recharge.

Jurisdictional Resources

Surface water resources determined to be "waters of the United States" are regulated by the U.S. Army Corps of Engineers (Corps) under Section 404 of the Federal Clean Water Act (CWA). In addition, surface water resources determined to be "waters of the State" are regulated by the California Regional Water Quality Control Boards (RWQCB) under the Porter-Cologne Water Quality Control Act. Such "waters" include a variety of features including streams, wetlands, and impoundments. Based on observations and photographs taken at the Project site, one feature appears to qualify as a resource that would be regulated by the Corps. This feature (termed "Drainage B" on Figure IV.D-1) is an ephemeral stream located between two of the Sierra Star Golf Course fairways. The channel is intermittently open and culverted under the golf course, discharging into a subsurface stormwater system that eventually flows into Mammoth Creek. The channel has flowing water only during and for a short duration following precipitation events in a typical year; runoff from rainfall and snowmelt is the primary source of hydrology. The streambed is located above the water table year-round; therefore, groundwater is not a primary source of water for stream flow. This feature meets the definition of "waters of the United States" and "waters of the State" as it is inundated for sufficient duration and depth to exclude growth of hydrophytic vegetation, convey water, and is defined by the presence of an ordinary high water (OHW) mark. All areas that are below or contained by an OHW mark are considered to be "waters of the United States" and "waters of the State" (for additional detail, see Section IV.D, Biological Resources, of this Draft EIR).

In addition to this surface drainage, one potential jurisdictional wetland feature was observed on the Project site just south of Minaret Road (also shown on Figure IV.D-1). This feature appears to be sustained by groundwater seepage that surfaces near the base of an earthen dam impounding a constructed pond. This area supports a predominance of hydrophytic vegetation, including wetland-classified northern willow herb (*Epilobium ciliatum*) and fireweed (*Epilobium angustifolium*). Sampled soil was determined to be hydric, as it exhibits a low chroma matrix and is distinct from soils observed in an adjacent upland area. Direct evidence of hydrology was also observed in the form of sediment deposits, a

well-defined drainage pattern within the wetland, and algal mats on the soil surface. The wetland drains into a two foot-wide channel that enters a culvert, flows under a newly constructed road, and eventually enters a stormwater ditch off-site. Although this wetland and associated channel does not exhibit a hydrologic connection to a jurisdictional "water of the United States", it does eventually flow into the Town storm drain system along Minaret Road. The jurisdictional status of this wetland would need to be verified by the Corps.

Regulatory Framework

Federal and State Water Quality Programs

NPDES Permits and Related Requirements

The 1972 amendments to the Federal Water Pollution Control Act, later referred to as the Clean Water Act (CWA), prohibit the discharge of any pollutant to navigable waters of the United States from a point source unless the discharge is authorized by a National Pollution Discharge Elimination System (NPDES) Permit. While the original CWA focused on point source discharges (defined pipes and outfalls), stormwater discharges were added to the scope of the law by Congress in 1987. The Environmental Protection Agency (EPA) adopted final regulations that established Phase I stormwater discharge control requirements for the NPDES program in 1990. These regulations required large municipalities and specific industrial sites to obtain stormwater discharge permits under the NPDES program. In addition, these regulations required that stormwater discharge permits be issued to large construction activities consisting of five acres or more of land. In 2003, the Phase II NPDES program requirements took effect, regulating nonpoint source discharges from all construction sites one acre or more in size and expanding the permit requirements to smaller municipalities. In California, the NPDES program is administered by the State Water Resources Control Board (SWRQB) through the nine Regional Water Control Boards (RWQCBs). Because the Town is a small community, it falls below the threshold for the Phase II NPDES program's municipal stormwater regulations. Therefore, the Town's municipal storm drainage system is not required to be covered by an NPDES permit. However, the construction activities component of the Phase II NPDES program does comply to construction sites that disturb one area or more within the Town.

In 1992, the California State Water Resources Control Board (SWRCB) adopted the General Construction Activity Storm Water Permit (GCASWP) which is "...required for all stormwater discharges associated with construction activity where clearing, grading, and excavation results in a land disturbance of 5 or more acres." However, by Modification of Water Quality Order 99-08-DWQ (approved by Motion on December 2, 2002) and consistent with the Phase II NPDES program for stormwater, the SWRCB lowered the threshold acreage of soil disturbance requiring permit coverage from 5 acres to 1 acre. Since most development projected to occur within the proposed SSMP area would fall within these criteria, permits must be obtained from the SWRCB prior to start of construction. In order to be covered under the General Permit, the Project applicant for each individual project to be developed within the SSMP area

must submit a Notice of Intent (NOI) to the SWRCB. For coordinated development proposals, a single NOI can be submitted.

The General Permit requires all owners of land where construction activities occur (i.e., dischargers) to:

- Eliminate or reduce non-stormwater discharges to storm sewer systems and other waters of the nation;
- Develop and implement a Stormwater Pollution Prevention Plan (SWPPP); and
- Perform inspections of stormwater pollution prevention measures (control practices).

The General Permit authorizes the discharge of stormwater associated with construction activity from construction sites. However, it prohibits the discharge of materials other than stormwater and all discharges which contain hazardous substances in excess of reportable quantities established at Title 40 Code of Federal Regulations Sections 117.3 or 302.4 unless a separate NPDES permit has been issued to regulate those discharges.

The General Permit requires development and implementation of a SWPPP, emphasizing Best Management Practices (BMPs), which are defined as "schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States." The SWPPP has two major objectives:

- To help identify the sources of sediment and other pollutants that affect the quality of stormwater discharges; and
- To describe and ensure the implementation of practices to reduce sediment and other pollutants in stormwater discharges.

In addition, dischargers are required to conduct inspections before and after storm events and to annually certify that they are in compliance with the General Permit.

Water Quality Standards and TMDLs

In addition, the CWA requires states to adopt water quality standards for water bodies and to have those standards approved by the EPA. Water quality standards consist of designated beneficial uses for a particular water body (e.g., wildlife habitat, agricultural supply, and fishing) and water quality criteria necessary to support those uses. Water quality criteria are expressed either in the form of set numeric concentrations or levels of constituents, such as lead, suspended sediment, and fecal coliform bacteria, or narrative statements that describe the quality of water necessary to support a particular beneficial use. In 2000, EPA established numeric water quality criteria for certain toxic constituents in California receiving

waters with human health or aquatic life designated uses in the form of the California Toxics Rule (CTR).[3]

The Lahontan RWQCB adopted the Water Quality Control Plan (Basin Plan) for the Lahontan Region in 1994. The Basin Plan has since been amended numerous times. The Basin Plan designates the beneficial uses of receiving waters, including Mammoth Creek to which the Project site ultimately discharges via the Town's storm drain system, and specifies both narrative and numerical water quality objectives for these receiving waters. Water quality objectives, as defined by the California Water Code Section 13050(h), are the "limits or levels of water quality constituents or characteristics which are established for the reasonable protection of beneficial uses or the prevention of nuisance within a specific area." Because these standards are applicable to receiving waters, they do not apply directly to stormwater runoff from the Project site. Table IV.H-1, Designated Beneficial Uses of Mammoth Creek, lists the designated beneficial uses for Mammoth Creek and its tributary streams as described in the Basin Plan.

Table IV.H-1
Designated Beneficial Uses of Mammoth Creek

Beneficial Use	Designated Beneficial Use
MUN – Municipal and Domestic Supply	Existing or Potential
AGR – Agricultural Supply	Existing or Potential
FRSH – Freshwater Replenishment	Existing or Potential
COMM – Commercial and Sport Fishing	Existing or Potential
GWR – Groundwater Recharge	Existing or Potential
REC1 – Water Contact Recreation	Existing or Potential
REC2 – Non-Contact Water Recreation	Existing or Potential
COLD – Cold Freshwater Habitat	Existing or Potential
RARE – Rare, Threatened, or Endangered Species	Existing or Potential
MIGR – Migration of Aquatic Organisms	Existing or Potential
SPWN – Spawning, Reproduction, and Development	Existing or Potential
WILD – Wildlife Habitat	Existing or Potential
Source: Water Quality Control Plan, Lahontan Region; California Regional Water Quality Control Board, Lahontan Region, 1994.	

Under Section 303(d) of the CWA, states, territories, and authorized tribes are required to develop lists of impaired waters. Impaired waters are those particular waterbodies whose beneficial uses are being compromised by poor water quality. The law requires that these jurisdictions establish priority rankings for these impaired waters and develop Total Maximum Daily Loads (TMDLs) for the impairing pollutant(s) affecting each impaired waterbody. A TMDL is an estimate of the total load of each pollutant that a waterbody can receive from point, nonpoint, and natural sources without exceeding water quality standards. Once established, a TMDL allocates pollutant loadings among current and future point and nonpoint pollutant sources discharging to the waterbody.

[3] *Title 40 Code of Federal Regulations Section 131.38.*

The Project site discharges through the Town's storm drain system into Mammoth Creek. Mammoth Creek identified in the 2002 Section 303(d) list of water quality impaired stream segments as impaired by metals. However, the listing is qualified with a statement that additional water quality monitoring is needed in order to determine the extent of the impairment and the need for a TMDL. Thus, the priority for TMDL is assigned as "low". Potential sources of potential elevated metals concentrations are identified as natural sources, urban runoff, and nonpoint sources.

The only TMDL-related work that is currently being undertaken by the RWQCB in the vicinity of the Mammoth Basin is the development of a nutrient TMDL for Crowley Lake, a reservoir on the Owens River downstream of the Mammoth Creek/Hot Creek confluence. However, the sources of these elevated nutrients are considered to most likely consist of pastures utilized for the grazing of cattle and located well downstream of the Town.

Additional Federal and State Regulations

Storm runoff from the Project site and discharges of runoff into and/or encroachment upon natural drainages, wetlands, and/or flood plains are subject to the requirements of the federal CWA and associated regulations, the State Porter-Cologne Water Quality Control Act and associated regulations, and to requirements established by the EPA, SWRCB, RWQCB, the Town, and the Mammoth Community Water District.[4] In addition, intrusions into jurisdictional areas are subject to the requirements of the CWA (Section 404/401 permitting) and Sections 1600-1607 of the State Fish and Game Code (the "Streambed Alteration Agreement Act"), and to the respective requirements established by the U.S. Army Corps of Engineers (Corps) and California Department of Fish and Game (CDFG) to administer these programs. As noted above, one jurisdictional water and, potentially, one jurisdictional wetland area are present on the portion of the Project site proposed for new development.

Section 401 of the CWA requires that any person applying for a federal permit or license which may result in a discharge of pollutants into waters of the United States must obtain a state water quality certification that the activity complies with all applicable water quality standards, limitations, and restrictions. No license or permit may be issued by a federal agency until certification required by Section 401 has been granted. Further, no license or permit may be issued if certification has been denied. Section 401 water quality certification is normally provided with coverage under the General Construction Activities Stormwater Permit (GCASWP).

In addition to the designation of beneficial uses and the establishment of applicable water quality standards and criteria, the Basin Plan also sets forth a series of land development guidelines intended to afford water quality protection for surface and groundwater (included in Appendix G to this Draft EIR). Although not mandatory, adoption of these guidelines by individual counties and municipalities within

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[4] *Federal CWA is at Chapter 33, United States Code, Sec. 1251 et seq.; Porter-Cologne Water Quality Control Act is at California Water Code, Sec. 13000 et seq.*

the Lahontan Region is recommended. In addition to these general guidelines, the Basin Plan identifies a set of specific policies and guidelines applicable to the Mammoth Lakes area above the 7,000 foot elevation contour (which includes the Project site). The policy requires that the equivalent of a SWPPP be submitted to the RWQCB at least 90 days prior to the start of construction activities for new developments of either six or more dwelling units or commercial development involving soil disturbance of 0.25 acre or more. The guidelines stipulate the specific components of this submittal, including the identification of interim erosion control measures to be applied during construction and short- and long-term erosion control measures to be employed following the construction phase.

Local Programs

The Town is currently in the process of updating the 1984 Storm Drainage and Erosion Control Design Manual that was prepared around the time the Town incorporated. This document specifies modeling and design approaches required for development projects located within the area served by the Town's storm drainage system. Although the new Storm Drain Master Plan Update is not yet finalized, progress has proceeded sufficiently far enough that current development proposals are expected to be consistent with the data and modeling approaches it utilizes. In addition, developments within the Town's storm drainage service area must comply with the erosion control requirements outlined in the 1984 Manual.

ENVIRONMENTAL IMPACTS

Thresholds of Significance

In accordance with Appendix G to the State CEQA Guidelines, a significant impact would occur if a project would:

(a) Violate any water quality standards or waste discharge requirements;

(b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted);

(c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner, which would result in substantial erosion or siltation on- or off-site;

(d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;

(e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;

(f) Otherwise substantially degrade water quality;

(g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;

(h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows;

(i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam; or

(j) Expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow.

As discussed in the Initial Study that was prepared for the Notice of Preparation (see Appendix A), the potential impacts associated with Thresholds (b), (d), (f), (g), (h), (i), and (j) listed above were determined to result in either a less than significant impact or no impact (see also Section IV.A of this Draft EIR). Therefore, only Thresholds (a), (c), and (e) listed above are addressed in the following discussion.

Project Details

The Project proposes to develop approximately 42 acres within the existing Lodestar Master Plan area. The Project will provide overnight accommodations, residences, and commercial facilities to the users of the Sierra Star Golf Course, residents of the Town, and visiting recreationists. The Project will contain a resort hotel, multi- and single-family residences, restaurants, retail stores, and affordable housing sites. A two-lane paved road will be constructed between Minaret Road and Main Street (State Highway 203), providing the primary access to the development. Several smaller roads will be constructed to access the individual building sites. The Project will require the culverting of portions of two existing drainages for road crossings and location of residential and commercial facilities.

Meridian Boulevard borders the golf course to the south, Main Street to the north, and residential developments lie along the east and west borders. Minaret Road bisects the golf course. The proposed development in the golf course would be comprised of residential housing and a resort hotel, accommodating 1,220 new residential and hotel dwelling units.

Project Impacts and Mitigation Measures

Impact HYD-1 Water Quality Standards

A significant impact may occur if a project discharges water that does not meet the quality standards of agencies which regulate surface water quality (in this case, the Lahontan RWQCB). Significant impacts would occur if a project does not comply with all applicable regulations with regard to surface water quality as governed by the State Water Resources Control Board (SWRCB). These regulations include compliance with the land development policies and guidelines applicable to the Mammoth Lakes area above 7,000 feet specified by the RWQCB in the Basin Plan.

Construction-Related Impacts

Three general sources of potential short-term construction-related stormwater pollution associated with the Project are: (1) the handling, storage, and disposal of construction materials containing pollutants; (2) the maintenance and operation of construction equipment; and (3) earth moving activities which, when not controlled, may generate soil erosion and transportation, via storm runoff or mechanical equipment. Poorly maintained vehicles and heavy equipment leaking fuel, oil, antifreeze, or other fluids on the construction site are also common sources of stormwater pollution and soil contamination. Generally, routine safety precautions for handling and storing construction materials may effectively mitigate the potential pollution of stormwater by these materials. These same types of common sense, "good housekeeping" procedures can be extended to non-hazardous stormwater pollutants such as sawdust, concrete washout, and other solid wastes.

In addition, grading activities can greatly increase erosion processes, leading to impacts on storm drains and sediment loading to storm runoff. Two general strategies are recommended to prevent construction silt from entering local storm drains. First, erosion control procedures should be implemented for those areas that must be exposed. Secondly, the area should be secured to control offsite migration of pollutants. Specific BMPs to be implemented on the Project site would be identified in detail in the SWPPPs to be prepared for individual developments within the SSMP area. Based upon the Drainage Reports prepared for these developments, these BMPs are likely to include the placement of riprap, rock cobble, and rock mulch, the use of existing sedimentation basins, and the installation of infiltration trenches.

Construction activities associated with all proposed development within the proposed SSMP area would be subject to inspection and would be required to be conducted in conformance with the GCASWP. Coverage under this permit must be obtained from the SWRCB prior to start of construction. The General Permit requires that non-stormwater discharges from construction sites be eliminated or reduced to the maximum extent practicable, that a SWPPP be developed governing construction activities for the Project, and that routine inspections be performed of all stormwater pollution prevention measures and control practices being used at the site, including inspections before and after storm events.

The SWPPP prepared for construction of the Project must also address hazardous materials storage and use, erosion and sedimentation control, and spill prevention and response in addition to identifying measures for preventing non-stormwater discharges to surface water drainages and the Town's storm drain system. In addition, provisions for implementing the land development policy and guidelines pertaining to the Mammoth Lakes area in the Basin Plan must be included in the SWPPPs. The required implementation of the BMPs in the Project's SWPPP would ensure that Project construction activities within the SSMP area would not cause the violation of any water quality standards within Mammoth Creek. Thus, the Project would not be considered to have a significant impact on the ability of Mammoth Creek to attain all applicable water quality standards.

Operation-Related Impacts

Activities associated with operation of the Project would generate substances that could degrade the quality of water runoff. The deposition of certain chemicals by cars in the parking areas and the internal roadway surfaces could have the potential to contribute metals, oil and grease, solvents, phosphates, hydrocarbons, and suspended solids to the storm drain system. However, impacts to water quality generated from Project operation can be reduced through the proposed implementation of BMPs designed to be protective of receiving water quality. These BMPs, as proposed in the Drainage Reports prepared for proposed development within the SSMP area, include detention and sedimentation basins as well as Rainstore 3 infiltration systems designed to filter runoff from paved areas on the Project site. Compliance with the mitigation measure below would reduce potentially ***significant*** impacts resulting from Project operation on receiving water quality in Mammoth Creek to a less-than-significant level.

Mitigation Measure HYD-1

In consultation with the Town, the Project applicant shall identify and implement a suite of stormwater quality BMPs designed to address the most likely sources of stormwater pollutants resulting from operation of the proposed development projects within the proposed SSMP area. Pollutant sources and pathways to be addressed by these BMPs include, but are not necessarily limited to, parking lots, maintenance areas, trash storage locations, rooftops, interior public and private roadways, and storm drain inlets. The design and location of these BMPs will be subject to review and comment by the Town. Implementation of these BMPs shall be assured by the Public Works Director and Town Engineer prior to the issuance of Grading or Building Permits.

Impact HYD-2 Drainage Pattern Alteration

Construction-Related Impacts

Development of the currently undeveloped areas within the proposed SSMP area would result in the modification of existing drainage paths and a higher amount of surface runoff than is currently generated by these areas. Siltation or other pollution carried by this increased runoff can be delivered to adjacent drainage channels during construction and can impact aquatic organisms and water quality downstream of the Project site.

As discussed above under Impact HYD-1, the required implementation of the BMPs in the Project's construction SWPPP would ensure that Project construction activities within the SSMP area would not cause substantial erosion or siltation on- or off-site. These BMPs would include, at a minimum, such measures as limiting site grading to dry spring and summer months and siltation fencing. Thus, the Project would be considered to have a ***less-than-significant*** impact in terms of increasing on- or off-site erosion and siltation through the alteration of existing drainage patterns.

Operation-Related Impacts

Activities associated with the operation of the proposed new developments within the SSMP area are not considered likely to substantially increase on- or off-site erosion or siltation. Nonetheless, the proposed installation of permanent storm control facilities and sedimentation/infiltration basins will reduce Project-generated erosion and siltation impacts (see Mitigation Measure HYD-1). Thus, impacts pertaining to Project operation-generated erosion and siltation anticipated to result from new development within the proposed SSMP area would be considered ***less-than-significant***.

Impact HYD-3 Drainage System Capacity

Under existing conditions, the SSMP area conveys stormwater runoff and run-on (from adjacent upstream areas) to three control points in the Town's storm drainage system: Control Points 1, 2, and 3.4. The existing 100-year, 24-hour storm event peak flows generated at these three control points are 132, 48, and 153 cubic feet per second (cfs), respectively.

With implementation of the proposed new development within the SSMP area, future developed condition 100-year, 24-hour storm peak flows at these three control points are projected to be 131, 51.5, and 154 cfs, respectively. The installation of a detention pond on the Project site would only change the flow rate at Control Point 2 slightly, reducing it from 51.5 to 51.4 cfs, due to its small capacity. The installation of a flow diversion from three drainage sub-basins which currently sheetflow toward the east into the existing downstream subdivision and where drainage facilities would be insufficient in capacity to carry the estimated future flows would deliver a portion of these flows to another sub-basin where there is excess storm drain capacity (a 48" storm drain in Dorrance Street). With implementation of this proposed flow diversion, 100-year, 24-hour storm peak flows at the three control points are projected to be 119, 42, and 171 cfs, respectively. The Dorrance storm drain has an approximate capacity of 187 cfs, which is adequate to convey the projected flows. According to the draft Storm Drain Master Plan, a future 36" storm drain to be located in Meridian Boulevard would further reduce storm flows in the existing Dorrance drain.

Compliance with the mitigation measure below would reduce potentially ***significant*** impacts resulting from Project operation on the Town's drainage infrastructure capacity to a less-than-significant level.

Mitigation Measure HYD-3

In consultation with the Town, the Project applicant shall identify and implement a suite of storm drainage routing and conveyance infrastructure components designed to reduce on- and off-site flooding to the maximum extent feasible and to convey stormwater runoff and run-on across the site to the downstream components of the Town's storm drain system in a manner consistent with the capacity of such components. The design, sizing, and location of these drainage components will be subject to review and comment by the Town. Implementation of this storm drainage infrastructure shall be assured by the Public Works Director and Town Engineer prior to the issuance of Grading or Building Permits.

CUMULATIVE IMPACTS

Impact HYD-4

Development of the Project in combination with the related projects would result in the further infilling of uses in an urbanized area. As discussed above, the Project site and the surrounding area primarily consist of a patchwork of undeveloped areas and developed impervious urbanized surfaces, and are served by existing storm drains that would be expanded in order to serve new development. It is likely that most of the related projects would also drain to the Town's storm drain system. Each individual related project would be required to submit a drainage analysis to the Town. Each drainage analysis must illustrate how peak flows generated from each related project site would be accommodated by the Town's existing and/or proposed storm drainage facilities. Where necessary, each related project would be required to include detention or infiltration features designed to reduce the total rate and/or volume of runoff generated at its site. Therefore, cumulatively considerable impacts to the Town's existing or planned stormwater drainage system capacity would be less than significant. In addition, per the Basin Plan, development on each site larger than 0.25 acre above the 7,000 foot elevation level would be subject to uniform policy guidelines designed to minimize the water quality impacts associated with Project construction to the maximum extent practicable. All related projects that disturb one acre or more must also obtain coverage under the GCASWP, including the preparation and submittal of a SWPPP to govern all construction activities associated with each project. As a result, cumulatively considerable water quality and erosion/siltation impacts would be reduced to a ***less-than-significant*** level.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Impacts to surface and groundwater resources and hydrology would be ***less than significant*** after implementation of the mitigation measures.

IV. ENVIRONMENTAL IMPACT ANALYSIS
I. LAND USE & PLANNING

ENVIRONMENTAL SETTING

Project Site and Surrounding Land Uses

The 228.8-acre Project site is located in the center of the Town of Mammoth Lakes (Town) to the north of Meridian Boulevard and is bisected by Minaret Road. The Project site is comprised of the following Assessor's Parcel Numbers (APN) and associated land use areas shown in parenthesis: 33-330-33 (Area 1D), 33-330-50 (Areas 2A, 2B/2C, 2D, 4A), 33-330-54 (Area 5), 33-330-55 (Areas 5B/5C/5D) and 33-330-25 (Area 7). The Project site is bounded to the east, south and west by Lodestar Master Plan developments that have been constructed, are under construction, or are approved for construction. The northwest portion of the Project site is boarded by The Village at Mammoth resort area. Surrounding land use zoning includes Resort (R), Specific Plan (SP), Commercial Lodging (CL), Residential Single Family (RSF), and Residential Multi-Family 1 (RMF-1). Figure III-1 illustrates the land uses of the proposed Project and surrounding areas.

Land Use Designation and Zoning

Town of Mammoth Lakes 1987 General Plan

California State Government Code Section 65300 requires each county and city, including charter cities, to adopt a comprehensive General Plan which should be integrated and internally consistent with a compatible statement of goals, objectives, policies and programs to provide for a decision-making basis on physical development. The Project site is located in the Town, and is thus subject to their General Plan. The General Plan was adopted in October 1987 and was designed to promote the public health, safety and general welfare of the community. The General Plan consists of six elements, including: 1) Land Use and Public Facility; 2) Transportation and Circulation; 3) Housing; 4) Conservation and Open Space; 5) Safety; and 6) Noise.

According to the 1987 General Plan, the Project site is currently designated Resort (R), which is characterized with primary emphasis to visitor lodging, amenities and services. Development in the Resort designation is generally applied to large parcels and is physically connected internally and to all primary visitor oriented destinations with an integrated system of streets, sidewalks, and recreational paths.

This designation includes mixed visitor oriented uses including lodging, visitor oriented commercial, and recreation uses. Maximum housing densities range between six units per acre and eight units per acre. Development standards are similar to those for equivalent uses in other designations. Lot coverage is limited to 50 percent of the overall Project area to provide space for outdoor recreation amenities.

The 1987 General Plan policies applicable to the proposed Project are discussed further below in the Environmental Impacts section in Table IV.I-1.

Town of Mammoth Lakes 2005 Draft General Plan

The 1987 General Plan is currently in the process of being updated. A Draft General Plan was prepared and distributed to the public for review in April 2005 and was revised in September 2005. The EIR for the Draft General Plan was completed in October 2005 and has been reviewed by the public. The review process for the Draft General Plan and preparation of the Final EIR for the Draft General Plan will continue into the summer of 2007, at which time the Town can consider adoption. Because the adoption of the Draft General Plan is an ongoing process, the standard for analysis used in this Draft EIR is based on the 1987 General Plan.

Lodestar Master Plan

The Lodestar Master Plan (LMP) was adopted by the Mammoth Lakes Town Council in May 1991 and was amended as follows: Ordinance 92-16 in November 1992, Ordinance 01-01 in February 2001, Ordinance 03-01 in January 2003, Ordinance 04-11 in July 2004, Ordinance 05-05 in May 2005, and 05-07 in June of 2005. The LMP set development standards for an approximately 226-acre site, divided into five development areas, situated around the Sierra Star Golf Course (Area G, 116 acres located west of Minaret Road and North of Meridian Boulevard). The LMP envisioned the development of a major commercial, residential, and recreational hub within the Town including 1,263 residential units and 80,000 square feet of proposed commercial space. Uses permitted within the LMP include:

- Golf Course
- Tennis Courts
- Swimming pools and spas
- Single Family Detached Dwellings (SF) within Areas 1, 2, 3, and 4
- Multiple Family Structures (MF) (with four or fewer dwelling per structure) within Areas 1, 2, 4, and 5
- Full Service Hotels in Area 5, with conference/meeting facilities, and any commercial or recreational uses within the hotel
- Transient Occupancies within Area 5
- Other Recreational Facilities (cross country skiing, ice skating, and similar recreation activities using the golf course, ponds or other approved facilities)

The following uses require a Use Permit from the Planning Commission:

- Overhead transit (e.g., chair lift), or fixed route transit (e.g., rail)
- Retail and commercial service uses not located within the hotel located in Area 5,
- Multiple family structures (with five or more dwellings per structure) within Areas 1, 2, 4, and 5
- Multiple family structures in within Area 3
- Transient occupancies within Areas 1 and 2
- Any recreation facilities and amenities not mentioned in permitted uses

Town of Mammoth Lakes Zoning Regulations

The Zoning Ordinance (Mammoth Lakes Municipal Code, Title 17) sets forth provisions governing the use of land, buildings, and structures in the Town. Such provisions address the size of yards abutting buildings and structures, height and bulk of buildings, density of population, number of dwelling units per acre, standards of performance, and other development criteria. The purpose of the Zoning Ordinance is to promote and protect the public health, safety, and welfare of the people of the town, to safeguard and enhance the appearance and quality of development of the town, and to provide for the social, physical and economic advantages resulting from comprehensive and orderly planned use of land resources (Section 17.04.010).

The Project site is zoned R (Resort). The Resort Zone is one of eight "special purpose zones" acknowledged in the Zoning Ordinance. Special purpose zones are established because of the special or unique land use character characteristics with which they are associated and because of the need to implement specific sections of the General Plan (Section 17.28.010). Specifically, the Resort Zone is designed to achieve the following purposes:

- To provide for the classification and development of parcels of land as coordinated, comprehensive projects so as to take advantage of the superior environment which can result from large scale community planning;
- To allow diversification of land uses as they relate to each other in a physical and environmental arrangement, while ensuring substantial compliance with the provisions of this title; and
- To provide for a zone classification encompassing various types of land uses such as: single-family residential developments, multiple housing projects, professional and administrative office uses, hotels including attendant support commercial activities, recreational facilities, public or quasi-public uses, or combinations of such uses through the adoption of a development plan and

text materials which set forth land use relationships and development standards. (Ord. 89-05 §1(part), 1989: prior code §19.12.041).

The following general requirements apply to all resort zone properties (Section 17.28.240):

- An application for a zone change to permit the establishment of a resort zone shall include and be accompanied by a development plan for the entire property;

- An application for development of property within a resort zone shall be subject to the approval of a development plan by the planning commission and town council;

- The area contained within a proposed resort zone shall be not less than twenty acres;

- A use permit may be required for any land use designation on the development plan;

- If ambiguity exists as to the specific dimensions or extent of any designated area on the development plan, the specific boundaries shall be set by the filing of a record of survey of the parcel in question in conjunction with the filing of a use permit, tentative subdivision, or parcel map, or construction permits;

- The maximum permissible density is eight units per acre;

- Densities for hotel/motel uses shall be computed at a ratio of two guest rooms for each unit;

- The maximum site coverage in the resort zone shall be fifty percent;

- Existing properties located within a resort zone shall not be subdivided unless the subdivision map is in conformance with an approved development plan. (Ord. 00-01 §1(Exh. A(part)), 2000; Ord. 96-01 §1(part), 1996; Ord. 90-06 §1(part), 1990: Ord. 89-05 §1(part), 1989: prior code §19.12.043)

Permitted uses in the Resort Zone include:

- Those uses designated on the development plan for the particular property as approved by the Town Council;

- The continuation of all land uses which existed in the zone at the time of adoption of the development plan. Existing land uses shall either be incorporated as part of the development plan or shall terminate in accordance with a specific abatement schedule submitted and approved as part of the development plan;

- Public utility installations;

- Accessory uses and structures incidental to permitted uses;
- Temporary uses as described in Sections 17.32.010 through 17.32.080;
- Those uses outlined in Section 17.28.220(C) subject to a use permit when proposed on parcels having less than 20 acres in area; and
- Fractional-use projects subject to a use permit and the requirements of Section 17.32.200 et seq. (Ord. 04-01 §1(Att. A(part)), 2004; Ord. 89-05 §1(part), 1989: prior code §19.12.042).

As per Section 17.28.250, performance and environmental standards in the resort zone shall be as specified in the development plan or accompanying text but shall be not less than those specified for similar uses in the residential or commercial zones. Also, the development plan shall indicate the design theme for the entire project; generally the theme shall conform to the requirements of Sections 17.32.120 through 17.32.150. (Ord. 90-06 §1(part), 1990: Ord. 89-05 §1(part), 1989: prior code §19.12.044)

As per Section 17.28.270, the development plan shall consist of maps, plans, reports, schedules, development standards and schematic drawings and such other documents deemed necessary by the planning director in accordance with the following requirements:

- The development plan shall be submitted in a form approved by the planning director and shall be sufficiently detailed to show all intended uses and their location on the property;
- The development of sections or areas within the resort zone may be permitted subject to one of the following or any combination thereof:
    - The uses and requirements of any of the zone classifications established by this title;
    - The uses and standards of development set forth in the development and text as approved and adopted by the town council;
    - Approval of a use permit prior to development;
    - Approval of a tentative subdivision map or parcel map.
- The development plan and any amendment thereto shall include the following:
    - The type and character of buildings or structures and the number of dwelling units per gross acre proposed for each residential area;
    - A statement of the standards of population density for the various proposed residential land uses;

- The general location of school sites, recreational areas, and other public and semi-public sites and the approximate area of each;

- The general location of all arterial and collector streets, all transit systems whether surface or aerial and all trails systems coordinated with the transportation and circulation element of the Town General Plan.

- The development plan and any amendment thereto shall be accompanied by the following:

  - A general land use map setting forth the proposed uses of all sections or areas within the subject property and the acreage of each;

  - An accompanying text setting forth the land use regulations which constitute the standards of development designed to govern those sections or areas specified in the development plan. Such standards shall contain definitions and information concerning requirements for building site coverage, building heights, building setbacks, off-street parking, vehicular access, signing, lighting, storage, screening and landscaping, and any other information which the planning director shall require to ensure substantial compliance with the purpose of the resort zone;

  - A topographic map and conceptual grading plan of the property;

  - A preliminary report and overall plan describing proposed provisions for storm drainage, sewage disposal, water supply and such other public improvements and utilities as the Town engineer may require. (Ord. 89-05 §1(part), 1989: prior code §19.12.046)

ENVIRONMENTAL IMPACTS

Thresholds of Significance

In accordance with Appendix G of the CEQA Guidelines, the proposed project could have a significant environmental impact if it would:

(a) physically divide an established community;

(b) conflict with any applicable land use plan, policy or regulation of an agency with jurisdiction over the project adopted for the purpose of avoiding or mitigating an environmental effect; or

(c) conflict with any applicable habitat conservation plan or natural community conservation plan.

Project Consistency with Plans and Policies

CEQA requires an analysis of consistency with plans and policies as part of the environmental setting (see CEQA Guidelines Section 15125). An EIR uses the policy analysis as an indicator of the resources that might be affected by a project and considers the importance a policy gives a resource in determining the significance of the physical impact. Conversely, the EIR considers the potential significance of the related physical impacts when analyzing a particular policy. Inconsistency with a policy may indicate a significant physical impact, but the inconsistency is not itself an impact. Using this approach, this EIR provides a detailed analysis of policies of the General Plan and analyses of other applicable plans (such as the LMP, Air Quality Management Plan, Inyo National Forest Land and Resource Management Plan, and Mono County Local Transportation Commission) and policies so that the decision-makers may determine project consistency. The physical impacts of the Project are analyzed in other sections of this EIR.

The General Plan Guidelines published by the State Office of Planning and Research defines consistency as, "An action, program, or project is consistent with the General Plan if, considering all its aspects, it will further the objectives and policies of the General Plan and not obstruct their attainment." Therefore, the standard for analysis used in the EIR is based on general agreement with the policy language and furtherance of the policy intent (as determined by a review of the policy context). The determination that the Project is consistent or inconsistent with the General Plan policies or other Town plans and policies is ultimately the decision of the Town.

Town of Mammoth 1987 Lakes General Plan

With approval of the Sierra Star Master Plan, the Project would be consistent with the 1987 General Plan land use designation for the Project site. Project consistency with individual 1987 General Plan policies is evaluated in Table IV.I-1 at the end of this section.

Lodestar Master Plan

Table III-1 in Section III Project Description compares the density and dwelling units per acre for the Lodestar Master Plan versus the Sierra Star Master Plan.

Town of Mammoth Lakes Zoning Regulations

The Project site is zoned for development of various uses that are permitted under the existing Resort zoning for the site. With approval of the Sierra Star Master Plan, the Project would be in conformance with the zoning regulations for the Project site.

Air Quality Management Plan

Mono County joined Inyo and Alpine Counties to form the Great Basin Unified Air Pollution Control District (GBUAPCD), which serves to enforce Federal, State, and local air quality regulations, and ensure that standards are met. The Town adopted its own Air Quality Management Plan (AQMP) as of November 1990 because of increased particulate matter (PM) in the winter due to a combination of increased tourism and more motor vehicles, and smoke from wood burning stoves and fireplaces. Of special concern are particles that measure less than 10 microns in diameter (about $1/7^{th}$ the thickness of a human hair), known as $PM_{10,}$ which can be inhaled and lodge in the lungs. The AQMP analyzes sources of PM_{10}, potential impacts, and the effectiveness of control measures.

Based on the analysis of the Project's impacts on air quality (see Section IV.C, Air Quality), through compliance with the proposed mitigation measures, Project impacts to air quality during construction and operation would be less than significant and would not result in an increase of particulate mater (PM_{10}). Additionally, modeling of the pollutant emissions associated with the Project shows that the long-term operation of the Project would not result in an exceedance of ozone (O_3) precursor emissions or of the 1-hour or 8-hour Federal or State standards for carbon monoxide (CO). Therefore, the Project would be consistent with the GBVAB and AQMP.

Inyo National Forest Land and Resource Management Plan

Much of the land within the Urban Growth Boundaries of the Town is public land falling under the jurisdiction of Inyo National Forest, and administered for recreational use. The Sierra Nevada Forest Plan amendment of 2001 updated the Inyo National Forest Plan of 1988, therefore consistency with Forest Service goals and policies will be considered.

Management of natural resources within the Inyo National Forest is being addressed by the U.S. Forest Service through planning efforts including the *USFS Trail and Commercial Pack Stock Management in the Ansel Adams and John Muir Wildernesses FEIS* and the *Inyo National Forest Winter Needs Assessment* conducted in collaboration with the Town in 2003 and 2004. In addition, the Inyo National Forest will need to update its Forest Land and Resource Management Plan, as it is nearly 20 years old and out-of-date[1], in accordance with the *Sierra Nevada Forest Plan Amendment (SNFPA).*

Mono County Local Transportation Commission (MCLTC)

The Mono County Local Transportation Commission (MCLTC) is the designated Regional Transportation Planning Agency for Mono County. Its membership includes three members of the Town Council and three members of the County Board of Supervisors. The Director of Caltrans District 9

[1] *Personal Communication: Mike Schlafmann, U.S. Forest Service. July 5, 2006.*

serves as an ex-officio member of the MCLTC. The MCLTC acts as an autonomous agency in filling the mandates of the Transportation Development Act.

The goal of the Mono County Regional Transportation Plan is to provide and maintain a transportation system which provides for the safe, efficient, and environmentally sound movement of people, goods and services, and which is consistent with the socioeconomic and land use needs of Mono County[2]. The plan includes the existing highway and road system, as well as the bikeway/trail component and air travel.

Senate Bill 45 expanded the role of the MCLTC with additional responsibilities for project monitoring with significant, additional and discretionary funding for transportation projects and increased transportation planning responsibilities. The primary duties of the MCLTC consist of the following:

- Every four years, prepare, adopt and submit a Regional Transportation Plan (RTP), and every two years prepare a Regional Transportation Improvement Program (RTIP) for the Department of Transportation (Caltrans) and the California Transportation Commission;
- Annually, review and comment on the Transportation Improvement Plan contained in the State Transportation Improvement Program (STIP);
- Provide ongoing administration of the Transportation Development Act (TDA) Funds.
- Annually, prepare and submit the Overall Work Program; and
- Periodically allocate funds for Transportation Enhancement Activities (TEA).

Although the MCLTC does not currently have any adopted policies, as noted in Section IV.M, the Project would not conflict with adopted policies, plans, or programs supporting alternative transportation.

Lahontan Regional Water Quality Control Board (RWQCB)

The Mammoth Community Water District (MCWD) provides service to the residents from both surface water appropriated from Lake Mary, and groundwater from the Mammoth Basin Watershed. The MCWD falls under the jurisdiction of the Lahontan Regional Water Quality Control Board (RWQCB), which has developed a Water Quality Control Plan for the Lahontan Region.

Additionally, the MCWD adopted a Groundwater Management Plan in July of 2005, which is thoroughly discussed in the December 2005 update to the Urban Water Management Plan.

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[2] *Mono County Local Transportation Commission Website, retrieved July 5, 2006, from http://www.monocounty.ca.gov/cdd%20site/LTC/ltc_home.html.*

The Project would be required to conform to the policies and guidelines concerning land development in the Mammoth Lakes area above 7,000 feet elevation as prescribed in the Water Quality Control Plan for the Lahontan Region (for additional detail, see Section IV.H, Hydrology and Water Quality, of this Draft EIR).

Project Impacts and Mitigation Measures

Impact LU-1 Physically Divide an Established Community

This Project would supersede the existing Lodestar Master Plan for the area. The proposed development for the Sierra Star Master Plan is within the existing development areas of the Lodestar Master Plan, which would not create a physical barrier within the community or otherwise divide contiguous land uses. Therefore, the Project would not physically divide an established community, and impacts would be ***less than significant.***

Impact LU-2 Conflict with Applicable Land Use Plans, Policies, or Regulations

As noted, the Project is generally consistent with and implements applicable plans and policies. The Project site is currently governed by the land use policies and regulations set forth in the General Plan (adopted in 1987), the Lodestar Master Plan (adopted in 1991 and amended in 1992), and the Zoning Ordinance. Table IV.I-1 compares the Project characteristics with the applicable land use polices outlined in the 1987 General Plan.

As discussed in Table IV.I-1 the Project would be generally consistent with the applicable policies in the 1987 General Plan with the exception of the height of the tower building in Area 5A, the alteration of views from the identified viewpoints, and lot coverage. Thus, Project impacts would be ***less than significant.***

Impact LU-3 Conflict with Applicable Habitat Conservation Plan or Natural Community Conservation Plan

The Project would not conflict with an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional or state habitat conservation plans. Therefore no further analysis of this issue is required. Thus, Project impacts would be ***less than significant.***

Table IV.I-1
Comparison of Project Characteristics to Applicable Policies in the 1987 General Plan

Objective/Policy	Consistency Discussion
LAND USE AND PUBLIC FACILITY AND SERVICES ELEMENT	
General Land Use Policies	
1. In furtherance of the Overall Goals set forth above and the General Goals of the General Plan listed on Page 6, it is the policy of the Town that the developable land area designations (all areas not designated Open Space) set forth in this plan and the overall development intensity described herein are to be the ultimate size and intensity for the community and no intensive development (housing, commercial, or industrial) shall take place outside the area designated for such development in this plan.	**Not Consistent.** Development of the Project would take place within an area designated for Resort (R) development. The Resort designation includes mixed visitor oriented uses including lodging, visitor oriented commercial, and recreation uses. The proposed uses are in accordance with the allowable uses for the Resort designation. The Project proposes 5.3 dwelling units per acre, including hotel units, which is in accordance with the maximum allowable density of eight units per acre for the Resort designation. The Project proposes the following lot coverage for each development area: 70% (Area 1D), 60% (Area 2), 70% (Area 4A), 70% (Area 5), and 70 % (Area 7). Thus, the Project would exceed the maximum allowable lot coverage of 50% for the Resort zone established in the 1987 General Plan.
2. The Town shall use Specific Plans to refine Land Use District Plans as needed and shall prepare Program Environmental Impact Report documents to guide Specific Area Plan Development and to reduce repetitive project level environmental documentation.	**Consistent.** The Project provides for a master planned community consisting of a variety of individual actions involving the construction of a series of residential neighborhoods, commercial uses, hotel/resort uses, recreational amenities, and a trail/roadway system over a 6-year buildout period. This Draft EIR constitutes a program-level environmental analysis of each of the proposed actions as a whole, reducing repetitive project-level documentation, avoiding duplicative reconsideration of basic policy considerations, and generally streamlining the environmental review process.
3. The Town shall evaluate each District Plan, Specific Area Plan, and development proposal to assure that a balanced expansion of all major land use types occurs, and is coordinated with commercial recreation development.	**Consistent.** The Project proposes several major land use types, including residential, commercial, retail, recreation, and hotel/resort uses. The Project would integrate a mix of residential types within distinct neighborhood contexts with a resort commercial/recreation center that presents multiple options for recreational amenities. The Project is subject to design review by the Town Planning Department, other departments and divisions, and outside agencies; environmental review pursuant to CEQA; review and subsequent recommendation for approval by the Town Planning Commission; and ultimate approval by the Mammoth Lakes Town Council. The extent to which the Project proposes a balanced expansion of all major land use types, coordinated with commercial recreation development, would be contemplated by each of the abovementioned entities during their respective periods of Project review and/or consideration.

Table IV.I-1
Comparison of Project Characteristics to Applicable Policies in the 1987 General Plan

Objective/Policy	Consistency Discussion
Residential Land Use Policies	
1. The Town shall encourage recreation visitor and commercial recreation-employee housing to be located in or near commercial centers, major recreation nodes (such as ski-base areas, golf courses and transit hub), through incentive and disincentive policies.	**Consistent.** The Project's diverse assortment of residential uses includes transient occupancy units, workforce housing, permanent multi-family and single-family housing, and resort lodges. The Sierra Star Master Plan would develop a major recreation node in proximity to the proposed residential uses, with multiple options for recreational amenities including the Sierra Star golf course, recreational trails and walkways, the golf course lake, individual pools, spas, and water play areas associated with resort hotels. The Project also proposes 29,000 square feet of retail space and 50,000 square feet of conference center/commercial space. In addition, the Project would also provide accessibility to surrounding commercial centers and recreational nodes by via shuttle connections between the Little Eagle Base Lodge and the Mammoth Mountain ski area.
2. Developments shall be encouraged (but not required) through incentives in the Development Code to provide employee housing on-site or where on-site provision is infeasible to provide such housing off-site, or if appropriate, contribute to an employee housing development fund.	**Consistent.** The Project allows for the development of on-site employee housing.
3. The Town shall encourage compact/clustered residential development and increased open space areas in non-single family areas, through criteria and incentives/disincentives.	**Consistent.** The Project is organized into a series of clustered residential neighborhoods (including non-single family areas) interspersed among outdoor use/open space areas, commercial and resort uses, and recreational amenities. The Project would organize the form and mass of a single building in relationship to the scale of neighboring buildings and in relationship to the size and use of adjacent open space to achieve comfortable outdoor spaces.
5. The Town shall allow residential uses in commercial areas to provide housing opportunities for employees within the commercial areas.	**Consistent.** See discussions for Residential Land Use Policies 1 and 2, above.
6. The Town shall preserve established single family neighborhoods by retaining existing single family land use designations and shall promote single family development in these areas through the provision of incentives in the Town's Development Code.	**Consistent.** The Project would not change an existing Single-Family land use designation, as the entire Project site is designated for Resort use. In addition, the Project allows for the development of on-site single-family housing. If developed, single-family units would be clustered in single-family neighborhoods with distinct neighborhood contexts.

Table IV.I-1
Comparison of Project Characteristics to Applicable Policies in the 1987 General Plan

Objective/Policy	Consistency Discussion
7. The Town shall develop and apply performance design review criteria for residential areas: 1) to assure that residential development is designed to enhance the Town's mountain resort character 2) to provide for sensitive transitions between residential and other land uses, through open space dedication and design, and 3) to better integrate residential development with a natural environment.	**Consistent.** As discussed above in the consistency analysis for General Land Use Policy 3, the Project is subject to design review by the Town Planning Department, other departments and divisions, and outside agencies. The objectives of the Design Guidelines for the Project are: 1) Sierra Star should be designed so that it is appropriate to the character of the Mammoth Lakes region, and 2) Sierra Star should further enhance the Town to be comparable to other high-quality mountain resort destinations in North America. Thus, the Project would aim towards enhancing the Town's mountain resort character. As discussed in the consistency analysis for Residential Land Use Policy 3, above, the Project would provide for sensitive transitions between residential and other land uses through open space dedication and design. The Project would further integrate residential development with a natural environment by emphasizing an architectural style appropriate to the climate and natural setting of the Eastern Sierra. Historic buildings in the California Mountains, which are sturdy and direct, using local stone in a strong and dramatic fashion, would be used as examples. Traditional tools of California architecture would be encouraged, including rugged stone building bases, and expressive detailing at roof edges, balconies, window trims, and doorways. The goal would be a distinctive building architecture that is executed with materials, colors, and finishes, appropriate to the local environment.
8. The Town shall encourage a diversity of housing types.	**Consistent.** See discussion for Residential Land Use Policy 1, above.
9. The Town shall encourage affordable housing through development incentives, and utilization of federal and state affordable housing programs as appropriate.	**Consistent.** The Project allows for the development of on-site affordable housing.
10. A slope density restriction shall be incorporated into the Town Development Code in order to preserve unique physical characteristics, protect environmentally sensitive areas and minimize disruptive grading.	**Consistent.** The Project is consistent with the underlying concepts expressed in this policy of ensuring slope consistency, preserving unique physical characteristics, protecting environmentally sensitive areas, and minimizing disruptive grading. The Project would develop the grades and topographic forms needed to achieve necessary grades. Where large vertical cuts or fills are required the use of retaining walls would be suggested to minimize the areas affected. Retaining walls, material and color would maintain the natural setting and context. Grading would be done to create natural-looking slopes that have diversity in gradient and profile where feasible,

Table IV.I-1
Comparison of Project Characteristics to Applicable Policies in the 1987 General Plan

Objective/Policy	Consistency Discussion
	utilizing round and feather tops, toes, and edges of slopes to blend naturally with adjacent grades. All grading operations would be carefully managed to avoid environmental damage to adjacent non-graded areas, to avoid water degradation in streams corridors, to riparian vegetation, to protect existing trees, and to minimize impacts on nearby properties. Where practical and appropriate to the design, existing trees would be preserved, either as groups or as individual trees. Grade disturbance within the tree's dripline would be avoided where feasible. Appropriate barricades and fencing would be installed by the contractor to protect preserved trees during grading operations.
11. The Town shall adopt a zoning ordinance which includes controls on site coverage and population density while allowing flexibility in the types and sizes of residential units to be developed.	**Consistent.** The Project is consistent with the underlying concept expressed in this policy of applying appropriate, site-specific land use restrictions on individual properties that allow for flexible development. The Sierra Star Master Plan includes land use regulations related to permitted and conditional uses, density, building height, street R.O.W., building setback, building separation, lot size, and site coverage. Each Development Area is assigned a variety of permitted and conditional land uses, allowing for future flexibility in the types and sizes of residential units to be developed in each Area (see discussion for Residential Land Use Policy 1, above). The Master Plan also includes Design Guidelines that are intended to assist in the implementation of basic planning and design ideas that underlay the Master Plan while also allowing for sufficient flexibility for the incorporation of future creative design solutions.
Commercial Land Use Policies	
2. Review criteria for commercial development proposals shall include: adequate site size for the proposed use, snow storage and removal, snow shedding, and an analysis of the relationship to the Town's transportation and other facilities and services including assurance of adequate access and on-site circulation. Utilization of the natural features of the site, a beneficial relationship to other land uses, and adequate landscaping and buffering shall be required.	**Consistent.** The Project is consistent with the underlying commercial design concepts expressed in this policy. The Design Guidelines for the Sierra Star Master Plan, which would be reviewed for adequacy as part of the overall Project review phase described above in the discussion for General Land Use Policy 3, include policies related to snow storage, removal, and shedding. The Project's relationship to the Town's transportation facilities and the adequacy of Project access and on-site circulation are analyzed in Section IV.M (Transportation/Traffic) of this Draft EIR. As discussed therein, the Project would not result in significant impacts related to traffic, access, or on-site circulation. As discussed in Sections IV.L (Public Services) and IV.N (Utilities/Service Systems) of this Draft EIR, the Project would not result in significant

Table IV.I-1
Comparison of Project Characteristics to Applicable Policies in the 1987 General Plan

Objective/Policy	Consistency Discussion
	impacts to other public services and facilities provided by the Town, including police and fire services, schools, parks, libraries, and water, sewer, and solid waste facilities. The degree to which the Project would utilize the natural features of the site is discussed above in the consistency analysis for Residential Land Use Policy 10. Landscape site work would be consistent with traditional approaches for the region, would address current needs, codes, regulations, and environmental considerations; would enhance the user experience, safety, and enjoyment; and would contribute to adequate buffering as needed. With respect to the visual relationship between on-site land uses, see discussions for Residential Land Use Policies 3 and 7, above.
3. The Town shall review proposed commercial developments and apply incentives and disincentives in the Development Code to achieve a balance between the commercial needs of visitors and permanent residents.	**Consistent.** See discussion for General Land Use Policy 3, above. The extent to which the Project achieves a balance between the commercial needs of visitors and permanent residents would be contemplated by each of the entities noted in the referenced discussion during their respective periods of Project review and/or consideration.
4. Existing tourist-related commercial uses shall be encouraged to relocate to major tourist facility areas, such as recreation nodes and the transit hub area, through the application of development code incentives.	**Consistent.** The Project would develop a major recreation node and transit hub area in the community. Existing tourist-related commercial uses in other areas of the community would have the opportunity to relocate to Sierra Star if they so choose.
7. The Town shall assure that commercial uses are compatible with Mammoth Lakes livability and environment (e.g., non-disruptive due to traffic, noise, pollution, or other impacts and designed appropriately for the site and environmental constraints) through the application of design review criteria and development incentives in the Town Development Code: a) The architectural design of existing and future commercial structures shall be encouraged to be in keeping with the alpine character of the area, and b) Commercial developments shall be encouraged to be constructed in compact centers, rather than in strip commercial areas or among non compatible uses.	**Consistent.** As discussed in Sections IV.M (Transportation/Traffic), IV.J (Noise), and IV.C (Air Quality), Project specific impacts would be less than significant in relation to traffic congestion, noise, and air pollution (respectively). With respect to other pertinent issues, the Project's compatibility with and impact on the surrounding environment is analyzed throughout the Environmental Impact Analysis contained in Section IV of this Draft EIR. With respect to the preservation of the alpine character through architectural design, see discussion for Residential Land Use Policy 7, above. The Project would development a Master Planned community consisting of a variety of land uses (including commercial uses) which would be designed and sited in a manner that emphasizes cohesiveness and compatibility between uses.
8. The Town shall determine the types of retail and service commercial developments which are needed to serve the Town's permanent population, and encourage their development through incentives in the Town's Development Code.	**Consistent.** The Project would provide a broad range of activities, services, and facilities for residents and visitors year round. See discussion for Residential Land Use Policy 1, above.

Table IV.I-1
Comparison of Project Characteristics to Applicable Policies in the 1987 General Plan

Objective/Policy	Consistency Discussion
Recreation and Resort Land Use Policies	
1. The Town shall encourage year-round visitors by providing incentives in the Development Code for recreation and visitor housing developments to provide resort amenities and recreation activities such as tennis courts, athletic clubs, skating rinks, golf courses, riding and hiking trails , etc.	**Consistent.** The Project is consistent with the underlying concepts expressed in this policy of providing visitor housing and recreation amenities. See discussion for Residential Land Use Policy 1, above.
2. The Town shall encourage resort and resort-related development such as recreation facilities, hotel/motel facilities, and recreation-related commercial projects at designated recreational activity nodes through incentives in the Town's Development Code.	**Consistent.** The Project is consistent with the underlying concept expressed in this policy of providing recreation and resort amenities. See discussion for Residential Land Use Policy 1, above.
4. Each recreation activity node and related development shall have an architectural theme, and a well integrated design plan which encourages visitors to stay in the designated resort nodes.	**Consistent.** See discussions for Residential Land Use Policies 3 and 7, above.
Open Space Policies	
4. The unique physical and visual features of the Mammoth Lakes Community should be maintained by an open space program and Development Code criteria which preserves the unique alpine qualities of the Town and wildlife habitat, including major rock outcroppings, forest canopies and mixed-aged stands of trees.	**Consistent.** The Project is consistent with the underlying concept expressed in this policy of preserving the unique physical and visual features of a site. See discussion for Residential Land Use Policy 10, above.
6. The Town shall designate passive and active open space areas in which varying levels of recreation activities are encouraged: • Use of open space areas such as paths, picnic facilities, etc., shall be limited to passive activities. • The Town shall restrict intensive recreational activities to areas designated for active open space uses.	**Consistent.** The Project is consistent with the underlying concept expressed in this policy of providing passive and active open space opportunities. See discussion for Residential Land Use Policy 1, above.
7. The Town shall maximize the visual quality of designated passive open space areas by careful screening of those development areas which can be viewed from the open space areas and by the maximum retention of the forest canopy and understory through design review criteria in the Town's Development Code.	**Consistent.** The Project is consistent with the underlying concept expressed in this policy of maximizing the visual quality of passive and active open space. See discussions for Residential Land Use Policies 3 and 10.
8. The visual impact of active recreation areas should be minimized through cooperation with the U.S. Forest Service and other appropriate agencies in areas outside the Town's jurisdiction and through incentives in the Town's Development Code, for areas within the Town's jurisdiction. The Town shall encourage the	**Consistent.** The Project is consistent with the underlying concept expressed in this policy of minimizing the visual impact of active recreation areas. See discussions for Residential Land Use Policies 3 and 10.

Table IV.I-1
Comparison of Project Characteristics to Applicable Policies in the 1987 General Plan

Objective/Policy	Consistency Discussion
Forest Service to permit active recreational uses, including ice skating rinks, golf courses and similar community recreational facilities when those facilities cannot reasonably be located on the private land base.	
General Public Facilities and Services Policies	
1. The Town shall ensure that public facilities planning and construction provide an efficient framework for and are constructed commensurate with community growth.	**Consistent.** As discussed under the "Growth Inducing Impacts" heading in Section V (General Impact Categories) of this Draft EIR, facility construction associated with the Project would be site-specific and would not foster substantial concomitant population growth in the community (e.g., the Project does not propose typical growth-inducing uses such as a major roadway extension or a water treatment plant). As discussed in Section IV.K (Population/Housing) of this Draft EIR, the Project would result in direct population growth associated with the proposed on-site residences, as well as some indirect population growth associated with the jobs that would be provided by the proposed commercial, retail, and recreational uses. The population growth associated with the Project, both direct and indirect, would be consistent with local and regional population and growth forecasts. Thus, the effects of the Project would be commensurate with anticipated community growth.
2. The Town shall consider impacts on community services and facilities prior to approval of development and annexation requests.	**Consistent.** Project impacts on community services and facilities are respectively analyzed in Sections IV.L (Public Services) and IV.N (Utilities/Service Systems) of this Draft EIR.
3. The Town shall require development projects to bear their proportionate share of the costs for needed services and facilities.	**Consistent.** As discussed in Section IV.L (Public Services) of this Draft EIR, the Project applicant is subject to development fees related to schools and parks in order to mitigate potentially significant impacts. As discussed in Section IV.N (Utilities/Service Systems) of this Draft EIR, all necessary utility improvements would be funded by the Project applicant.
Water Supply Policies	
1. The Town shall only approve development when adequate water supply and fire flows can be demonstrated at the appropriate stage of development as identified in the Development Code. When evaluating available water supply, the Town shall consider water available during a year where precipitation is less than 50% of normal.	**Consistent.** As discussed in Section IV.N (Utilities/Service Systems) of this Draft EIR, the Water Supply Assessment prepared for the Project by the Mammoth Community Water District indicates that adequate water supply, storage, and offsite distribution facilities exist for buildout of the Project. As discussed in Section IV.L (Public Services) of this Draft EIR, all water lines would be sized per Mammoth Community Water District requirements and to provide the required fire flow per Mammoth Lakes Fire Protection District requirements.

Table IV.I-1
Comparison of Project Characteristics to Applicable Policies in the 1987 General Plan

Objective/Policy	Consistency Discussion
2. The Town shall work with the Mammoth County Water District (MCWD) and other potential water suppliers to provide adequate water. The Town shall support MCWD actions to reduce per capita usage, increase groundwater capabilities and develop additional storage and where feasible, secure additional water rights, initiate, appropriate water reclamation and reuse and possible water importation programs.	**Consistent.** The Project is consistent with the underlying concept expressed in this policy of ensuring adequate water supply and water conservation. Regarding water supply, see discussion for Water Supply Policy 1, above.
3. The Town shall encourage the detailed study of water usage, basin groundwater and additional surface water supply sources by seeking grants for such studies and/or requiring developers to contribute to a water study fund.	**Consistent.** The Project is consistent with the underlying concept expressed in this policy of ensuring adequate water supply. The Water Supply Assessment that was prepared for the Project (see discussion for Water Supply Policy 1, above) was funded by the Project applicant. The water supply assessment considers all currently feasible water supply sources available to the Project.
4. The Town shall require water resource conservation through design criteria in the Town Development Code (see Open Space and Conservation Ordinance policies).	**Consistent.** The Project is consistent with the underlying concept expressed in this policy of ensuring water conservation. See discussion for Water Supply Policy 2, above.
5. The Town may only permit development which can show that the provision of water service is coordinated with the provision of other public facilities and services.	**Consistent.** See discussions for Water Supply Assessment Policy 1, above.
6. The Town shall ensure water system improvements are made with the least disruption to the environment and community through its reviewing powers.	**Consistent.** Refer to mitigation measures in Section IV.N.
Waste Water Management Policies	
2. The Town shall monitor growth trends and sewer tap requirements to assure development does not exceed the capacity of sewage lines and facilities. The Town shall encourage the MCWD to have adequate sewage capacity available when needed.	**Consistent.** The Project is consistent with the underlying concept expressed in this policy of ensuring adequate sewer capacity and treatment. As discussed Section IV.N (Utilities/Service Systems) of this Draft EIR, sewer infrastructure and treatment plants have adequate capacity to serve the Project upon buildout.
3. The Town shall permit only that development which can be adequately accommodated by the sewage facilities and lines, through conditions in the Town Development Code.	**Consistent.** See discussion for Waste Water Management Policy 2, above.
4. The Town shall encourage MCWD to research the use of reclaimed and non-potable water and developers shall be encouraged to use reclaimed or non-potable water, if available.	**Consistent**. The Project is consistent with the underlying concept expressed in this policy of utilizing reclaimed and non-potable water when feasible.

Table IV.I-1
Comparison of Project Characteristics to Applicable Policies in the 1987 General Plan

Objective/Policy	Consistency Discussion
Storm Drainage System Policies	
1. The Town shall implement the Storm Drainage Master Plan.	**Consistent.** As discussed in Section IV.H (Hydrology/Water Quality) of this Draft EIR, the proposed drainage plan has been designed in accordance with the standards and requirements set forth in the Town's Storm Drainage Master Plan.
2. The Town shall through requirements in the Town Development Code, assure that development projects provide the necessary on and off site drainage facilities and erosion control measures which assure that Mammoth Creek and other properties are not significantly affected by development runoff.	**Consistent.** As discussed in Section IV.H (Hydrology and Water Quality) of this Draft EIR, the Project would not result in significant impacts related to on- or off-site drainage issues, including drainage system capacity, erosion, and runoff water quality.
3. The Town shall work with the regional water quality control agency and the County to develop site-specific erosion control and runoff criteria to be integrated into the Town Development Code.	**Consistent.** The Project is consistent with the underlying concept expressed in this policy of implementing site-specific erosion and runoff control measures. Such measures are discussed in Section IV.H (Hydrology and Water Quality) of this Draft EIR.
4. Grading of properties having steep slopes shall be minimized and controlled in the Town Development Code in order to further reduce erosion and runoff.	**Consistent.** See discussions for Residential Land Use Policy 10 and Storm Drainage System Policies 2 and 3, above.
School Policies	
2. The Town shall assure that proposed developments pay appropriate school development fess or dedicate other appropriate items (e.g., sites, facilities, etc.) through requirements in the Town Development Code.	**Consistent.** As discussed in Section IV.L (Public Services) of this Draft EIR, the Project applicant is required to pay school developer fees levied by the Town pursuant to Section 17620 of the California Education Code.
Community Resident Recreation Facility Policies	
2. The Town shall encourage developers to provide not only project-related recreation facilities, but public recreation facilities, including playfields, parks and trails, through requirements and conditions in the Town Development Code.	**Consistent.** The Project would provide not only project-related recreation facilities, including the Sierra Star golf course, the golf course lake, and individual pools, spas, and water play areas associated with resort hotels, but would also provide publicly-accessible recreational trails and walkways.
3. The development of resident recreational facilities shall be coordinated with both public and private visitor recreation facility development.	**Consistent.** See discussion for Residential Land Use Policy 1, above, and discussion for Community Resident Recreation Facility Policy 2, also above.
Fire Protection Policies	
2. The Town shall require development projects to conform to the Mammoth Lakes Fire Protection District Plan project design and fire suppression programs, through conditions and requirements in the Town Development Code.	**Consistent.** As discussed in Section IV.L (Public Services) of this Draft EIR, the Project conforms with the design and fire suppression standards and requirements in the Mammoth Lakes Fire Protection District Plan. Furthermore, the analysis in Section IV.L concludes that the Project would not create any undue fire hazard related to design, fire flow, emergency access/response time, or fire hazards.

Table IV.I-1
Comparison of Project Characteristics to Applicable Policies in the 1987 General Plan

Objective/Policy	Consistency Discussion
3. The Town shall implement a roadway improvement program to improve the access of fire fighting equipment and to reduce response times.	**Consistent.** The Project is consistent with the underlying concepts expressed in this policy of ensuring adequate emergency access and response time. See discussion for Fire Protection Policy 2, above.
Police Service Policies	
1. The Town shall provide police protection and services sufficient to provide for the community's present security and safety needs.	**Consistent.** The Project is consistent with the underlying concept expressed in this policy of ensuring adequate police protection service. As discussed in Section IV.L (Public Services) of this Draft EIR, the Town of Mammoth Lakes Police Department would have sufficient resources to adequately satisfy the Project's demand for police protection service in addition to the existing demand for such service in the community.
Street and Road Maintenance Policies	
4. The Town shall prepare a Snow Removal and Storage Plan which: • Designates appropriate snow storage areas • Sets priorities for roadway, pedestrian path and trail clearance • Encourages the upgrading and dedication of private roads and pedestrian pathways into the public snow removal system • Establishes requirements in the Town Development Code for appropriate off-street parking areas, snow storage, and snow handling design requirements (such as covered sidewalks, snow loading design and roof design) for development projects, and • Sets forth a snow removal financing program.	**Consistent.** Snow management would be addressed with each building to ensure that residents and visitors are provided safe and convenient access to and from lodging and within the public use areas throughout the winter season. Ground and roof level snow storage areas would be identified. Landscape snow shed areas would be designated and located adjacent to the base of buildings and would be sized to accommodate the anticipated volumes of snow. Roof forms would be designed in coordination with pedestrian areas at the base of buildings. Snow falling from roofs would be directed to landscaped areas at the base for the buildings or to lower level flat roofs.
PARKING AND TRANSPORTATION ELEMENT	
Roadway Design	
1.1. Plan, design, and regulate roadways in accordance with the functional classification system described in this element, as shown in the Circulation Plan. Develop and adopt roadway standards consistent with this Element.	**Consistent.** All roadway designs would be reviewed by the Town for adequate roadway standards and emergency vehicle access prior to the approval of individual development plans within the SSMP area.
1.3 Road, sidewalk, and bikeway standards should recognize the Town's climate to enhance functionality and to reduce the long-term maintenance costs of the circulatory system.	**Consistent.** All roadway, pedestrian, and bicycle facilities would be reviewed by the Town for functionality in a mountain climate prior to the approval of individual development plans within the SSMP area.
1.4 At intersections on arterial roads, ensure that traffic control devices, and other traffic safety and operational improvements are installed for the safe and efficient movement of all types of traffic and pedestrians, and provide levels of service that conform to these policies. Lighting will be evaluated to meet safety standards.	**Consistent.** The Project includes the restriping of the southbound approach to provide for separate left- and right-turn lanes at Minaret Road/Old Mammoth Road in order to improve the LOS to an acceptable LOS C (22.6 seconds of delay), thereby assisting in safe, efficient traffic movements.

Table IV.I-1
Comparison of Project Characteristics to Applicable Policies in the 1987 General Plan

Objective/Policy	Consistency Discussion
1.6 Use alternatives to the construction of new traffic signals, including modem roundabouts and prohibitions on turn movements where they can be shown to benefit roadway capacity consistent with other community goals.	**Consistent.** The Project includes the restriping of the southbound approach to provide for separate left- and right-turn lanes at Minaret Road/Old Mammoth Road in order to improve the LOS to an acceptable LOS C (22.6 seconds of delay) to improve roadway capacity.
Level of Service	
1.7 Establish and maintain a Level of Service D or better on a typical winter Saturday peak-hour for signalized intersections and for primary through movements for unsignalized intersections along arterial and collector roads. This standard is expressly not applied to absolute peak conditions, as it would result in construction of roadway improvements that are warranted only a limited number of days per year and that would unduly impact pedestrian and visual conditions.	**Consistent.** The Project includes the restriping of the southbound approach to provide for separate left- and right-turn lanes at Minaret Road/Old Mammoth Road in order to improve the LOS to an acceptable LOS C (22.6 seconds of delay) to maintain intersection operations at LOS D.
1.8 Require the preparation of a traffic impact analysis report to identify impacts and mitigation measures for projects that may potentially result in significant traffic impacts. Level of service shall be computed according to the methodology presented in the Highway Capacity Manual. Cumulative impacts shall be modeled assuming full build-out of the General Plan.	**Consistent.** A Traffic Impact Study was prepared for the Project that identified a significant impact at the Minaret Road/ Old Mammoth Road intersection. The Project includes the restriping of the southbound approach to provide for separate left- and right-turn lanes to maintain LOS C.
1.9 In planning the Town's transportation system, strive for a balanced system that provides alternatives to the automobile while still meeting the LOS standards expressed in this Element.	**Consistent.** The Project includes pedestrian and bicycle facilities that connect to the broader Town trail system. The Project would also include the construction of bus shelters.
Roadway Network	
1.11 The Town will investigate and, where appropriate, implement steps to address documented and significant "cut through" traffic problems on residential streets.	**Consistent.** The Project would not provide any access to roads that would entice motorists to use Project roadways as "cut through" routes.
1.14 To aid the access of emergency vehicles and the evacuation of residents and visitors, access routes should be provided and maintained to all portions of the community, consistent with the Mammoth Lakes Fire Protection District requirements.	**Consistent.** The Project would provide three access points to Minaret Road and Meridian Boulevard that could be used in an emergency.
Financing of Improvements	
1.17 Require proponents of development proposals to analyze the project's contribution to increased vehicle traffic, transit demand, air quality impacts, and pedestrian/bicycle traffic, and to implement improvements necessary to address the increase. Mitigation of significant project-related impacts may require improvements beyond those addressed by the Town's Capital Improvement Program, and Air Quality Management Plan and Particulate Emissions Regulations.	**Consistent.** A Traffic Impact Study was prepared for the Project that identified a significant impact at the Minaret Road/Old Mammoth Road intersection. The Project applicant would fund the improvements to the intersection, which would consist of the restriping of the southbound approach to provide for separate left- and right-turn lanes in order to improve the LOS.

Table IV.I-1
Comparison of Project Characteristics to Applicable Policies in the 1987 General Plan

Objective/Policy	Consistency Discussion
1.18 Require new development to dedicate right-of-way consistent with adopted road standards. New development, as warranted, shall pay its fair share of roadway, pedestrian, transit, bicycle, and airport improvements.	**Consistent.** Project streets would be privately-owned and maintained and no other right-of-way dedication is required. The Project would contribute to funding of improvements at the Minaret Road/Old Mammoth Road intersection.
Parking	
1.23 Encourage the use of alternative transportation modes, as a means of reducing parking demand.	**Consistent.** The Project includes pedestrian and bicycle facilities that connect to the broader Town trail system. The Project would also include the construction of bus shelters.
1.25 Promote the use of shuttle transit services from development projects to major destinations, in order to reduce parking demand.	**Consistent.** The Project is consistent with the underlying concepts expressed in this policy by including the construction of transit shuttle stops. The Project site is currently served by several transit services.
Inter-Jurisdictional Coordination	
2.1 Coordinate with service providers to relocate existing overhead utilities underground along existing roadways while restoring the roadways to an "as good or better condition." Require underground utilities in new developments.	**Consistent.** All electrical lines would be located underground and would be reviewed by the Town for consistency with Design Guidelines prior to the approval of individual development plans within the SSMP area.
2.3 New roads and roadway improvements shall be correlated with the guidelines of the Noise Element of the 1987 General Plan.	**Consistent.** The Project would not create impacts from noise or expose persons to noise in excess of the Town noise standards or policies in the Noise Element.
2.5 Ensure that roadways are no wider than adequate to safely accommodate traffic and bicycle demands, however, adequate right of way shall be provided for safe snow storage, trucking or alternative snow management means have been specifically identified.	**Consistent.** All roadway designs would be reviewed by the Town for adequate right of way for safe snow storage, trucking or alternative snow management practices prior to the approval of individual development plans within the SSMP area.
2.6 Consider the modification of street geometry to address documented traffic speed, neighborhood cut-through, or safety issues. Any modification must be carefully evaluated in light of potential emergency response and snow removal impacts.	**Consistent.** All roadway designs would be reviewed by the Town for adequate roadway standards, emergency vehicle access, and snow removal prior to the approval of individual development plans within the SSMP area.
Transit	
3.1 Work with transit providers to provide year-round transit services within and to the Town that are timely, cost effective, convenient, and responsive to growth patterns and to existing and future transit demand.	**Consistent.** The Project includes the construction of transit stops. The Project site is currently served by several transit services.
3.2 Consider the need for future transit facility right-of-way in reviewing and approving plans for development and roadway construction or improvements. Incorporate features to encourage transit and reserve right-of-way for future transit access in plans for new growth areas. Transit right-of-way may either be exclusive or shared with other vehicles.	**Consistent.** See response to Policy 1.25.

Table IV.I-1
Comparison of Project Characteristics to Applicable Policies in the 1987 General Plan

Objective/Policy	Consistency Discussion
3.3 Develop transit and parking management strategies that encourage visitors to leave their private vehicles at their lodging property throughout the course of their stay.	**Consistent.** The Project is consistent with the underlying concepts expressed in this policy by providing transit stops, pedestrian and bicycle facilities, and adequate parking.
3.7 In the development of both community-wide land use plans and site plans for individual projects, strive to provide a development pattern that supports use of public transit through the clustering of land use density near established transit stops and the provision of convenient pedestrian connections to transit stops.	**Consistent.** The Project is consistent with the underlying concepts expressed in this policy by proposing several major land use types including residential and commercial uses near transit stops. Additionally, the Project would provide pedestrian and bicycle connections to transit stops. The extent to which the Project proposes a balanced expansion of all major land use types, coordinated with commercial recreation development, would be contemplated by the Town during Project review and/or consideration.
3.8 Require new development to provide sheltered public transit stops with turnouts where appropriate. Consider development of turnouts in existing developed areas when roadway improvements are made, or as deemed necessary for traffic flow and public safety.	**Consistent.** See response to Policy 1.25.
Transportation Control Measures (TCM)	
4.2 Provide for the development of a transportation and circulation system that maintains or enhances air quality in and around the Town.	**Consistent.** The Project is consistent with the underlying concepts expressed in this policy by mitigating Project impacts to maintain adequate LOS. Additionally, the Project would include facilities that would encourage the use of alternative transportation modes (bicycle and pedestrian facilities, transit stops).
4.5 Require transportation studies for major development projects to address potential use of bicycle routes, pedestrian trail, and public transportation to mitigate traffic impacts.	**Consistent.** A Traffic Impact Study was prepared for the Project that included analysis of bicycle and pedestrian facilities.
4.7 Promote the development of a public transit system that reduces the need for automobile usage, promotes the usage of non-motorized modes of transit, and compliments the pedestrian-oriented vision of the Town.	**Consistent.** The Project includes the construction of transit stops. The Project site is currently served for transit by several transit providers, which would link the Project to many areas of the Town.
Non-Motorized Transportation	
5.3 Commercial uses, recreational activity centers, institutional uses, and multi-family residential areas should be linked to the community-wide pedestrian trails network, where feasible.	**Consistent.** The Project would include a pedestrian and bicycle system with interior trails and sidewalks fronting internal streets as well as connecting trails from recreational amenities, outdoor spaces and neighborhoods.
5.5 New bikeways should be linked with other bikeways and parks, to provide safe continuous routes, wherever feasible.	**Consistent.** The Project would include a bicycle system connecting with existing Town trails and recreational amenities, outdoor spaces and neighborhoods; thereby creating safe continuous bikeways.

Table IV.I-1
Comparison of Project Characteristics to Applicable Policies in the 1987 General Plan

Objective/Policy	Consistency Discussion
5.7 Establish pedestrian and bicycle access standards. Require developers to finance and install pedestrian walkways, equestrian trails, cross-country ski trails, and multi-use trails in new development, consistent with adopted plans and policies, or as appropriate and necessary to address circulation needs.	**Consistent.** The Project would include pedestrian and bicycle facilities. Trails will tie into the larger Town wide recreational trail network which includes pedestrian trails, bike lanes and sidewalks that are adjacent to major roadways such as Minaret Road, Meridian Boulevard, and Main Street.
5.9 Strive to provide for a variety of non-motorized user experiences.	**Consistent.** The Project would include a pedestrian and bicycle system with interior trails and sidewalks fronting internal streets as well as connecting trails from recreational amenities, outdoor spaces and neighborhoods.
Development of New Growth Areas	
8.1: Encourage development patterns within the urban limits to provide a variety of land uses, in order to maximize the proportion of trip purposes that can be accommodated by short trips.	**Consistent.** The Project proposes residential and commercial land use types. The Project would include be located close to multiple options for recreational amenities. This variety of land use types would provide many amenities within a compact area.
8.2: Require that transportation systems in new developments be designed to provide residents and employees with the opportunity to accomplish many of their trips within the new development areas and to other major destinations of the Town by walking, bicycling, crosscountry skiing, and using public transit.	**Consistent.** The Project would include commercial, residential, and recreational uses connected by a pedestrian and bicycle system both internally and to the Town's trail system. The Project site is currently served for transit by Mammoth Lakes Transit Red Line.
8.3 Promote the development of crosswalks, sidewalks, neck-downs for crosswalks, public sitting areas, pedestrian trails, bike trails, and cross-country ski trails in the new development areas, in order to enhance safety, compliment the non-motorized vehicle trails, and promote a pedestrian atmosphere.	**Consistent.** As discussed in Section III, Project Description, the Project would include a pedestrian and bicycle system with interior trails and sidewalks fronting internal streets as well as connecting trails from recreational amenities, outdoor spaces and neighborhoods.
HOUSING ELEMENT	
1.A. The Town shall administer land use regulations to maintain and expand existing housing options.	**Consistent.** The Project is consistent with the Resort General Plan land use designation, which allows for the development of a variety of housing types.
1.B. The Town shall administer land use and development regulations to facilitate the development of housing. These regulations shall include incentives for the development of affordable housing.	**Consistent.** The Project proposes a variety of housing types, which would create homeownership opportunities to a variety of income levels.
2.A. The Town shall promote handicapped and elderly access in new housing developments, common areas, and public facilities.	**Consistent.** The Project would be ADA-compliant.
2.B. The Town shall maintain zoning which provides for different types of housing throughout the community	**Consistent.** The Project is consistent with the Resort zoning, which permits a variety of housing types.

Table IV.I-1
Comparison of Project Characteristics to Applicable Policies in the 1987 General Plan

Objective/Policy	Consistency Discussion
2.C. The Town shall work to eliminate discrimination in housing.	**Consistent.** Public spaces would be designed to be ADA-compliant. The Project would provide housing types (low-, medium-, and high density housing) to meet the needs of a variety of households.
3.A. The Town shall work to assure that all new development is energy efficient.	**Consistent.** The Project would be consistent with this policy by including energy efficient appliances and by incorporating the Town's recycling program, thereby diverting solid waste from the landfill.
CONSERVATION AND OPEN SPACE ELEMENT	
Natural Vegetative Resources	
2. The Town shall inventory and map all natural vegetation with an emphasis on the location and identification of rare unique and endangered species.	**Consistent.** The Project would incorporate mitigation measures to protect bats and raptors and would not significantly impact and rare, unique, or endangered species.
3. Riparian and in-channel vegetation shall be preserved or restored to the maximum extent possible to protect water quality and the wild life habitat associated with riparian corridors, through the application of design criteria and Incentives in the Town Development Code.	**Consistent.** A formal jurisdictional delineation report would be submitted to and verified by the Corps. The Project would be reconfigured to avoid impacts to potentially jurisdictional features to the maximum extent feasible.
5. Vegetative species which are rare, unique or endangered should be protected from destruction or alteration to their environment which would impair their vigor.	**Consistent.** See response to Policy 2.
7. Sensitive habitat areas shall be protected through open space buffers, fencing and signage, construction of roads, trails and paths away from sensitive areas, and reduction or removal of development densities near sensitive areas.	**Consistent.** See response to Policy 3.
8. Landscaping plantings shall be required to: 1) be of the native plant species they replace, and/or non-invasive, and 2) drought resistant, to the greatest extent feasible, in accordance with design criteria in the Town Development Code.	**Consistent.** The Project would use native plantings that are non-invasive and drought resistant in accordance with design criteria in the Town Development Code.
9. Landscaping plans which require intensive summer irrigation, fertilization and intensive landscaping should be discouraged by design criteria and disincentives in the Town Development Code.	**Consistent.** See response to Policy 8.
10. Motorcycles, all-terrain bicycles, and other vehicles shall be restricted in ecologically sensitive areas.	**Consistent.** The Project does not propose the use of motorcycles, vehicles or bicycles in areas that are not paved.
Wildlife Resources	
1. Through development controls and incentives, the Town shall identify: 1) primary habitat areas which shall be protected from intrusion by development and human activity, and 2) other habitat areas in which the impact of development and human activity will be minimized.	**Consistent.** No riparian or sensitive habitat exists within or adjacent to the Project site and the Project would avoid wetland habitat to minimize the impact of human development.

Table IV.I-1
Comparison of Project Characteristics to Applicable Policies in the 1987 General Plan

Objective/Policy	Consistency Discussion
2. The Town shall maximize the protection of primary wildlife habitats though public and/or private management programs which include: 1) requiring (encouraging) the construction of active and passive recreation and development areas away from the habitat, and 2) use of fences, or other barriers and buffer zones.	**Consistent.** See response to Policy 1.
3. The Town shall minimize the impact of development and human activity on non-primary habitat areas through: 1) retaining of natural vegetation in proposed development areas, 2) providing buffers where necessary and design controls, 3) by enforcing leash laws and providing public information concerning the potential destruction of wildlife by domestic pets, and 4) by clustering development away from these areas to the maximum extent practicable.	**Consistent.** Some Jeffrey pine are scattered throughout the basin sagebrush on the Project site. Some trees on the site may meet the minimum size (six inches in diameter) to require approval from the Town prior to removal. The Project would be designed to conform with the municipal code such that existing trees and vegetation are preserved to the maximum extent possible. Prior to the removal of any trees, a final analysis of the value of trees removed shall be prepared by a licensed forester or arborist
4. The Town shall protect the deer herds and their migration corridors to the maximum practical extent through: a) provision of open space buffers between developments adjacent to migration corridors; b) limited construction of new roads crossing migration routes; and c) modification of existing road impacts to deer migration areas by measures which could include: l) posting signs, 2) limiting driving speeds, and 3) devising channels migrating animals.	**Consistent.** The Project is unlikely to disrupt wildlife movement and will not impede the use of native wildlife nursery sites or migration corridors. Given that the Project site already consists of developed and/or disturbed habitats, and is nearly surrounded by residential or resort developments and busy Town streets, it is unlikely that the Project site is important for wildlife movement or nursery use. In addition, no major migratory routes for mule deer or other important migratory animals in the region, occurs within the Urban Growth Boundary (UGB) which entirely encompasses the Project site.
5. Instream water quality and quantity should be maintained to preserve riparian habitats (see the Water Resources Policies)	**Consistent.** The Project includes retention basins and water quality treatments that would maintain instream water quality and preserve riparian habitats.
Water Resources	
1. The quality and quantity of surface and ground waters should be maintained at acceptable levels as determined by appropriate agencies.	**Consistent.** The Project would be in compliance with all RWQCB regulations.
2. The Town shall retain to the maximum practical extent, primary community water-courses and bodies in their natural state, through criteria in the Town Development Code. Creek corridors should be carefully Identified, corridor setbacks established and strict regulations precluding riparian vegetation removal and creek regimen modification should be adopted.	**Consistent.** The Project would avoid community water courses and would not impact any riparian resources.
3. The Town shall develop a stream corridor preservation plan for the Mammoth Creek corridor. An Open Space Stream Conservation corridor (OSSC) has been designated along the creek (see the Land Use Element).	**Consistent.** See response to Policy 2.

Table IV.I-1
Comparison of Project Characteristics to Applicable Policies in the 1987 General Plan

Objective/Policy	Consistency Discussion
4. The Town shall carefully regulate development encroachment into flood plains and the perimeter of natural water bodies.	**Consistent.** The Project would not be located in any floodplains.
Cultural Resources	
2. An archeological and historic site survey shall be conducted for environmental impact reports whenever a critical site(s) might exist within a project area and to the maximum practicable extent any discovered site shall be preserved or treated in accordance with the recommendations in the survey report.	**Consistent.** An archaeological and historic site survey was conducted for the project.
SAFETY ELEMENT	
Avalanche Safety	
1. The Town shall require developers to implement appropriate mitigation measures in avalanche areas through requirements in ^ the Town Development Code.	**Consistent.** The potential for rock falls or snow avalanches to occur on the Project site is considered low and no evidence of landslides has been observed.
Snow Shedding	
6. To adopt standards In the Town Development Code which will limit hazards to people and property resulting from snow and ice falling from roofs. These standards could Include setbacks, roof orientation, roof construction, and other applicable considerations.	**Consistent.** The Project would incorporate snow management devices and roof drainage systems in the roof and building design, so that snow will not be permitted to shed freely into active pedestrian or vehicular areas.
Flood Zone	
7. No development shall be allowed in Murphy Creek or other flood hazard area and such areas shall be maintained in open space uses which will not contribute to run off and snowmelt in the hazard area.	**Consistent.** The Project would not be located in the floodplain and creeks.
Fire Protection	
9. The Fire District should minimize the incidence of structural fires by: a) regular inspections by the Fire I District, b) voluntary residential inspections, c) review of new development and remodeling plans in coordination with the Town's Development Review Procedures, and d) institution of public fire education programs.	**Consistent.** The Project would be reviewed by the Town for conformance with Fire District standards. The Project conforms to design and fire suppression standards and requirements in the Mammoth Lakes Fire Protection District Plan. Furthermore, the Project would not create any undue fire hazard related to design, fire flow, emergency access/response time, or fire hazards.
10. The Town shall help assure provision of adequate fire protection services by requiring development to conform to Fire District Plans, ordinances and requirements, and. to provide for tire protection personnel and equipment through requirements in the Town's Development Code, subdivision requirements and ordinances	**Consistent.** See response to Policy 9.

Table IV.I-1
Comparison of Project Characteristics to Applicable Policies in the 1987 General Plan

Objective/Policy	Consistency Discussion
12. The Town shall assist the Fire Department In reducing access land location delays, and in improving fire suppression by requiring: a) business and house numbers to be visibly posted on each structure; b) a Fire District review of proposed development and remodeling projects as part of the Town Development Review Process, to assure proposed structures, roads/access and fire prevention proposals are adequate; c) to the maximum extent feasible, consultation between the Town and Fire District be held before any plans involving street, road, hydrant, water main/supply, or any other improvement affecting fire safety are approved by the Town or submitted for bid; d) incorporation of appropriate site and structure design criteria in the Town Development Code to reduce fire hazards including: fire preventive building design appropriate building location and spacing, adequate access, etc.; e) to the maximum extent possible, consistency between the various Town Codes and Fire Codes; f) a roadway snow removal priority plan based on fire response access to the urbanized areas of Mammoth Lakes during heavy snow conditions.	**Consistent.** See response to Policy 9.
15. Within the municipal boundaries, the Town shall support the policies of the Mammoth Lakes Fire Protection District regarding storage of explosives or chemicals listed as hazardous by the state or federal government and shall prohibit the above ground bulk storage of gasoline, diesel or propane fuels.	**Consistent.** The Project does not propose any storage of gasoline, diesel, or propane fuels on-site.
Geologic Safety	
18. The Town shall require developers to complete a preliminary soils and foundation analysis, and prepare a comprehensive erosion control plan to prevent erosion and siltation of streams in the Community, through conditions in the Town Development Code.	**Consistent.** A geotechnical report was prepared for the Project. Additionally, the Project would include Best Management Practices for grading and construction activities, which would prevent erosion and siltation of streams.
19. The Town shall require detailed geotechnical studies of sites with slopes of 20% or greater, land slide or liquefaction potential, or other potential geotechnical hazards, through requirements in the Town Development Code.	**Consistent.** A geotechnical report was prepared for the Project to assess the potential for and slide or liquefaction potential, or other potential geotechnical hazards to occur on the Project site.

Table IV.I-1
Comparison of Project Characteristics to Applicable Policies in the 1987 General Plan

Objective/Policy	Consistency Discussion
21. The Town shall encourage grading and foundation plans which minimize excavation. Off-site disposal of soils shall be discouraged, and where excavation Is necessary, balanced cut and fill will be encouraged. Further, if excavated soils must be moved off-site, designated borrow pits shall be used and sculpted to fit the surrounding topography. Fill materials shall be extracted from Town designated areas.	**Inconsistent.** The Project includes underground parking and would require excavation. No grading plans are available at this time and it is unknown whether cut and fill for the Project would be balanced.
22. Soil erosion and soil transport during construction shall be controlled through requirements in the Town Development Code, including: a) Disturbed soil surfaces covered with mulch or grass until vegetation is re-established and/or permanent surface is overlaid. b) Minimization of exposed graded areas for extended periods through project phasing. c) Sprinkling of disturbed soils. d) Covering, windfencing around or wetting of stockpiled topsoil or dusty building materials. e) Use of wind erosion construction barriers In sites exposed to wind erosion during construction, f) Limitation of construction equipment and vehicle speeds to 5 miles per hour on construction sites, g) Use of sedimentation basins or ponds to prevent sediment reaching streams and the Town drainage system.	**Consistent.** The Project would include Best Management Practices for grading and construction activities, which would minimize the erosion of soils on the Project site.
25. The Town shall require major developments to prepare and Specific Area Plans to address hazard emergencies such as evacuation, shelter, communication Issues, etc.	**Consistent.** The Project would include the preparation of an emergency evacuation plan.
Seismic Safety	
26. The Town shall ensure that new development, modernization projects and public works facilities(1) projects will be constructed to reduce structural damage during seismic events through conditions in the Town's Development Code, including: a) The strict enforcement of the Uniform Building Code sections regarding seismic design, grading and excavation. b) Upgrading of utilities serving the development to withstand projected earthquake loadings and/or to shut off utility in case of failure (e.g. gas pressure drop valves) c) Requiring detailed geotechnical studies for development sites with liquefaction, landslide and faulting potential to insure appropriate siting and design is utilized in project development.	**Consistent.** The Project would be designed in conformance with the recommendations contained in the Geotechnical Report and to current California Building Code requirements, which will reduce the potential for structures on the Project site to sustain damage during an earthquake event.

Table IV.I-1
Comparison of Project Characteristics to Applicable Policies in the 1987 General Plan

Objective/Policy	Consistency Discussion
29. The Town shall ensure that adequate emergency access is available to evacuate peak populations during emergencies through: a) Designation of an additional emergency access road alignment(s) to accommodate buildout populations. b) Completion of the existing roadway system. c) Encouragement of continued airport improvements to improve its use for emergency evacuation.	**Consistent.** The Project would include three access points that would be used in the event of an emergency.
Police Services	
35. The Town shall maintain an adequate police force commensurate with increases in Town population and development.	**Consistent.** The Town of Mammoth Lakes Police Department would have sufficient resources to adequately satisfy the Project's demand for police protection service in addition to the existing demand for such service in the community.
NOISE ELEMENT	
4.2.1 New development of noise-sensitive land uses shall not be permitted in areas exposed to existing or projected future levels of noise from transportation noise sources which exceed 60 dB Ldn in outdoor activity areas or 45 dB Ldn in interior spaces.	**Generally Consistent.** As noted in Section IV.J. (Noise), the proposed residential uses within the Project site would not be exposed to traffic noise levels exceeding 60 L_{dn} .
4.2.2 Noise created by new transportation noise sources, including roadway improvement projects, shall be mitigated so as not to exceed 60 dB L_{dn} within outdoor activity areas and 45 dB L_{dn} within interior spaces of existing noise-sensitive land uses.	**Consistent.** Project mitigation measures for construction noise are discussed in Section IV.J. (Noise).
4.2.3 New development of noise-sensitive land uses shall not be permitted where the noise level from existing stationary sources exceeds the noise level standards of Table VII.	**Consistent.** Existing stationary sources do not exceed the noise level standards of Table VII (refer to Section IV.J. (Noise).
4.2.4 Noise created by new proposed stationary noise sources or existing stationary noise sources which undergo modifications that may increase noise levels shall be mitigated so as not to exceed the noise level standards of Table VII at noise-sensitive uses.	**Consistent.** Project mitigation measures for noise are discussed in Section IV.J. (Noise).
PARKS AND RECREATION ELEMENT	
1A-1 The Town shall encourage year round visitors by creating incentives in the Development Code for recreation and visitor housing developments to provide resort amenities and recreation activities such as tennis courts, athletic clubs, skating rinks, golf courses, riding and hiking trails, etc.	**Consistent.** The Project is nearby year-round resort amenities and recreation activities such as a golf course, multi-use pathways, and ski activities.

Table IV.I-1
Comparison of Project Characteristics to Applicable Policies in the 1987 General Plan

Objective/Policy	Consistency Discussion
1A-3 The Town shall preserve the resort-alpine character of Mammoth Lakes through the adoption of tree preservation standards which retain heritage trees (i.e., significant stands of old growth trees of unique or heritage quality, and large individual specimens) and groves where reasonable, and retain to the maximum extent feasible, the forest canopy and forested character of the Town. Native tree species should be planted to help offset the loss of trees unavoidably removed during construction (Conservation and Open Space Natural Vegetative Resources Policy #1).	**Consistent.** As noted in Section IV.B (Aesthetics), the Project design would create a scale, form, and mass suited to the resort-alpine character of the site and the adjacent land uses. During grading operations, existing trees would be protected to the extent feasible. Landscaping would incorporate trees and shrubs to revegetate disturbed areas, to buffer or frame views to allow summertime shading of outdoor places, to allow transition in scale and to soften building massing, and to introduce decoration and color into outdoor use areas. Planting on the project site would use native conifers, deciduous trees, and shrubs. Trees would be primarily coniferous but with an intermixing of deciduous trees species.
1B-2 The Town shall include more recreation programs designed specifically for the short duration visitor and second homeowner.	**Consistent.** The Project will provide recreation programs for the short duration visitor and second homeowner.
2A-2 The Town shall retain, to the maximum practical extent, primary community water-courses and bodies in their natural state, through criteria in the Town Development Code. Creek corridors should be carefully identified, corridor setbacks established and strict regulations precluding riparian vegetation removal and creek regimen modification should be adopted.	**Consistent.** Potentially jurisdictional wetland and waters features may be impacted by the project. Mitigation measures are proposed in order to reduce Project impacts to less-than-significant levels. Refer to Section IV.D (Biological Resources) for details.
2B-1 The Town shall encourage developers to provide not only project related recreational facilities, but public recreation facilities, including those projects identified in the Needs Assessment like playfields, parks and trails, through requirements and conditions in the Town Development Code.	**Generally Consistent.** The Project provides for some public recreational facilities including sidewalks adjacent to public roadways.
2C-1 The Town shall establish an effective trails network which connects frequently used destinations and follows heavily traveled routes. Trails shall be established whenever possible: 1) along scenic routes, 2) between recreation and visitor residential nodes, 3) to public facilities, areas of cultural, educational, recreational and historic interest, and 4) to campgrounds, camping areas, forest and wilderness areas.	**Consistent.** As discussed in Section III, Project Description, the Project would include a pedestrian and bicycle system with interior trails and sidewalks fronting internal streets as well as connecting trails from recreational amenities, outdoor spaces and neighborhoods.
2C-2 The Town shall develop a trails plan and system which provides for bikeway and pedestrian paths for use during summer and ski trails in the winter.	**Consistent.** The pedestrian and bicycle system will include interior trails and sidewalks fronting internal streets as well as connecting trails from recreational amenities, outdoor spaces and neighborhoods.

Table IV.I-1
Comparison of Project Characteristics to Applicable Policies in the 1987 General Plan

Objective/Policy	Consistency Discussion
2C-5 The Town may require new development and to the extent feasible, existing uses which are redeveloping, to 1) provide non-motorized path easements to develop paths in conformance with an adopted non-motorized transit plan, 2) provide crosswalk striping, and 3) provide lighting for safe pedestrian use of paths.	**Consistent.** The Project will provide non-motorized path easements, crosswalk striping, and lighting for safe use of pedestrian paths.
2C-6 Primary Scenic Areas and Scenic Resources shall be protected through design criteria and incentives and disincentives in the Town Development Code including: a) location of structures, or modification of building height and bulk, to reduce impact to views of primary scenic areas and resources, b) control of development on prominent ridgelines, bluffs and exposed hillsides, c) use of building materials, and colors which blend rather than contrast with the surrounding visual resources, d) limiting removal of vegetation, particularly mature trees, e) locating sensitive visual, biological and geological resource areas within Special Conservation Planning districts.	**Not Consistent.** As noted in Section IV.B (Aesthetics), the Project would be consistent with the Town's design criteria with the exception of the height of the tower building in Area 5A. As discussed above, a 200-foot maximum height is proposed in Area 5A for purposes of potentially attracting a hotel complex, which would exceed the Town's current height limit. The location of the proposed structures, bulk/massing, use of building materials, colors, and landscaping would be consistent with the Town Development Code. Specific details regarding these features, as proposed with the development of the project, are provided below and in Section III, Project Description, of this Draft EIR. With respect to the location of structures to avoid obstruction of views of primary scenic areas and resources, as further discussed below, the development of the Project would result in significant impacts from three viewpoints identified as Major View Corridors or Vistas in the General Plan. The Project would not develop any structures on prominent ridgelines, bluffs, or exposed hillsides. As the Project would exceed the Town's height limitation and would alter existing View Corridors or Vistas, the project would be inconsistent with this policy.
7. Preserve the important scenic vistas which occur along Old Mammoth Road, Meridian Boulevard and other defined areas by retaining sufficient minimum building setbacks and adoption of viewshed protection criteria and requirements in the Town Development Code.	**Generally Consistent.** As noted in Section IV.B (Aesthetics), although the Project would result in a significant impact on the Meridian Boulevard and Minaret Road (Views 9 and 10) viewpoint (see detailed discussion below), the proposed structures would comply with minimum building setback requirements. Therefore, the Project would be generally consistent with this policy.

CUMULATIVE IMPACTS

Impact LU-4

Cumulative land use impacts could occur if other related projects in the vicinity of the Project site would result in land use impacts in conjunction with the Project. Of the 49 related projects, 41 are residential projects located within the Town. Each of these related projects would be required to demonstrate consistency with the goals, policies, and objectives of the 1987 General Plan, applicable regional plans. These requirements ensure that cumulative land use impacts will be avoided or mitigated to ***less-than-significant*** levels.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

The Project's land use impacts would be ***less than significant***.

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IV. ENVIRONMENTAL IMPACT ANALYSIS
J. NOISE

INTRODUCTION

This section analyzes the potential for adverse impacts on project area noise levels resulting from implementation of the Project. Information used in the following analysis is drawn from the Project description, the Traffic Impact Analysis prepared for the Project and the Town of Mammoth Lakes 1987 General Plan.

ENVIRONMENTAL SETTING

Fundamentals of Sound and Environmental Noise

Sound is technically described in terms of amplitude (loudness) and frequency (pitch). The standard unit of sound amplitude measurement is the decibel (dB). The decibel scale is a logarithmic scale that describes the physical intensity of the pressure vibrations that make up any sound. The pitch of the sound is related to the frequency of the pressure vibration. Since the human ear is not equally sensitive to a given sound level at all frequencies, a special frequency-dependent rating scale has been devised to relate noise to human sensitivity. The A-weighted decibel scale (dBA) provides this compensation by discriminating against frequencies in a manner approximating the sensitivity of the human ear.

Noise, on the other hand, is typically defined as unwanted sound. A typical noise environment consists of a base of steady ambient noise that is the sum of many distant and indistinguishable noise sources. Superimposed on this background noise is the sound from individual local sources. These can vary from an occasional aircraft or train passing by to virtually continuous noise from, for example, traffic on a major highway. Table IV.J-1, Representative Environmental Noise Levels, illustrates representative noise levels in the environment.

Several rating scales have been developed to analyze the adverse effect of community noise on people. Because environmental noise fluctuates over time, these scales consider that the effect of noise upon people is largely dependent upon the total acoustical energy content of the noise, as well as the time of day when the noise occurs. The L_{eq} is a measure of ambient noise, while the L_{dn} and Community Noise Exposure Levels (CNEL) are measures of community noise. Each is applicable to this analysis and defined as follows:

- L_{eq}, the equivalent energy noise level, is the average acoustic energy content of noise for a stated period of time. Thus, the L_{eq} of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs during the day or the night.

- L_{dn}, the Day-Night Average Level, is a 24-hour average L_{eq} with a 10 dBA "weighting" added to noise during the hours of 10:00 P.M. to 7:00 A.M. to account for noise sensitivity in the nighttime. The logarithmic effect of these additions is that a 60 dBA 24 hour L_{eq} would result in a measurement of 66.4 dBA L_{dn}.

- CNEL, the Community Noise Equivalent Level, is a 24-hour average L_{eq} with a 5 dBA "weighting" during the hours of 7:00 P.M. to 10:00 P.M. and a 10 dBA "weighting" added to noise during the hours of 10:00 P.M. to 7:00 A.M. to account for noise sensitivity in the evening and nighttime, respectively. The logarithmic effect of these additions is that a 60 dBA 24 hour L_{eq} would result in a measurement of 66.7 dBA CNEL.

- L_{min}, the minimum instantaneous noise level experienced during a given period of time.

- L_{max}, the maximum instantaneous noise level experienced during a given period of time.

Table IV.J-1
Representative Environmental Noise Levels

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	—110—	Rock Band
Jet Fly-over at 100 feet		
	—100—	
Gas Lawnmower at 3 feet		
	—90—	
		Food Blender at 3 feet
Diesel Truck going 50 mph at 50 feet	—80—	Garbage Disposal at 3 feet
Noisy Urban Area during Daytime		
Gas Lawnmower at 100 feet	—70—	Vacuum Cleaner at 10 feet
Commercial Area		Normal Speech at 3 feet
Heavy Traffic at 300 feet	—60—	
		Large Business Office
Quiet Urban Area during Daytime	—50—	Dishwasher in Next Room
Quiet Urban Area during Nighttime	—40—	Theater, Large Conference Room (background)
Quiet Suburban Area during Nighttime		
	—30—	Library
Quiet Rural Area during Nighttime		Bedroom at Night, Concert Hall (background)
	—20—	
		Broadcast/Recording Studio
	—10—	
Lowest Threshold of Human Hearing	—0—	Lowest Threshold of Human Hearing

Source: California Department of Transportation, 1998.

Noise environments and consequences of human activities are usually well represented by median noise levels during the day, night, or over a 24-hour period. Environmental noise levels are generally considered low when the CNEL is below 60 dBA, moderate in the 60–70 dBA range, and high above 70 dBA. Noise levels greater than 85 dBA can cause temporary or permanent hearing loss. Examples of low daytime levels are isolated, natural settings with noise levels as low as 20 dBA and quiet suburban residential streets with noise levels around 40 dBA. Noise levels above 45 dBA at night can disrupt sleep. Examples of moderate level noise environments are urban residential or semi-commercial areas (typically 55–60 dBA) and commercial locations (typically 60 dBA). People may consider louder environments adverse, but most will accept the higher levels associated with more noisy urban residential or residential-commercial areas (60–75 dBA) or dense urban or industrial areas (65–80 dBA).

When evaluating changes in 24-hour community noise levels, a difference of 3 dBA is a barely perceptible increase to most people. A 5 dBA increase is readily noticeable, while a difference of 10 dBA would be perceived as a doubling of loudness.

Noise levels from a particular source decline as distance to the receptor increases. Other factors, such as the weather and reflecting or shielding, also help intensify or reduce the noise level at any given location. A commonly used rule of thumb for roadway noise is that for every doubling of distance from the source, the noise level is reduced by about 3 dBA at acoustically "hard" locations (i.e., the area between the noise source and the receptor is nearly complete asphalt, concrete, hard-packed soil, or other solid materials) and 4.5 dBA at acoustically "soft" locations (i.e., the area between the source and receptor is earth or has vegetation, including grass). Noise from stationary or point sources is reduced by about 6 to 7.5 dBA for every doubling of distance at acoustically hard and soft locations, respectively. Noise levels may also be reduced by intervening structures; generally, a single row of buildings between the receptor and the noise source reduces the noise level by about 5 dBA, while a solid wall or berm reduces noise levels by 5 to 10 dBA. The manner in which older homes in California were constructed generally provides a reduction of exterior-to-interior noise levels of about 20 to 25 dBA with closed windows. The exterior-to-interior reduction of newer homes is generally 30 dBA or more.

Fundamentals of Environmental Groundborne Vibration

Groundborne vibration is sound radiated through the ground, and is an oscillatory motion that can be described in terms of the displacement, velocity, or acceleration. The rumbling sound caused by the vibration of room surfaces is called groundborne noise. Sources of groundborne vibrations include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides, etc.), or manmade causes (explosions, machinery, traffic, trains, construction equipment, etc.). Vibration sources may be continuous, such as factory machinery, traffic, trains, and most construction vibrations (with the

exception of pile driving, blasting, and some other types of construction/demolition), or transient, such as explosions.[1]

The ground motion caused by vibration is measured as particle velocity in inches per second in the United States. The peak particle velocity (PPV) is defined as the maximum instantaneous positive or negative peak of the vibration signal. According to data published by the California Department of Transportation (Caltrans), the PPV threshold of perception for humans falls approximately in the 0.006-0.019 range. Most perceptible indoor vibration is caused by sources within buildings, such as operation of mechanical equipment, movement of people, or the slamming of doors. Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the groundborne vibration from traffic is rarely perceptible.

The general human reaction to various continuous vibration levels, as well as their potential damage to buildings, is described in Table IV.J-2, Reaction of People and Damage to Buildings at Various Continuous Vibration Levels.

Table IV.J-2
Reaction of People and Damage to Buildings at Various Continuous Vibration Levels

Vibration Level (Peak Particle Velocity – in/sec)[a]	Human Reaction	Effect on Buildings
0.006-0.019	Threshold of perception; possibility of intrusion.	Vibrations unlikely to cause damage of any type.
0.08	Vibrations readily perceptible.	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected. This criterion level may also be used for historical buildings, or buildings that are in poor condition.
0.10	Level at which continuous vibrations begin to annoy people.	Virtually no risk of "architectural" damage to normal buildings.
0.20	Vibrations annoying to people in buildings (this agrees with the levels established for people standing on bridges and subjected to relative short periods of vibrations).	Threshold at which there is a risk of "architectural" damage to normal dwelling-houses with plastered walls and ceilings. Special types of finish such as lining of walls, flexible ceiling treatment, etc., would minimize "architectural" damage.
0.4-0.6	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges.	Vibrations at a greater level than normally expected from traffic, but would cause "architectural" damage and possibly minor structural damage.

[a] *The vibration levels are based on peak particle velocity in the vertical direction. Where human reactions are concerned, the value is at the point at which the person is situated. For buildings, the value refers to the ground motion. No allowance is included for the amplifying effect, if any, of standard components.*

Source: California Department of Transportation, Transportation Related Earthborne Vibrations, Technical Advisory Number TAV-02-01-R9601, February 20, 2002.

[1] *California Department of Transportation, Transportation Related Earthborne Vibrations, Technical Advisory Number TAV-02-01-R9601, February 20, 2002.*

As shown in Table IV.J-2, data published by Caltrans indicate that 0.08 inch/second PPV is the level at which continuous vibrations are readily perceptible by people, and 0.10 inch/second PPV is the level at which continuous vibrations begin to annoy people in buildings. It should be noted, however, that the annoyance levels in Table IV.J-2 needs to be interpreted with care. Depending on the activity (or inactivity) a person is engaged in, vibrations may be annoying at much lower levels than those shown in Table IV.J-2. In particular, elderly, retired, or ill people staying mostly at home, people reading in a quiet environment, people involved in vibration sensitive hobbies or other activities are but a few examples of people that are potentially annoyed by much lower vibration levels.[2]

Regulatory Framework

Federal

Noise

There are no federal noise regulations applicable to the Project.

Groundborne Vibration

The CEQA Guidelines do not define the levels at which groundborne vibration is considered "excessive." This analysis uses the Federal Railway Administration's vibration impact thresholds for sensitive buildings, residences, and institutional land uses. These thresholds for residences and buildings where people normally sleep (e.g., nearby residences) are 80 VdB for infrequent activities (less than 70 per day) and 72 VdB for frequent events (more than 70 per day).

State

Noise

The California Department of Health Services (DHS), Office of Noise Control, has published the Guidelines for Noise and Land Use Compatibility, which recommend guidelines for local governments to use when setting standards for human exposure to noise and preparing noise elements for general plans. These guidelines are summarized in Table IV.J-3, Noise and Land Use Compatibility Criteria. It should be noted that application of these guidelines to development projects is not mandated by the DHS; however, each jurisdiction is required to consider the Noise and Land Use Compatibility Criteria when developing its general plan noise element and when determining acceptable noise levels within its community.

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[2] *California Department of Transportation, Transportation Related Earthborne Vibrations, Technical Advisory Number TAV-02-01-R9601, February 20, 2002.*

Table IV.J-3
Noise and Land Use Compatibility Criteria

Land Use	Community Noise Exposure (L_{dn} or CNEL, dB)			
	Normally Acceptable[a]	**Conditionally Acceptable[b]**	**Normally Unacceptable[c]**	**Clearly Unacceptable[d]**
Single-family, Duplex, Mobile Homes	50 - 60	55 - 70	70 - 75	above 70
Multi-Family Homes	50 - 65	60 - 70	70 - 75	above 70
Schools, Libraries, Churches, Hospitals, Nursing Homes	50 - 70	60 - 70	70 - 80	above 80
Transient Lodging – Motels, Hotels	50 - 65	60 - 70	70 - 80	above 80
Auditoriums, Concert Halls, Amphitheaters	---	50 - 70	---	above 65
Sports Arena, Outdoor Spectator Sports	---	50 - 75	---	above 70
Playgrounds, Neighborhood Parks	50 - 70	---	67 - 75	above 72
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50 - 75	---	70 - 80	above 80
Office Buildings, Business and Professional Commercial	50 - 70	67 - 77	above 75	---
Industrial, Manufacturing, Utilities, Agriculture	50 - 75	70 - 80	above 75	---

[a] Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.
[b] Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.
[c] Normally Unacceptable: New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
[d] Clearly Unacceptable: New construction or development should generally not be undertaken.

Source: Office of Noise Control, California Department of Health Services (DHS).

As shown in Table IV.J-3, residential land uses and other noise sensitive receptors generally should be located in areas where outdoor ambient noise levels do not exceed 65 to 70 dBA (L_{dn} or CNEL). For single-family, duplex, and mobile homes, an exterior noise level up to 60 dBA (L_{dn} or CNEL) is considered to be a "normally acceptable" noise level, which is based on the assumption that any buildings involved are of normal construction that would not require special noise insulation. For multi-family homes, motels, and hotels, an exterior noise level up to 65 dBA (L_{dn} or CNEL) is considered to be a "normally acceptable" noise level. Between these noise values and 70 dBA (L_{dn} or CNEL), exterior noised levels for these land uses would be considered to be "conditionally acceptable," where construction should only occur after a detailed analysis of the noise reduction requirements is made and needed noise attenuation features are included in the Project site. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice. For commercial uses, exterior noise levels up to 70 dBA (L_{dn} or CNEL) are considered to be a "normally acceptable" noise level, while exterior noise levels up to 77 dBA (L_{dn} or CNEL) are considered to be a "conditionally acceptable" noise level.

Title 24 of the California Code of Regulations codifies Sound Transmission Control requirements, which establishes uniform minimum noise insulation performance standards for new hotels, motels, dormitories, apartment houses, and dwellings other than detached single-family dwellings. Specifically, Title 24 states that interior noise levels attributable to exterior sources shall not exceed 45 dBA CNEL in any habitable room of new multi-family dwellings. Dwellings are to be designed so that interior noise levels will meet this standard for at least 10 years from the time of building permit application.

Groundborne Vibration

There are no adopted State policies or standards for groundborne vibration. The traditional view has been that vibrations associated with highway traffic and construction poses no threat to buildings and structures, and that annoyance to people is no worse than other discomforts experienced from living near highways.[3]

Local

Town of Mammoth Lakes Noise Regulation

The Town of Mammoth Lakes (Town) is the local agency responsible for adopting and implementing policies as they relate to noise levels and its affect on land uses within its jurisdiction. Both acceptable and unacceptable noise levels associated with construction activities and exterior noise levels at various land use zones have been defined and quantified. Chapter 8.16 of the Mammoth Lakes Municipal Code (Town Noise Ordinance) controls unnecessary, excessive, and annoying noise in the Town. The Town Noise Ordinance sets forth sound measurement and criteria, maximum ambient noise levels for different land use zoning classifications, sound emission levels for specific uses, hours of operation for certain uses, standards for determining when noise is deemed to be a disturbance to the peace, and legal remedies for violations.

Exterior Noise Limits

Section 8.16.070 of the Town Noise Ordinance establishes exterior noise limits for various land use categories. These exterior noise limits are shown in Table IV.J-4, Town's Exterior Noise Limits. According to Section 8.16.070 of the Town Noise Ordinance, noise levels are not allowed to exceed:

1) The noise standard for that land use identified in Table IV.J-4 for a cumulative period of more than thirty minutes in any hour; or

[3] *California Department of Transportation, Transportation Related Earthborne Vibrations, Technical Advisory Number TAV-02-01-R9601, February 20, 2002.*

2) The noise standard plus five decibels for a cumulative period of more than fifteen minutes in any hour; or

3) The noise standard plus ten decibels for a cumulative period of more than five minutes in any hour; or

4) The noise standard plus fifteen decibels for a cumulative period of more than one minute in any hour; or

5) The noise standard plus twenty decibels or the maximum measured ambient level, for any period of time.

Table IV.J-4
Town of Mammoth Lakes Exterior Noise Limits

Receiving Land Use	Time Period	Noise Zone Classification[a] Maximum Noise Levels (dBA) (Levels Not to Be Exceeded More Than Thirty Minutes in Any Hour)		
		Rural/ Suburban	Suburban	Urban
One and Two Family Residential	10 P.M. to 7 A.M.	40	45	50
	7 A.M. to 10 P.M.	50	55	60
Multiple Dwelling Residential/Public Space	10 P.M. to 7 A.M.	45	50	55
	7 A.M. to 10 P.M.	50	55	60
Limited Commercial/Some Multiple Dwellings	10 P.M. to 7 A.M.	55	--	--
	7 A.M. to 10 P.M.	60	--	--
Commercial	10 P.M. to 7 A.M.	60	--	--
	7 A.M. to 10 P.M.	65	--	--
Light Industrial	Anytime	70	--	--
Heavy Industrial	Anytime	75	--	--

[a] *The classification of different areas of the community in terms of environmental noise zones shall be determined by the noise control officer, based upon assessment of community noise survey data. Additional area classification should be used as appropriate to reflect both lower and higher existing ambient levels than those shown. Industrial noise limits are intended primarily for use at the boundary of industrial zones rather than for noise reduction within the zone.*

Source: Town of Mammoth Lakes Noise Ordinance, Chapter 8.16.

In addition, if the existing exterior ambient noise level exceeds the permissible level within the noise limit categories, the allowable noise exposure standard is increased in five dBA increments in each category as appropriate to encompass or reflect the ambient noise level. Furthermore, in the event the ambient noise level exceeds the fifth noise limit category, the maximum allowable noise level under this category would be increased to reflect the maximum ambient noise level (Section 8.16.070 and 8.16.080 of the Town Noise Ordinance).

Interior Noise Limits

Section 8.16.080 of the Town Noise Ordinance establishes interior noise limits for multifamily residential dwellings. According to Section 8.16.080 of the Town Noise Ordinance, interior noise levels resulting from outside sources within residential units shall not exceed 45 dBA for a cumulative period more than five minutes in any hour between 7 A.M. and 10 P.M., and 35 dBA for a cumulative period of more than five minutes in any hour between 10 P.M. and 7 A.M. In addition, interior noise levels may not exceed:

1) The noise standards plus five decibels for a cumulative period of more than one minute in any hour; or

2) The noise standard plus ten decibels or the maximum measured ambient, for any period of time.

Furthermore, if the existing interior ambient noise level exceeds the permissible level within the noise limit categories, the allowable noise exposure standard is increased in five dBA increments in each category as appropriate to encompass or reflect the ambient noise level.

Construction Noise Limits

According to Section 15.08.020 of the Town Municipal Code, construction activities are permitted between the hours of 7 A.M. and 8 P.M., Monday through Saturday. Work hours on Sundays and Town recognized holidays are limited to the hours between 9 A.M. and 5 P.M., and are permitted only with the approval of the building official or designee.

The Town has established noise standards for construction activity in Section 8.16.090 of the Town Noise Ordinance. The construction noise standards are shown in Table IV.J-5, Town Construction Noise Standards. As shown in Table IV.J-5, the Town has established maximum exterior noise levels during permitted work hours from the operation of equipment used in construction, drilling, repair, alteration, or demolition work. All mobile and stationary internal-combustion powered equipment and machinery are also required to be equipped with suitable exhaust and air-intake silencers in proper working order.

Table IV.J-5
Town of Mammoth Lakes Construction Noise Standards

Construction Equipment[a]	Maximum Noise Levels			
	Type I Areas Single-Family Residential	**Type II Areas Multi-Family Residential**	**Type III Areas Semi-Residential Commercial**	**Business Properties**
Mobile Equipment[b]				
Daily, except Sundays and legal holidays; 7 A.M. to 8 P.M.	75 dBA	80 dBA	85 dBA	--
Daily, 8 P.M. to 7 A.M. and all day Sunday and legal holidays	60 dBA	65 dBA	70 dBA	--
Daily, including Sunday and legal holidays; All hours	--	--	--	85 dBA
Stationary Equipment[c]				
Daily, except Sundays and legal holidays; 7 A.M. to 8 P.M.	60 dBA	65 dBA	70 dBA	--
Daily, 8 P.M. to 7 A.M. and all day Sunday and legal holidays	50 dBA	55 dBA	60 dBA	--
Daily, including Sunday and legal holidays, All hours	--	--	--	75 dBA

[a] *All mobile or stationary internal combustion engine-powered equipment or machinery shall be equipped with suitable exhaust and air intake silencers in proper working order.*
[b] *Maximum noise levels for nonscheduled, intermittent, short-term operation (less than ten days) of mobile equipment.*
[c] *Maximum noise levels for repetitively scheduled and relatively long-term operation (periods of ten days or more) of stationary equipment.*

Source: Town of Mammoth Lakes Noise Ordinance, Chapter 8.16.

Town of Mammoth Lakes Groundborne Vibration Regulation

A vibration threshold has been established in Section 8.16.090 of the Town Noise Ordinance. As indicated in Section 8.16.090 of the Noise Ordinance, operating or permitting the operation of any device that creates a vibration that is above the vibration perception threshold of an individual at or beyond the property boundary of the source if on private property or at 150 feet (46 meters) from the source if on a public space or public right-of-way is prohibited. According to Section 8.16.020 of the Town Noise Ordinance, the vibration perception threshold is generally defined as a motion velocity of 0.01 inch per second over the range of one to one hundred Hertz (Hz),[4] which is considered to be the minimum ground-borne or structure-borne vibrational motion necessary to cause a normal person to be aware of the vibration by such direct means as, but not limited to, sensation by touch or visual observation of moving objects.

[4] *Hertz is a unit of frequency equal to one cycle per second.*

Existing Conditions

Existing Noise Environment

The Project site and surrounding area are characterized predominantly by residential and resort developments. The Project site is primarily bounded to the east, south and west by completed Lodestar Master Plan developments, including the Sierra Star Golf Course and residential condominiums and townhomes. The northwest portion of the Project site is bordered by The Village at Mammoth resort area. Surrounding land use zoning includes Resort (R), Specific Plan (SP), Commercial Lodging (CL), Residential Single Family (RSF), and Residential Multiple-Family 1 (RMF-1).

The Project site currently consists of a total of 457 residential units that have been developed or approved under the Lodestar Master Plan. The residential units include a 46-unit condominium development (Area 1A, Mammoth Green), a 24-unit condominium project (Area 1B, The Cabins), an 11-lot single family residential subdivision (Area 1C, Crooked Pines), an 8-unit Multi-Family residential structure (Area 1D), a 54-lot single family residential subdivision (Area 3, Starwood), a 35-unit Workforce Housing development (Area 4C, The Chutes), and a 32-unit townhome condominium project (Area 5F, The Timbers). A 58-unit condominium project (Area 5E, Solstice) and a 19-unit condominium project (Area 6, Tallus) are currently under construction and a 40-unit Workforce Housing condominium project (Area 4B/4E) and a 28-unit townhome condominium project (Area 5G, Woodwinds) were recently approved within the Project site. Additionally, 44-units of density (4D, Mammoth Crossing) were sold to Western Resort Properties. The 4D: Mammoth Crossings (Lode*Star) project was approved by the Planning Commission on February 14, 2007 with 44 units of density. Currently, no commercial space that was proposed under the Lodestar Master Plan has been developed within the Project site.

According to the Town General Plan Noise Element, the most significant noise sources in the Town include:

- Traffic on State Route 203 and major Town roadways
- Aircraft operations at Mammoth/June Lakes Airport (Mammoth Yosemite Airport)
- Helicopter operations at Mammoth Hospital[5]
- Snowmaking operations
- Snow removal activities
- Avalanche control operations

[5] *The Mammoth Hospital is no longer being used for helicopter operations.*

- Industrial activities near State Route 203 and Meridian Boulevard

Additional noise sources in the Town also result from temporary or periodic construction activities as well as recreational activities, such as the use of snowmobiles and off-road motorcycles. Located within the Town, the Project site is also subject to these various noise sources.

Existing Roadway Noise Levels Onsite

While the various noise sources identified above generate mostly short-term noise levels, vehicular traffic is the major long-term noise source in the Town. Due to the lack of buildings or other obstructions within the Project site, the noise generated by traffic is able to travel large distances and can be heard throughout the Project site.

Existing (winter 2004) roadway noise levels were calculated for the roadway segment of Minaret Road bisecting the Project site and the roadway segments of Main Street and Meridian Boulevard bordering the Project site to identify on-site noise levels due to traffic.[6] This task was accomplished using the Federal Highway Administration Highway Noise Prediction Model (FHWA-RD-77-108) and traffic volumes from the Project traffic analysis (included as Appendix J to this Draft EIR). The noise model calculates the average noise level at specific locations based on traffic volumes, average speeds, roadway geometry, and site environmental conditions. The average vehicle noise rates (energy rates) utilized in the FHWA Model have been modified to reflect average vehicle noise rates identified for the state of California by Caltrans. The Caltrans data show that California automobile noise is 0.8 to 1.0 dBA higher than national levels and that medium and heavy truck noise is 0.3 to 3.0 dBA lower than national levels. The calculated average daily 24-hour noise levels along these roadway segments are presented in Table IV.J-6, Existing (Winter 2004) Roadway Noise Levels Onsite.

Existing Roadway Noise Levels Offsite

Existing (winter 2004) roadway noise levels were calculated for the roadway segments in the Project vicinity that have existing noise-sensitive uses facing the roadways. As with the on-site noise levels, this task was accomplished using the FHWA-RD-77-108 model and traffic volumes from the Project traffic analysis. The average daily noise levels along these roadway segments are presented in Table IV.J-7, Existing (Winter 2004) Roadway Noise Levels Offsite. These noise measurements shown represent the noise levels experienced at approximately 75 feet from the roadway centerline.

[6] *The roadway noise levels are calculated for the existing (2004) typical winter Saturday condition, which was used to represent the baseline condition in the Traffic Impact Analysis for the Project.*

Table IV.J-6
Existing (Winter 2004) Roadway Noise Levels Onsite

Roadway	Roadway Segment	Reference CNEL at 100 feet[a]	Distance to Noise Contour (feet)		
			70 L_{dn}	65 L_{dn}	60 L_{dn}
Minaret Road	Main Street to Meridian Boulevard	58.0	16	34	74
Main Street	Minaret Road to Mountain Boulevard	62.4	31	68	145
Meridian Boulevard	West of Minaret Road	58.3	—	36	77
	Minaret Road to Old Mammoth Road	58.0	—	34	73

— = noise contour is located within the roadway lanes

[d] *Distances are in feet from roadway centerline. The identified noise level at 100 feet from the roadway centerline is for reference purposes only as a point from which to calculate the noise contour distances. It does not reflect an actual building location or potential impact location.*

Source: Christopher A. Joseph and Associates, 2006. Calculation data and results are provided in Appendix H to this Draft EIR.

Table IV.J-7
Existing (Winter 2004) Roadway Noise Levels Offsite

Roadway	Roadway Segment	Off-Site Noise Sensitive Uses	dBA L_{dn} at 75 feet[a]
Minaret Road	North of Main Street	Residential	62.4
	Meridian Boulevard to Old Mammoth Road	Residential	58.1
Lake Mary Road	West of Minaret Road	Residential	64.5
Meridian Boulevard	Minaret Road to Majestic Pines Drive	Residential	62.5
	Minaret Road to Old Mammoth Road	Residential	62.1
	Sierra Park Road to Main Street	Residential	58.2
Old Mammoth Road	West of Minaret Road	Residential	60.7
	Minaret Road to Meridian Boulevard	Residential	58.2
	Meridian Boulevard to Main Street	Residential	62.5

[a] *The dBA L_{dn} values represent the noise levels experienced at approximately 75 feet from the roadway centerline.*

Source: Christopher A Joseph and Associates, 2006. Calculation data and results are provided in Appendix H of this Draft EIR.

Existing Groundborne Vibration

Existing sources of groundborne vibration in the Town, including the Project site and its vicinity, generally include, but are not limited to, construction activities, avalanche control activities (e.g., blasting), snow removal activities, and roadway truck traffic. Within the Project site, the existing residential uses are considered to be vibration-sensitive land uses.

ENVIRONMENTAL IMPACTS

Methodology

Implementation of the Project could result in the introduction of noise levels that may exceed permitted Town noise levels. The primary sources of noise associated with the Project would be construction activities at the Project site and Project-related traffic volumes associated with operation of the proposed residential and commercial developments. Secondary sources of noise would include new stationary sources (such as heating, ventilation, and air conditioning units) and increased human activity throughout the Project site. The net increase in Project site noise levels generated by these activities and other sources have been quantitatively estimated and compared to the applicable noise standards and thresholds of significance.

Aside from noise levels, groundborne vibration would also be generated during the construction phase of the Project by various construction-related activities and equipment. Thus, the groundborne vibration levels generated by these sources have also been quantitatively estimated and compared to applicable thresholds of significance.

Construction Noise Levels

Construction noise levels were estimated by data published by the United States Environmental Protection Agency (U.S. EPA). Potential noise levels are identified for off-site locations that are sensitive to noise, including existing residences.

Roadway Noise Levels

Roadway noise levels have been calculated for various locations around the Project site vicinity. The noise levels were calculated using the FHWA-RD-77-108 model and traffic volumes from the Project traffic analysis. The average vehicle noise rates (energy rates) utilized in the FHWA Model have been modified to reflect average vehicle noise rates identified for California by Caltrans.

Groundborne Vibration Associated with Construction Equipment

Groundborne vibration levels resulting from construction activities occurring within the Project site were estimated by data published by Harris Miller Miller & Hanson Inc. for the Federal Transit Administration. Potential vibration levels resulting from construction of the Project are identified for off-site locations that are sensitive to vibration, including existing residences.

Thresholds of Significance

In accordance with Appendix G of the CEQA Guidelines, the Project could have a significant environmental impact if it would result in:

(a) Exposure of persons to or generation of noise levels in excess of standards established in any applicable plan or noise ordinance, or applicable standards of other agencies;

(b) Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels;

(c) A substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project;

(d) A substantial temporary or periodic increase in ambient noise levels in the Project above levels existing without the Project;

(e) Exposure of people residing or working in the Project area to excessive noise levels if the Project is located within an area covered by an airport land use plan, or where such plan has not been adopted, within two miles of a public airport or public use airport; or

(f) Exposure of people residing or working in the Project area to excessive noise levels if the Project is located in the vicinity of a private airstrip.

The State CEQA Guidelines do not define the levels at which groundborne vibration or groundborne noises are considered "excessive." This analysis uses the Town's vibration impact threshold identified in Section 8.16.090 of the Town Noise Ordinance. According to Section 8.16.090 of the Town Noise Ordinance, operating or permitting the operation of any device that creates a vibration that is above the vibration perception threshold of an individual at or beyond the property boundary of the source if on private property or at 150 feet (46 meters) from the source if on a public space or public right-of-way is prohibited. The vibration perception threshold is generally defined in the Town Noise Ordinance as a motion velocity of 0.01 inch per second over the range of one to one hundred Hertz (Hz).

The CEQA Guidelines do not define the levels at which temporary and permanent increases in ambient noise are considered "substantial." As discussed previously in this section, a noise level increase of three dBA is barely perceptible to most people, a five dBA increase is readily noticeable, and a difference of 10 dBA would be perceived as a doubling of loudness. Based on this information, an increase in the L_{dn} noise level resulting from the Project at noise sensitive land uses of three dBA or greater would be considered a significant impact when projected noise levels would exceed those considered satisfactory for the affected land use (see Table IV.J-4, Town of Mammoth Lakes Exterior Noise Limits). If the noise environment at the sensitive land use is at or below normally-acceptable noise levels, an increase in noise levels of five dBA or greater would be considered significant.

Project Impacts and Mitigation Measures

Impact NOISE-1 Exposure of Persons to Excessive Noise Levels

Construction Noise

Construction of the Project would require the use of heavy equipment for site grading and excavation, installation of utilities, paving, and building fabrication. Development activities would also involve the use of smaller power tools, generators, and other sources of noise. During each stage of development, there would be a different mix of equipment operating and noise levels would vary based on the amount of equipment in operation and the location of the activity.

The U.S. EPA has compiled data regarding the noise generating characteristics of specific types of construction equipment and typical construction activities. These data are presented in Tables IV.J-8, Noise Ranges of Typical Construction Equipment, and IV.J-9, Typical Outdoor Construction Noise Levels. These noise levels would diminish rapidly with distance from the construction site at a rate of approximately 6 dBA per doubling of distance. For example, a noise level of 84 dBA L_{eq} measured at 50 feet from the noise source to the receptor would reduce to 78 dBA L_{eq} at 100 feet from the source to the receptor, and reduce by another 6 dBA L_{eq} to 72 dBA L_{eq} at 200 feet from the source to the receptor.

During construction, two basic types of activities would be expected to occur and generate noise. The first activity would involve the preparation, excavation, and grading of the Project site to accommodate the building foundations for the new residential developments that are being proposed.[7] The second activity that would generate noise during construction would involve the physical construction and finishing of the new buildings. Overall, construction activities within the Project site are anticipated to occur over a six-year period, ending in 2012. No pile driving activities would be required for the Project.

Table IV.J-8
Noise Ranges of Typical Construction Equipment

Construction Equipment	Noise Levels in dBA L_{eq} at 50 feet[a]
Front Loader	73–86
Trucks	82–95
Cranes (moveable)	75–88
Cranes (derrick)	86–89
Vibrator	68–82
Saws	72–82
Pneumatic Impact Equipment	83–88
Jackhammers	81–98
Pumps	68–72

[7] *Limited commercial development (up to a maximum of 29,000 square feet of retail space and up to a maximum of 50,000 square feet of conference center/commercial space) would also be allowed in specific sectors of the plan with discretionary approval by the Town.*

Table IV.J-8
Noise Ranges of Typical Construction Equipment

Construction Equipment	Noise Levels in dBA L_{eq} at 50 feet[a]
Generators	71–83
Compressors	75–87
Concrete Mixers	75–88
Concrete Pumps	81–85
Back Hoe	73–95
Pile Driving (peaks)	95–107
Tractor	77–98
Scraper/Grader	80–93
Paver	85–88

[a] *Machinery equipped with noise control devices or other noise-reducing design features does not generate the same level of noise emissions as that shown in this table.*

Source: U.S. EPA 1971

Table IV.J-9
Typical Outdoor Construction Noise Levels

Construction Phase	Noise Levels at 50 Feet with Mufflers (dBA L_{eq})	Noise Levels at 60 Feet with Mufflers (dBA L_{eq})	Noise Levels at 100 Feet with Mufflers (dBA L_{eq})	Noise Levels at 200 Feet with Mufflers (dBA L_{eq})
Ground Clearing	82	80	76	70
Excavation, Grading	86	84	80	74
Foundations	77	75	71	65
Structural	83	81	77	71
Finishing	86	84	80	74

Source: U.S. EPA, 1971.

As shown in Table IV.J-9, typical outdoor noise levels at noise-sensitive receptors 50 feet from the noise source could range from 77 dBA to 86 dBA L_{eq} with the use of noise-attenuating devices. The noisiest pieces of equipment that would be used during the Project's construction phase would include jackhammers and pavers, which produce noise levels of approximately 75 and 80 dB(A) at 50 feet with implementation of the required feasible noise reduction control measures. Construction equipment would not include pile drivers. As with all construction equipment, these noise levels would diminish rapidly with distance from the construction site at a rate of approximately six dB(A) per doubling of distance. The uses nearest the Project site that are sensitive to construction noise are the existing multi-family residential uses located on both sides of Minaret Road that are adjacent to the Project site's boundaries. The property line of the nearest off-site, multi-family residential uses are located approximately 80 feet from the edge of the areas of construction within the Project site. Based on the information presented in Table IV.J-9, excavation and grading activities occurring at the Project site could reach approximately 82

dBA L_{eq} during the daytime at the property line of these multi-family residential uses.[8] In addition, it should also be noted that because the proposed developments within the Project site would be developed in different phases over a construction period of six years, some portions of the Project site may be developed and occupied with residents during the construction of the remaining portions of the Project site. Consequently, these new residents would also be exposed to construction noise levels.

Currently, under Section 15.08.020 of the Town Municipal Code, construction activities are limited to between the hours of 7 A.M. and 8 P.M., Monday through Saturday. Work hours on Sundays and Town recognized holidays are limited to the hours between 9 A.M. and 5 P.M., and are permitted only with the approval of the building official or designee. In addition, the Town has established noise standards for construction activity in Section 8.16.090 of the Town Noise Ordinance (see Table IV.J-5, Town of Mammoth Lakes Construction Noise Standards). According to these established construction noise standards, the maximum exterior noise levels allowed in multi-family residential areas for mobile (e.g., excavator, backhoe, dozer, loader, etc.) and stationary equipment (e.g., generators, compressors, pumps, etc.) during 7 A.M. to 8 P.M. Monday through Saturday are 80 dBA and 65 dBA, respectively. In addition, the maximum exterior noise levels allowed in multi-family residential areas for mobile and stationary equipment during 8 P.M. to 7 A.M. Monday through Saturday, and all day Sunday and legal holidays, are 64 dBA and 55 dBA, respectively. Furthermore, all mobile and stationary internal-combustion powered equipment and machinery are required to be equipped with suitable exhaust and air-intake silencers in proper working order under the Town Noise Ordinance.

Because the Project would be required to comply with the provisions of the Town Municipal Code and Noise Ordinance, construction activities associated with the Project would only occur within the hours permitted for construction within the Town (i.e., 7 A.M. to 8 P.M., Monday through Saturday, and 9 A.M. to 5 P.M. on Sundays and Town recognized holidays with approval of the building official or designee). However, as discussed above, due to the close proximity of some existing off-site residential uses to the Project site, the construction noise levels experienced by these off-site uses during construction of the Project would exceed the maximum exterior noise level standards allowed for mobile and stationary construction equipment under the Town Noise Ordinance. As such, a ***significant*** impact could result. To reduce the noise levels resulting from construction of the Project to the extent feasible, Mitigation Measures NOISE-1a and NOISE-1b shall be implemented, which requires the Project to comply with the construction hours of the Town Municipal Code and that construction best management practices (BMPs) to be implemented by contractors to reduce construction noise levels. While these noise attenuation measures would reduce the construction noise levels of the Project to the maximum extent feasible, they would not ensure that the noise levels would not exceed the Town's maximum exterior noise standard for

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[8] *The noise level was determined with the following equation from Harris Miller Miller & Hanson Inc.'s (HMMH) Transit Noise and Vibration Impact Assessment, Final Report: L_{eq} = L_{eq} at 50 ft. – 20 Log(D/50), where L_{eq} = noise level of noise source, D = distance from the noise source to the receiver, L_{eq} at 50 ft.= noise level of source at 50 feet.*

construction activity at single-family residential, multi-family residential, commercial, and business properties (see Table IV.J-5, Town of Mammoth Lakes Construction Noise Standards). Depending on the distance of nearby off-site uses to the Project site, implementation of Mitigation Measures NOISE-1 and NOISE-1b would ensure that noise levels are below the Town's maximum exterior noise standards for construction activity, resulting in a ***less-than-significant*** level.

Mitigation Measure NOISE-1a Exposure of Persons to Excessive Noise Levels

Construction activities shall be limited to between the hours of 7 A.M. and 8 P.M., Monday through Saturday. Work hours on Sundays and Town recognized holidays shall be limited to the hours between 9 A.M. and 5 P.M., and shall be permitted only with the approval of the building official or designee.

Mitigation Measure NOISE-1b Exposure of Persons to Excessive Noise Levels

Project developers shall require by contract specifications that the following construction best management practices (BMPs) be implemented by contractors to reduce construction noise levels:

- Provide advance notification of construction to the immediate surrounding land uses around a development site
- Ensure that construction equipment is properly muffled according to industry standards
- Place noise-generating construction equipment and locate construction staging areas away from residences, where feasible
- Schedule high noise-producing activities between the hours of 8 A.M. and 5 P.M. to minimize disruption on sensitive uses
- Implement noise attenuation measures to the extent feasible, which may include, but are not limited to, noise barriers or noise blankets

Traffic Noise Levels On-site

Upon completion of the Project, noise levels within the Project site would be dominated by vehicular traffic on the surrounding roadways. As discussed previously, the Town has established exterior noise standards for different land uses. As indicated in the Town Noise Ordinance, noise levels at each land use may not exceed the exterior noise standard plus 20 dBA for any period of time (maximum noise level). As such, the maximum noise level that is allowed for any period of time for one and two-family residential uses would be 60 dBA L_{dn} (See Table IV.J-4, Town of Mammoth Lakes Exterior Noise Limits). As the residential development associated with the Project would include single-family and multi-family residential units, the average daily noise levels along the roadway segment of Minaret Road bisecting the Project site and the roadway segments of Main Street and Meridian Boulevard bordering the

Project site are determined to identify on-site noise levels due to traffic on these roadways in the future when the Project is completed. Table IV.J-10, Cumulative Plus Project Roadway Noise Levels Onsite, shows the average daily 24-hour noise levels along these roadway segments in the future when development of the Project along with the other related projects are completed.

Table IV.J-10 shows the distances from the roadway centerlines to the 60 L_{dn} contour for each of the roadways that would either bisect or border the Project site in the future when built-out of Project has been completed. Based on the conceptual site plan for the Project showing the locations of the proposed residential uses relative to the surrounding roadways, none of the residential uses proposed in the Project site would be located within the 60 L_{dn} contours of the roadways analyzed in Table IV.J-10. Thus, the proposed residential uses within the Project site would not be exposed to traffic noise levels exceeding 60 L_{dn}. Thus, impacts associated with traffic noise levels onsite would be ***less than significant***.

Table IV.J-10
Cumulative Plus Project Roadway Noise Levels Onsite

Roadway	Roadway Segment	Reference CNEL at 100 feet[a]	Distance to Noise Contour (feet)		
			70 L_{dn}	65 L_{dn}	60 L_{dn}
Minaret Road	Main Street to Sierra Star Parkway	61.0	25	54	116
	Sierra Star Parkway to Meridian Boulevard	60.7	24	52	112
Main Street	Minaret Road to Mountain Boulevard	63.7	38	82	178
Meridian Boulevard	West of Sierra Star Parkway	60.0	—	46	100
	Sierra Star Parkway to Minaret Road	60.3	—	49	105
	Minaret Road to Old Mammoth Road	59.5	—	43	92
Sierra Star Parkway	Meridian Boulevard to Minaret Road	49.3	—	—	19
	Minaret Road to Main Street	47.7	—	—	15
Secondary Sierra Star Access	Minaret Road to Main Street	44.2	—	—	—

— = noise contour is located within the roadway lanes
[a]

Source: Christopher A. Joseph and Associates, 2006. Calculation data and results are provided in Appendix H to this Draft EIR.

Impact NOISE-2 Excessive Construction-Related Groundborne Vibration

Construction activities that would occur within the Project site would include grading and excavation, which would have the potential to generate low levels of groundborne vibration. Table IV.J-11, Vibration Source Levels for Construction Equipment, identifies various PPV levels for the types of construction equipment that would operate during the construction of the Project. Based on the information presented

in Table IV.J-11, vibration levels could reach as high as approximately 0.089 PPV within 25 feet of the Project site from the operation of a large bulldozer.

Table IV.J-11
Vibration Source Levels for Construction Equipment

Construction Equipment	PPV at 25 feet (in/sec)
Large Bulldozer	0.089
Caisson Drilling	0.089
Loaded Trucks	0.076
Jackhammer	0.035
Small Bulldozer	0.003
Source: Harris Miller Miller Hanson, Transit Noise and Vibration Impact Assessment, Final Report, April 1995.	

Construction activities associated with the Project would have the potential to impact the existing off-site sensitive receptors to the Project site, which includes the multi-family residential uses that are located adjacent to the Project site's boundaries on both sides of Minaret Road. The nearest multi-family residential uses include those located adjacent to the easternmost Project site boundary, and the multi-family residential uses located adjacent to the southernmost Project site boundary just north of Meridian Boulevard and south of Sierra Star Parkway. These multi-family residential uses are located approximately 80 feet from the construction areas within the Project site. Based on this distance, the vibration levels at these multi-family residential uses could reach as high as 0.016 PPV when large bulldozers are operating within the Project site.[9]

As discussed under Regulatory Framework above, the Town of Mammoth Lake has identified a vibration impact threshold in Section 8.16.090 of the Town Noise Ordinance. According to Section 8.16.090 of the Town Noise Ordinance, operating or permitting the operation of any device that creates a vibration that is above the vibration perception threshold of an individual at or beyond the property boundary of the source if on private property or at 150 feet (46 meters) from the source if on a public space or public right-of-way is prohibited. The vibration perception threshold is generally defined in the Town Noise Ordinance as a motion velocity of 0.01 inch per second over the range of one to one hundred Hertz (Hz).

As discussed above, some of the multi-family residential uses located adjacent to the Project site's boundaries could experience vibration levels as high as 0.016 PPV during construction at the Project site. Consequently, operation of construction equipment at the Project site could exceed the vibration threshold of 0.01 inch per second at sensitive uses or on a public space or public right-of-way that is 150 feet from

[9] *The vibration level was determined with the following equation from Harris Miller Miller & Hanson Inc.'s (HMMH) Transit Noise and Vibration Impact Assessment, Final Report: $PPV_{equip} = PPV_{ref} X (25/D)^{1.5}$, where PPV_{equip} = Peak particle velocity in in/sec of the equipment adjusted for distance, PPV_{ref} = Reference vibration level in in/sec at 25 feet from Table IV.J-9,D = Distance from the equipment to receiver..*

the equipment. As such, a ***significant*** impact could result. In an effort to minimize the vibration levels experienced by the existing off-site residential uses located near the Project site, Mitigation Measure NOISE-2 shall be implemented to require the operation of vibration-generating equipment to be located as far away from vibration-sensitive sites as possible. Construction of the Project would require the use of typical construction equipment that could generate some ground-borne vibration and ground-borne noise, but the Project would not involve the use of pile drivers, which have the potential to generate substantial vibration. In addition, per the City's requirements, construction activities that would produce groundborne vibration would primarily occur between the hours of 7:00 AM and 8:00 PM Monday through Friday. Therefore, these activities would not occur during recognized sleep hours for residences. Based on this information, proposed construction activities associated with the Project would not expose sensitive receptors in the Project vicinity to excessive groundborne vibration levels. Therefore, Project impacts related to excessive construction-related groundborne vibration would be considered ***less than significant***.

Mitigation Measure NOISE-2 Excessive Construction-Related Groundborne Vibration

Project developers shall require by contract specifications that construction staging areas along with the operation of earthmoving equipment on a construction site within the Project site would be located as far away from vibration-sensitive sites as possible. Contract specifications shall be included in the Project construction documents, which shall be reviewed by the Town prior to issuance of a grading permit.

Impact NOISE-3 Temporary Increases in Noise (Construction Noise)

As discussed previously, the uses nearest the Project site that are sensitive to construction noise are the existing multi-family residential uses located on both sides of Minaret Road that are adjacent to the Project site's boundaries. The property line of the nearest off-site, multi-family residential uses are located approximately 80 feet from the edge of the areas of construction within the Project site. Based on this distance, construction activities occurring at the Project site could reach approximately 82 dBA L_{eq} during the daytime at the property line of these multi-family residential uses. These construction activities would represent a substantial temporary or periodic increase in ambient noise levels because the Project site is currently undeveloped and does not contain any noise sources. As discussed under the Thresholds of Significance heading of this section, this EIR assumes that an increase of five dBA or greater over ambient noise levels is substantial and significant. Because the Project site is currently undeveloped and does not contain any noise sources, the noise generated by construction activities for the Project at the Project site would result in a temporary increase in ambient noise levels of over five dBA at the existing off-site, multi-family residential uses that are located adjacent to the Project site boundaries. However, the construction activities would only occur during the permitted hours designated in the Town's Municipal Code, and thus would not occur during recognized sleep hours for residences or on days that residents are most sensitive to exterior noise. In addition, the construction activities would also be required to comply with the construction noise standards established in the Town Noise Ordinance. As such, while the physical impact from an increase in ambient noise levels would occur from the

construction activities associated with the Project, an adverse effect on the nearby residents would not occur. Therefore, with compliance with the Town's Municipal Code and Noise Ordinance, the magnitude of this impact would be reduced to a ***less-than-significant*** level.

Impact NOISE-4 Permanent Increases in Noise (Operational Impacts)

Traffic Noise

The increase in traffic resulting from implementation of the Project would increase the ambient noise levels at sensitive off-site locations in the Project vicinity. Because traffic is considered to be a long-term noise source, a substantial permanent increase in ambient noise levels in the Project vicinity could potentially occur. Table IV.J-12, Predicted Future Roadway Noise Levels Offsite, identifies the changes in future noise levels along the study-area roadway segments in the Project vicinity that have existing residential uses. As discussed previously, a difference of three dBA between 24-hour noise levels is a barely-perceptible increase to most people. A five dBA increase is readily noticeable, and a difference of 10 dBA would be perceived as a doubling of loudness. Thus, as discussed under the Thresholds of Significance heading of this section, this EIR assumes that an increase of five dBA or greater over ambient noise levels is substantial and significant. Furthermore, this EIR also assumes that an increase in noise level of three dBA or greater over ambient noise levels is substantial and significant if the noise increase would meet or exceed the Town's noise level standard for the affected land use, while any increase in noise level below three dBA is not considered perceptible and is therefore ***less than significant*** and no mitigation measures are required.

Table IV.J-12
Predicted Future Roadway Noise Levels Offsite

Roadway Segment	Existing Off-Site Noise Sensitive Uses	Noise Levels in dBA L_{dn} at 75 feet[a]			
		Cumulative (Existing Plus Approved Projects)	Cumulative Plus Project	Increase	Significance Threshold[b]
Minaret Road					
North of Main Street	Residential	64.2	64.4	0.2	3.0
Meridian Boulevard to Old Mammoth Road	Residential	59.8	59.9	0.1	5.0
Lake Mary Road					
West of Minaret Road	Residential	65.7	66.2	0.5	3.0
Meridian Boulevard					
West of Sierra Star Parkway	Residential	63.5	64.1	0.6	3.0
Minaret Road to Old Mammoth Road	Residential	63.2	63.6	0.4	3.0
Sierra Park Road to Main Street	Residential	59.1	59.9	0.8	5.0
Old Mammoth Road					
West of Minaret Road	Residential	62.5	62.5	0.0	3.0
Minaret Road to Meridian Boulevard	Residential	59.5	59.6	0.1	5.0
Meridian Boulevard to Main Street	Residential	63.3	63.3	0.0	3.0

[a] *The dBA L_{dn} values represent the noise levels experienced at approximately 75 feet from the roadway centerline.*

[b] *As described under the Thresholds of Significance heading of this section, the significance threshold is three dBA if the noise increase would meet or exceed the Town's noise level standard for the affected land use (see Table IV.J-4, Town of Mammoth Lakes Exterior Noise Limits). However, if the noise levels remain below the Town's noise level standard for the affected land use, then an increase in noise levels of five dBA or greater would be considered significant.*

Source: Christopher A. Joseph and Associates 2006. Calculation data and results are provided in Appendix H to this Draft EIR.

As shown in Table IV.J-12, implementation of Project would increase local noise levels by a maximum of 0.8 dBA L_{dn} at the segment of Meridian Boulevard located between Sierra Park Road and Main Street. Because the increase in local noise levels at all nine roadway segments resulting from implementation of the Project would not exceed the established thresholds of significance, which are discussed in under the Thresholds of Significance heading of this section, they would not represent a substantial permanent increase in ambient noise levels. Therefore, this impact would be ***less than significant*** and no mitigation measures are required.

On-Site Non-Vehicular Noise

Upon completion of the proposed residential developments associated with the Project, sources of noise that would be generated by operation of the new residential buildings would include new stationary sources such as rooftop heating, ventilation, and air conditioning (HVAC) systems. In addition, limited

commercial development (up to a maximum of 29,000 square feet of retail space and up to a maximum of 50,000 square feet of conference center/commercial space) would also be allowed in specific sectors of the plan area with discretionary approval by the Town. As such, the potential commercial developments would also include stationary sources of noise such as HVAC systems as well as noise associated with delivery vehicles and loading dock activities. However, in accordance with Section 8.16.090 of the Town Noise Ordinance, the HVAC systems associated with the proposed residential and commercial developments within the Project site would be required to be sufficiently enclosed or muffled and maintained so as not to create a noise disturbance in excess of the exterior noise standards established for different land uses in the Town (see Table IV.J-4, Town of Mammoth Lakes Exterior Noise Limits). In terms of noise generated by delivery vehicles and loading dock activities at the hotel and new commercial developments, Section 8.16.090 of the Town Noise Ordinance also prohibits the loading, unloading, opening, closing or other handling of boxes, crates, containers, building materials, garbage cans, or similar objects between the hours of 10 P.M. and 7 A.M. in such a manner as to cause a noise disturbance across a residential property line. Furthermore, the new commercial developments within the Project site would also be subject to the exterior noise standards established by the Town. Thus, with compliance with the provisions of the Town Noise Ordinance, potential noise impacts associated with HVAC systems and commercial loading dock activities would be ***less than significant*** and no mitigation measures are required.

Impact NOISE-5 Exposure of Persons to Excessive Noise Levels from an Airport

The Project is not located within two miles of a public airport. The nearest airport to the Project site is the Mammoth Yosemite Airport (former Mammoth/June Lake Airport), which was purchased by the Town from Mono County in 1992. The Mammoth Yosemite Airport is located approximately seven miles from the Town, and there are currently no sensitive land uses and no people living within the CNEL 65 noise exposure area of the airport.[10] Because development of the Project would not locate sensitive receptors within the airport's 65 CNEL contour, the Project would not expose people residing or working in the Project area to excessive noise levels. As such, ***no impact*** would occur.

Impact NOISE-6 Exposure of Persons to Excessive Noise Levels from a Private Airstrip

The Project site is not located in the vicinity of a private airstrip. As such, ***no impact*** would occur.

[10] *Revised Draft Program Environmental Impact Report, Town of Mammoth Lakes 2005 General Plan Update, Mammoth Lakes, CA, October 2005.*

CUMULATIVE IMPACTS

Impact NOISE-7

This cumulative impact analysis considers development of the Project in combination with ambient growth and other development projects within the vicinity of the Project. As noise is a localized phenomenon, and drastically reduces in magnitude as distance from the source increases, only projects and growth in the nearby area could combine with the Project to result in cumulative noise impacts.

Development of the Project in combination with the related projects would result in an increase in construction-related and traffic-related noise in the Sierra Star Master Plan Area. However, each of the related projects would be subject to Section 15.08.020 of the Town Municipal Code, which limits the hours of allowable construction activities. In addition, each of the related projects would also be subject to Section 8.16.090 of the Town Noise Ordinance, which establishes noise standards for mobile and stationary construction equipment. With conformance with Sections 15.08.020 of the Town Municipal Code and 8.16.090 of the Town Noise Ordinance, the cumulative construction noise impact would be ***less than significant***.

Future construction associated with the related projects could result in a cumulatively significant impact with respect to temporary or periodic increases in ambient noise levels. Construction noise is localized in nature and decreases substantially with distance. Consequently, in order to achieve a substantial cumulative increase in construction noise levels, more than one source emitting high levels of construction noise would need to be in close proximity to the Project. While cumulative development in the Project vicinity would include a total of 49 related projects, some of which are in close proximity to the Project site, the construction activities for each related project would only occur during the permitted hours designated in the Town's Municipal Code, and thus would not occur during recognized sleep hours for residences or on days that residents are most sensitive to exterior noise. In addition, the construction activities would also be required to comply with the construction noise standards established in the Town Noise Ordinance. As such, while the physical impact from an increase in ambient noise levels would occur from the construction activities associated with the related projects, an adverse effect on nearby residents would not occur. Therefore, the cumulative impact of the Project would be ***less than significant***.

Cumulative development in the Town would not result in the exposure of people to or the generation of excessive groundborne vibration, due to the localized nature of vibration impacts and the fact that all construction would not occur at the same time and at the same location. As mentioned above, the construction activities for each related project would only occur during the permitted hours designated in the Town's Municipal Code, and thus would not occur during recognized sleep hours for residences or on days that residents are most sensitive to exterior noise. In addition, the construction activities would also be required to comply with the construction vibration threshold established in the Town Noise Ordinance.

As such, future cumulative development would result in a less-than-significant cumulative impact. Therefore, the cumulative impact of the Project would also be ***less than significant***.

The cumulative baseline and cumulative plus Project ambient noise levels are presented in IV.J-13. As shown Table IV.J-13, cumulative development would increase local noise levels by a maximum of 2.0 dBA L_{dn} along the segment of Minaret Road north of Main Street. With the exception of the segments of Minaret Road, between Meridian Boulevard and Old Mammoth Road, Meridian Boulevard, between Sierra Park Road and Main Street, and Old Mammoth Road, between Minaret Road and Meridian Boulevard, the cumulative noise increase along the other six roadway segments would exceed the City's 60 dBA L_{dn} noise level standard for sensitive land uses. However, because none of the roadway segments would experience an increase in local noise levels by more than 3.0 dBA L_{dn}, the resulting cumulative impact would be less than significant. Since the Project would not contribute to an increase in noise levels of 3.0 dBA L_{dn} or greater at any of the nine roadway segments, the cumulative impact of the Project would be ***less than significant***.

Table IV.J-13
Cumulative Project Roadway Noise Impacts

Roadway Segment	Noise Levels in dBA L_{dn} at 75 feet[a]				
	Existing Traffic	**Cumulative (Existing Plus Approved Projects)**	**Cumulative Plus Project**	**Cumulative Increase**	**Project Contribution**
Minaret Road					
North of Main Street	62.4	64.2	64.4	2.0	0.2
Meridian Boulevard to Old Mammoth Road	58.1	59.8	59.9	1.8	0.1
Lake Mary Road					
West of Minaret Road	64.5	65.7	66.2	1.7	0.5
Meridian Boulevard					
West of Sierra Star Parkway	62.5	63.5	64.1	1.6	0.6
Minaret Road to Old Mammoth Road	62.1	63.2	63.6	1.5	0.4
Sierra Park Road to Main Street	58.2	59.1	59.9	1.7	0.8
Old Mammoth Road					
West of Minaret Road	60.7	62.5	62.5	1.8	0.0
Minaret Road to Meridian Boulevard	58.2	59.5	59.6	1.4	0.1
Meridian Boulevard to Main Street	62.5	63.3	63.3	0.8	0.0

[a] *The dBA L_{dn} values represent the noise levels experienced at approximately 75 feet from the roadway centerline.*

Source: Christopher A. Joseph & Associates 2006. Calculation data and results are provided in Appendix H to this Draft EIR.

With regard to stationary sources, it is also not expected that there would be a cumulatively significant impact. The major stationary source of noise that will be introduced into the Sierra Star Master Plan Area would likely be HVAC equipment for new residential and commercial developments. However, in accordance with Section 8.16.070 of the Town Noise Ordinance, all new developments within the Town would also be subject to the exterior noise standards established by the Town for different land uses (see Table IV.J-4, Town of Mammoth Lakes Exterior Noise Limits). Furthermore, in accordance with Section 8.16.090 of the Town Noise Ordinance, the HVAC systems associated with new developments in the Town would be required to be sufficiently enclosed or muffled and maintained so as not to create a noise disturbance in excess of the exterior noise standards established for different land uses in the Town. Thus, with compliance with the provisions of the Town Noise Ordinance, potential noise impacts associated with HVAC systems would be ***less than significant*** and no mitigation measures are required

LEVEL OF SIGNIFICANCE AFTER MITIGATION

With implementation of Mitigation Measures NOISE-1a, -1b, and NOISE-2, listed above, which would require the implementation of BMPs during construction at the Project site to reduce construction noise levels, and would require that construction staging areas and the operation of earthmoving equipment on construction areas within the Project site be located as far away from vibration-sensitive sites as possible, the construction-related noise impacts associated with the Project would be reduced to a ***less-than-significant*** level.

With implementation of Mitigation Measures NOISE-1a and NOISE-1b listed above, which would require the implementation of BMPs during construction at the Project site to reduce a ***less-than-significant*** level.

With implementation of Mitigation Measure NOISE-2, which serves to locate construction staging areas and earthmoving equipment as far away from vibration-sensitive sites as possible, the construction-related vibration impacts associated with the Project would be reduced to a ***less-than-significant*** level.

IV. ENVIRONMENTAL IMPACT ANALYSIS
K. POPULATION & HOUSING

INTRODUCTION

This section addresses the following: (1) the potential of the Project to induce population and/or housing growth; (2) the degree to which the Project would cause growth in comparison to adopted population and housing growth forecasts; (3) the consistency of the Project with adopted regional and local policies; and (4) the potential of the Project to affect the balance between jobs and housing. In addition, the potential cumulative population and housing impacts of the Project in combination with all known related projects are evaluated in this section.

ENVIRONMENTAL SETTING

Existing Onsite Physical Conditions

The portions of the Project site where development would occur under the Project are currently undeveloped. As such, these portions of the Project site do not contain any existing residents, employees, or livable housing units.

Housing

The total number of housing units in the Town of Mammoth Lakes (Town) increased 12 percent from 1990 to 2000 as shown in Table IV.K-1. Multi-family housing experienced the greatest increase during this time period. By 2024 the total number of housing units in the Town is anticipated to increase approximately 69 percent from 9,871 in 2004 to 16,710 in 2024.[1]

Table IV.K-1
Housing Unit Growth Trends (1990 – 2024)

Year	Units	Numerical Change	Percent Change
1990	7,102	-	
2000	7,960	858	12%
2004	9,871	1,911	24%
2024	16,710	6,839	69%

Source: Census Bureau and Town of Mammoth Lakes Revised Draft Program EIR, October 2005.

[1] *Town of Mammoth Lakes Revised Draft Program EIR, 2005 General Plan Update – Population, Housing and Employment, October 2005, pages 4-220 and 4-221.*

General Plan Housing Element

Household Tenure

Census data concluded that there were 2,814 households residing in the Town during 2000, 53.9 percent of which were classified as family households. Although there are more housing units in Mammoth Lakes than there are households, housing units are not affordable or available for the average resident. Census 2000 data shows the housing unit count to be 7,960, but only 2,814 of these housing units are occupied year round. The remaining 4,579 housing units (57.5 percent) are owned by second homeowners and are utilized on a seasonal, recreational, or occasional basis.[2] Additionally, of the 2,966 households in 2004, 2,560 were employee households.[3]

Overcrowded Households

The United States Census Bureau defines overcrowding as a housing unit that is occupied by more than one person per room (not including kitchens and bathrooms). Overcrowded households are defined as those with 1.01 or more persons per room, and units with more than 1.5 persons per room are considered severely overcrowded.

According to the 2000 census, 301 households in the Town are living in overcrowded conditions compared to the 164 units that were overcrowded in 1990. Mammoth Mountain Ski Area employees have an average of 2.8 roommates compared to the 2.3 roommates of the average Mammoth area employee. These numbers may not be reflected in census data because many ski area employees are not permanent residents.

In comparison with the statewide average for overcrowding (15.2 percent), census data shows the Town has fewer overcrowded units than the average California community. However, the true number of overcrowded households is likely greater than reflected in the census due to seasonal overcrowding, which was not accounted for in the census data.

Housing Units by Type

As noted, although there are more housing units located in Mammoth Lakes than there are households, the majority of these units are owned by second homeowners and used for seasonal, recreational, or occasional occupation. Census data show single-family detached homes are the most common form of

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2 *Eastern Sierra Housing Needs Assessment, prepared by Housing Collaborative, Inc., December 2004, page 58.*

3 *Eastern Sierra Housing Needs Assessment, prepared by Housing Collaborative, Inc., December 2004, page 62.*

residential housing (3,309 units). However, the combined total for multi-family units is higher (5,721 units).[4]

Regional Housing Need

A Regional Housing Needs Allocation Plan is required pursuant to Section 65584 of Article 10.6 of state housing element law. The housing need is the minimum number of units needed to serve the Town, projected household population and to accommodate a normal vacancy rate and the expected loss of housing stock. In a January 8, 2002 letter, the state Department of Housing and Community Development (HCD) provided a range of numbers of housing units for which the Town should plan (refer to Table IV.K-2).[5]

Table IV.K-2
Mammoth Lakes Fair Share of Regional Housing Needs (2001- 2008)

Income Group	Number	Percent
Very Low	60	20.2%
Low	53	17.9%
Moderate	69	23.2%
Above Moderate	114	38.4%
Total	**296**	**99.7%**
Source: Regional Housing Need Plan		

Affordable Housing Mitigation Regulations

The Town Council adopted revised Affordable Housing Mitigation Regulations in July 2004 (also referred to elsewhere in the Housing Element as Inclusionary Zoning). The regulations address the impact of new development based on the supply of affordable housing. A formula is used to estimate the number of fulltime equivalent employees for each business type. The result is that new development is required to provide housing for the estimated number of its fulltime equivalent employees (FTEE).[6]

A housing mitigation development plan must be submitted along with the project generating the need for the housing. Housing must be provided at 250 sq. ft. per FTEE. On-site housing is preferred. However, the regulations do allow Alternate Housing Proposals. These may deviate from the requirement for new construction of on-site affordable housing. In the interest of having existing housing units acquired, rehabilitated and restricted as affordable housing, the Commission shall consider Alternate Housing

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[4] *California Department of Finance, Demographic Research Unit, Table 2: E-5 City/County Population and Housing Elements, January 1, 2006.*

[5] *Town of Mammoth Lakes - Housing Element, December 2003, page 17.*

[6] *Town of Mammoth Lakes, Revised Draft Program EIR, 2005 General Plan Update – Population, Housing and Employment, October 2005, page 4-226.*

Proposals that include such an acquisition and rehabilitation component provided that the Commission finds the proposal provides a greater community affordable housing benefit. Regardless of whether housing is provided on site or off site through acquisition and rehabilitation, the majority of the units must be available for rent. Affordability levels range from 80 percent to 200 percent of median household income with the majority being affordable to households making median income or less.[7]

Commercial projects less than 5,000 square feet, resort or residential projects less than one-half acre, and all industrial projects may pay a fee in lieu of providing housing. To encourage on-site housing in commercial projects beyond the mitigation regulations, shared parking is permitted.[8]

Population

Population Characteristics and Growth Forecasts

The Town is experiencing growth rates similar to the rest of the Eastern Sierra region. As of 2000, the full-time resident population was 7,094 with a growth rate of 48 percent from 1990 to 2000. The permanent population at build out is expected to grow from approximately 7,600 residents in 2004 to approximately 11,000 people in 2024 (refer to Table IV.K-3).[9] Actual build out population will depend on the types and density of units actually developed (not all properties are anticipated to develop at the maximum density).

Table IV.K-3
Population Growth Trends (1970 – 2024)

Year	Population	Numerical Change	Percent Change
1970	3,528	-	-
1980	3,929	401	11%
1990	4,785	856	22%
2000	7,094	2,309	48%
2003	7,495	401	6%
2004	7,569	74	1%
2024	11,000	3,431	45%

Source: Census Bureau and Town of Mammoth Lakes - Housing Element, December 2003.

The Town is prone to large fluctuations in the total non-resident population because of the seasonal nature of its tourism economy. During peak tourist seasons, the community and Mammoth Mountain Ski Area

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7 *Town of Mammoth Lakes Revised Draft Program EIR, 2005 General Plan Update – Population, Housing and Employment, October 2005, page 4-227.*

8 *Ibid.*

9 *Town of Mammoth Lakes - Housing Element, December 2003, page 8.*

require many more employees (more than can be filled by the full-time resident community). As a result, the resident population increases by 2,000 during the peak tourism season.

Employment

Due to Mammoth Lakes' tourism-based economy the majority of the population living in the Town is employed in the retail and services industry, education, and health and social services as shown in Table IV.K-4. It is this employment group that is most profoundly impacted by increasing real-estate values and rents. Escalating real-estate values are forcing many employees to relocate further and further away from their place of full-time employment. Many households must spend more than 30 percent of their monthly income on housing, or are faced with increased commuting costs and potentially decreased living standards.[10]

Table IV.K-4
Employment by Industry 2000

Industry Type	2000	
	Number	**Percent**
Agriculture, forestry, fishing and hunting, and mining	40	.9
Construction	350	8.1
Manufacturing	113	2.6
Wholesale trade	77	1.8
Retail trade	424	9.8
Transportation and warehousing, and utilities	60	1.4
Information	46	1.1
Finance, insurance, real estate and rental and leasing	166	10.8
Professional, scientific, management, admin.	379	8.8
Educational, health and social services	482	11.2
Arts, entertainment, recreation, and services	1,598	37.1
Other services	117	2.7
Public administration	161	3.7
TOTAL	**4,013**	**100**
Source: Census Bureau (2000 Census, SF3: P49)		

[10] *Town of Mammoth Lakes Housing Element, December 2003, pages 8-9.*

ENVIRONMENTAL IMPACTS

Thresholds of Significance

As stated in §15126.2(d) of the *CEQA Guidelines*, "It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment." Based on Appendix G of the *CEQA Guidelines*, a project would have a significant impact on population and housing resources if the project would:

(a) Induce substantial population growth in an area, either directly (for example, through extension of roads or other infrastructure);

(b) Displace substantial numbers of existing housing necessitating the construction of replacement housing; or

(c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

As discussed in the Initial Study that was prepared for the Notice of Preparation (see Appendix A to this Draft EIR), there would be no impact with respect to the second and third thresholds listed above because the portions of the Project site to be developed under the Project are currently undeveloped and the Project would therefore not displace existing housing or people. Therefore, only the first threshold listed above is addressed in the following discussion.

Project Impacts and Mitigation Measures

Impact POP-1 Population Growth Associated with Employment

Population Growth Due to Temporary Jobs

Construction of the Project is anticipated to generate temporary construction-related jobs. The work requirements of many construction projects are highly specialized so that construction workers remain at a job site only for the time frame in which their specific skills are needed to complete a particular phase of the construction process. As a result, construction workers typically work at several job sites within a particular region throughout the year. Therefore, most construction workers would not relocate their household's place of residence as a consequence of working on the Project. As such, a substantial number of permanent residents would not likely be generated as a result of the construction of the Project and impacts associated with population growth due to temporary jobs would be ***less than significant***.

Population Growth Due to Permanent Jobs

The Project includes 29,000 square feet of commercial/retail space, 20,000 square feet of commercial/conference space, and 30,000 square feet of conference space, which would serve the convenience needs of residents and would be accessible from within the site only. The type of employment associated with this use could be filled by persons from the existing employment base in the Project area and/or by future residents at the Project site. Because it is not expected that the nature of the jobs that would be provided by the Project would cause employees from surrounding areas to relocate their places of residence to the Project area, impacts associated with population growth due to permanent jobs would be ***less than significant***.

Impact POP-2 Population Growth Associated with New Infrastructure

Infrastructure associated with the Project would serve the Project site and would not facilitate additional development as a result of increased infrastructure. Additionally, the Project is consistent with the General Plan. Therefore, impacts associated with the development of the Project would be ***less than significant***.

Impact POP-3 Population Growth Associated with New Housing

The Project would result in construction of 763 dwelling units. The Project is consistent with 1987 General Plan population projections and is anticipated to contribute eight percent to future build-out development.[11] Therefore, impacts to population growth associated with the development of the Project would be ***less than significant***.

Additionally, the Project will comply with the Affordable Housing Mitigation Regulations per the vested rules of the Development Agreement and will provide housing for the estimated number of its Full Time Equivalent Employee (FTEE) associated with the Project. A housing mitigation development plan will be submitted along with the project generating the need for the housing. Housing will be provided at 250 sq. ft. per FTEE. Therefore, impacts to affordable housing associated with the development of the Project would be ***less than significant***.

CUMULATIVE IMPACTS

Impact POP-4

Of the 49 related projects listed in Table II-1 (Related Projects) in Section II (Environmental Setting) of this Draft EIR, 42 include residential developments within the Town, totaling 2,716 dwelling units that

[11] *Town of Mammoth Lakes Revised Draft Program EIR, 2005 General Plan Update – Population, Housing and Employment, October 2005, Figure 4.9-1.*

would accommodate a population of 6,627 persons.[12] When combined with the Project's 763 units and estimated population of 1,862 persons, cumulative residential development amounts to 3,479 units and 8,489 persons.

By 2024, development of the Project in conjunction with the applicable related projects would account for approximately 21 percent of the 16,710 units and approximately 77 percent of the 11,000 permanent residents, forecasted by the Draft 2005 General Plan.

For the reasons noted above, development of the Project in conjunction with the applicable related projects would assist the Town in meeting its fair share of regional housing need, constituting a beneficial rather than adverse housing impact.

Because development of the Project and the related projects would help address a portion of unmet housing demand and serve anticipated population growth in the Project area, either directly (for example, by proposing new homes and businesses), or indirectly (for example, through extension of roads or other infrastructure), cumulative impacts would be ***less than significant*** and beneficial rather than adverse.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Project specific impacts to population and housing would be ***less than significant*** and beneficial rather than adverse.

[12] *United States Census Bureau, Census 2000; www.census.gov, CAJA staff, March 14, 2006*

IV. ENVIRONMENTAL IMPACT ANALYSIS
L. PUBLIC SERVICES

1. POLICE SERVICES

ENVIRONMENTAL SETTING

The Town of Mammoth Lakes Police Department (MLPD), located at 568 Old Mammoth Road, provides police services to the Project site and surrounding area. The MLPD is responsible for providing public safety services in the town including patrol, investigations, custody of adult offenders, wildlife management, and narcotic enforcements.[1] In addition, the MLPD offers the following specialized crime enforcement teams to protect the citizens and property of Mammoth Lakes: Patrol Division, K-9 Unit, Detective Division, Sexual Assault Response Team (SART), Wildlife Management, Drug Abuse Resistance Education/School Resource Officer (DARE/SRO), High Tech Crimes, Property & Evidence, Mono County Narcotic Enforcement Team (MONET), Bicycle Patrol and a Mounted Enforcement Unit. The Mono County Sheriff's Department and the California Highway Patrol also provide police protection and law enforcement in the Town of Mammoth Lakes (Town) and surrounding community.[2]

The MLPD currently employs 21 sworn officers and 6 non-sworn employees; consisting of one chief, one lieutenant, four patrol sergeants, one detective sergeant, ten patrol officers, one detective, one narcotics investigator, one K-9 officer, one DARE/SRO officer, one community service officer, two records clerks, one executive assistant, one animal control officer and one part-time wildlife management specialist. MLPD remains the only agency within Mono County that provides 24 hour patrol coverage. The present staffing for patrol is four patrol sergeants and twelve patrol officers. The average response time for emergency calls in the Project area is approximately five minutes and approximately 7 to 8 minutes for non-emergency calls. The existing level of service for the MLPD is one officer per 1,000 residents. This level of service is based on the average daily population (i.e., visitors plus permanent residents) which is currently estimated at 17,000 and is also impacted by the maximum population at one time (PAOT) which is currently at about 35,000. The Town is subject to large fluctuations in resident populations and visitation levels due to its tourism based economy. MLPD officers responded to 4,478 dispatched calls, completed 2,276 reports and made 512 arrests in 2004. In 2005 the MLPD officers responded to 3,824 dispatched calls for service, wrote 2,064 reports, and made 531 total arrests. Table IV.L-1 shows crime trends in Mono County from 2002 to 2003. The existing level of police service provides adequate protection to the Project site and surrounding community.[3]

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[1] *TOML, http://www.mammothlakespd.org/, CAJA staff, March 2, 2006.*

[2] *TOML, http://www.ci.mammoth-lakes.ca.us/General%20Plan/DEIR.htm, CAJA staff, March 2, 2006.*

[3] *Lieutenant Randy Schienle, Mammoth Lakes Police Department, correspondence, March 14, 2006.*

ENVIRONMENTAL IMPACTS

Threshold of Significance

In accordance with Appendix G of the CEQA Guidelines, the proposed project could have a significant environmental impact if it would:

(a) result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police services.

Table IV.L-1
County of Mono California Crime Index (CCI), 2002-2003

	2002*		2003*		Percent Change 2002-2003	
Crimes	**Number of Crimes**	**Crimes/100,000 population**	**Number of Crimes**	**Crimes/100,000 population**	**Number of Crimes**	**Crimes/100,000 population**
Total violent crimes	31	—	41	—	—	—
Homicide	0	—	1	—	—	—
Forcible rape	4	—	5	—	—	—
Robbery	6	—	2	—	—	—
Aggravated assault	21	—	33	—	—	—
Total property crimes	374	—	337	—	-9.9	—
Burglary	131	—	116	—	-11.5	—
Motor vehicle theft	18	—	13	—	—	—
Larceny-theft over $400	225	—	208	—	-7.6	—

** The population of Mono County in 2002 was 13,350; the population in 2003 was 13,400.*
Source: Criminal Justice Statistics Center, http://stats.doj.ca.gov/cjsc_stats/prof03/26/3A.htm, CAJA staff, March 14, 2006.

Project Impacts and Mitigation Measures

Impact PS-1 Police Services

Under the Project, a total maximum of 763 new dwelling units would be developed. The Project would include single family residential, townhomes, condominiums, workforce housing, a destination resort hotel, and resort lodges. Limited commercial development (up to a maximum of 29,000 square feet of

retail space and up to a maximum of 50,000 square feet of conference center/commercial space) would also be allowed in specific sectors of the plan area with discretionary approval by the Town. According to the United States Census Bureau Census 2000, the Project is anticipated to generate 2.44 persons per household, which would result in approximately 1,862 new residents.[4] The additional number of people and activity on the Project site could result in an increase in the need for police services. The crime rate, which represents the number of crimes reported, affects the "needs" projection for staff and equipment for the MLPD. To some extent, it is logical to anticipate that the crime rate in a given area would increase as the level of activity or population increase, along with an increase in opportunities for crime. However, because a number of other factors also contribute to the resultant crime rate, such as police presence, crime prevention measures, and on-going legislation/funding, the potential for increased crime rates is not necessarily directly proportional to increases in land use activity. As shown in Table IV.L-1, the violent crime rate in Mono County has essentially remained the same from 2002 to 2003 while the property crime rate has decreased.

The MLPD has indicated that the construction of developments similar to the Sierra Star Master Plan have brought large numbers of contractors and their laborers to the Town. Many of these workers have become problems for local law enforcement as they socialize in the local bars and restaurants after hours, become involved in drug use and other criminal activities requiring police intervention, thus creating a short-term increase in demand for police services.[5] While the Project would increase the number of persons and level of activity on the Project site, given the type of use, it is reasonable to expect that the Project would not result in a meaningful increase in the amount of crime in the Project area. Further, given that the Project is not expected to generate a considerable increase in crime, the affect that the Project would have on response times would be minimal, if at all. Additionally, according to the MLPD, although additional police equipment and staff would be necessary to accommodate the Project, the additional demand for police services created by the Project would not require the need for new or altered police facilities other than those currently planned for future police staffing and facilities.[6] Therefore, Project impacts on police services would be ***less than significant*** and no mitigation measures are required.

CUMULATIVE IMPACTS

Impact PS-2 Police Services

Implementation of the Project in conjunction with the related projects listed in Table II-1 would further increase the demand for police services. Projects proposed, planned or under construction within the Town would significantly increase both the permanent and tourist populations. Increases in population in

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4 *United States Census Bureau, Census 2000; www.census.gov, CAJA staff, March 14, 2006.*

5 *Lieutenant Randy Schienle, Mammoth Lakes Police Department, correspondence, March 14, 2006.*

6 *Lieutenant Randy Schienle, Mammoth Lakes Police Department, correspondence, March 14, 2006.*

the Town have the potential to increase calls for police protection services. The impacts created by new development would be reduced by the incorporation of security measures (e.g., security personnel staffed at any new bars and restaurants that cater to late night crowds and private security patrolling the Project) as well as the designation of Transient Occupancy Tax (TOT) dollars and Developer Impact Fees for police services. In addition, the MLPD would continue to fund new staff positions through the Town's General Fund, which is created primarily through the Town's TOT tax base, and proactively pursue State and Federal Grants as they come available. However, given the current condition of the existing police station combined with the increasing development and population in Mammoth Lakes, it is anticipated a new station will be needed for the MLPD to adequately provide police protection services in the future. The current facility is at capacity and could not meet these demands. The Project in conjunction with the related projects listed in Table II-1 would require that the new police facility be completed in the next two to three years or in the later phases of the Project to meet these needs. As a result, cumulative police protection impacts are considered to be ***significant***. New police facilities would be required in order to fully mitigate this significant cumulative impact to a less-than-significant level.

Because the Project in conjunction with anticipated cumulative development would result in significant impacts related to police protection services, the following mitigation measures are recommended by the MLPD:

Mitigation Measure PS-2a

Bars and restaurants that cater to late night crowds will have trained security personnel in order to reduce demand on police services.

Mitigation Measure PS-2b

Provide fair share of Developer Impact Fees to assist the MLPD in the construction of a public safety and dispatch facility and holding facilities as needed.

Mitigation Measure PS-2c

Provide private security as required within the commercial components of the Project to patrol to reduce criminal behavior and work in conjunction with law enforcement to solve crimes and crime problems.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Project impacts on police services would be ***less than significant***.

2. FIRE PROTECTION SERVICES

ENVIRONMENTAL SETTING

Fire Protection and Emergency Response Services in the Project area are provided by the Mammoth Lakes Fire Protection District (MLFPD). Mono County provides primary emergency medical paramedic services for the Project and the MLFPD serves as the backup medical service provider. The MLFPD has two stations (see Table IV.L-2) that cover the Town and the surrounding areas of Lakes Basin, Camp High Sierra and the Mammoth Mountain Ski Area.[7] The MLFPD has automatic mutual-aid agreements with adjoining fire departments in Long Valley and June Lake to provide backup assistance during an emergency. In addition, the MLFPD attends unified command planning meetings with the California Department of Forestry and Fire Protection (CDF) and retains the ability to respond under mutual aid requests, but as there are no CDF response lands in close proximity, the incident related interaction is limited.[8]

Table IV.L-2
Fire Stations that Serve the Project Area

Fire Station	Location	Equipment*	Staff	Approximate Distance from Project Site (miles)
MLFPD Station 1	3150 Main St Mammoth Lakes, CA 93546	2 Engines 1 Ladder Truck 1 Rescue Vehicle 1 Water Tender	1 Fire Chief 1 Full-Time Firefighter 27 Volunteer Firefighters** 2 Mono County Paramedics	1 mile
MLFPD Station 2	1574 Old Mammoth Rd Mammoth Lakes, CA 93546	2 Engines	2 Full Time Firefighters 26 Volunteer Firefighters**	1 mile

**Two utility vehicles vary depending on needs and four staff vehicles are assigned to staff personnel.*
***The combined stations staff 55 volunteer (paid per call) personnel; approximately half are assigned to each station.*
Source: Fire Marshal Thom Heller, MLFPD, correspondence, March 15, 2006.

Fire Stations

There are two fire stations that would serve the Project and surrounding area (see Table IV.L-2). The distance to the Project site from each fire station would be less than one mile depending of the exact location of the incident. Fire Station Number One is in the process of being replaced by an updated and expanded facility. The new building will be approximately 17,600 square feet with administrative offices in addition to housing for full time staff. The expansion is expected to be completed by January 2007.[9]

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[7] *TOML, http://www.ci.mammoth-lakes.ca.us/General%20Plan/DEIR.htm, CAJA staff, April 14, 2006.*

[8] *Fire Marshal Thom Heller, Mammoth Lakes Fire Protection District, correspondence, March 15, 2006.*

[9] *Fire Marshal Thom Heller, Mammoth Lakes Fire Protection District, correspondence, March 15, 2006.*

In addition, the MLFPD plans to build a third facility in the North Village area to provide increased protection.[10]

Response Times

Response distance relates directly to the linear travel distance (i.e., miles between a station and a site) and the MLFPD's ability to successfully navigate the given accessways and adjunct circulation system. Roadway congestion and intersection level of service along the response route can affect the response distance when viewed in terms of travel time. The response time goal of MLFPD is less than six minutes for all incidents in MLFPD's district; this goal is generally met within the private land boundary of town. However, adverse weather conditions are the primary reason for not successfully having the first in unit arriving within the first six minutes. Response outside the private land boundary, such as to the Lakes Basin or Mammoth Mountain Main Lodge/Inn take longer due to additional driving time.

Staffing

Staffing for the MLFPD includes 55 volunteer (paid per call) personnel and four full time employees, including the Chief (see Table IV.L-2). In addition, two Mono County Paramedics are based at Station Number One. Approximately half of the department members are assigned to each station. The District's offices are located at Fire Station 1, which is the station located on Main Street. The current ratio of fire fighters per population varies due to the Town's large fluctuations in resident populations and visitation levels. The MLFPD has 55 firefighters for 7500 permanent residents or a ratio of 1:136. At current maximum occupancy (permanent residents plus visitors), MLFPD has 55 firefighters for 41,000 population or a ratio of 1:745. The MLFPD is currently adequately staffed to meet the current demands in the MLFPD's service area.[11]

ENVIRONMENTAL IMPACTS

Thresholds of Significance

In accordance with Appendix G of the CEQA Guidelines, the proposed project could have a significant environmental impact if it would:

(a) result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection services.

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[10] *TOML, http://www.ci.mammoth-lakes.ca.us/General%20Plan/DEIR.htm, CAJA staff, March 2, 2006.*

[11] *Fire Marshal Thom Heller, Mammoth Lakes Fire Protection District, correspondence, March 15, 2006.*

Project Impacts and Mitigation Measures

Impact PS-3 Fire Services

Under the Project, a total maximum of 763 new dwelling units would be developed. The Project would include single family residential, townhomes, condominiums, workforce housing, a destination resort hotel, and resort lodges. Limited commercial development (up to a maximum of 29,000 square feet of retail space and up to a maximum of 50,000 square feet of conference center/commercial space) would also be allowed in specific sectors of the plan area with discretionary approval by the Town. According to the United States Census Bureau Census 2000, the Project is anticipated to generate at 2.44 persons per household, which would result in approximately 1,862 new residents.[12] Physical augmentation of the site would include removal of some of the existing vegetation and trees and development of manufactured slopes, building pads, and on-site roadways. The existing major public roads that serve the Project site are Minaret Road and Meridian Boulevard. New internal access roads would be created on the east and west sides of the Project site. The internal roadway system would be privately owned and maintained, and would provide residential, neighborhood and emergency access. Emergency vehicles would circulate through the Project area using the internal roadway system. In addition, supplemental fire lanes would be developed in conjunction with the roadway system to provide looped secondary emergency vehicle access and egress. Fire lanes, turning radii and back up space around buildings would be designed in cooperation with local officials so as to be adequate for emergency and fire equipment vehicles. Pavements would be designed to support loads created by emergency vehicle traffic. Standpipe and fire suppression systems connections would be incorporated into architectural and landscaping design elements where practical and in location accessible to fire equipment.

The Project would incorporate a number of fire safety features in accordance with applicable MLFPD fire-safety code and Town regulations for construction, access, fire flows, and fire hydrants. These fire safety features include, but are not limited to, ample roads, adequate building spacing, use of fire resistive building materials, and adequate vegetative clearance around structures. Considering that the Project site is undeveloped and that current use of the site is limited to open space the Project would represent a more intense use of the site. Although the relationship is not directly proportional, more intense uses of land typically result in the increased potential for fire and emergency incidents. Thus, the Project would create an increased demand for fire protection services. However, according to the MLFPD, with the mutual-aid agreement with neighboring fire districts, their current staffing, and equipment, facility levels are adequate to accommodate the Project's demand for fire protection services. In addition, the MLFPD is a participant in the Town's Emergency Operations Plan (Plan) which includes the Project area. The Plan would be revised with the development of the Project to include any needed updates or changes. It would be anticipated that only minor changes would be needed to update the plan based upon the current plans

[12] *United States Census Bureau, Census 2000; www.census.gov, CAJA staff, March 14, 2006.*

and zoning.[13] Therefore, Project impacts related to fire protection services would be ***less than significant*** and no mitigation measures are required.

CUMULATIVE IMPACTS

Impact PS-4 Fire Services

The Project in conjunction with the related projects listed in Table II-1 would not cumulatively increase the demand for fire protection services in the MLFPD. According to the MLFPD, implementation of the related projects would not require the need for new staff or new or altered fire protection facilities.[14] MLFPD recognizes that the call volume and incident complexity will continue to increase as the population and unit numbers increase. As stated previously, MLFPD is in the process of remodeling and enlarging Fire Station 1 in response to additional community development. The MLFPD is anticipating the hiring of more fulltime positions to increase their capability to respond to additional calls and the associated administrative work that will come along with increased development. MLFPD is also involved in the development of a strategic plan that will aid the department in planning for the future. Therefore, cumulative impacts to fire protection services would be ***less than significant*** and no mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Project impacts on fire services would be ***less than significant***.

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[13] *Fire Marshal Thom Heller, Mammoth Lakes Fire Protection District, correspondence, March 15, 2006.*

[14] *Fire Marshal Thom Heller, Mammoth Lakes Fire Protection District, correspondence, March 15, 2006.*

3. SCHOOL SERVICES

ENVIRONMENTAL SETTING

Public education services within the Town of Mammoth Lakes (Town) are provided by the Mammoth Unified School District (MUSD). The MUSD has a current enrollment of 1,190 K-12 students, and is comprised of five schools including three high schools, one middle school, and one elementary school.[15]

Mammoth Elementary (grades K-5), located at 2600 Meridian Boulevard, Mammoth Middle School (grades 6-8), located at 1600 Meridian Boulevard, Mammoth High School (grades 9-12), located at 365 Sierra Park Road, Sierra Continuation High School (SHS) (grades 11-12), located at 1601 Meridian Boulevard and Mammoth Olympic Academy for Academic Excellence School (MOAAES) (grades 9-12), located at 365 Sierra Park Road are the MUSD schools that serve the Project site and surrounding area. Enrollment and class size trends for the three main schools over the last three years are shown in Table IV.L-3. Due to the specialized nature and small enrollment the MOAAES and the SHS are not included in Table IV.L-3. The MOAAES first opened in the 2003-2004 school year and has maintained an average enrollment of 14 students. The SHS has maintained an average class size of 24.3 students over the past three years. Schools near the Project site experience steady enrollment. These schools are near the estimated capacity of 1,290 and according to the MUSD both the Mammoth Elementary School and the Mammoth High School are in need of major improvements.[16] [17]

Table IV.L-3
School Data for Project and Vicinity

	Mammoth Elementary School			**Mammoth Middle School**			**Mammoth High School**		
School Year	**2002 2003**	**2003 2004**	**2004 2005**	**2002 2003**	**2003 2004**	**2004 2005**	**2002 2003**	**2003 2004**	**2004 2005**
Enrollment	554	549	536	287	283	295	376	327	317
Average Class Size	24.1	22.6	22.6	26	24.1	25.3	21.1	21.0	21.7
Pupil-Teacher Ratio	20.5	19.6	19.1	20.8	19.9	20.3	19.8	18.0	17.2

Source: California Department of Education Educational Demographics Unit DataQuest, http://dq.cde.ca.gov/dataquest/dataquest.asp, CAJA staff, April 9, 2006.

School Developer Fees

Pursuant to California Education Code §17620(a)(1), the governing board at any school district is authorized to levy a fee, charge, dedication, or other requirement against any construction within the

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[15] *Mammoth Unified School District, http://www.mammothusd.org/home.asp, CAJA staff, April 9, 2006.*

[16] *James Maxey, Business Manager, Mammoth Unified School District, correspondence, April 27, 2006.*

[17] *TOML, http://www.ci.mammoth-lakes.ca.us/General%20Plan/DEIR.htm, CAJA staff, March 2, 2006.*

boundaries of the district, for the purpose of funding the construction or reconstruction of school facilities. The MUSD currently charges developer fees of $2.63 per square foot of residential development and $0.42 per square foot of commercial development. [18] Provided in §65996 of the California Government Code, the payment of such fees is deemed to fully mitigate the impacts of new development on schools services.

ENVIRONMENTAL IMPACTS

Thresholds of Significance

In accordance with Appendix G of the CEQA Guidelines, the proposed project could have a significant environmental impact if it would:

(a) result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for school services.

Project Impacts and Mitigation Measures

Impact PS-5 School Services

Under the Project, a total maximum of 763 new dwelling units would be developed. The Project would include single family residential, townhomes, condominiums, workforce housing, a destination resort hotel, and resort lodges. Limited commercial development (up to a maximum of 29,000 square feet of retail space and up to a maximum of 50,000 square feet of conference center/commercial space) would also be allowed in specific sectors of the plan area with discretionary approval by the Town. According to the United States Census Bureau Census 2000, the Project is anticipated to generate 2.44 persons per household, which would result in approximately 1,862 new residents.[19] As stated previously, the schools that would serve the Project experience steady enrollment and are currently at or near capacity. According to the MUSD, the Project has the potential to generate approximately 372 Kindergarten through Twelfth grade students. The estimated break down is 329 elementary students, 24 middle school students, and 19 high school students. The student generation rates for the MUSD are shown in Table IV.L-4.[20] Thus, according to the MUSD, new school facilities would be required to accommodate the Project.

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[18] *James Maxey, Business Manager, Mammoth Unified School District, correspondence, October 23, 2006.*

[19] *United States Census Bureau, Census 2000; www.census.gov, CAJA staff, March 14, 2006.*

[20] *James Maxey, Business Manager, Mammoth Unified School District, correspondence, May 1, 2006.*

Table IV.L-4
Student Generation Rates for MUSD

Development Type	K-6 Elementary	7-8 Middle	9-12 High School
Single-Family	.4002	.0294	.0227
Source: James Maxey, Business Manager, Mammoth Unified School District, correspondence, May 1, 2006.			

Based on the developer fees established by each of the school districts, the Project applicant would be required to pay $2.63 per square foot of residential development and $0.42 per square feet of commercial development. As stated previously, provided in §65996 of the California Government Code, the payment of such fees is deemed to fully mitigate the impacts of new development on school services. Therefore, with payment of these required developer fees, Project impacts to school services would be ***less than significant*** and no mitigation measures are required.

CUMULATIVE IMPACTS

Impact PS-6 School Services

Implementation of the Project in conjunction with the related projects listed in Table II-1 would further increase the demand for school services. However, as with the Project, the applicants of the related projects would be required to pay developer fees to the MSUD; payment of these fees would fully mitigate any impact that the related projects would have on school services. As stated previously, the Project's impacts to school services would be less than significant. Therefore, cumulative impacts to school services would be ***less than significant*** and no mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Project impacts to school services would be ***less than significant***.

4. PARKS & RECREATIONAL SERVICES

ENVIRONMENTAL SETTING

The Town of Mammoth Lakes (Town) Parks and Recreation Department manages over 53 acres of parkland accessible to residents and visitors in the Town's five active parks and open space/trail system (See Table IV.5). The Town owns and operates 18 acres of parkland and operates 16.5 acres of parkland under a Special Use Permit from the United States Forest Service (USFS). In addition, the Town and Mono County jointly operate Whitmore Park, which consists of 18.66 acres of parkland leased from Los Angeles. The parks in Mammoth Lakes include Community Center Park, Mammoth Creek Park, Shady Rest Park, Trails End Park and Whitmore Park. The Town currently has plans to construct six more parks. The proposed new parks include a recreation center, festival/cultural sites, improvements to the Shady Rest Park, Shady Rest Affordable Housing Project (private development with park element), Open Space/Parklands and a Winter Play area with parking. In addition to parks, the Town has seven miles of off-road Class A bike trails totaling over six acres and numerous other nearby recreation opportunities such as Mammoth Mountain Ski Area, Lakes Basin, Devils' Postpile National Monument, Red's Meadow, Inyo National Forest, and the John Muir and Ansel Adams Wilderness Areas. Maintenance of public parks and recreational facilities in Mammoth Lakes is funded largely through the Town General Fund, through the Quimby Act and other park fees.

Table IV.L-5
Parks and Recreational Areas Near the Project Site

Name	Size	Amenities	Approximate Distance from Project Site (miles)
Community Center Park	4.52 acres	- Community Center - library - children's daycare - children's play area - six tennis courts - picnic tables - walking paths - restrooms - paved parking	1.5
Mammoth Creek Park	8.97 acres	- Hayden Cabin museum - picnic tables - restrooms - children's play area - art sculpture - walking trails - biking trails - paved parking	1.0
Shady Rest Park	12.52 acres	- two soccer fields - three softball fields - restrooms - two sand volleyball courts - picnic areas/covered pavilion	2.5

Table IV.L-5
Parks and Recreational Areas Near the Project Site

Name	Size	Amenities	Approximate Distance from Project Site (miles)
		- a play area - paved parking	
Trails End Park*	4.11acres	- Brothers Skate Park - children's play area - water play area - horseshoe pits - restrooms - picnic pavilion	1.5
Whitmore Park	18.66 acres	- three baseball/softball diamonds - restrooms - picnic/play areas - community swimming pool - paved parking	2.0
Deed Restricted Open Space and Trails	6.22 acres	- Open Space and Trails	1.0

**Currently under development*
Source: TOML, http://www.ci.mammoth-lakes.ca.us/General%20Plan/DEIR.htm, CAJA staff, April 14, 2006.
Craig Olson, Senior Planner, Town of Mammoth Lakes, correspondence, CAJA staff, July 10, 2006.

ENVIRONMENTAL IMPACTS

Thresholds of Significance

In accordance with Appendix G to the CEQA Guidelines, the proposed project could have a significant environmental impact if it would:

(a) result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for park services.

(b) increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; or

(c) include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

Project Impacts and Mitigation Measures

Impact PS-7 Park Services

Implementation of the Project would result in the development of 763 new dwelling units and would generate approximately 1,862 new residents, including approximately 372 school-aged children, and thus, would create an additional demand for parks and recreational services.[21, 22] The Project is viewed as a resort recreation center with residential uses, outdoor use areas, and multiple options for recreational amenities. These include the Sierra Star golf course, recreational trails and walkways, the golf course lake, individual pools, spas, and water play areas associated with resort hotels and hotels. The proposed recreational amenities in conjunction with the Town's current facilities and the collection of Developer Impact Fees that support the Town's park and recreation fund would be adequate to accommodate the Project's demand for parks and recreational services.[23] As development occurs, within the Project area, Developer Impact Fees will be paid to the Town to offset the recreational facilities and maintenance. No additional parks or recreational facilities beyond what are proposed would be required. Therefore, Project impacts to park services would be ***less than significant*** and no mitigation measures are required.

CUMULATIVE IMPACTS

Impact PS-8 Park Services

As shown in Table II-1, the related projects in the Town are primarily residential projects. Residential projects typically have the greatest impact on parks and recreational facilities, because they generate the greatest users of parks and recreational facilities – families with children. Similar to the Project, the applicants of the related projects would be required to pay Developer Impact Fees that support the Town's park and recreation fund; payment of these fees would fully mitigate any impact that the related projects would have on park and recreational services. As stated previously, the Project's impacts to park services would be less than significant. Therefore, cumulative impacts to school services would be ***less than significant*** and no mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Project impacts to park services would be ***less than significant***.

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[21] *James Maxey, Business Manager, Mammoth Unified School District, correspondence, May 1, 2006.*

[22] *United States Census Bureau, Census 2000; www.census.gov, CAJA staff, March 14, 2006.*

[23] *Town of Mammoth Lakes Municipal Code Chapter 15.16 §15.16.085 part E, CAJA staff, April 14, 2006.*

5. SNOW REMOVAL SERVICES

ENVIRONMENTAL SETTING

The Town of Mammoth Lakes Public Works Department is responsible for snow removal on the majority of non-state and non-federal public roadways. Roadway maintenance and snow removal on private roads and private property is the responsibility of the land owners. The Town owns and operates two plow trucks and nine Caterpillar loaders, five of which are equipped with plows and four with blowers. As necessary, snow removal occurs 24 hours a day during two 12-hour shifts. On average six loaders are employed during the day shift and eight on the night shift. Snow is stored along roadways and in vacant lots. The Town currently requires a ten-foot roadside easement for snow storage on roadways with less than 60 feet of right-of-way. In a large storm event, the easement alone would not be capable of containing the entire quantity of the snow. Snow removal uses up to two thirds of each year's total maintenance and improvement budget. During intense snow storm periods, equipment and facilities have been overburdened and unable to maintain the roads clear of snow.[24]

Caltrans provides snow removal services on SR-203 from the junction of U.S. Highway 395 to the Caltrans Minaret Maintenance Station at postmile 2.4. In general, Caltrans is able to blow snow and store snow within their existing right-of-way. The Caltrans right-of-way closest to the Project area is just north of the Project site and is 200 feet wide, with actual highway pavement varying from approximately 64 feet to 76 feet. However, some snow is blown and stored on the northern uphill side of the Project site, but more is blown and stored on the southern downhill side. It is sometimes difficult for Caltrans to keeping up with snow removal during large storms while maintaining adequate traffic flow and managing illegal parking.[25]

ENVIRONMENTAL IMPACTS

Thresholds of Significance

In accordance with Appendix G to the CEQA Guidelines, the proposed project could have a significant environmental impact if it would:

(a) result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction which would cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for public facilities.

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[24] *TOML, http://www.ci.mammoth-lakes.ca.us/General%20Plan/DEIR.htm, CAJA staff, April 14, 2006.*

[25] *Gayle Rosander, IGR/CEQA Coordinator, Caltrans D-9, correspondence, CAJA staff, March 15, 2006.*

Project Impacts and Mitigation Measures

Impact PS-9 Snow Removal Services

Under the Project, a total maximum of 763 new dwelling units would be developed. The Project would include single family residential, townhomes, condominiums, workforce housing, a destination resort hotel, and resort lodges. Limited commercial development (up to a maximum of 29,000 square feet of retail space and up to a maximum of 50,000 square feet of conference center/commercial space) would also be allowed in specific sectors of the plan area with discretionary approval by the Town. According to the United States Census Bureau Census 2000, the Project is anticipated to generate 2.44 persons per household, which would result in approximately 1,862 new residents.[26]

The existing major public roads that serve the Project site are Minaret Road and Meridian Boulevard. New internal access roads would be created on the east and west sides of the Project site. The internal roadway system would be privately owned and maintained. The management of snow at the Project site would be the sole responsibility of the Sierra Star Home Owners Association. Snow management would be addressed with each building to ensure that residents and visitors are provided safe and convenient access to and from lodging and within the public use areas throughout the winter season. Ground and roof level snow storage areas would be identified and would ensure sight distance is not inhibited for any mode of transportation. Landscape snow shed areas would be designated and located adjacent to the base of buildings and would be sized to accommodate the anticipated volumes of snow. Roof forms would be designed in coordination with pedestrian areas at the base of buildings. In limited areas, snow rails or fencing, heated gutters, and heated roof edges may be required to prevent snow shed and ice buildup. Snow would not be permitted to shed freely into active pedestrian areas. However, minor snow depths may remain on pedestrian paved areas during cold periods. When snow begins to melt and creates conditions for icing of surfaces, it would be removed or treated with anti-icing agents. Snow would be removed from heavily used pedestrian paved areas, ramps and stairs by snowmelt systems. For other circulation routes and pedestrian areas, snow would be removed as soon as practical following snowfall to ensure access by emergency vehicles and easy pedestrian movement. Appropriate sized snow removal vehicles would be allowed into the pedestrian areas. As stated previously, roadway maintenance and snow removal on private roads and private property is the responsibility of the land owners. Therefore, Project impacts to the Town's snow removal services would be ***less than significant*** and no mitigation measures are required.

[26] *United States Census Bureau, Census 2000; www.census.gov, CAJA staff, March 14, 2006.*

CUMULATIVE IMPACTS

Impact PS-10 Snow Removal Services

The Project in conjunction with the related projects listed in Table II-1 would not cumulatively increase the demand for snow removal services in the Town. As shown in Table II-1, the related projects in the Town are primarily private projects and therefore, as with the Project, the private land owners would be responsible for their own snow removal services. This would fully mitigate any impact that the related projects would have on snow removal services in the Town. As stated previously, the Project's impacts to snow removal services would be less than significant. The implementation of the related projects would not require the need for new staff or new or altered public works facilities. Therefore, cumulative impacts to snow removal services would be ***less than significant*** and no mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Project impacts to snow removal services would be ***less than significant***.

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IV. ENVIRONMENTAL IMPACT ANALYSIS
M. TRAFFIC/CIRCULATION

INTRODUCTION

The information in this section is based primarily on the Traffic Impact Analysis prepared by LSA in May 2006 and revised August 2006 (included in Appendix J of this Draft EIR).

Study Intersections and Forecast Scenarios

Analysis Scenarios

Three analysis scenarios were utilized in the Traffic Impact Analysis:

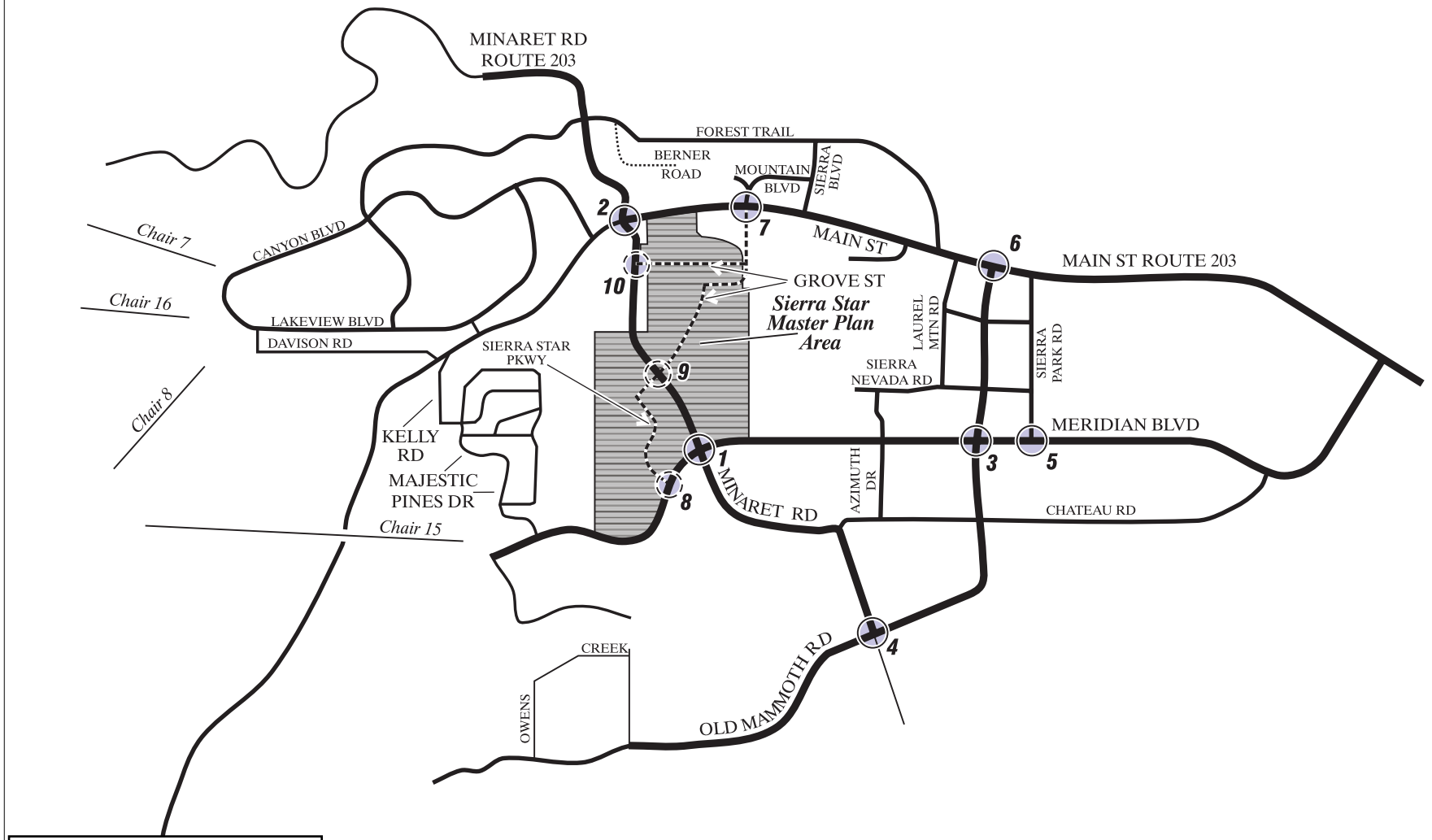
- Existing Conditions
- Baseline Conditions (existing plus related projects)
- Project Conditions (baseline with the Project)

Project Study Intersections, Roadway Segments, and Freeway Segments

Intersection operations for ten intersections were evaluated during the morning (AM) and evening (PM) peak commute periods for the analysis scenarios described above (refer to Figure IV.M-1).

Study Area Intersections

1) Minaret Road/Meridian Boulevard
2) Minaret Road/Main Street/Lake Mary Road
3) Old Mammoth Road/Meridian Boulevard
4) Minaret Road/Old Mammoth Road
5) Sierra Park Road/Meridian Boulevard
6) Old Mammoth Road/Main Street
7) Mountain Boulevard/Main Street
8) Sierra Star Parkway/Meridian Boulevard
9) Minaret Road/Sierra Star Parkway/Grove Street
10) Minaret Road/Grove Street



Source: LSA, 2006

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Figure IV.M-1
Study Area Intersections
and Circulation System

Analysis Methods

Typical winter Saturday peak hour baseline conditions were used to analyze traffic impacts for the existing and cumulative (existing plus approved Project) conditions. The "design" day used in this study is a "typical" winter Saturday. This level of traffic occurs 15 to 20 times a year. Typical winter Saturday peak hour traffic counts previously conducted by the Town and other approved traffic studies were utilized. For intersections where existing traffic counts were not available, traffic counts from the General Plan Update Traffic Analysis were used. Through traffic volumes at the Project driveways were extrapolated from the existing adjacent intersections.

Study intersection operations were evaluated using level of service (LOS) calculations as discussed below.

LOS Criteria

The operations of intersections, roadway segments, and freeway segments are described with the term "level of service" (LOS). LOS is a qualitative description of traffic flow based on factors such as speed, travel time, delay, and freedom to maneuver. Six levels of service are defined ranging from LOS A (indicating free flow traffic conditions with little or no delay) to LOS F (representing over-saturated conditions where traffic flows exceed design capacity, resulting in long queues and delays). LOS E corresponds to operations "at capacity." When volumes exceed capacity, stop-and-go conditions result and operations are designated as LOS F.

The Town's LOS standard for intersections is LOS D, which corresponds to a volume-to-capacity (v/c) ratio of 0.90 for signalized intersections. An unsignalized intersection would be considered deficient if an individual minor street movement operates at LOS E or F and total minor approach delay exceeds four vehicle hours for a single-lane approach and five vehicle hours for a multilane approach, consistent with the adopted Circulation Element and General Plan Update Traffic Analysis (2004).

A complete description of the meaning of LOS can be found in the Transportation Research Board Special Report 209, *Highway Capacity Manual*, which also establishes LOS A–F. Brief descriptions of the six LOS, as abstracted from the Manual, are shown in Table IV.M-1. The LOS criteria for unsignalized and signalized intersections are shown in Table IV.M-2.

Table IV.M-1
Intersection LOS Descriptions

LOS	Description
A	No approach phase is fully utilized by traffic, and no vehicle waits longer than one red indication. Typically, the approach appears quite open, turns are made easily, and nearly all drivers find freedom of operation.
B	This service level represents stable operation, where an occasional approach phase is fully utilized and a substantial number are approaching full use. Many drivers begin to feel restricted within platoons of vehicles.
C	This level still represents stable operating conditions. Occasionally, drivers may have to wait through more than one red signal indication, and backups may develop behind turning vehicles. Most drivers feel somewhat restricted but not objectionably so.
D	This level encompasses a zone of increasing restriction approaching instability at the intersection. Delays to approaching vehicles may be substantial during short peaks within the peak period; however, enough cycles with lower demand occur to permit periodic clearance of developing queues, thus preventing excessive backups.
E	Capacity occurs at the upper end of this service level. It represents the most vehicles that any particular intersection approach can accommodate. Full utilization of every signal cycle is seldom attained no matter how great the demand.
F	This level describes forced-flow operations at low speeds, where volumes exceed capacity. These conditions usually result from queues of vehicles backing up from a restriction downstream. Speeds are reduced substantially, and stoppages may occur for short or long periods of time due to the congestion. In the extreme case, both speed and volume can drop to zero.

Source: Transportation Research Board Special Report 209, Highway Capacity Manual

Table IV.M-2
Level of Service Parameters

Level of Service	Signalized Intersections Delay (seconds)	Unsignalized Intersections Delay (seconds)[1]
A	≤ 10.0	≤ 10.0
B	> 10.0 and ≤ 20.0	> 10.0–15.0
C	> 20.0 and ≤ 35.0	> 15.0–25.0
D	> 35.0 and ≤ 55.0	> 25.0–35.0
E	> 55.0 and ≤ 80.0	> 35.0 seconds/vehicle and > 4.0 hour cumulative delay for single lane or > 5.0 hour cumulative delay for two land approach
F	> 80.0	

Source: Transportation Research Board Special Report 209, Highway Capacity Manual
Notes: 1) If the intersection exceeds LOS D criteria, the hourly total criteria (four vehicle-hours) standard applies.

For all study area intersections, the *2000 Highway Capacity Manual* (HCM 2000) analysis methodologies were used to determine intersection LOS. All LOS were calculated using the Traffix Version 7.7 software, which uses the HCM 2000 methodologies.

Signalized Intersections and Unsignalized Intersections

LOS for signalized and unsignalized intersections are determined using the methodology set forth in the 2000 HCM, where the calculation of LOS is dependent on the occurrence of gaps in the through traffic flow of the major street. Using data collected describing the intersection configuration and traffic volumes at the study area intersections; the delay (in seconds per vehicle) of each minor street or major street conflicting movement was estimated. These delays were used to calculate the intersection's average delay per vehicle, which was used to determine the intersection LOS. It should be noted that at two-way, stop-controlled intersections, the intersection delay refers only to the delay experienced by vehicles on the stop-controlled minor street. As a result, at locations where a higher volume of through traffic is experienced on the major street, fewer gaps will be experienced in the through traffic flow of the major street. As a result, the addition of only one or two vehicles to the stop-controlled minor street could result in the rapid deterioration of LOS at that intersection, although most vehicles at the intersection do not experience any delay.

The LOS threshold at unsignalized intersections can be easily exceeded when only a few vehicles experience a delay greater than 35 seconds. Therefore, the Town has identified unsignalized intersection LOS standards that allow greater delay on low-volume approaches. These thresholds of significance identify a deficiency if the approach delay exceeds four vehicle-hours for a single-lane approach and five vehicle-hours for a multilane approach.

ENVIRONMENTAL SETTING

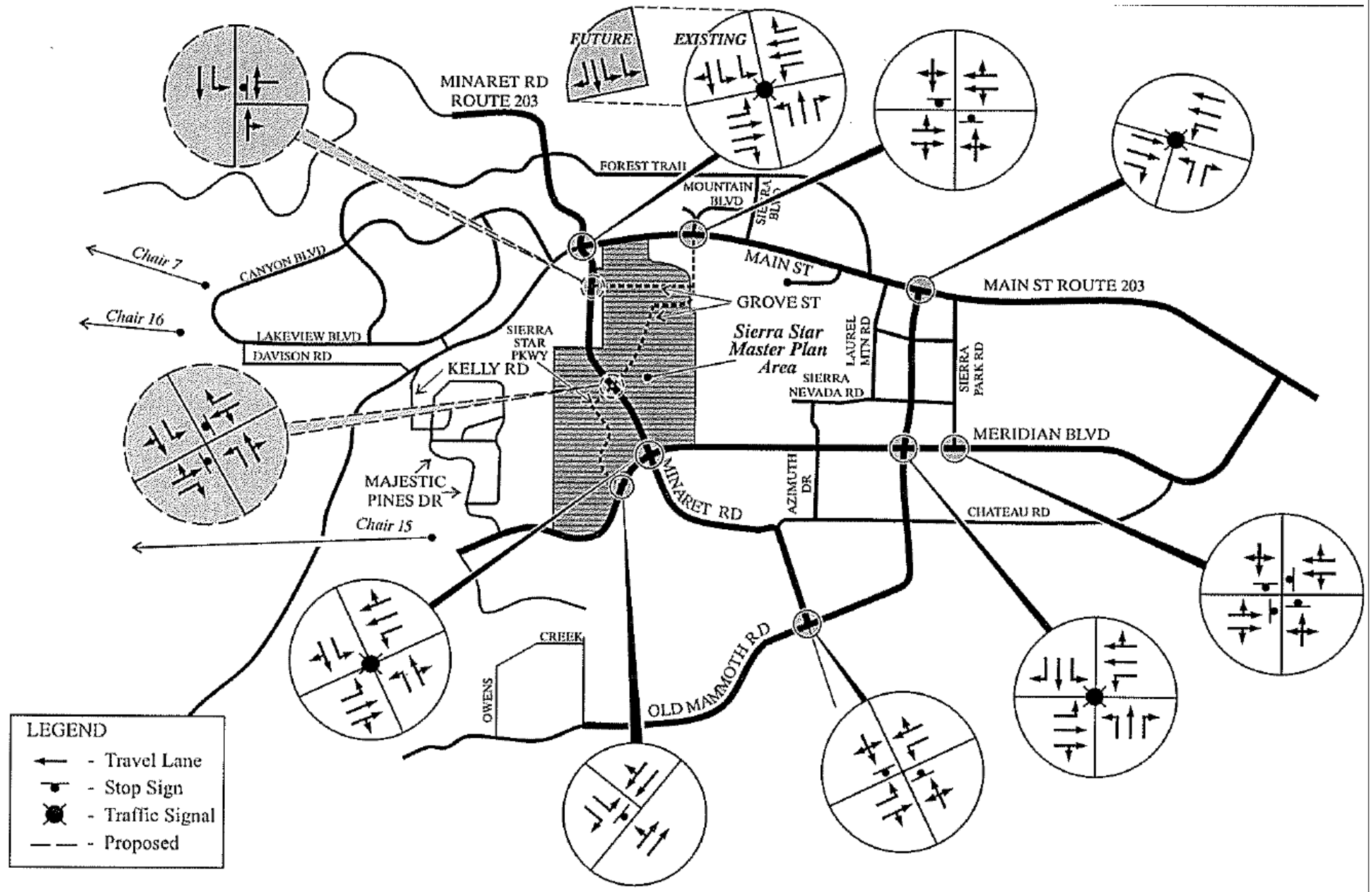
Existing Traffic Conditions

The existing number of lanes and intersection control for the study area intersections are shown in Figure IV.M-2 and the existing typical winter Saturday peak hour traffic volumes at each study area intersection are shown in Figure IV.M-3. Existing levels of service at study area intersections are shown in Table IV.M-3. The LOS worksheets for the existing conditions are presented in Appendix J.

Table IV.M-3
Existing (2004) Typical Winter Saturday Intersection LOS

Intersection	Delay (sec)	LOS
1. Minaret Rd./Meridian Blvd.	19.9	B
2. Minaret Rd./Lake Mary Rd.-Main St.	20.0	C
3. Old Mammoth Rd./Meridian Blvd.	19.3	B
4. Minaret Rd./Old Mammoth Rd.*	18.9	C
5. Sierra Park Rd./Meridian Blvd.*	7.7	A
6. Old Mammoth Rd./Main St.	18.5	B
7. Mountain Blvd./Main St.*	>35.0 but < 4.0 hour cumulative delay on minor street approach	D

Source: Traffic Impact Analysis prepared by LSA in May 2006 revised August 2006
*Notes: * = unsignalized intersection*



Source: LSA, August, 2006.

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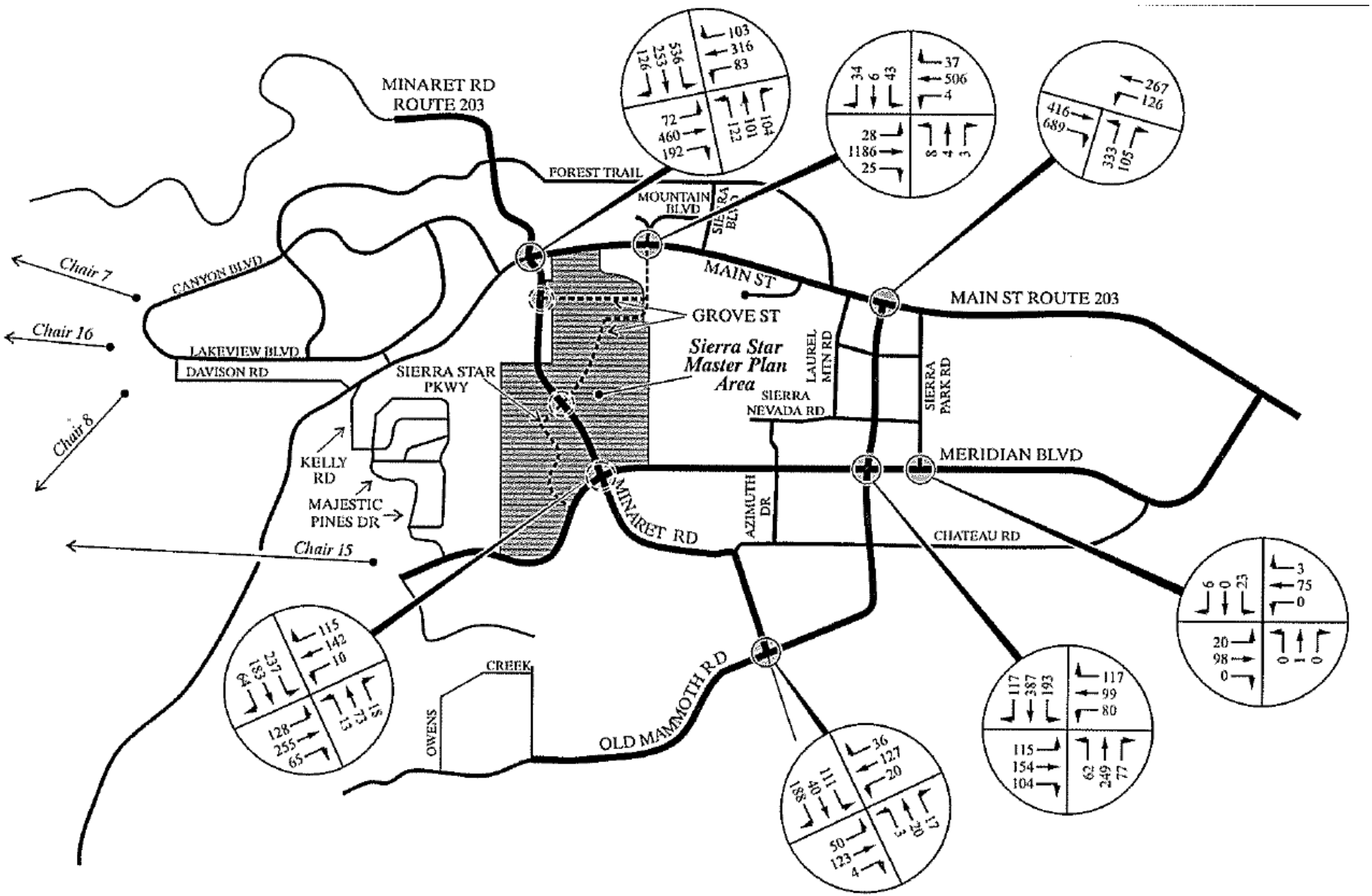
Figure IV.M-2
Study Area Intersection Geometrics
and Traffic Control Devices



Source: LSA, August, 2006.

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Figure IV.M-3
Existing Condition Typical Winter Saturday
Peak Hour Traffic Volumes

As shown in Table IV.M-3, all study area intersections currently operate at satisfactory levels of service in the existing condition with the exception of the unsignalized intersection of Mountain Boulevard/Main Street. This intersection currently operates at LOS F due to the delay conditions experienced on Mountain Boulevard. The majority of traffic at this intersection does not experience any delay. However, based on an analysis of the Mountain Boulevard total delay, the four vehicle-hour criteria for a single lane approach is not exceeded.

Parking

Parking in the vicinity of the Project site is provided primarily by private lots at ski access areas and commercial centers. One park-and-ride lot exists adjacent to a transit stop on the corner of Tavern and Old Mammoth Road. Parking facilities are well utilized during periods of peak visitor activity and many commercial areas lack adequate parking supply.[1]

Bicycle and Pedestrian Facilities

Pedestrian facilities include sidewalks, crosswalks, and pedestrian signals. Sidewalks are provided on some of the existing roadway facilities in the study area. The Town Trail System Master Plan proposes the extension of facilities to promote such non-motorized alternative forms of transportation as walking, bicycling, and cross-country skiing.

Transit Access

The following public and private transit operations currently serve the Town[2]:

- Mammoth Area Shuttle System – winter public transit service
- USFS Seasonal Shuttle Bus from Mammoth Mountain Inn to Reds Meadow and Devils Postpile National Monument
- Private On-Demand Shuttle System
- Mammoth Mountain and June Mountain Ski Areas Employee Shuttle
- Taxicab Service
- Inyo-Mono Transit Dial-A-Ride and Commuter Service
- Town of Mammoth Lakes Fixed Route Seasonal Service

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1 *Town of Mammoth Lakes General Plan Update EIR, October 2005.*

2 *Ibid.*

- Carson Ridgecrest Eastern Sierra Transit – Ridgecrest to Reno
- Yosemite Area Regional Transportation System Seasonal Weekend Shuttle

Baseline Conditions (Existing plus Related Projects)

To forecast background traffic conditions, traffic volumes from approved projects in the vicinity of the Project were added to existing traffic volumes. With coordination from the Town, the related projects list (see Table II-1) was modified slightly for the traffic analysis and is included in Appendix J to this Draft EIR. The modified list includes approved projects with more than 10 units.

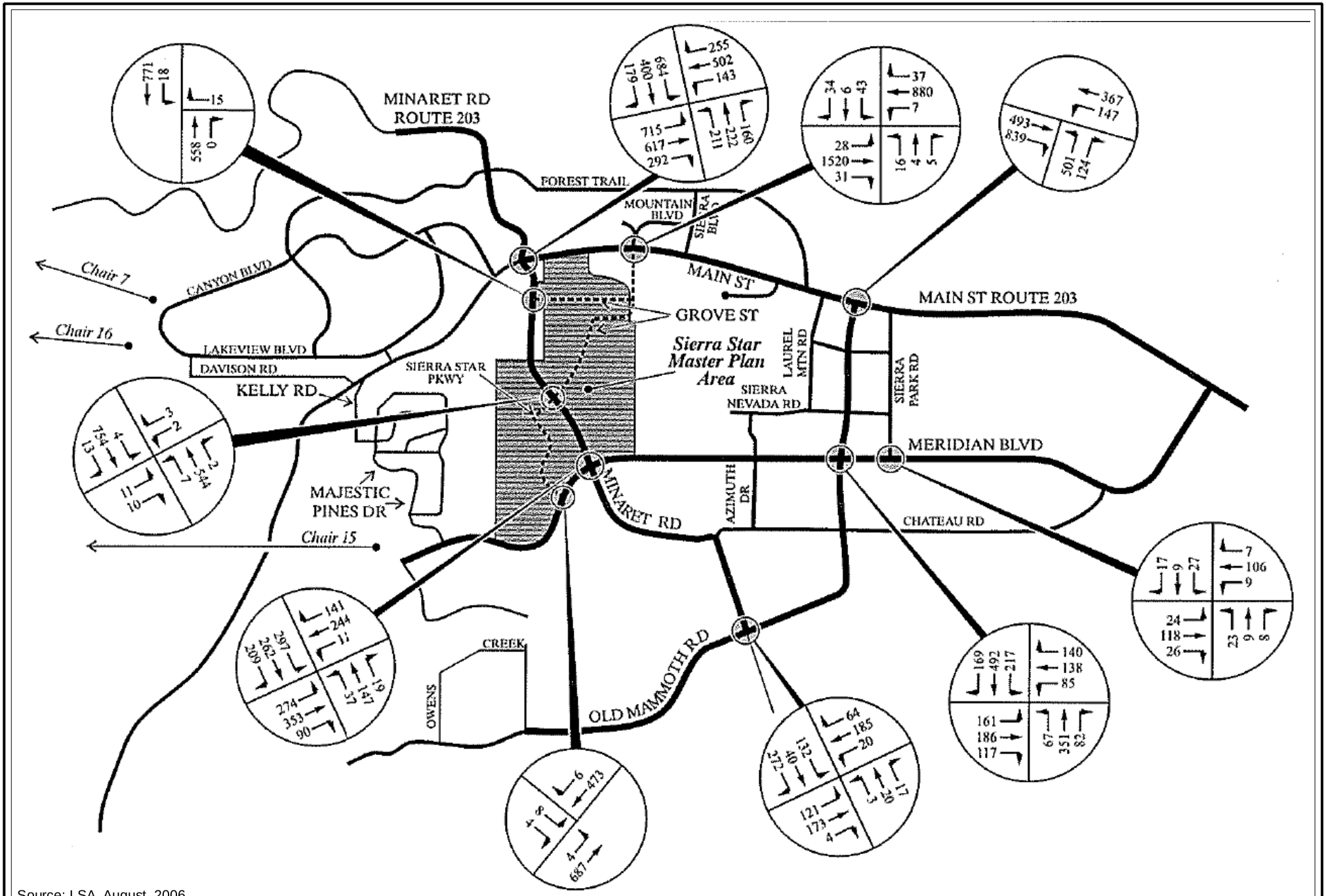
Traffic generated by the reasonably foreseeable projects was added to existing traffic to arrive at the baseline condition. The baseline traffic volumes at each intersection are illustrated in Figure IV.M-4. The level of service calculations shown in Table IV.M-4 include the implementation of mitigation measures associated with the Village at Mammoth project (i.e., a southbound through and right turn lane at Minaret Rd./Lake Mary Rd.-Main Street). The LOS worksheets for the cumulative baseline conditions are presented in Appendix J to this Draft EIR.

Table IV.M-4
Baseline Typical Winter Saturday Intersection Levels of Service

Intersection	Delay (sec)	LOS
1. Minaret Rd./Meridian Blvd.	34.5	C
2. Minaret Rd./Lake Mary Rd.–Main St.	27.0	C
3. Old Mammoth Rd./Meridian Blvd.	22.0	C
4. Minaret Rd./Old Mammoth Rd.*	>35.0 and > 4.0 hour cumulative delay on minor street approach	**F**
5. Sierra Park Rd./Meridian Blvd.*	8.0	A
6. Old Mammoth Rd./Main St.	24.7	D
7. Mountain Blvd./Main St.*	>35.0 but < 4.0 hour cumulative delay on minor street approach	D

Source: Traffic Impact Analysis prepared by LSA in May 2006 revised August 2006
*Notes: * = unsignalized intersection*

As shown in Table IV.M-4, study area intersections are forecast to operate at satisfactory LOS (LOS D or better) in the baseline condition with the exception of the unsignalized intersections of Minaret Road/Old Mammoth Road. This intersection is forecast to operate at LOS F due to the delay conditions experienced on the minor street (Minaret Road). Based on analysis of delay, the intersection of Minaret Road/Old Mammoth Road exceeds the four vehicle-hour criteria.



Source: LSA, August, 2006.

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Figure IV.M-4
Baseline Typical Winter Saturday
Peak Hour Traffic Volumes

ENVIRONMENTAL IMPACTS

Thresholds of Significance

In accordance with Appendix G of the *CEQA Guidelines*, a project would have a significant transportation/traffic impact if it would:

(a) cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number or vehicle trips, the V/C ratio on roads, or congestion at intersections);

(b) exceed, either individually or cumulatively, a LOS standard established by the Town (or Caltrans for State Highway 203) for designated roads or highways;

(c) result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;

(d) substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);

(e) result in inadequate emergency access;

(f) result in inadequate parking capacity; or

(g) conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).

Project Impacts and Mitigation Measures

Impact TRANS-1 Project Trip Generation

Winter Saturday daily and peak-hour trips were generated for the Project using trip rates from the Mammoth Lakes Transportation Model (MTM) and the Institute of Transportation Engineers (ITE) *Trip Generation Manual,* 7th Edition. The MTM was developed with the specific goal of providing analyses of the interrelated issues of land use, transportation demand, and air quality. Trip rates from the MTM were used to develop daily trip forecasts. Peak-hour traffic volumes were derived from peak-to-daily ratios and in/out splits for similar land uses from the ITE *Trip Generation Manual*, 7th Edition. Project impacts would be ***less than significant***.

The Project trip rates and trip generation are shown in Table IV.M-5.

Table IV.M-5
Project Trip Generation

Land Use	Dwelling Units	ADT	In	Out	Total Trips
Area 1D	24	240	11	9	17
Area 2A	22	220	10	8	16
Area 2B/2C	182	1,820	82	70	133
Area 2D	56	560	25	21	41
Area 4A	80	640	29	25	46
Area 5A	144	1,179	58	46	104
Area 5B/C/D	273	2,236	110	86	197
Area 7	40	400	18	15	29
Total	-	**7,295**	**342**	**280**	**583**

Source: Traffic Impact Analysis prepared by LSA in May 2006 revised August 2006
Note: The trip rates used are as follows: Seasonal Medium Density Residential (MF) – 10,000 ADT, 0.448 In, 0.382 Out, and 0.729 Total; and Visitor Lodging (Hotel) – 8,190 ADT, 0.403 In, 0.317 Out, and 0.720 Total

Impact TRANS -2 Internal Circulation and Access

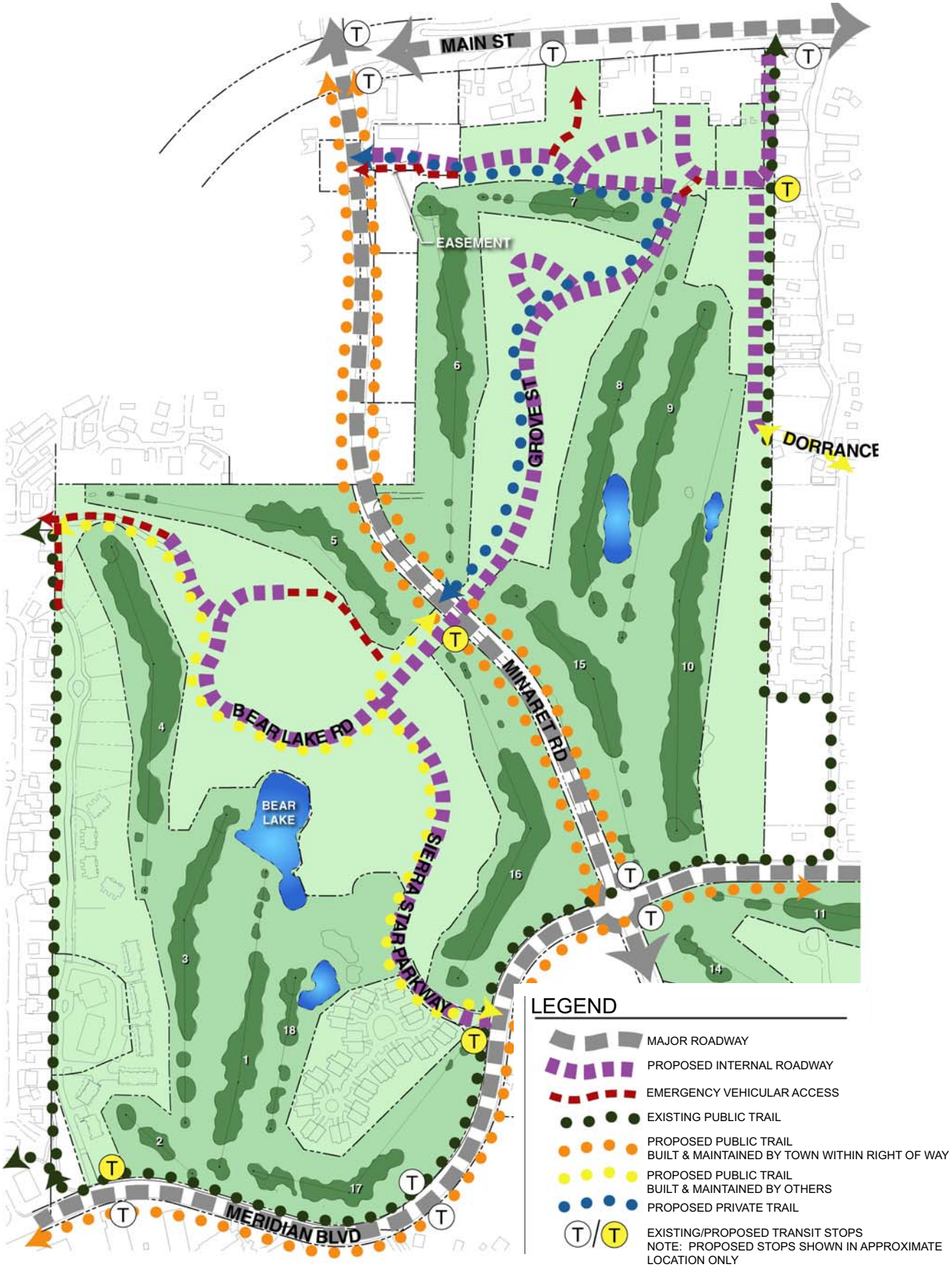
Internal circulation and access proposed for the Project is illustrated in Figure IV.M-5. As shown, the Project's major internal roadway (Sierra Star Parkway/Grove Road) would provide access to Meridian Boulevard and Minaret Road.

Areas 2A, 2B, 2C, 5A, 5B, 5C, 5D, and 7 of the Project would have access to Sierra Star Parkway and Grove Road. This traffic would enter the site via the three unsignalized intersections of Sierra Star Parkway/Meridian Boulevard, Minaret Road/Sierra Star Parkway, and Minaret Road/Secondary Sierra Star access (south of Ullr Lodge).

Area 4 would not have access to Sierra Star Parkway. This traffic would enter the site via an internal roadway. Traffic exiting from Area 4 to the north would use this roadway to exit onto Main Street. Traffic exiting to the south would use Dorrance Street and either Joaquin Road or Manzanita Road to Meridian Boulevard. Therefore, impacts would be ***less than significant***.

Impact TRANS -3 LOS Intersection Analysis

A Highway Capacity Manual **(**HCM) analysis was prepared for Sierra Star Parkway/Meridian Boulevard, Minaret Road/Sierra Star Parkway-Grove Street, and Minaret Road/Grove Street. Based on the trip assignment of the Project, Sierra Star Parkway/Meridian Boulevard is forecast to operate at an acceptable LOS C (16.5 seconds of delay), Minaret Road/Sierra Star Parkway Boulevard-Grove Street is forecast to operate at an acceptable LOS D (greater than 35 seconds of delay but less than four vehicle- hours), and Minaret Road/Secondary Sierra Star secondary access is forecast to operate at an acceptable LOS C (18.2 seconds of delay).



Source: Perkins Design Associates, IDS, CAJA, April 2007.

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Figure IV.M-5
Internal Circulation and Access

At Minaret Road/Sierra Star Parkway-Grove Street, the northbound and southbound left turns out of the Project onto Minaret Road are the primary reason that the intersection is forecast to operate at over 35 seconds of delay. Because the northbound and southbound directions are uncontrolled, no delay would be experienced by the vehicles traveling on Minaret Road, and there is minimal delay for vehicles turning right into or out of Sierra Star Parkway/Grove Street. The delay would not exceed the criteria of four vehicle-hours and therefore would not be considered to be a significant impact. To further evaluate the operation of this intersection, a traffic signal warrant analysis was prepared that considered left turns, not right turns, as the critical movement. Figure IV.M-6 shows that the intersection does not satisfy the peak hour warrant for a traffic signal and would not satisfy other warrant criteria.

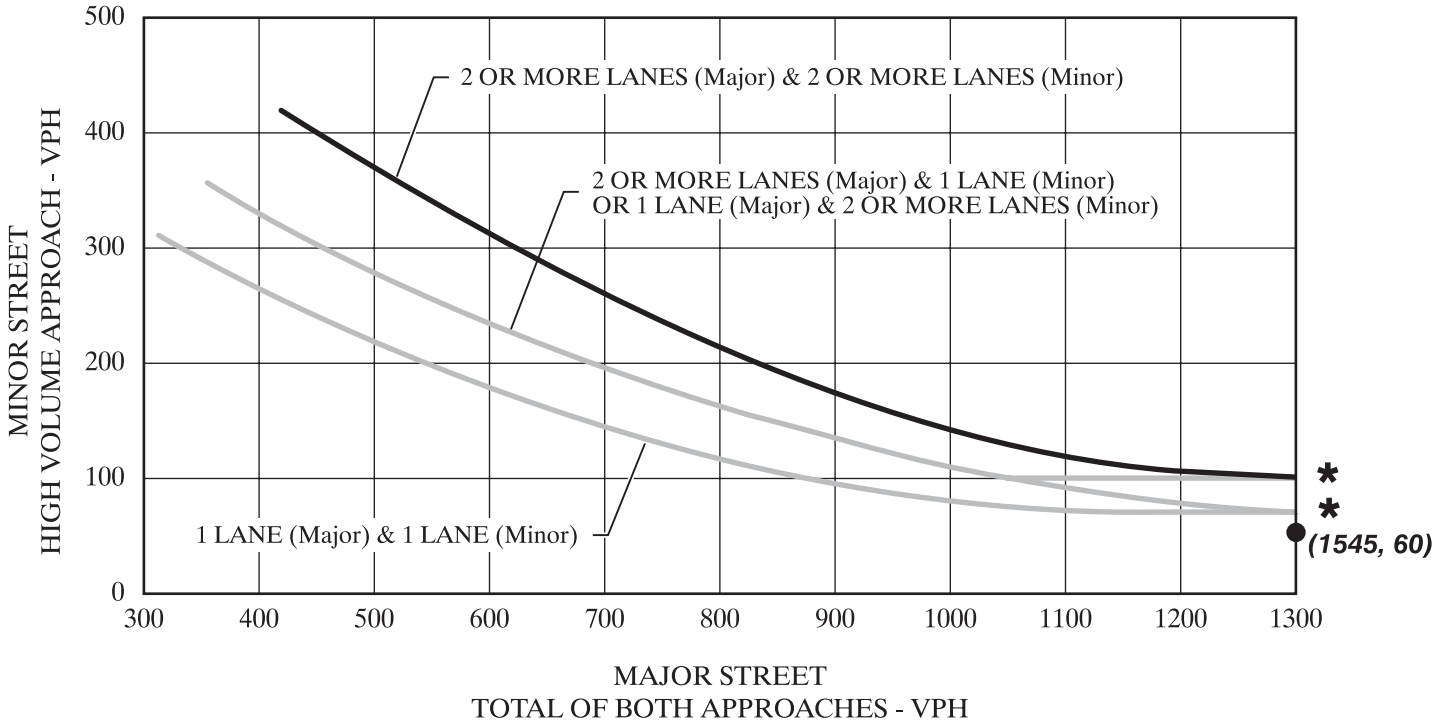
Traffic generated by Area 4A will not have access to Sierra Star Parkway. Instead, this traffic will enter the site via an internal roadway that provides access to Main Street and Dorrance Street. Traffic exiting from Area 4A to the north will use the internal roadway to exit onto Main Street. Traffic exiting to the south will be able to exit onto Dorrance Street and then use either Joaquin Road or Manzanita Road to travel to Meridian Boulevard. Table IV.M-6 shows the forecasted existing plus Project traffic volumes and volume to capacity (v/c) ratios for Joaquin Road and Manzanita Road. As shown in Table IV.M-6, the addition of traffic from the Project would not cause traffic volumes along Joaquin Street or Manzanita Street to exceed the capacity of these roadways and impacts would be ***less than significant***.

Table IV.M-6
Traffic on Joaquin Road and Manzanita Road

Roadway Segment	Capacity	ADT	V/C Ratio	LOS
Joaquin Road south of Dorrance Street	4,000	516	0.13	A
Manzanita Road south of Dorrance Street	4,000	400	0.10	A
Source: Traffic Impact Analysis prepared by LSA in May 2006 revised August 2006				

Impact TRANS -4 Project LOS

Project trips were distributed to the surrounding circulation system based on the location of activity centers in the Town, and the location of the Project in relation to the Town's recreational and commercial areas. The trip distribution and Project trips at study area intersections are illustrated in Figure IV.M-7. Cumulative plus Project traffic volumes are shown in Figure IV.M-8. Levels of service at study area intersections were analyzed and are shown in Table IV.M-7. The Project LOS worksheets are presented in Appendix J to this Draft EIR.



WARRANT NOT SATISFIED

* 100 VPH applies as the lower threshold volume for a minor street approach with two or more lanes and 75 VPH applies as the lower threshold volume for a minor street approaching with one lane.

Source: CALTRANS Traffic Manual, Figure 9-9, LSA, 2006

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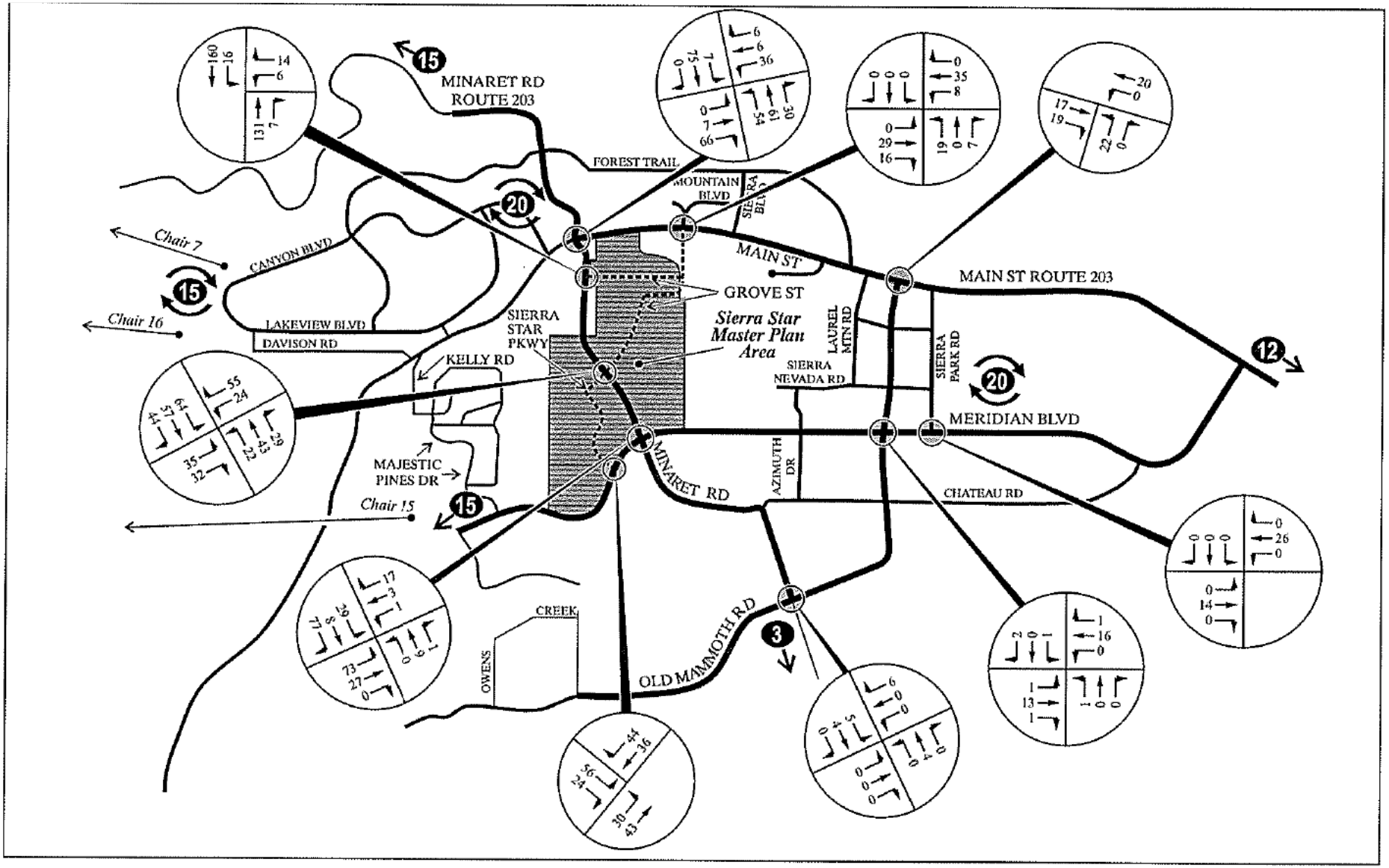
Figure IV.M-6
Peak-Hour Traffic Signal Warrant
at Minaret Road/Sierra Star Parkway



Source: LSA, August, 2006.

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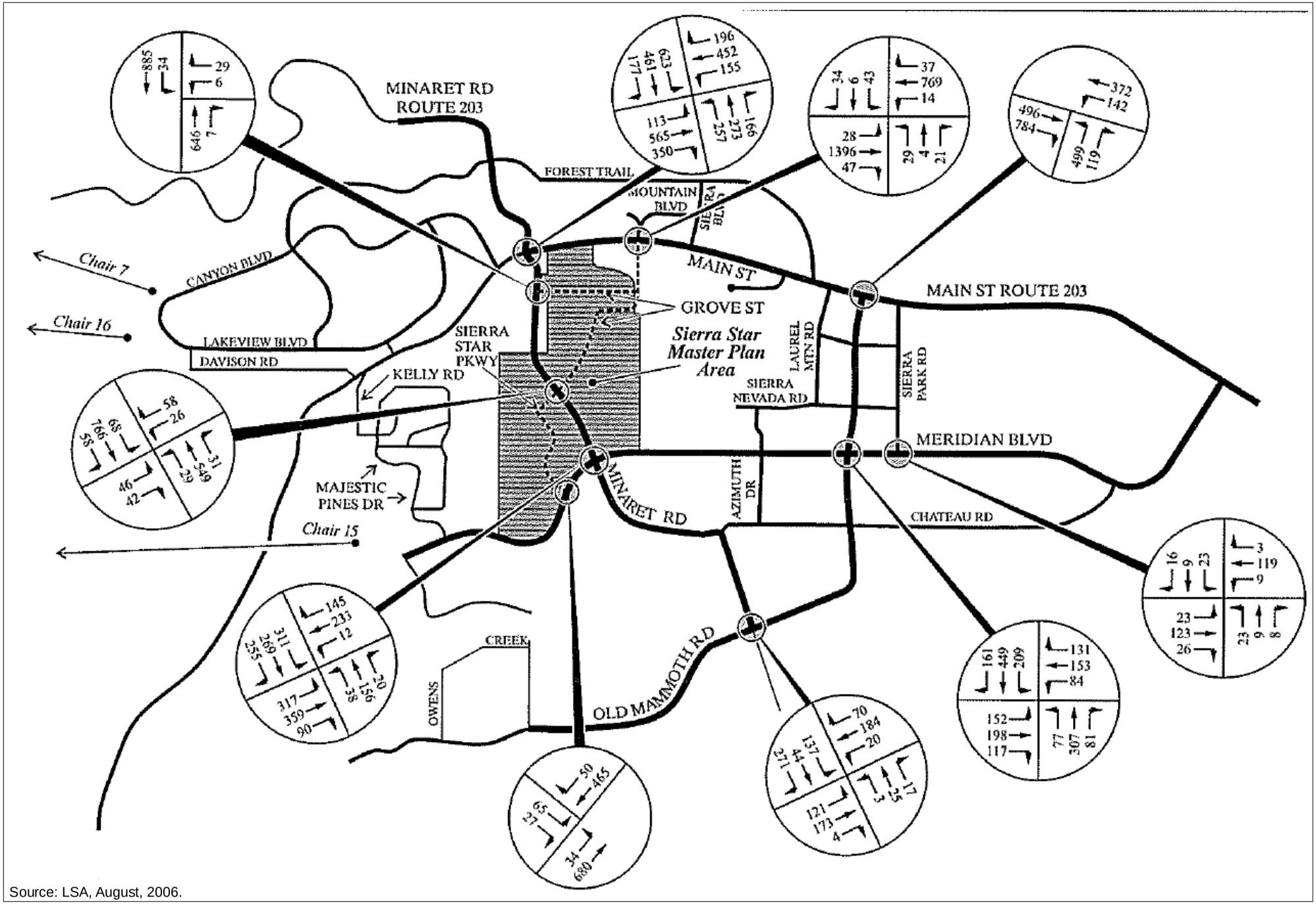
Figure IV.M-7
Project Trip Distribution and Assignment



Source: LSA, August, 2006.

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Figure IV.M-8
Cumulative Plus Project Typical Winter
Saturday Peak Hour Traffic Volumes

Table IV.M-7
Project Typical Winter Saturday Intersection LOS

Without Mitigation			With Mitigation	
Intersection	**Delay (sec)**	**LOS**	**Delay (sec)**	**LOS**
1. Minaret Rd./Meridian Blvd.	48.0	D		
2. Minaret Rd./Lake Mary Rd.-Main St.	38.4	D		
3. Old Mammoth Rd./Meridian Blvd.	23.5	C		
4. Minaret Rd./Old Mammoth Rd.	>35.0 and > 4.0 hour cumulative delay on minor street approach	**F**	22.9	C
5. Sierra Park Rd./Meridian Blvd.	8.1	A		
6. Old Mammoth Rd./Main St.	27.0	C		
7. Mountain Blvd./Main St.	>35.0 but < 4.0 hour cumulative delay on minor street approach	D		

Source: Traffic Impact Analysis prepared by LSA in May 2006 revised August 2006
*Notes: * = unsignalized intersection*

As shown in Table IV.M-7, the unsignalized intersection of Minaret Road/Old Mammoth Road is forecast to operate at LOS F with development of both the Project and other reasonably foreseeable projects. The intersection of Minaret Road/Old Mammoth Road is forecast to exceed the four hour criteria in both the baseline and Project conditions, therefore impacts would be ***significant***. However, implementation of the Mitigation Measure TRANS-4 below would reduce the impacts to a less-than-significant level.

Mitigation Measure TRANS -4

Restripe the southbound approach to provide for separate left- and right-turn lanes at Minaret Road/Old Mammoth Road in order to improve the LOS to an acceptable LOS C (22.6 seconds of delay).

Impact TRANS -5 Parking

Short-term surface parking would be provided adjacent to the check-in locations with guests then directed to underground parking structures located under the major residential buildings. Short-term parking uses include passenger drop off and loading, service, deliveries, transit vehicles, and guest parking for residential uses. Some buildings may share check-in and parking access. The affordable residential units in Area 4A would be allowed surface parking for both resident and guest use. Surface parking would be provided for golf course use. There are no plans to provide any permanent day skier parking within the Project site. Shuttle stops would be located at transit shelters. The specific design, location, and operational criteria for these transit facilities would be considered in conjunction with the pending development of a community-wide transit system. Surface parking lots would be appropriately landscaped and would connect to pedestrian/bicycle walk/bike and trail systems.

The Project will be required to provide adequate parking as part of the approval process. Therefore the Project would not result in inadequate parking capacity and impacts would be ***less than significant***.

Impact TRANS -6 Bicycle and Pedestrian Facilities

The pedestrian and bicycle system within the Project would include interior trails and sidewalks fronting internal streets as well as connecting trails from recreational amenities, outdoor spaces and neighborhoods. Walkways to and from residential areas as well as trail connections that would tie into the larger Town-wide recreational trail network would be provided. This Town-wide network includes pedestrian trails, bike lanes and sidewalks that are adjacent to major roadways such as Minaret Road, Meridian Boulevard, and Main Street (see Figure III-4). The walks would vary in width from 4 to 20 feet depending upon type and intensity of use. When possible, the major internal pedestrian corridors would be located adjacent to landscape features. Therefore, impacts would be ***less than significant***.

Impact TRANS -7 Transit

A gondola may be constructed that would transport patrons from Area 5 to the Eagle Lodge ski area. Although the gondola is not part of the Project, it is reasonable to expect that this amenity, if developed, would result in a reduction in vehicle trips to and from the Eagle Lodge ski area. The gondola was analyzed as part of the April 13, 1995 Mammoth Transportation Model Final Report. According to this report, the gondola was forecast to carry approximately 3,450 daily and 600 peak hour passengers. Based on this study, it is anticipated that gondola person-trips results in a reduction of 1,643 daily and 286 peak hour vehicle trips.

Gondola patrons would be expected to originate primarily from Area 5 of the Project. Patrons from Project Areas 2 or 4 would not be as likely to use the gondola because of the distance that it would be necessary to walk to access the gondola. Therefore, the reduction in vehicle trips attributed to the gondola is applied only to Project Area 5. Vehicles destined to Eagle Lodge ski area from Project Area 5 would use Sierra Star Parkway to access and turn right on Meridian Boulevard, then travel west on Meridian Boulevard to Eagle Lodge ski area. This route would not include any study area intersections. Therefore, the results of the level of service analysis would be the same for the Project with and without the gondola. However, it should be recognized that with the construction of the gondola, the vehicle trips generated by the Project would be reduced by 30 percent during the peak hour on a typical winter Saturday. Therefore, impacts to transit would be ***less than significant***.

Impact TRANS -8 Air Traffic

The Project does not result in a change in air traffic patterns and impacts would be ***less than significant***.

Impact TRANS -9 Hazards

The Project would not substantially increase hazards due to a design feature or incompatible uses and impacts would be ***less than significant***.

Impact TRANS -10 Emergency Access

The Project would not result in inadequate emergency access and impacts would be ***less than significant***.

Impact TRANS -11 Policy Consistency

As noted, the Project will provide for pedestrian and bicycle facilities, and would provide for bus/shuttle shelters sited to facilitate the safety, use and comfort of passengers using transit within the Project area. Therefore the Project would not conflict with adopted policies, plans, or programs supporting alternative transportation and impacts would be ***less than significant***.

CUMULATIVE IMPACTS

Impact TRANS -12

As shown in Table IV.M-7, the unsignalized intersection of Minaret Road/Old Mammoth Road is forecast to operate at LOS F with development of both the Project and other reasonably foreseeable projects. The intersection of Minaret Road/Old Mammoth Road is forecast to exceed the four hour criteria in the baseline and Project conditions, therefore cumulative impacts would be ***significant***. Mitigation Measure TRANS-4 is proposed to reduce this impact to a less-than-significant level.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Implementation of the mitigation measure listed above and compliance with applicable regulations would reduce Project impacts related to traffic and circulation to a ***less-than-significant*** level.

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IV. ENVIRONMENTAL IMPACT ANALYSIS
N. UTILITIES

INTRODUCTION

This section addresses the subject of utilities with respect to the Project and includes an examination of the existing services provided to the Project site, future needs, and the impacts that the Project would have on those services. The utilities section is subdivided into the following three sections: 1) wastewater 2) water and 3) solid waste.

1. WASTEWATER SERVICES

ENVIRONMENTAL SETTING

The Mammoth Community Water District (MCWD) was formed in 1958 to provide water and wastewater services to the Town of Mammoth Lakes (Town). The MCWD boundaries include 3,640 acres of land in the developed portion of the Town. The Town includes approximately 2,500 acres of privately owned land in the developed portion of the 24-square mile incorporated area. The remaining incorporated area is publicly owned and is managed by the Inyo National Forest. A major characteristic of the Town is the seasonality of land use activities. As a result, the MCWD experiences large fluctuations in demand for water and wastewater service. During the seven-month winter ski season, activity is centered in the Town. During the summer months of July, August, and September, outdoor recreation activities shift to areas outside of the Town. The greatest demand for water service occurs during the summer months when irrigation of residential landscaping takes place. October and November represent the lowest period of demand for service from the MCWD. The majority of the water demand on the District's system comes from residential uses.

Wastewater lines within the boundaries of the Town are owned, operated and maintained by MCWD. The MCWD's sewage collection system includes 13 wastewater pump stations and over 52 miles of wastewater mains and interceptors. The MCWD sewer collection system consists of four main wastewater lines ranging in size from 6 to 18 inches in diameter, located within Old Mammoth Road, Meridian Boulevard, Sierra Star Golf Course to Center Street, and Main Street. The interceptor lines vary in diameter from 18 to 21 inches.[1]

For the collection and transmission system, MCWD engineers performed hydraulic modeling and found negligible amounts of capacity in existing facilities available to serve future demands, when examining the collection system as a whole.[2]

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[1] *MCWD, http://www.mcwd.dst.ca.us/UWMP/UWMP2005.pdf, CAJA staff, March 4, 2006.*

[2] *MCWD Study to Determine Revised Water and Wastewater Connection Fees September 2006.*

The wastewater generated in the Project area is conveyed to the MCWD wastewater treatment facility, located near the intersection of Meridian Boulevard and Main Street (SR 203), through two 18-inch interceptor sewer lines. The wastewater treatment facility provides advanced secondary treatment, which includes biological treatment, filtration, and disinfection through the utilization of chlorine. The wastewater treatment plant is designed to provide treatment for peak daily flows of 4.9 million gallons per day (mgd). The current average daily flow is 1.7 mgd with a peak daily flow of 2.6 mgd on holidays and weekends.[3] By the year 2025, MCWD projects that 2.6 mgd of wastewater will be generated and collected on average with peak flows reaching approximately 4.3 mgd. Treated wastewater is currently discharged to Laurel Pond, an effluent dominated water body located approximately 5.5 miles southeast of the Town on United States Forest Service (USFS) land. The MCWD holds a waste discharge permit and has been discharging treated effluent to this pond since 1985. Throughout the years, the pond has become a constructed wetland and a migratory magnet for waterfowl and shorebirds.[4] Disposal occurs at the pond through percolation into the ground and evaporation into the atmosphere. The existing wastewater treatment plant is designed to accommodate the average and peak amounts of wastewater generated in the community through the year 2025.[5]

Proposed Improvements

MCWD is proposing to upgrade the water treatment process to California Code of Regulations Title 22 (Title 22) tertiary treatment as part of their new Recycled Water Project, which involves improving the existing filtration and disinfection process at the Wastewater Treatment Plant (WWTP). Improvements to the WWTP would include secondary effluent pumping, coagulant/polymer addition and mixing, filtration system upgrades, disinfection system upgrades, recycled water in-plant storage, and recycled water pumping equipment. The system will be designed for peak filtration and disinfection flow of 1,600 gallons per minute (gpm), equivalent to 2.3 mgd. At current WWTP flows experienced during the irrigation season, the system is initially expected to produce an average flow of 1.4 mgd of disinfected tertiary effluent suitable for unrestricted irrigation per Title 22.[6]

In addition to improved treatment processes, the Recycled Water Project proposes adding pipelines for distribution of the treated water for irrigation purposes. Distribution facilities will include a recycled water pumping station to be located in the WWTP, adjacent to the storage basin. The pumping station will feed three force mains for conveyance to Sierra Star and Snowcreek golf courses, as well as Shady Rest Park. A below grade concrete receiving tank with level transducer will be provided at each golf course. Receiving tank level will be transmitted to the WWTP pumping station to control pump operation and speed. The receiving tanks will be sized to provide just sufficient volume to allow adequate pump

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[3] *Hegeman, Ericka, Public Affairs and Environmental Specialist, Mammoth Community Water District, correspondence CAJA staff, February 2, 2007.*

[4] *http://www.fs.fed.us/outdoors/naturewatch/california/Wildlife/laurel-ponds/index.shtml*

[5] *MCWD, http://www.mcwd.dst.ca.us/UWMP/UWMP2005.pdf, CAJA staff, March 4, 2006.*

[6] *Bauer Planning & Environmental Services, Inc. Mammoth Community Water District, Recycled Water Distribution Project, Subsequent Draft EIR, September 2006.*

cycling at the WWTP pumping station. The receiving tanks will be connected to the wet well of existing golf course irrigation pumping stations, currently supplied by well water storage ponds. Isolation valves will be installed in the line connecting the recycled water receiving tank and the on-site irrigation pumping station wet well, and in the line connecting the well water storage pond and the wet well. This will eliminate the need for recycled water open storage in the existing golf course ponds, and will allow well water to be used as backup.[7]

The 2006 Recycled Water Distribution Project EIR addresses Sierra Star Golf Course, Snowcreek Golf Course, and Shady Rest Park as customers to receive the reclaimed water during the summer months. MCWD certified the final Recycled Water Project EIR at its March 15, 2007 meeting. The Recycled Water Project is anticipated to be complete by the summer of 2010.

Other planned improvements to the system include upgrading the filter backwash system at Groundwater Treatment Plant #2. The planned upgrade would increase capacity in the sewer lines by about 300 to 350 gpm. This would be achieved by reclaiming the filtered backwash water and could recycle as much as 95 to 99 percent of the backwash that currently goes into the sewer. Although the improvement has not yet been designed, construction may occur as early as the winter 2006/2007 or as late as winter 2007/2008.[8]

REGULATORY SETTING

Regional Water Quality Control Board

The Town is within the jurisdictional boundaries of the Lahontan Regional Water Quality Control Board (RWQCB). The Lahontan RWQCB develops and enforces water quality objectives and implementation plans that safeguard the quality of water resources in its region. In accordance with Section 13263 of the California Water Code, Regional Waters Boards are authorized to issue Waste Discharge Requirements as well as periodically review self-monitoring reports submitted by the discharger, and perform independent compliance checking, and take enforcement action if necessary. Chapter 4.4 of the Water Quality Control Plan for the Lahontan Region, North and South Basins, outlines policies and regulations for municipal wastewater treatment, disposal, and reclamation. The standards contained within the Water Quality Control Plan are designed to provide developers with a uniform approach for the design and installation of adequate systems to control wastewater and wastewater treatment/sewage disposal impacts from the Town, and to prevent any potential contamination of groundwater at the discharge site.

Urban Water Management Plan

In accordance with the California Water Code 10610, also known as the Urban Water Management Planning Act (Act) of 1984, the MCWD adopted an Urban Water Management Plan (2005 UWMP) in

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[7] *Bauer Planning & Environmental Services, Inc. Mammoth Community Water District, Recycled Water Distribution Project, Subsequent Draft EIR, September 2006.*

[8] *PCR DEIR on the proposed Eagle Lodge project, September 2006, page 468.*

December 2005. The Act states that the UWMP must be updated every five years to identify short-term and long-term water demand management in order to meet growing water demands during normal, dry and multiple dry years. The 2005 UWMP provides information about MCWD's responsibilities towards water supply and water recycling in the community including wastewater generation, collection, treatment, and disposal.

ENVIRONMENTAL IMPACTS

Thresholds of Significance

In accordance with Appendix G to the CEQA Guidelines, the proposed project could have a significant environmental impact if it would:

(a) exceed treatment requirements of the applicable Regional Water Quality Control Board;

(b) require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; or

(c) result in a determination by the wastewater treatment provider that serves or may serve the project that it has inadequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

Wastewater Services Issues Not Analyzed Further

As previously stated, the RWQCB enforces waste discharge requirements for the MCWD's service area and WWTP. The Project site is not served by a private on-site wastewater treatment system but instead conveys wastewater via municipal sewage infrastructure maintained by the MCWD. The MCWD wastewater treatment plant is a public facility and therefore, is subject to the State's wastewater treatment requirements. Consequently, wastewater from the Project site is, and would continue to be, treated according to the wastewater treatment requirements enforced by the LRWQCB.[9] Therefore, the Project would not exceed wastewater treatment requirements, and no further analysis of this issue is required.

Project Impacts and Mitigation Measures

Impact UTIL-1 Wastewater Generation

Under the Project, a total maximum of 763 new dwelling units would be developed. The Project would include single family residential units, townhomes, condominiums, workforce housing, a destination resort hotel, and resort lodges. Limited commercial development (up to a maximum of 29,000 square feet (sf) of retail space and up to a maximum of 50,000 sf of conference center/commercial space) would also

[9] *Hegeman, Ericka, Public Affairs and Environmental Specialist, Mammoth Community Water District, correspondence CAJA staff, May 18, 2006.*

be allowed in specific sectors of the plan area with discretionary approval by the Town. As explained in detail in Section III (Project Description), approval of the Lodestar Master Plan allowed for the construction of a total of 1,263 units, with 806 units remaining to be constructed (refer to Table III-1). The Project proposes to develop a total maximum of 763 dwelling units. Since the Lodestar Master Plan was included both in the Town's 1987 General Plan and in the 2005 Urban Water Master Plan, MCWD used 1,263 units when calculating the amount of proposed water use for the Water Supply Assessment (Project WSA) for the Project. This is discussed in further detail below in Section 2 (Water Services). Therefore, the same numbers were used for consistency when analyzing the wastewater flows.

According to the United States Census Bureau's Census 2000 data, the Project is anticipated to generate 2.44 persons per household, which would result in approximately 1,862 new residents. As such, the amount of wastewater generated at the Project site would increase. Given the fluctuation of the Town's tourism, the majority of the proposed residential units and commercial uses are likely to be occupied seasonally rather than on a year-round basis. Wastewater generation rates are analyzed for average day and peak day flows.

Table IV.N-1
Project Estimated Wastewater Demands

Unit Type	Size	Average Daily Generation Rate	Total Average Gallons Per Day (GPD)	Peak Daily Generation Rate*	Total Peak GPD
RESIDENTIAL	**Dwelling Units (du) / Hotel Rooms**				
Area 1 Single Family Homes	24 du	135 gpd/unit	3,240	180 gpd/unit	4,320
Area 2 Condominiums	213 du	110 gpd/unit	23,430	150 gpd/unit	31,950
Area 4A Multifamily/Apartments	69 du	170 gpd/unit	11,730	195 gpd/unit	13,455
Area 5A Hotel	356 hotel rooms(1)	75 gpd/room	26,700	110 gpd/unit	39,160
Area 5B/C/D Condo/Hotel	239 du	60 gpd/unit	14,340	100 gpd/unit	23,900
Area 7 Single Family Homes	40 du	135 gpd/unit	5,400	180 gpd/unit	7,200
COMMERCIAL	**Square Feet (sf)**				
General Commercial	29,000	150 gpd/1,000 sf	4,350	280 gpd/1,000 sf	8,120
General Commercial	20,000	150 gpd/1,000 sf	3,000	280 gpd/1,000 sf	5,600
Conference Center	30,000	70 gpd/1,000 sf	2,100	90 gpd/1,000 sf	2,700
		Total Wastewater Demands	**94,290**		**136,405**

(1) *Under Town Code a hotel room/suite or private residence room equals ½ of a unit, thus the 356 hotel rooms equates to 178 dwelling units.*

Source: Sierra Star Master Plan WSA and July 2006 Generation Rates from MCWD.

As mentioned above, wastewater from the Project site would be conveyed via wastewater infrastructure to the WWTP. Currently, the WWTP treats an average daily flow of 1.6 mgd, a peak daily flow of 2.6 mgd, and has capacity to treat 4.9 mgd. This translates into a remaining capacity of 2.3 mgd of wastewater at average daily flows and 3.2 mgd of wastewater at peak daily flows that can be treated at the WWTP.

Based on the methodology described above, as indicated in Table IV.N-1, the Project's estimated average wastewater generation is approximately 94,290 gpd (.09 mgd) and the peak wastewater generation rate is 136,405 gpd (.14 mgd). Therefore, the Project's anticipated average daily flow would be approximately six percent of the current usage and the peak daily flow would be approximately five percent of the current usage.[10] The Project would represent approximately three percent of the peak daily flow capacity

[10] *Percentages were calculated using .09/1.6 = .0562 (~6% of average daily flows) and .14/2.6 = .0538 (~5% of peak daily flows).*

of the WWTP for peak daily flows up to 4.9 mgd.[11] Thus, Project impacts related to wastewater treatment capacity would be ***less than significant*** and no mitigation measures are required.

Impact UTIL-2 Wastewater Infrastructure

The Project includes installation of wastewater infrastructure within the Project site to convey wastewater generated by the proposed uses to the existing wastewater lines. Figure IV.N-1 illustrates the existing and proposed wastewater infrastructure expected to serve the Project. According to MCWD, areas of deficiency have been identified in sewer collection lines on Manzanita Road from Dorrance Drive and along Center Street, the final sewer trunk lines coming into the WWTP located at the corner of Meridian Boulevard and State Highway 203, and a short section of sewer line on Meridian Boulevard near the intersection with Old Mammoth Road. However, the connection fees for the Project would help to pay for the necessary upgrades to the sewer collection pipelines described above. Although MCWD plans to upgrade these pipelines in the future, MCWD cannot guarantee that timelines for the upgrades will coincide with development associated with the Project. In consideration of the above, Project impacts related to wastewater infrastructure would be ***less than significant*** and no mitigation measures are necessary.

[11] *Percentage was calculated using .14/4.9 = .0285 (~3% of maximum WWTP flow capacity).*

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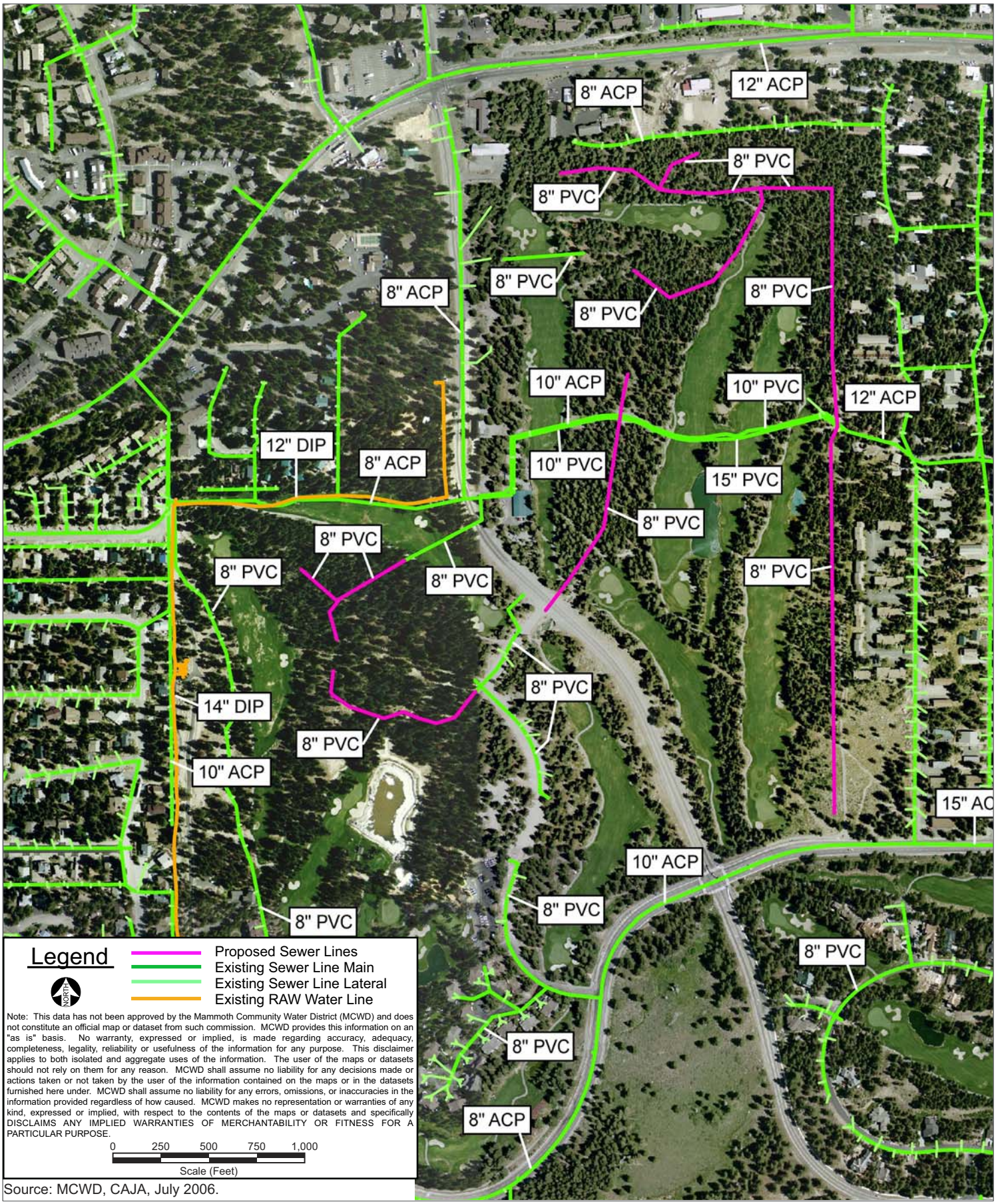

Source: MCWD, CAJA, July 2006.

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Figure IV.N-1
Existing and Proposed Sewer Lines

CUMULATIVE IMPACTS

Impact UTIL-3 Cumulative Wastewater Generation

Implementation of the Project in combination with the related projects in Table II-1 would further increase demands on wastewater infrastructure and treatment capacity. As shown in Table IV.N-2, the Project and the related projects would generate approximately at an average daily rate of approximately 409,626 gpd (.41) mgd and a peak flow rate of approximately 583,672 gpd (.59 mgd) of wastewater at peak flow. The potential need for the related projects to require upgraded wastewater lines to accommodate wastewater generated by these projects is site-specific, and there is little, if any, cumulative relationship between the development of the Project and the related projects. In addition, many of the related projects consist of redevelopment that would result in the elimination of existing wastewater generation patterns at these sites. Thus, the total amount of wastewater generation shown in Table IV.N-2 is likely overstated. Nonetheless, as noted above, the MCWD has a remaining capacity of 3.2 mgd of wastewater at peak daily flows that can be accommodated at the WWTP; thus cumulative impacts to the remaining capacity of the WWTP would be ***less than significant*** and no mitigation measures are required.

Table IV.N-2
Estimated Peak Day Wastewater Generation for Proposed and Related Projects

Related Project No.	Land Use	Size (units) (square feet)	Average Daily Generation Rate*	Total Average Gallons Per Day (GPD)	Peak Daily Generation Rate	Total Peak Gallons Per Day (GPD)
1	HDR - R	106 units	170 gpd/unit	18,020	195 gpd/unit	20,670
2	IP – PS	12,000 sf	150 gpd/1,000 sf	1,800	280 gpd/1,000 sf	3,360
3	IP – PS	40,000 sf	150 gpd/1,000 sf	6,000	280 gpd/1,000 sf	11,200
4	HDR – CL	71 units	110 gpd/unit	7,810	150 gpd/unit	10,650
5	HDR – CL	11 units	110 gpd/unit	1,210	150 gpd/unit	1,650
6	V – SP	23 units	110 gpd/unit	2,530	150 gpd/unit	3,450
7	RMF-1	11 units	170 gpd/unit	1,870	195 gpd/unit	2,145
8	LDR -1 – SP	14 units	135 gpd/unit	1,890	180 gpd/unit	2,520
9	SP	230 units 4,000 sf	60 gpd/unit 150 gpd/1,000 sf	13,800 600	100 gpd/unit 280 gpd/1,000 sf	23,000 1,120
10	HDR – CL	12 units	110 gpd/unit	1,320	150 gpd/unit	1,800
11	HDR - R	58 units	110 gpd/unit	6,380	150 gpd/unit	8,700
12	LDR -1 – R	19 units	135 gpd/unit	2,565	180 gpd/unit	3,420
13	IP – PS	17,600 sf	150 gpd/1,000 sf	2,640	280 gpd/1,000 sf	4,928
14	HDR – R	71 units	110 gpd/unit	7,810	150 gpd/unit	10,650
15	HDR – RMF-2	6 units	170 gpd/unit	1,020	195 gpd/unit	1,170
16	HDR – RMF-2	24 units	170 gpd/unit	4,080	195 gpd/unit	4,680
17	HDR – R	61 units	110 gpd/unit	6,710	150 gpd/unit	9,150
18	HDR – R	40 units	110 gpd/unit	4,400	150 gpd/unit	6,000
19	NVSP – SP	6 units	110 gpd/unit	660	150 gpd/unit	900
20	HDR – RMF-2	3 units	170 gpd/unit	510	195 gpd/unit	585
21	HDR – R	28 units	110 gpd/unit	3,080	150 gpd/unit	4,200
22	HDR – RMF-1	2 units	170 gpd/unit	340	195 gpd/unit	390

Table IV.N-2
Estimated Peak Day Wastewater Generation for Proposed and Related Projects

Related Project No.	Land Use	Size (units) (square feet)	Average Daily Generation Rate*	Total Average Gallons Per Day (GPD)	Peak Daily Generation Rate	Total Peak Gallons Per Day (GPD)
23	HDR – RMF-2	4 units	170 gpd/unit	680	195 gpd/unit	780
24	HDR – SP	21 units	110 gpd/unit	2,310	150 gpd/unit	3,150
25	HDR – R	22 units	110 gpd/unit	2,420	150 gpd/unit	3,300
26	R	1 unit	135 gpd/unit	135	180 gpd/unit	180
27	HDR – SP	247 units	60 gpd/unit	14,820	100 gpd/unit	24,700
28	SP	193 units	60 gpd/unit	11,580	100 gpd/unit	19,300
29	HDR – R	180 units 21,000 sf	110 gpd/unit 150 gpd/1,000 sf	19,800 3,150	150 gpd/unit 280 gpd/1,000 sf	27,000 5,880
30	HDR – R	118 units	170gpd/unit	20,060	195 gpd/unit	23,010
31	I – M	19,126 sq	150 gpd/1,000 sf	2,869	280 gpd/1,000 sf	5,355
32	HDR – CL	54 units	110 gpd/unit	5,940	150 gpd/unit	8,100
33	HDR – CL	23 units	110 gpd/unit	2,530	150 gpd/unit	3,450
34	HDR – CG	480 units 28,205 sf	60 gpd/unit 150 gpd/1,000 sf	28,800 4,231	100 gpd/unit 280 gpd/1,000 sf	48,000 7,897
35	HDR – SP	4 units	110 gpd/unit	440	150 gpd/unit	600
36	HDR – PS	70 units	110 gpd/unit	7,700	150 gpd/unit	10,500
37	HDR – AH	460 units 31,000 sf	135 gpd/unit 150 gpd/1,000 sf	62,100 4,650	180 gpd/unit 280 gpd/1,000 sf	82,800 8,680
38	Forest Service Land	5,500 sf	150 gpd/1,000 sf	825	280 gpd/1,000 sf	1,540
39	HDR – RMF-1	14 units	170 gpd/unit	2,380	195 gpd/unit	2,730
40	HDR – RMF-2	4 units	170 gpd/unit	680	195 gpd/unit	780
41	IP	340 parking spaces	n/a	n/a	n/a	n/a
42	RMF-2	95 units	170 gpd/unit	16,150	195 gpd/unit	18,525
43	CG	9 units	170 gpd/unit	1,530	195 gpd/unit	1,755
44	RSF	1 unit	135 gpd/unit	135	180 gpd/unit	180
45	CL	3,600 sf	510 gpd/1,000 sf	1,836	560 gpd/1,000 sf	2,016
46	RSF	1 unit	135 gpd/unit	135	180 gpd/unit	180
47	RSF	1 unit	135 gpd/unit	135	180 gpd/unit	180
48	RSF	1 unit	135 gpd/unit	135	180 gpd/unit	180
49	RR	1 unit	135 gpd/unit	135	180 gpd/unit	180
			Related Projects Total	**315,336**		**447,267**
			Project Total	**94,290**		**136,405**
			Cumulative Total	**409,626**		**583,672**

Land Use Key:
sf = square feet
LDR-1 = Low-Density Residential 1
LDR-2 = Low-Density Residential 2
HDR-1 = High-Density Residential 1
HDR-2 = High-Density Residential 2
RSF = Residential Single Family
RMF = Residential Multi-Family
RR = Rural Residential
C = Commercial
CG = Commercial General
IP = Institutional Public R = Resort
I = Industrial
NVSP = North Village Specific Plan

Sources: Town of Mammoth Lakes Development Tracking, Dennis Hartwick and Craig Olson, correspondence, April 28, 2006.
Sierra Star Master Plan WSA and July 2006 Generation Rates from MCWD.
Sisson, Gary, MCWD, correspondence, CAJA staff, June 6, 2006.

Impact UTIL-4 Cumulative Wastewater Infrastructure

MCWD has identified deficiencies in the collection system that would be exacerbated by the Project and the related projects. Improvements to the wastewater collection system are is currently scheduled to be implemented between 2010 and 2013, and MCWD has stated that the work must be done prior to full occupation of the Project area. MCWD developed future demand projections for the 2005 General Plan Update Draft EIR that resulted in plans for some infrastructure improvements. A sewer flow model of the entire collection system revealed several areas of inadequacy that will need to be addressed by upgrading existing sewer lines as well as installation of new sewer lines. The potential need for the related projects to require upgraded wastewater lines to accommodate wastewater generated by these projects is site-specific, and there is little, if any, cumulative relationship between the development of the Project and the related projects. In addition, the connection fees paid by individual developers would help to pay for the necessary upgrades to the sewer collection pipelines described above. In consideration of the above, cumulative impacts related to wastewater infrastructure would be ***less than significant*** and no mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Project impacts to wastewater services would be ***less than significant***.

2. WATER SERVICES

ENVIRONMENTAL SETTING

As previously discussed, MCWD provides water and wastewater services to the Town and portions of USFS lands. The MCWD serves the Town with a network of water pipelines that range from 2 to 12 inches in diameter. The amount of water available to the MCWD in any given year is dependent on the precipitation (snowfall) received during the winter season as measured at Mammoth Pass. In the past 30 years, below average precipitation conditions have been experienced for 50 percent of those years. In 30 percent of the years, seasons with less than 70 percent of average precipitation have been experienced. Surface water availability is directly impacted by the amount of precipitation received in a season whereas impacts to groundwater sources are more gradual over a period of years. The greatest demand for water service occurs during the summer months when irrigation of residential landscaping takes place. October and November represent the lowest period of demand for service from the MCWD. The majority of the water demand on MCWD's system comes from residential uses.

The MCWD has water entitlements from Mammoth Creek for domestic uses, storage rights in Lake Mary, and operates eight groundwater production wells within the MCWD service area. The Town receives domestic water from two primary sources: from local surface water supplied by snowmelt water diverted from the Mammoth Creek watershed and from Mammoth Basin watershed groundwater pumped from wells within the Town's boundaries.[12] The District utilizes varying quantities of either source depending upon a variety of conditions and, over the last ten years, has averaged about 60 percent surface water and 40 percent groundwater.[13] The MCWD monitors its surface and groundwater sources to ensure that water supplies are not over-drafted. Surface water levels and flow rates are monitored at 12 locations throughout the Mammoth Basin watershed. Groundwater levels are monitored in the MCWD's eight production wells, as well as 15 shallow and deep monitoring wells. The MCWD prepares an annual groundwater monitoring report that evaluates groundwater levels, surface flow and water quality.

Regulatory Setting

Senate Bill (SB) 610 and SB 221

Senate Bill (SB) 610 and SB 221 amended State law in January 2002 to facilitate the exchange of water supply availability information during the planning processes of certain developments. SB 610, which requires water supply assessments (WSA) to be furnished to local governments for inclusion in the environmental documentation for certain projects, primarily relates to the California Water Code. SB 221 requires an affirmative written verification of sufficient water supply for the approval of certain projects.

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[12] *Town of Mammoth Lakes, http://www.ci.mammoth-lakes.ca.us/General%20Plan/DEIR.htm, CAJA staff, March 4, 2006.*

[13] *Hegeman, Ericka, Public Affairs and Environmental Specialist, Mammoth Community Water District, email correspondence CAJA staff, October 3, 2006.*

The WSA describes the relationship between projected demands on the Town's water supply and the availability of that supply under normal and dry years. The WSA is a comprehensive document, which is prepared to assist the Town Council in making decisions related to land use and is designed to assist in water supply planning efforts.

Section 10912(a) of the California Water Code defines seven types of projects which are subject to the mandates of SB 610, such as: (1) a proposed residential development of more than 500 dwelling units; (2) a proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space, (3) a proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space; (4) a proposed hotel or motel, or both, having more than 500 rooms; (5) a proposed industrial, manufacturing or processing plant, or industrial park planned to house more than 650,000 square feet of floor area; (6) a mixed-use project that includes one or more of the projects specified in this subdivision; and (7) a project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.

Urban Water Management Planning Act

As previously discussed, in accordance with the California Water Code 10610, also known as the Urban Water Management Planning Act (Act) of 1984, the MCWD adopted its 2005 Urban Water Management Plan (2005 UWMP) in December. The Act states that the UWMP must be updated every five years to identify short-term and long-term water demand management in order to meet growing water demands during normal, dry and multiple dry years.

Groundwater Management Act

In an effort to monitor groundwater availability and in accordance with Assembly Bill (AB) 3030, the Groundwater Management Act, MCWD adopted a Groundwater Management Plan (2005 GWMP) in July 2005.[14] AB 3030 provides local water agencies with procedures to develop a groundwater management plan so those agencies can manage their groundwater resources efficiently and safely while protecting the quality of supplies. Under AB 3030, the development of a GWMP by a local water agency is voluntary. However, once a plan is adopted, the rules and regulations contained therein must also be adopted to implement the program outlined in the plan. Information and analysis contained within the 2005 GWMP is based on previously published reports, conclusions of recent research and MCWD data compilations on hydrologic conditions, facility locations, and water production for the Mammoth Basin watershed.

Methodology

Since the Project would provide for the development of more than 500 dwelling units, a WSA is required as per SB 610. The Town formally requested a WSA for the Project on October 13, 2006. The MCWD

[14] *MCWD, http://www.mcwd.dst.ca.us/UWMP/UWMP2005.pdf, CAJA staff, March 4, 2006.*

prepared a WSA (Project WSA) for the Sierra Star Master Plan and MCWD's Board of Directors adopted the WSA on December 7, 2006 pursuant to Water Code Section 10910. The information and analysis in this section is based primarily on the Project WSA, as well as the 2005 UWMP, the 2005 GWMP, and other information provided by MCWD. General Plan policies related to water use are addressed in Section IV.I Land Use, in Table IV.I-1 for the 1987 General Plan. With the exception of the Project WSA, which is in Appendix K to this Draft EIR, these documents are incorporated by reference and are all available from the Town of Mammoth Lakes, the Mammoth Community Water District, or via their respective websites.

EXISTING CONDITIONS

Water Supply & Availability

In accordance with the State Urban Water Management Planning Act, MCWD analyzed water supply in the 2005 UWMP by addressing availability of water during normal, single dry and multiple dry water years. Table IV.N-3 provides a breakdown of existing water supplies for surface and groundwater sources. Normal water years are based on a 10 percent deviation from an April 1st average snow pack of 43 inches or 38.7 to 47.3 inches. Normal water years historically have occurred every nine years. The base years for normal water years on which MCWD analyzes its data are: 1946, 1949, 1954, 1971, 1984, 1996 and 1997. According to the *Guidebook to Assist Water Suppliers in the Preparation of a 2005 UWMP*, a single dry year is "generally considered to be the lowest annual runoff for a watershed since the water-year beginning in 1903." The records for the Mammoth Basin begin in 1928 and the lowest April 1st snow water content, which generally equates to the runoff for the watershed occurred in 1977 with about 12 inches of snow water content. This data was used in the 2005 UWMP to prepare projections for a single dry year where essentially no surface water would be available for the MCWD to divert. Groundwater data for single dry water years is determined using the driest years for which the MCWD's production wells were in use: 1992 for wells 1, 6, 10 and 15; 2001 for wells 16, 17, 18, and 20. In addition, MCWD bases multiple dry years on the lowest average runoff for a consecutive, multiple year period (i.e., three years or more) since 1928. The driest multiple year period for the Mammoth watershed was the six years from 1987 to 1992, which averaged 28.7 inches of snow water content at Mammoth Pass.

Table IV.N-3
Existing Water Supply Reliability[1]

Supply	Normal Water Year	Single Dry Water Year	Multiple Dry Years			
			Year 1	Year 2	Year 3	Year 4
Projected Surface Water	2,760[2]	0	1,780	1,500	1,100	1,084
Projected Groundwater Wells	4,000[3]	3,410	3,410	3,408	3,408	3,408
Projected Total Supply	**6,760**	**3,410**	**5,190**	**4,908**	**4,508**	**4,492**

[1] Units of measure are acre-feet (af) per year. An af equals approximately 325,821 gallons.
[2] Total MCWD is "entitled" to. This amount has been used by MCWD.
[3] Total MCWD has a "right" to. This amount has been used by MCWD.

Note: While MCWD currently has surface water rights that total a maximum of 2,760 acre-feet annually, the bypass flow requirements that MCWD operates under have not been permanently established and the final bypass requirements that are eventually established could potentially result in less surface water being available to MCWD. In addition, the volume of groundwater noted in this table is the maximum amount of groundwater that MCWD has projected to pump in any given year and does not necessarily represent the safe yield of the aquifer.

Source: MCWD SB 610 WSA for the Sierra Star Master Plan.

Surface Water

The MCWD is currently entitled, through two licenses and one permit, to divert 2,760 acre-feet per year (afy) from Lake Mary at a maximum diversion rate of 5 cubic feet per second from November 2nd to April 30th and 5.039 cfs from May 1st to November 1st. Surface water is delivered from Lake Mary to the MCWD water system through a 10-inch pipeline along Lake Mary Road. Surface water storage rights are limited to 660 acre-feet (af) annually, of which 606 af may be collected between April 1st and June 30th, and 54 af may be collected between September 1st and September 30th of each year. The MCWD is also limited to a maximum drawdown in Lake Mary of 3.0 feet during the period between June 1st and September 15th, and a total maximum annual drawdown of 5.7 feet. Recent improvements to the Lake Mary surface water treatment plant allow MCWD to utilize the full 2,760 af permitted in normal and wet precipitation conditions. The volume of surface water in normal years is based on the maximum volume of water available through MCWD's surface water rights. However, the volume of surface water in multiple dry years is based on the actual surface water that could have been available in 1992, the last year of a six-year drought.[15]

Since MCWD's diversion facilities are located on USFS land, the USFS has authority over MCWD water operation activities through a Master Operation Agreement (MOA) developed in 1977. The MOA provides terms for instream flow requirements that are designed to protect aquatic species in Mammoth Creek. Additionally, the amount of water that MCWD may store or divert is influenced by the bypass

[15] *MCWD, http://www.mcwd.dst.ca.us/UWMP/UWMP2005.pdf, CAJA staff, March 4, 2006.*

flow requirements in Mammoth Creek that are included as part of MCWD's water rights. MCWD measures Mammoth Creek flows at its Old Mammoth Road gage located near Mammoth Creek Park. MCWD is only allowed to directly divert natural flows entering Lake Mary and divert natural flows to storage when the flows, as measured at the Old Mammoth Road gage, exceed the bypass flow requirements. When the flows at MCWD's Old Mammoth Road gage are equal to or less than the bypass flow requirements, no water may be directly diverted or diverted to storage, and MCWD must bypass all incoming flows to Lake Mary.

MCWD is second to the City of Los Angeles Department of Water and Power (LADWP) for being the largest diverter of Mammoth Creek water. LADWP exercises it rights to divert 440 afy upstream of U.S. Highway 395, and 4,400 afy downstream of U.S. Highway 395 in the Chance Meadows area, to be used for grazing purposes. However LADWP's water rights are older and do not include instream flow requirements.[16]

While MCWD must currently operate under the bypass flow requirements, there is potential for these requirements to become modified. MCWD is currently preparing an EIR that evaluates the environmental effects of the proposed bypass flow requirements for Mammoth Creek. The outcome of the Mammoth Creek EIR and the resulting decision by the State Water Resources Control Board could modify the existing temporary bypass flows to a different regime that could result in less surface water being available to MCWD. Surface water supply volumes used in the preparation of the Project WSA assume that the existing bypass flow requirements will remain as they are currently established. Potential reductions in surface water supplies in the future are a possibility, but the amount of these reductions is currently unknown.[17]

Groundwater

The 2005 GWMP describes a monitoring and operation plan for the long-term use of local groundwater and surface water resources. The intent of the 2005 GWMP is to ensure that groundwater resources are managed in a manner that ensures sufficient, high quality groundwater resources while minimizing potential environmental impacts. The MCWD pumps groundwater from the Mammoth Basin watershed, which is located within the Long Valley Groundwater Basin identified by the California Department of Water Resources (DWR) as part of the South Lahontan Hydrologic Region. Mammoth Basin is the watershed of Mammoth Creek and is bounded on the south by the drainage divide of Convict Creek; on the west by the Mammoth Crest; on the north by the drainage divide of Dry Creek; and on the east extending along the watershed of Hot Creek. The area of the Mammoth Basin is about 71 square miles and extends approximately 13 miles west to east and nine miles north to south.

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[16] *CH2M Hill, 2000 Draft EIR for the Proposed Changes for Mammoth Creek Instream Flow Requirements, Point of Measurement, and Place of Use.*

[17] *MCWD SB 610 WSA for the Sierra Star Master Plan*

The Mammoth Basin has not been adjudicated or identified by DWR as being overdrafted. Groundwater is pumped from eight production wells located within the MCWD's service area. According to the 2005 GWMP, groundwater may not be extracted at a rate greater than 4,000 afy.[18] During the past five year period (2002 to 2006), MCWD pumped 10,327 af of groundwater, averaging 2,065 afy. As shown in Table IV.N-4, the maximum volume pumped occurred in 2002 and amounted to 2,719 af. When precipitation is lower than normal the use of groundwater is increased, as less surface water supply is available. Production volumes of groundwater in any one year are dependent on the type of precipitation year experienced and consequent availability of surface water. During dry-year periods, groundwater levels within the Mammoth Basin decrease due to increased pumping and less recharge. During normal and above-normal precipitation years, groundwater levels increase and tend to fully recover after two years of normal precipitation.

Table IV.N-4
Annual Volumes[(1)] of Groundwater Pumped

Well No.	2002	2003	2004	2005	2006
1	132	184	71	188	297
6	184	454	347	554	1
10	1086	602	500	577	135
15	592	807	381	244	390
16	141	107	239	55	0
17	310	172	138	100	229
18	77	114	58	226	1
20	196	80	187	167	13
Total Acre-Feet	**2,719**	**2,520**	**1,921**	**2,111**	**1,066**

(1) Units of measure are acre-feet (af) per year. An af equals approximately 325,821 gallons.
Note: Groundwater pumpage reflects the metered amount of water pumped from individual wells, which tends to vary slightly from the flow measured through the treatment plants.
Source: MCWD SB 610 WSA for the Sierra Star Master Plan.

Fire Flow

In addition to supplying water for domestic uses, MCWD also supplies water for fire protection services, in accordance with Mammoth Lakes Fire Protection District (MLFPD) requirements, also discussed in Section IV.L. 1 (Public Services). Fire flow requirements are closely related to land use as the quantity of water necessary for fire protection varies with the type of development, life hazard, type and level of occupancy, and degree of fire hazard (based on such factors as building age or type of construction). The MLFPD-established fire flow requirements vary from 1,500 gpm in low density residential areas and 2,000 gpm high density residential to 2,500 gpm in commercial areas for two hours. Additionally, for high-rise construction, MLFPD requires a pressure of 100 pounds per square inch (PSI) at the roof. In any instance, a minimum residual water pressure of 20 PSI is to remain in the water system while the required gpm is flowing. According to MCWD, the system pressures in the Project area range from 50 to 150 PSI.

[18] *4,000 afy is the maximum amount of groundwater projected to pump in any given year and does not necessarily represent the safe yield of the aquifer.*

Local Water Infrastructure

The MCWD serves the Town with a network of water pipelines that range from 2 to 12 inches in diameter. The water pipelines are constructed of either steel, ductile iron pipe (DIP), or polyvinyl chloride (PVC). The existing water pipelines in the area are 8" and 10" DIP. Figure IV.N-2 represents the proposed and existing water lines for the Project area.

Water Treatment

In 2004, MCWD completed modifications to the Lake Mary surface water treatment plant to meet new standards of the California Department of Health Services. As a result of these modifications, the production capacity of the plant is now rated at the 5 cfs diversion rate allowed in the water rights permit. These improvements have enabled MCWD to utilize the full 2,760 af of water available from its state water right permits in normal and wet precipitation conditions.[19]

Projected Water Demand

The majority of the water demand on MCWD's system comes from residential uses; with 30 percent from condominiums, 18 percent single family units, and 4 percent multifamily units.[20] The total water demand in 2005 amounted to 3,423 af. This value includes golf course irrigation, system use, and unaccounted for water. Table IV.N-5 shows the past, current, and projected future water demands.

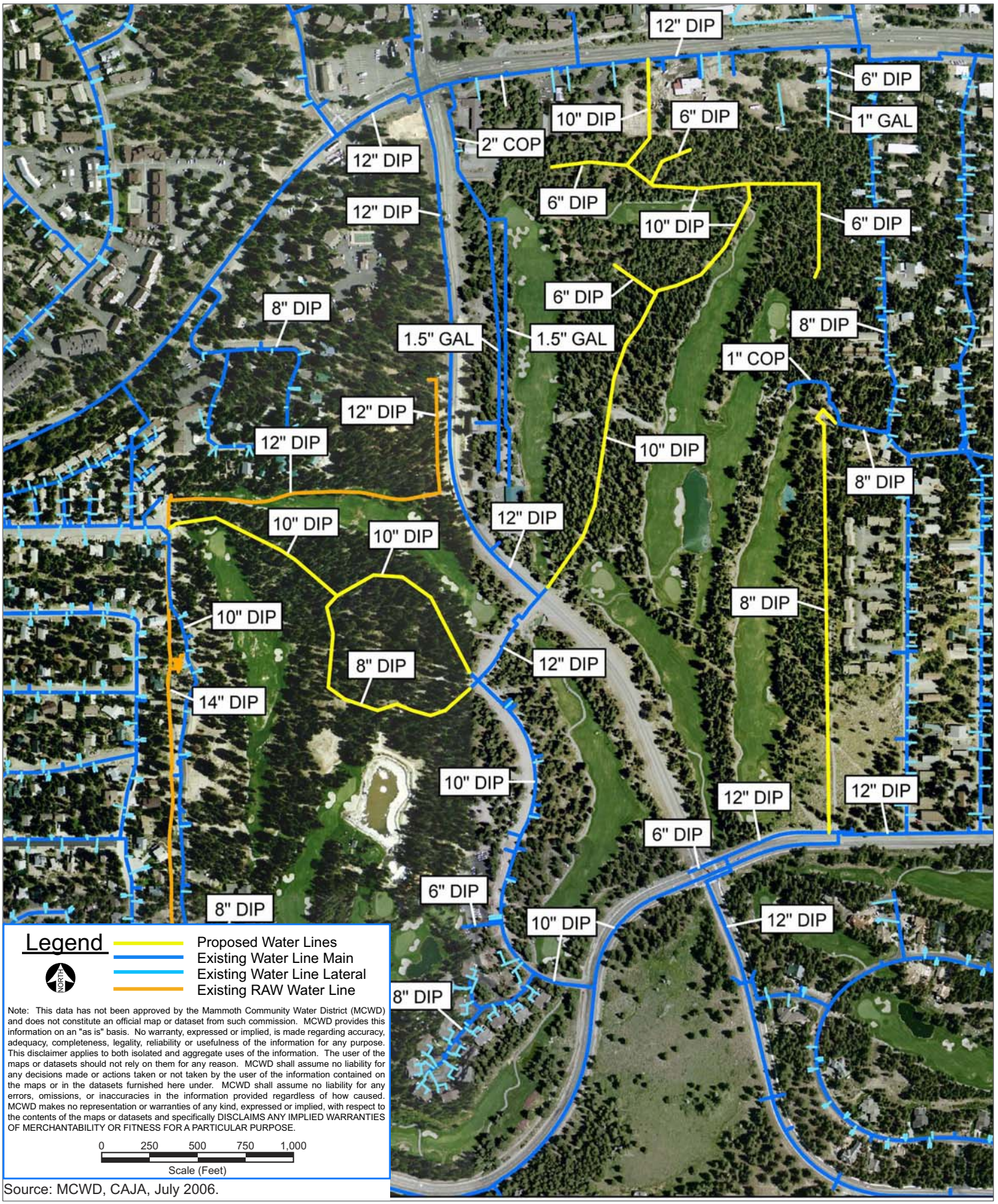
Table IV.N-5
Past, Current, and Projected Water Use[(1)]

Water Use Sector	2000	2005	2010	2015	2020	2025
Single Family Residential	515	549	586	623	659	696
Condominium	961	948	960	973	985	997
Multi-Family Residential	144	140	211	282	353	424
Commercial/Industrial and Public	217	257	374	469	565	660
Motel / Hotel	112	111	304	496	689	881
Public Sector	170	296	n/a[(4)]	n/a [(4)]	n/a [(4)]	n/a [(4)]
Golf Course[(2)]	297	263	400	400	400	400
Other[(3)]	53	107	80	80	80	80
Unaccounted	486	752	760	760	760	760
Total	**2,955**	**3,423**	**3,674**	**4,082**	**4,490**	**4,898**

[(1)] Units of measure are acre-feet (af) per year. An af equals approximately 325,821 gallons.
[(2)] Golf course water use is based on existing demand from Sierra Star and Snowcreek golf courses.
[(3)] Other = treatment plant process water, fire fighting, line cleaning, etc.
[(4)] Public Sector is included in commercial for future projections for consistency with the Town's General Plan EIR (2005).
Note: Existing hotel/motel water-use includes those units that are separately metered and does not include units that share water meters with commercial. Commercial includes mixed uses such as restaurants, condo/hotel, retail, etc. Groundwater data in this table is based upon metered flows from the MCWD's groundwater treatment plants, which varies slightly from amounts measured from individual wells.
Source: 2005 Urban Water Management Plan

[19] *MCWD, http://www.mcwd.dst.ca.us/UWMP/UWMP2005.pdf, CAJA staff, March 4, 2006.*

[20] *MCWD, http://www.mcwd.dst.ca.us/UWMP/UWMP2005.pdf, CAJA staff, March 4, 2006.*



Source: MCWD, CAJA, July 2006.

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Figure IV.N-2
Existing and Proposed Water Lines

When projected future water demand estimates are compared with current supply data, it is projected that water supply deficiencies would occur after a single dry year and in multiple year drought conditions. Table IV.N-6 compares current supply and future demands in normal, single dry and multiple dry years, without the Project. Table IV.N.6 illustrates that shortfalls in supply would occur if MCWD were to continue to utilize existing water supplies to meet demands at build-out of the community without the Project. Deficiencies of over 1,000 af would occur in a single dry year without the Project.

Table IV.N-6
Current Supply and Demand Without Project[(1)]

Current Supply			Multiple Dry Water Years			
	Average Normal Water Year	Single Dry Water Year	Year 1	Year 2	Year 3	Year 4
Supply Total	6,760	3,410	5,190	4,908	4,508	4,492
Demand Total (without Project)	4,747	4,747	4,747	4,747	4,747	4,747
Difference (without Project)	**2,013**	**-1,337**	**443**	**161**	**-239**	**-255**

(1) Units of measure are acre-feet (af) per year. An af equals approximately 325,829 gallons.

Source: MCWD SB 610 WSA for the Sierra Star Master Plan.

Additional Sources of Water

California Water Code 10911 requires that if, as a result of its assessment, the public water system concludes that its water supplies are, or will be, insufficient, the public water system shall provide to the city or county its plans for acquiring additional water supplies. Since existing supplies are insufficient and result in a shortfall in single dry years, MCWD has developed the following plans regarding implementation of water conservation measures, use of recycled water, and development of new supplies.

Future Groundwater

MCWD has identified groundwater as being a significant source of future water supplies for the community. Groundwater would be extracted from either the Mammoth Basin watershed or the Dry Creek Basin watershed to the north of the Mammoth Basin. Additional groundwater production wells in the Mammoth Basin would require environmental review and hydrogeologic analysis to ensure that additional volumes of water can be safely extracted. Well development in the Dry Creek Basin would also require environmental review and hydrogeologic analysis prior to utilizing this water source. Overall, depending upon supplies needed, about 1,000 af of additional groundwater supplies may be developed in the future from either the Mammoth Basin watershed or the Dry Creek watershed. Volumes of groundwater projected to be available from the Dry Creek watershed are estimated at 1,500 afy during normal years and 1,245 afy during multiple dry year periods.

As shown in the Project WSA, although groundwater supplies are supplemented with surface water and MCWD may be supplementing existing well supplies with additional production wells in the future, the volume of groundwater currently available from existing wells is insufficient to meet the total demand under multiple dry-year conditions as the community nears build-out in 2025. A study conducted for MCWD indicated that a total volume of 3,800 afy could be pumped from the Mammoth Basin during a three-year dry period.[21]

Future Recycled Water

MCWD currently supplies untreated groundwater for irrigation of the existing nine-hole Snowcreek Golf Course and the Sierra Star Golf Course, and supplies potable water to Shady Rest Park.

As described briefly in the Wastewater Section, MCWD has identified the use of recycled water as a potential source of water supply for golf course and park irrigation. The source of supply would come from the WWTP. Although the WWTP currently produces recycled water, there are some upgrades necessary to meet current State Department of Health standards. Parallel recycled water pipelines would be installed from the WWTP to the Sierra Star Golf Course and the existing nine-hole Snowcreek Golf Course. A third pipeline would be installed from the WWTP to Shady Rest Park. MCWD certified the final Recycled Water Project EIR at its March 15, 2007 meeting. The Recycled Water Project is anticipated to be complete by the summer of 2010. The Recycled Water Project would provide the capability to produce 1.55 mgd of recycled water.

Since golf course irrigation consists of approximately 12 percent of water use currently; along with nine percent used for parks and public facility irrigation[22]; the availability of recycled water to be used instead of potable water would substantially help the Town meet existing and future water supply needs. In addition, potable water supplied to Shady Rest Park over the past four years averaged about 30 afy. Overall, it is anticipated that the amount of potable water that could be made available through the implementation of the Recycled Water Project is approximately 400 afy. However, depending upon customer demands, the Recycled Water Project could potentially supply approximately 550 afy to large turf irrigators in the community during the summer irrigation season.[23]

Future Conservation

In 1992, MCWD implemented water restrictions that included limiting landscape irrigation to three days per week. This restriction resulted in an average reduction in water demand of 25 percent for the irrigation period of June through September. Projections of available water supply are prepared each year after final snowpack measurements are made on April 1st. At that time, if projections indicate possible

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[21] *"Investigation of Groundwater Production Impacts on Surface Water Discharge and Spring Flow", Wildermuth Environmental, Inc. November 2003.*

[22] *MCWD, http://www.mcwd.dst.ca.us/UWMP/UWMP2005.pdf, CAJA staff, February 5, 2007.*

[23] *MCWD SB 610 WSA for the 2006 Revised Snowcreek Master Plan.*

water supply insufficiencies, MCWD's Board of Directors may declare the existence or threatened existence of a drought and may then implement any level of restrictions as deemed necessary.

Future Water System Loss Reduction

MCWD has been implementing an aggressive main water pipeline replacement program to replace old leaking water pipes since 2001. Over the past several years, an average of 10,000 feet of pipeline per year has been replaced. It is estimated that replacement of all of the existing old pipelines in the entire system will occur over the next eight-year period. As a result of the completion of this replacement work, MCWD hopes to achieve a reduction in water loss within the system of approximately 300 af.

Table IV.N-7 summarizes the new sources of water potentially available to assist in resolving water supply deficiencies.

Table IV.N-7
Future Water Supplies

Project Name	Demand Reduction	Supply Increase	Projected Completion Date
New groundwater development		1,000 af (or amount needed to meet demands)	As needed
Recycled Water Project		400 af	2010
Water Conservation with irrigation restriction enforced	500 af (at build out)		n/a
Water Pipeline Replacement 10-15% loss rate goal	300 af (at build out)		Ongoing, full implementation anticipated by 2011
Total	**800 afy**	**1,400 afy**	

Source: MCWD SB 610 WSA for the Sierra Star Master Plan.

Table IV.N-8 provides a breakdown of existing water supplies for surface and ground water, plus recycled water and water from future wells.

Table IV.N-8
Existing Water Supply Reliability Plus 2025 Future Water Sources[1]

Supply	Normal Water Year	Single Dry Water Year	Multiple Dry Years			
			Year 1	Year 2	Year 3	Year 4
Projected Surface Water	2,760[2]	0	1,780	1,500	1,100	1,084
Projected Groundwater Wells	4,000[3]	3,410	3,410	3,408	3,408	3,408
Future Groundwater	1,000	1,000	1,000	1,000	1,000	1,000
Future Recycled Water	360	360	360	360	360	360
Projected Total Supply	**8,120**	**4,770**	**6,550**	**6,268**	**5,868**	**5,852**

[1] Units of measure are acre-feet (af) per year. An af equals approximately 325,829 gallons.
[2] Total MCWD is "entitled" to. This amount has been used by MCWD.
[3] 4,000 afy is the total MCWD has a "right" to. This amount has been used by MCWD.

Note: While MCWD currently has surface water rights that total a maximum of 2,760 af annually, the bypass flow requirements that MCWD operates under have not been permanently established and the final bypass requirements that are eventually established could potentially result in less surface water being available to MCWD. In addition, the volume of groundwater noted in this table is the maximum amount of groundwater that MCWD has projected to pump in any given year and does not necessarily represent the safe yield of the aquifer.

Source: MCWD SB 610 WSA for the Sierra Star Master Plan.

ENVIRONMENTAL IMPACTS

Thresholds of Significance

In accordance with Appendix G to the CEQA Guidelines, the proposed project could have a significant environmental impact if it would:

(a) require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant effects; or

(b) have insufficient water supplies available to serve the project from existing entitlements and resources, or would require new or expanded entitlements.

Water Services Issues Not Analyzed Further

In 2004, MCWD completed modifications to the Lake Mary surface water treatment plant (plant) to meet new standards of the California Department of Health Services. As a result of these modifications, the production capacity of the plant is now rated at the 5 cfs diversion rate allowed for in the water rights

permit. These improvements have enabled MCWD to utilize the full 2,760 af of water available from its state water right permits in normal and wet precipitation conditions.[24] However, MCWD has never been able to divert the full 2,760 af due to bypass flow requirements, lower water demand during fall and spring months, and other management constraints. The most that has been diverted in a single year was 2,449 af in 1984.[25] The Project would receive a mixture of treated surface water from the Lake Mary plant, and treated groundwater from Groundwater Treatment Plant No. 1, located off Old Mammoth Road near Snowcreek Athletic Club. According to MCWD, these two treatment plants have sufficient treatment capacity to serve the Project's demand for water. It is also possible that groundwater from Groundwater Treatment Plant No. 2 at the corner of Majestic Pines Drive and Meridian Boulevard could supply the Project area occasionally.[26] As such, the increased demand for water services generated by the Project would not result in the need for a new or expanded water treatment facility to be constructed. Therefore, ***no impact*** would occur, and no further analysis of this issue is required.

Project Impacts and Mitigation Measures

The 2005 UWMP included proposed development associated with the Town's 2005 General Plan Update. While the current updates to the Town General Plan are an ongoing process, the 2005 draft General Plan represents the best, most current information regarding potential future development in the community. For this reason, MCWD included the unit counts in the Draft General Plan Update EIR dated October 2005 in the preparation of its 2005 UWMP. In addition, as explained in detail in Section III (Project Description), approval of the 1981 Master Plan allowed for the construction of a total of 2,368 units, with 1,223[27] units remaining to be constructed (refer to Table III-1 and Figure III-1). Therefore, since the 1981 Master Plan was included both in the Town's 1987 General Plan and in the 2005 UWMP, it can be assumed that the development figures used to prepare the 2005 UWMP included the Project. Thus, according to Water Code section 10910 (c) (2), the analysis of water demand for the Project may be incorporated from the UWMP.

Impact UTIL-5 Water Supply

Under the Project, a total maximum of 763 new dwelling units would be developed. The Project would include single family residential, townhomes, condominiums, workforce housing, a destination resort hotel, and resort lodges. Limited commercial development (up to a maximum of 29,000 square feet of retail space and up to a maximum of 50,000 square feet of conference center/commercial space) would also be allowed in specific sectors of the plan area with discretionary approval by the Town. According

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[24] *MCWD, http://www.mcwd.dst.ca.us/UWMP/UWMP2005.pdf, CAJA staff, March 4, 2006.*

[25] *Hegeman, Ericka, Public Affairs and Environmental Specialist, Mammoth Community Water District, correspondence CAJA staff, October 3, 2006.*

[26] *Hegeman, Ericka, Public Affairs and Environmental Specialist, Mammoth Community Water District, e-mail correspondence CAJA staff, February 8, 2007.*

[27] *The Project is proposing the development of 1,050 dwelling units, resulting in 173 less dwelling units than the development projected under the 1981 Master Plan.*

to the United States Census Bureau's Census 2000 data, the Project is anticipated to generate 2.44 persons per household, which would result in approximately 1,862 new residents. As such, the demand for domestic water in the Town would increase as a result of the Project. Given the fluctuations characteristic of the Town's tourism pattern, the majority of the proposed residential units and commercial uses are likely to be occupied seasonally rather than on a year-round basis and therefore would not use water over the course of an entire year. Table IV.N-9 represents the water generation rates analyzed for average day and peak day flows.

Table IV.N-9
Project Estimated Water Demands

Unit Type	Size	Average Daily Generation Rate	Total Average Gallons Per Day (GPD)	Peak Daily Generation Rate*	Total Peak GPD
RESIDENTIAL	**Dwelling Units (du) / Hotel Rooms**				
Area 1 Single Family Homes	24 du	250 gpd/unit	6,000	455 gpd/unit	10,920
Area 2 Condominiums	213 du	170 gpd/unit	36,210	295 gpd/unit	62,835
Area 4A Multifamily/ Apartments	69du	135 gpd/unit	9,315	200 gpd/unit	13,800
Area 5A Hotel	356 hotel rooms(1)	80 gpd/room	28,480	120 gpd/unit	42,720
Area 5B/C/D Condo/Hotel	239 du	100 gpd/unit	23,900	105 gpd/unit	25,095
Area 7 Single Family Homes	40 du	250gpd/unit	10,000	455 gpd/unit	18,200
COMMERCIAL	**Square Feet (sf)**				
General Commercial	29,000	150 gpd/1,000 sf	4,350	280 gpd/1,000 sf	8,120
General Commercial	20,000	150 gpd/1,000 sf	3,000	280 gpd/1,000 sf	5,600
Conference Center	30,000	125gpd/1,000 sf	3,750	230 gpd/1,000 sf	6,900
		Total Water Demands	**125,005**		**194,190**

(1) *Under Town Code a hotel room/suite or private residence room equals ½ of a unit, thus the 356 hotel rooms equates to 178 dwelling units.*
Source: Sierra Star Master Plan WSA and July 2006 Generation Rates from MCWD.

Based on the methodology described above, as indicated in Table IV.N-9, the Project's estimated average water demand is approximately 125,005 gpd (140 afy) and the peak water demand is approximately 194,190 gpd (218 afy). According to the existing water supply available to the MCWD (refer to Table IV.N-3 above) there is sufficient water supply at average and peak times in both normal and multiple dry years for the Project. Thus, Project impacts to water use within the Town would be considered ***less than significant*** and no mitigation measures are required.

Because the Project would not result in any significant impacts related to water service, no mitigation measures are required. However, to further reduce the Project's demand on water services, the following measures are recommended:

Mitigation Measure UTIL-5a Water Supply

The applicant should ensure that the landscape irrigation system be designed, installed and tested to provide uniform irrigation coverage. Sprinkler head patterns shall be adjusted to minimize over spray onto walkways and streets.

Mitigation Measure UTIL-5b Water Supply

The applicant should install either a "smart sprinkler" system to provide irrigation for the landscaped areas or, at a minimum, set automatic irrigation timers to water landscaping during early morning or late evening hours to reduce water losses from evaporation. Irrigation run times for all zones shall be adjusted seasonally, reducing water times and frequency in the cooler months (fall, winter, spring). Sprinkler timer run times shall be adjusted to avoid water runoff, especially when irrigating sloped property.

Mitigation Measure UTIL-5c Water Supply

The applicant should select and use drought-tolerant, low-water consuming plant varieties to reduce irrigation water consumption.

Mitigation Measure UTIL-5d Water Supply

The applicant should install ultra-low flush water toilets and urinals and shall maintain the MCWD's current requirement to limit the maximum flow per shower head to 2.75 gallons per minute, in new construction. Low-flow faucet aerators should be installed on all sink faucets.

Mitigation Measure UTIL-5e Water Supply

The applicant shall be subject to the provisions of a recycled water ordinance adopted by the Town pursuant to Article 10.9, beginning with Section 65601 of the Government Code, and titled Water Recycling in Landscaping Act (Act) at such time as the Town is notified by the Mammoth Community Water District of the future availability of recycled water. In addition, the Sierra Star Master Plan shall include a provision that, for all projects constructed or approved prior to the notice, the applicant shall use their best efforts to use recycled water consistent with the Town, the Act, and water district policy.

Mitigation Measure UTIL-5f Water Supply

The applicant should install Energy Star dishwashers and clothes washers.

Impact UTIL-6 Water Infrastructure

The existing water system infrastructure would not be able to deliver proposed demand at the Project site due to piping constraints. The water pipelines are constructed of either steel, ductile iron pipe (DIP), or polyvinyl chloride (PVC). The MCWD has worked with design engineers associated with the existing Lodestar Master Plan developments and the Project development to ensure that the future design of development constructed under the Project would be sufficient to meet expected water demands. The consulting design engineer (Triad Holmes Associates) has prepared design plans for new pipelines that would serve the Project site. These water supply lines are shown on Figure IV.N-2 and include approximately:

- 6,300 feet of 10-inch ductile iron pipe
- 900 feet of 8-inch ductile iron pipe
- 900 feet of 6–inch ductile iron pipe

According to the MCWD, the above-described engineering work is expected to be sufficient to relieve the piping constraints that have been identified. As such, new or expanded water lines beyond these would not be needed to convey water to the Project site. Therefore, Project impacts related to water infrastructure would be ***less than significant*** and no mitigation measures are required.

CUMULATIVE IMPACTS

Impact UTIL-7 Cumulative Water Supply

Implementation of the Project in combination with the related projects in Table II-1 would further increase demands on water supply and conveyance infrastructure. With respect to the Town's overall water supply condition, the water supply requirements for any project that is consistent with the Town's 1987 General Plan have been taken into account in the planned growth of the water system in the MCWD 2005 Urban Water Management Plan. According to the Town, all of the related projects are generally consistent with their respective land use designations.[28] The MCWD has developed an expected total water demand for the Town of 4,898 afy at Town buildout utilizing the unit counts projected in the Town of Mammoth Lakes General Plan Update Draft EIR (October 2005), including the related projects as presented in Table II-1 and Table IV.N-2. As discussed previously and illustrated in Table IV.N-6, there would be insufficient supplies of water during dry years at Town buildout without the Project. Consequently, as shown in Table IV.N-10, there would also be insufficient water for the Project plus the related projects during dry water years. Deficiencies of over 1,000 af would occur in a single dry year,

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[13] *Town of Mammoth Lakes Development Tracking, Dennis Hartwick and Craig Olson, correspondence CAJA staff, April 28, 2006, 2005 General Plan Land Use Designations, http://www.ci.mammoth-lakes.ca.us, March 2006.*

which is considered the lowest historical runoff for the watershed. Thus, impacts of the Project together with the related projects on overall MCWD water supply during single and multiple dry year scenarios would be ***significant.***

Table IV.N-10
Existing Water Supply
Comparison of Current Supply and Demand With Project Plus Related Projects[(1)]

Current Supply			Multiple Dry Water Years			
	Average/ Normal Water Year	Single Dry Water Year	Year 1	Year 2	Year 3	Year 4
Supply Total	6,760	3,410	5,190	4,908	4,508	4,492
Cumulative Demand Total	4,898	4,898	4,898	4,898	4,898	4,898
Difference	**1,862**	**-1,488**	**292**	**10**	**-390**	**-406**

(1) Units of measure are acre-feet (af) per year. An af equals approximately 325,821 gallons.
Source: MCWD SB 610 WSA for the Sierra Star Master Plan.

As stated previously, MCWD is working to develop new groundwater sources, use recycled water, and implement water restrictions as a means to increase supplies to resolve any potential water supply deficiencies during drought periods. However, even with full implementation of these various water supply projects, it is expected that insufficient water would be available to meet projected demand during a single dry year (refer to Table IV.N-11 below). Therefore, because these future water sources do not exist at present the Project's contribution to overall water supply demand within the Town would be cumulatively considerable, and cumulative water supply impacts would be ***significant***.

Table IV.N-11
2025 Future Water Sources
Comparison of Supply and Demand With Project Plus Related Projects[(1)]

2025 Supply			Multiple Dry Water Years			
	Average/ Normal Water Year	Single Dry Water Year	Year 1	Year 2	Year 3	Year 4
Supply Totals	8,120	4,770	6,550	6,268	5,868	5,852
Cumulative Demand Totals	4,898	4,898	4,898	4,898	4,898	4,898
Difference	**3,222**	**-128**	**1,652**	**1,370**	**970**	**954**

Units of Measure: acre-feet (af) per year.
Note: The supply totals on this table assume 1,000 af of future groundwater well water and 360 af of recycled water would be utilized in normal water years.
Source: MCWD SB 610 WSA for the Sierra Star Master Plan.

Impact UTIL-8 Cumulative Water Infrastructure

The potential need for the related projects to require upgraded water lines to accommodate water consumption by these projects is a site-specific issue that would be evaluated on an individual basis by the MCWD. Additionally, there is little, if any, cumulative relationship with respect to water infrastructure between the Project and the related projects given the distance separating the related projects from the Project site. As stated previously, all of the related projects are generally consistent with their respective land use designations. Therefore, the capacity of the main water lines serving the projects would be considered adequate, because the infrastructure was designed to accommodate planned development in the Town. In consideration of the above, cumulative impacts related to water infrastructure would be ***less than significant*** and no mitigation measures are required.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Project impacts to water services would be ***less than significant*** and although implementation of the recommended mitigation listed above would reduce the Project's contribution to overall cumulative impacts, the cumulative impacts would remain ***significant and unavoidable***.

At this time, the specifics of system-wide improvements needed to provide adequate water supplies to meet cumulative water demand during single and multiple dry year scenarios are unknown since the Final EIR Mammoth Creek that will specify water amounts available to MCWD has not been certified. In addition, new or expanded groundwater production wells in the Mammoth Basin would require environmental review and hydrogeologic analysis to ensure that additional volumes of water can be safely extracted. Well development in the Dry Creek Basin would also require environmental review and hydrogeologic analysis. Until these analyses are complete and specific projects have been approved to supplement MCWD's existing water supply, cumulative impacts associated with the Project and related projects would remain ***significant and unavoidable.***

3. SOLID WASTE SERVICES

ENVIRONMENTAL SETTING

Solid waste collection service for the Town of Mammoth Lakes (Town) is provided under a franchise agreement with Mammoth Disposal, Incorporated (MDI). Landfill availability is limited by several factors, including: (1) restrictions on accepting waste generated only within a landfill's particular jurisdiction and/or watershed boundary, (2) tonnage permit limitations, and (3) operational constraints. While the Town has a five-year option to dispose of solid waste at the Pumice Valley Landfill, all solid waste generated by the Town is currently hauled to the Mammoth Lakes Disposal Transfer Station and transferred to the Benton Crossing Landfill (Landfill).[29] The Landfill is located at 899 Pit Road in Whitmore Hot Springs, approximately 15 miles east of the Project site.[30]

The Benton Crossing Landfill is owned and operated by the County of Mono on a site leased from the Los Angeles Department of Water and Power. The Landfill is approximately 145 acres in size with a landfill footprint of approximately 72 acres. The Landfill receives an average of 108 tons per day (tpd) of non-hazardous and hazardous solid waste, with a peak daily loading rate of 400 tpd. The maximum daily permitted throughput is 500 tpd. The Landfill has a remaining capacity of 1.7 million cubic yards of compacted waste. The projected closure date of the landfill is December 2023.[31]

In order to reduce the amount of solid waste generated by the Town, the Town implements a recycling program comprised of four key elements: (1) source reduction, (2) recycling, (3) composting, and (4) special waste handling. Based on these elements, the Town is engaged in the following activities:

- operates a recycling center at the Mammoth Lakes Disposal Transfer Station where plastics, aluminum, glass, metal, paper and cardboard are accepted;
- offers cardboard containers free of charge for any local businesses that opt to participate;
- provides recycling containers adjacent to the supermarket and at the parks and visitors center; and
- uses sludge from the sewage treatment plant for ground cover at the local landfill, grindings from road maintenance as base for newly paved areas, and wood chips from construction projects and/or down limbs for erosion control and landscaping.

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[29] *Town of Mammoth Lakes, http://www.ci.mammoth-lakes.ca.us/General%20Plan/DEIR.htm, CAJA staff, April 4, 2006.*

[30] *California Integrated Waste Management Board/Site Summary Details, website: http://www.ciwmb.ca.gov/SWIS/detail.asp?PG=DET&SITESCH=26-AA-0004&OUT=HTML, CAJA staff, April 4, 2006.*

[31] *Town of Mammoth Lakes, http://www.ci.mammoth-lakes.ca.us/General%20Plan/DEIR.htm, CAJA staff, April 4, 2006.*

In addition, both the Mammoth Lakes Disposal Transfer Station and the Landfill accept and safely dispose of batteries, oil, paint, tires, household appliances, electronic appliances and fluorescent bulbs.

Solid Waste Regulatory Background

The California Integrated Waste Management Act of 1989 (AB 939) was enacted to reduce, recycle, and reuse solid waste generated in the State to the maximum extent feasible. Specifically, AB 939 required city and county jurisdictions to identify an implementation schedule to divert 50 percent of the total waste stream from landfill disposal by the year 2000. AB 939 also required each city and county to promote source reduction, recycling, and safe disposal or transformation. Cities and counties were required to maintain the 50 percent diversion specified by AB 939 past the year 2000. The Town has not yet met the 50 percent diversion rate. The current diversion rate is at 38 percent.[32] In an effort to obtain or exceed the 50 percent diversion rate, the Town is working to develop a new recycling center in the industrial park to handle additional materials. The new facility is anticipated to be underway in the summer of 2007.[33]

AB 939 further requires each town to conduct a Solid Waste Generation Study and to prepare a Source Reduction and Recycling Element (SRRE) to describe how solid waste reduction goals would be achieved. The SRRE contains programs and policies for continued fulfillment of the goals of AB 939 and must be updated annually to account for changing market and infrastructure conditions. As projects and programs are implemented, the characteristics of the waste stream, the capacities of the current solid waste disposal facilities, and the operational status of those facilities are upgraded, as appropriate. California cities and counties are required to submit annual reports to the CIWMB to provide updates on their progress toward the AB 939 goals. The CIWMB has approved the Town's SRRE, as well as the Town's Household Hazardous Waste Elements (HHWE) and Non-Disposal Facility Elements (NDFE).[34]

Town of Mammoth Lakes Ordinance No. 88-01

All construction, demolition, and renovation projects in the Town are subject to the requirements of Ordinance No. 88-01 as codified in the Town's Municipal Code Chapter 15.08: Construction Site Regulation. As stated therein, each permittee shall provide for the adequate removal and disposal of all construction debris.[35]

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[32] *Town of Mammoth Lakes, http://www.ci.mammoth-lakes.ca.us/General%20Plan/DEIR.htm, CAJA staff, April 4, 2006.*

[33] *Grossblatt, Michael, Town of Mammoth Lakes Public Works, correspondence, CAJA staff, May 15, 2006.*

[34] *California Integrated Waste Management Board, May 23-34, 2000 Agenda Item 46, CAJA staff, April 4, 2006.*

[35] *Town of Mammoth Lakes, http://municipalcodes.lexisnexis.com/codes/mammothlks/, CAJA staff, April 4, 2006.*

ENVIRONMENTAL IMPACTS

Thresholds of Significance

In accordance with Appendix G to the CEQA Guidelines, the proposed project could have a significant environmental impact if it would:

(a) be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs; or

(b) not comply with federal, state, and local statutes and regulations related to solid waste.

Solid Waste Services Issues Not Analyzed Further

The construction and operation of the Project would be required to adhere to all applicable federal, state, and local statutes and regulations related to solid waste. Therefore, no impact would occur, and no further analysis of this issue is required.

Project Impacts and Mitigation Measures

Impact UTIL-9 Short-Term Construction Impacts on Solid Waste Disposal

During the Project's implementation period, construction activities undertaken in accordance with the Sierra Star Master Plan at the Project site would generate a variety of scraps and wastes, with the majority of recyclables being wood waste, drywall, metal, paper, and cardboard. Based on a construction waste generation rate of 4.38 pounds of waste for every square foot of new residential construction, and 3.89 pounds of waste for every square feet of commercial construction, development under the Project is expected to generate approximately 2,242.4 tons of waste over the construction period (see Table IV.N-12).[36] Recycling of construction-related waste materials in compliance with the Town's recycling program would substantially reduce this waste stream that would otherwise go to a landfill. As stated previously, the remaining capacity for landfills is 1.7 million cubic yards of compacted waste. As such, the Landfill would have adequate capacity to accommodate the construction waste generated by the Project. Therefore, the Project's construction impacts on solid waste services would be ***less than significant*** and no mitigation measures are required

[36] *USEPA Report No EPA530-R-98-010, Characterization of Building Related Construction and Demolition Debris in the United States, June 1998, http://www.epa.gov/epaoswer/hazwaste/sqg/c&d-rpt.pdf, CAJA staff, April 3, 2006.*

Table IV.N-12
Estimated Construction Solid Waste Generation

Land Use	Size	Generation Rate (lbs/sf)	Total (tons)
Residential	953,750 sf*	4.38 lbs/sf	2088.7
Commercial	79,000 sf	3.89 lbs/sf	153.7
		Total	**2,242.4**

**Note: Square footage is based on 763 units @ 1,250 sf per unit.*
Source: USEPA Report No EPA530-R-98-010, Characterization of Building Related Construction and Demolition Debris in the United States, June 1998, http://www.epa.gov/epaoswer/hazwaste/sqg/c&d-rpt.pdf, CAJA staff, April 3, 2006.

Impact UTIL-10 Long-Term Operational Impacts

Operation of the development to be constructed under the Project would result in ongoing generation of solid waste. Over the long-term, the Project would be expected to generate approximately 4 tons of solid waste per day (see Table IV.N-13). As stated previously, the remaining combined daily capacity for the Benton Crossing Landfill is 1.7 million cubic yards of compacted waste. As such, the Landfill would have adequate capacity to accommodate the operational waste generated by the Project. Additionally, as discussed previously, in the Town's efforts to comply with AB 939, the Town has successfully diverted 38 percent of its waste from the local landfill through the Town's recycling program. The Project would be incorporated into the Town's recycling program. Thus, it is likely that the amount of solid waste generated by the Project that would go to the local landfills would be much less than the estimated approximately 4 tons per day. Therefore, the long-term operational impacts of the Project on solid waste services would be ***less than significant***.

Table IV.N-13
Estimated Solid Waste Generation

Land Use	Size	Daily Generation Rate	Total (tons/day)
Residential	763 units	10 lbs/unit	3.815
Commercial	79,000 sf	5 lbs/1,000 sf	0.1975
Total Solid Waste			**4.0125**

Sources: California Integrated Waste Management Board, Estimated Solid Waste Generation Rates for Residential Developments, website: http://www.ciwmb.ca.gov/WasteChar/WasteGenRates/Residential.htm, April 3, 2006.
California Integrated Waste Management Board, Estimated Solid Waste Generation Rates for Residential Developments, website: http://www.ciwmb.ca.gov/WasteChar/WasteGenRates/Commercial.htm, April 3, 2006.

CUMULATIVE IMPACTS

Impact UTIL-11 Cumulative Impacts

Implementation of the Project in combination with the related projects listed in Table II-1 would further increase demands on landfill capacities. As shown in Table IV.N-14, the Project and the related projects would generate approximately 18.79 tons of solid waste per day. As stated previously, the combined

remaining daily intake of the Landfill is 500 tpd, and thus, adequate capacity would exist to accommodate the 18.79 tpd disposal needs of the Project and the related projects. Similar to the Project, the related projects would participate in the Town's reduction and recycling program, further reducing the amount of solid waste to be disposed of at the local landfill. Therefore, cumulative impacts to solid waste services would be ***less than significant*** and no mitigation measures are required.

Table IV.N -14
Estimated Solid Waste Generation for the Proposed and Related Projects

Number	Land Use	Size	Daily Generation Rate	Total (lbs/day)
1	HDR - R	106 units	10 lbs/unit	1,060
2	IP – PS	12,000 sf	62.5 lbs/1,000 sf	750
3	IP – PS	40,000 sf	62.5 lbs/1,000 sf	2,500
4	HDR – CL	71 units	10 lbs/unit	710
5	HDR – CL	11 units	10 lbs/unit	110
6	V – SP	23 units	10 lbs/unit	230
7	RMF-1	11 units	10 lbs/unit	110
8	LDR -1 – SP	14 units	10 lbs/unit	140
9	SP	230 units 4,000 sf	10 lbs/unit 5 lbs/1,000 sf	2,320
10	HDR – CL	12 units	10 lbs/unit	120
11	HDR - R	58 units	10 lbs/unit	580
12	LDR -1 – R	19 units	10 lbs/unit	190
13	IP – PS	17,600 sf	62.5 lbs/1,000 sf	1,100
14	HDR – R	71 units	10 lbs/unit	710
15	HDR – RMF-2	6 units	10 lbs/unit	60
16	HDR – RMF-2	24 units	10 lbs/unit	240
17	HDR – R	61 units	10 lbs/unit	610
18	HDR – R	40 units	10 lbs/unit	400
19	NVSP – SP	6 units	10 lbs/unit	60
20	HDR – RMF-2	3 units	10 lbs/unit	30
21	HDR – R	28 units	10 lbs/unit	280
22	HDR – RMF-1	2 units	10 lbs/unit	20
23	HDR – RMF-2	4 units	10 lbs/unit	40
24	HDR – SP	21 units	10 lbs/unit	210
25	HDR – R	22 units	10 lbs/unit	220
26	R	1 unit	10 lbs/unit	10
27	HDR – SP	247 units	10 lbs/unit	2,470
28	SP	193 units	10 lbs/unit	1,930
29	HDR – R	180 units 21,000 sf	10 lbs/unit 5 lbs/1,000 sf	1,905
30	HDR – R	118 units	10 lbs/unit	1,180
31	I – M	19,126 sq	62.5 lbs/1,000 sf	1,195.375
32	HDR – CL	54 units	10 lbs/unit	540
33	HDR – CL	23 units	10 lbs/unit	230
34	HDR – CG	480 units 28,205 sf	10 lbs/unit 5 lbs/1,000 sf	4,941.025
35	HDR – SP	4 units	10 lbs/unit	40

Table IV.N -14
Estimated Solid Waste Generation for the Proposed and Related Projects

Number	Land Use	Size	Daily Generation Rate	Total (lbs/day)
36	HDR – PS	70 units	10 lbs/unit	700
37	HDR – AH	460 units 31,000 sf	10 lbs/unit 5 lbs/1,000 sf	310
38	Forest Service Land	5,500 sf	5 lbs/unit	27.5
39	HDR – RMF-1	14 units	10 lbs/unit	140
40	HDR – RMF-2	4 units	10 lbs/unit	40
41	IP	340 parking spaces	n/a	n/a
42	RMF-2	95 units	10 lbs/unit	950
43	CG	9 units	10 lbs/unit	90
44	RSF	1 unit	10 lbs/unit	10
45	CL	3,600 sf	5 lbs/1,000 sf	18
46	RSF	1 unit	10 lbs/unit	10
47	RSF	1 unit	10 lbs/unit	10
48	RSF	1 unit	10 lbs/unit	10
49	RR	1 unit	10 lbs/unit	10
			Related Projects Total	29,567
			Project Total	8,025
			Cumulative Total	37,592 (18.796 tpd)

Land Use Key:
sf = square feet
LDR-1 = Low-Density Residential 1
LDR-2 = Low-Density Residential 2
HDR-1 = High-Density Residential 1
HDR-2 = High-Density Residential 2
RSF = Residential Single Family
RMF = Residential Multi-Family
RR = Rural Residential
C = Commercial
CG = Commercial General
IP = Institutional Public
R = Resort
I = Industrial
NVSP = North Village Specific Plan

Sources: Town of Mammoth Lakes Development Tracking, Dennis Hartwick and Craig Olson, correspondence, April 28, 2006.
California Integrated Waste Management Board, Estimated Solid Waste Generation Rates for Residential Developments, website: http://www.ciwmb.ca.gov/WasteChar/WasteGenRates, April 3, 2006.
Sisson, Gary, MCWD, correspondence, CAJA staff, June 6, 2006.

LEVEL OF SIGNIFICANCE AFTER MITIGATION

Project impacts to solid waste services would be ***less than significant***.

V. GENERAL IMPACT CATEGORIES

A. SUMMARY OF SIGNIFICANT UNAVOIDABLE IMPACTS

Section 15126.2(b) of the CEQA Guidelines requires that an EIR describe any significant impacts which cannot be avoided. Specifically, Section 15126.2(b) states:

> "*Describe any significant impacts, including those which can be mitigated but not reduced to a level of insignificance. Where there are impacts that cannot be alleviated without imposing an alternative design, their implications and the reason why the project is being proposed, notwithstanding their effect, should be described."*

Based on the analysis contained in this Draft EIR, implementation of the Project would result in significant unavoidable environmental impacts relative to the following:

Aesthetics

- Public Views and Scenic Vistas
- Scenic Resources (cumulative impacts)

Utilities

- Water Supply (cumulative impacts)

B. GROWTH INDUCING IMPACTS OF THE PROPOSED PROJECTS

Section 15126.2(d) of the CEQA Guidelines requires a discussion of the ways in which a proposed action could be growth inducing. This includes ways in which the project would foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Section 15126.2(d) of the CEQA Guidelines reads as follows:

> "*Discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of a waste water treatment plant might, for example, allow for more construction in service areas). Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also discuss the characteristic of some project which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment."*

The Project includes development of a total maximum of 763 new dwelling units and 79,000 square feet of commercial development. The Project would include single family residential, townhomes, condominiums, workforce housing, a destination resort hotel, resort lodges and commercial development. As discussed in detail in Section IV.K (Population and Housing), implementation of the Project would increase the permanent residential population on the Project site by 1,862 persons.[1] This new on-site residential population would likely patronize local businesses and services in the area, fostering economic growth. Although the Project would provide short-term employment opportunities, which would likely be filled from the local employee base, the permanent jobs associated with the Project's 79,000 square feet of commercial space would serve the convenience needs of residents and would be accessible from within the site only. Because it is not expected that the nature of the jobs that would be provided by the Project would cause employees from surrounding areas to relocate their places of residence to the Project area, the Project would not result in long-term employment growth in the area. The Project is not a regionally-significant employer, and although the Project would provide employment opportunities, fostering some economic growth, most of the jobs would likely be filled by people in the local employment base, and the Project would not induce additional population growth.

The Project site is located in an area that is surrounded by commercial and residential land use developments and is served by existing roadways, utility infrastructure, and service systems. The Mammoth Community Water District provides sanitary sewer and water service to the Project site. The amount of water consumed and wastewater generated by the Project would not require or result in the construction of new treatment facilities or the expansion of existing facilities. Additionally, the Project would not require new or expanded water entitlements. The permitted landfill in Mono County has the capacity to accommodate the Project's solid waste disposal needs, as discussed in detail in Section IV.N (Utilities): The Project would participate in the Town's recycling and refuse collection service to the Project site. The Project would not require the expansion of landfill capacity. Therefore, the Project would not foster population growth by removing an obstacle to growth.

The Project site is located in a developed, urban area with existing public services (i.e., police, fire protection, schools, parks and recreation and snow removal). Public services to the Project site and area are currently provided by the Town of Mammoth Lakes Police Department, the Mammoth Lakes Fire Protection District, Mammoth Unified School District, the Town of Mammoth Lakes Parks and Recreation Department, the Town of Mammoth Lakes Public Works Department and Caltrans, respectively. As discussed in Section IV.L (Public Services), the residential population generated by the Project would result in an increased demand for the public services provided by the agencies listed above. Although the police and fire departments would need to hire new staff to accommodate the demands created by the Project, no new or altered police or fire protection facilities would be needed. The Project would require new school facilities for the school district serving the Project area. However, based on Section 65996 of the California Government Code, the Project applicant would be required to pay the

[1] *United States Census Bureau, Census 2000; www.census.gov, CAJA staff, March 14, 2006.*

established developer fees. The payment of such fees is deemed to fully mitigate the impacts of new development on school services. The proposed recreational amenities in conjunction with the Town's current facilities and the collection of Developer Impact Fees that support the Town's park and recreation fund would be adequate to accommodate the Project's demand for parks and recreational services.[2] Therefore, the Project would not tax the existing community services facilities by requiring the construction of new public facilities that would cause significant environmental effects.

As discussed in greater detail in Section III (Project Description), the Project would involve changes to the 1991 Lodestar Master Plan (LMP) that would result in replacement of the LMP with a new master plan that would change the name, land area, and land uses set forth in the LMP for the remaining portion of the LMP area that has not been developed, unless redeveloped in the future.. The Project would require an amendment to the 1987 General Plan. The 1987 General Plan is currently in the process of being updated. A Draft General Plan was prepared and distributed to the public for review in April 2005 and was revised in September 2005. The EIR for the Draft General Plan was completed in October 2005 and has been reviewed by the public. The review process for the Draft General Plan and the EIR for the Draft General Plan will continue in 2007[3], at which time the Town can consider adoption. Because the adoption of the Draft General Plan is an ongoing process, the standard for analysis used in this Draft EIR is based on the 1987 General Plan. The current 1987 General Plan land use designation for the Project site is Resort (R), which is characterized with primary emphasis to visitor lodging, amenities and services. Development in the Resort designation is generally applied to large parcels and is physically connected internally and to all primary visitor oriented destinations with an integrated system of streets, sidewalks, and recreational paths.[4] The Project would be consistent with the Resort land use designation.

The requested General Plan amendment necessary to adopt the Sierra Star Master Plan is not a precedent-setting action that could lead to growth, given that such actions occur often and are a regular aspect of the planning process for towns and counties. The degree to which the requested discretionary action associated with the Project would encourage or facilitate other amendments to the General Plan for areas in the vicinity of the Project site to allow uses that are not consistent with the existing land use designations and zoning cannot be estimated at this time. If in the future such actions were requested, the Town would review those requests on a case-by-case basis to determine the appropriateness of the actions and whether the actions would lead to any significant environmental impacts, as is currently being done for the Project. To allow changes to the land use designation and zoning of any property within the Town is solely at the discretion of the Town decision-makers and is exclusive of the Project.

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2 *Town of Mammoth Lakes Municipal Code Chapter 15.16 §15.16.085 part E, CAJA staff, April 14, 2006.*

3 *Correspondence, Jen Daugherty, Assistant Planner, Town of Mammoth Lakes, December 12, 2006.*

4 *Town of Mammoth Lakes, 1987 adopted General Plan Land Use Designation chapter, http://www.ci.mammoth-lakes.ca.us, retrieved February 20, 2006.*

Additionally, the Project site and surrounding area are part of a "built environment." Thus, if other amendments to the General Plan and zone changes are requested in the future for other properties in the area, the subsequent development that would occur due to approval of the changes would not necessarily be growth inducing, considering that most of the properties in the Project area are already developed with some type of use. For these reasons, the Project would not be considered growth inducing.

C. SIGNIFICANT IRREVERSIBLE CHANGES TO THE ENVIRONMENT

Section 15126.2(c) of the CEQA Guidelines states that significant irreversible environmental changes associated with a proposed project shall be discussed, including the following:

- Uses of nonrenewable resources during the initial and continued phases of the project that may be irreversible because a large commitment of such resources makes removal or nonuse thereafter unlikely;

- Primary impacts and, particularly, secondary impacts (such as highway improvement that provides access to a previously inaccessible area), which generally commit future generations to similar uses; and

- Irreversible damage that could result from environmental accidents associated with the project.

The Project site is located in an urbanized area of the Town. Development of the Project would represent a long-term commitment to a more intensive land use of the site. As a result, the Project would involve an irreversible commitment to the use of non-renewable resources during the construction and operation phases in the form of refined petroleum-based fuels, natural gas for space and water heating, and mineral resources used in construction materials.

The Project includes development of a total maximum of 763 new dwelling units and 79,000 square feet of commercial development. The Project would include single family residential, townhomes, condominiums, workforce housing, a destination resort hotel, resort lodges and commercial development in an urbanized area that is already served by an existing roadway system and utility infrastructure. The current 1987 General Plan land use designation for the Project site is Resort (R), which is characterized with primary emphasis to visitor lodging, amenities and services. Development in the Resort designation is generally applied to large parcels and is physically connected internally and to all primary visitor oriented destinations with an integrated system of streets, sidewalks, and recreational paths.[5] Therefore, implementation of the Project would commit future generations to using the Project site for similar uses.

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[5] *Town of Mammoth Lakes, 1987 adopted General Plan, Land Use Designation chapter, http://www.ci.mammoth-lakes.ca.us, retrieved February 20, 2006.*

With the exception of common household cleaning solvents, paints, landscape fertilizers, and pesticides typically used in residential and retail/commercial settings, the Project would not involve the routine use, transport, or disposal of hazardous materials. Also, during Project construction the Project applicant would follow all applicable requirements to ensure safe use, storage and disposal of any hazardous materials or wastes that could be used. No significant environmental (contamination) issues occur at the site, and no further investigations relative to the environmental conditions on the site are needed. Therefore, the Project would not result in irreversible damage that could result from environmental accidents associated with the Project.

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VI. ALTERNATIVES TO THE PROPOSED PROJECT

INTRODUCTION

The State CEQA Guidelines require that EIRs include the identification and evaluation of a reasonable range of alternatives that are designed to reduce the significant environmental impacts of the Project while still meeting the general Project objectives. The State CEQA Guidelines also set forth the intent and extent of the alternatives analysis to be provided in an EIR. Those considerations are discussed below.

Section 15126.6(a) of the CEQA Guidelines states: "An EIR shall describe a range of reasonable alternatives to the Project, or to the location of the Project, which would feasibly attain most of the basic objectives of the Project but would avoid or substantially lessen any of the significant effects of the Project, and evaluate the comparable merits of the alternatives. An EIR need not consider every conceivable alternative to a Project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible. The lead agency is responsible for selecting a range of Project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason."

Purpose

Section 15126.6(b) of the CEQA Guidelines states: "Because an EIR must identify ways to mitigate or avoid the significant effects that a Project may have on the environment, the discussion of alternatives shall focus on alternatives to the Project or its location which are capable of avoiding or substantially lessening any significant effects of the Project, even if these alternatives would impede to some degree the attainment of Project objectives, or would be more costly."

Potentially Significant Project Impacts

The Project specific impacts include the following:

- Aesthetics – Public Views and Scenic Vistas, Signage, and Light and Glare
- Air Quality – Construction /Demolition Impacts and Operational Emissions
- Biological Resources – Special-Status Plant and Animal Species, Jurisdictional Resources, and Conformance with Town Policies and Ordinances
- Cultural Resources – Archaeological Resources, Paleontological Resources, and Human Remains
- Geology/Soils –Liquefaction, Volcanic Activity, and Soil Erosion/Loss of Topsoil

- Hydrology/Water Quality – Water Quality from Site Runoff, Storm Drain System Capacity
- Noise - Excessive Noise Levels and Excessive Groundborne Vibrations During Construction
- Transportation/Traffic –Intersection LOS
- Utilities – Water Supply

Project Contributions to Potentially Significant Cumulative Impacts

The Project's incremental contribution to cumulative impacts includes the following:

- Aesthetics – Visual Quality and Alteration of Existing Views
- Public Services – New Police Facilities
- Utilities – Water Supply

All other impacts are less than significant and do not require mitigation. Therefore, the choice of Project alternatives for analysis in the EIR focused on those that would reduce or avoid significant aesthetics, air quality, biological resources, cultural resources, geology/soils, noise, hydrology/water quality, public services, transportation/traffic, and utilities impacts.

Project Objectives

As stated above, the range of potential alternatives to the proposed Project shall include those that could feasibly accomplish most of the basic objectives of the Project. The objectives of the proposed Project are as follows:

- To produce a development design that is appropriate to the character of the Mammoth Lakes region.
- To enhance the Town of Mammoth Lakes (Town) to be comparable to other high-quality mountain resort destinations in North America.
- To refocus the remaining development within the Lodestar Master Plan (LMP) area toward the creation of transient occupancy units, establishment of a more efficient transportation and circulation system, and the development of additional affordable housing units and hotel and condominium units.
- To provide bicycle and pedestrian trails connections to existing trails and other town-wide circulation systems.

- To provide development that is responsive to the existing and expected future resort housing and hotel demand within the Town.

Selection of a Reasonable Range of Alternatives

Section 15126.6(c) of the CEQA Guidelines states: "The range of potential alternatives to the proposed Project shall include those that could feasibly accomplish most of the basic objectives of the Project and could avoid or substantially lessen one or more of the significant effects. The EIR should briefly describe the rationale for selecting the alternatives to be discussed. The EIR should also identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency's determination. Additional information explaining the choice of alternatives may be included in the administrative record. Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR are: (i) failure to meet most of the basic Project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts."

Alternatives Rejected as Being Infeasible

As described above, Section 15126.6(c) of the CEQA Guidelines requires EIRs to identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process, and briefly explain the reasons underlying the lead agency's determination. An alternative that would further decrease the height of buildings in Area 5 was considered, but was rejected as being infeasible because it would result in an increase in densities throughout the remaining areas of the Project. Additionally, an off site alternative was considered. This 64-acre site is located on the south side of Meridian, between the College and the Water District facilities and is currently National Forest land administered by the U.S. Forest Service. This alternative was rejected as infeasible because a large portion of the LMP development has been completed, including the golf course. Additionally, the alternative site is currently zoned Public and Quasi Public.

Overview of Selected Alternatives

Three alternatives are evaluated in this analysis: the No Project, Reduced Density, and Reduced Building Height alternatives. All alternatives are located on the Project site and all are located within the same roadway configuration shown on the site plan. Differences between the alternatives include the height of the buildings, number and average size of the residential units, and the amount of commercial space. These differences result in changes to the potential size and massing of the buildings for each alternative and therefore subtle differences in the design and siting of the buildings on the site plan. A more thorough description of each of the alternatives is provided below. The alternatives to be analyzed in comparison to the proposed Project are as follows:

Alternative A: No Project Alternative – Lodestar Master Plan (LMP) Buildout

Alternative B: Reduced Density

Alternative C: Reduced Building Height

Assumptions and Methodology

A project may have the potential to generate significant impacts, but considerations in Project design may also afford the opportunity to avoid or reduce such impacts. The alternatives analysis is presented as a comparative analysis to the Project. The following alternatives analysis compares the potential significant environmental impacts of the three alternatives with those of the proposed Project for each of the environmental topics analyzed in detail in Section IV (Environmental Impact Analysis) of the EIR.

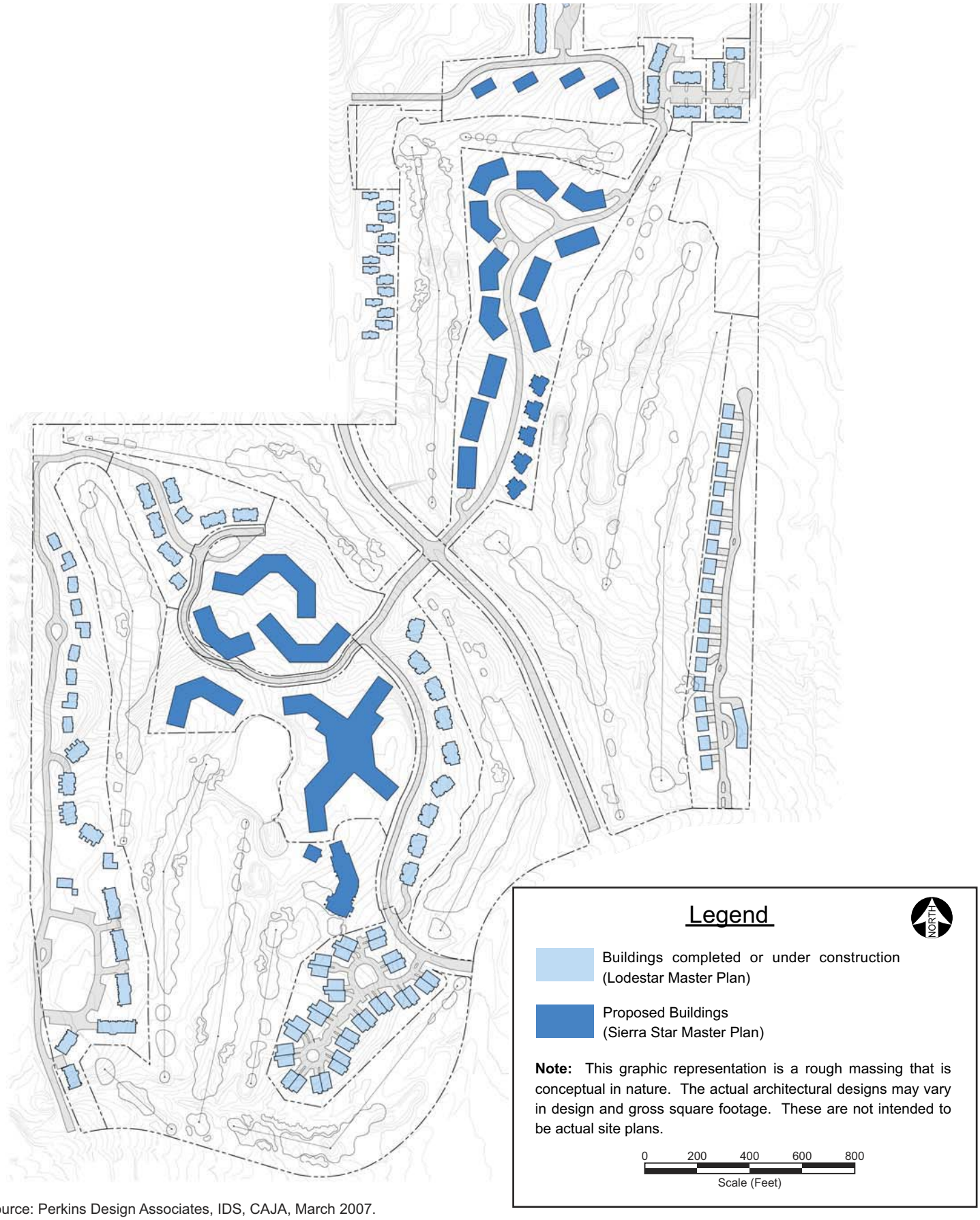
A. NO PROJECT ALTERNATIVE (Alternative A)

Description

As required by CEQA, this subsection analyzes a "No Project" Alternative (Alternative A). Under Alternative A, proposed development on the Project site would not be constructed in accordance with the proposed Sierra Star Master Plan (Project), but would instead be developed in accordance with the existing LMP (Alternative A). Similar to the Project, Alternative A would set development standards for the approximately 228-acre site situated around the Sierra Star Golf Course (Area G, 112 acres located west of Minaret Road and north of Meridian Boulevard as well as in the southeast corner of the intersection of Minaret Road and Meridian Boulevard).

Alternative A proposes the development of up to 1,263 residential units and 80,000 square feet of commercial space, including two resort hotels, resulting in an increase in residential units by approximately 3.5 percent over the Project (1,263 units as opposed to 1,220). Alternative A also proposes the construction of open space areas; roadways; short-term parking areas; transit, pedestrian and bicycle facilities; landscaping; and lighting on the site. Building heights would be at or below 73 feet in height (proposed buildings would be allowed additional height beyond the permitted 65 feet due to inclusion of underground parking per the Town of Mammoth Lakes' Zoning Ordinance).

Currently, a total of 457 residential units have been developed or approved under the existing LMP. No commercial space has been developed. Alternative A would include the development of the remaining residential units and commercial space on the site. Alternative A would develop these residential uses at a total density of 5.6 dwelling units per acre. Table VI-1 shows the development under Alternative A. A site plan for Alternative A is shown in Figure VI-1, which was developed using the proposed gross square footage of the Project adjusted to the building heights, footprints, and density approved under the LMP. Conceptual building massing is shown in Figure VI-2.



Source: Perkins Design Associates, IDS, CAJA, March 2007.

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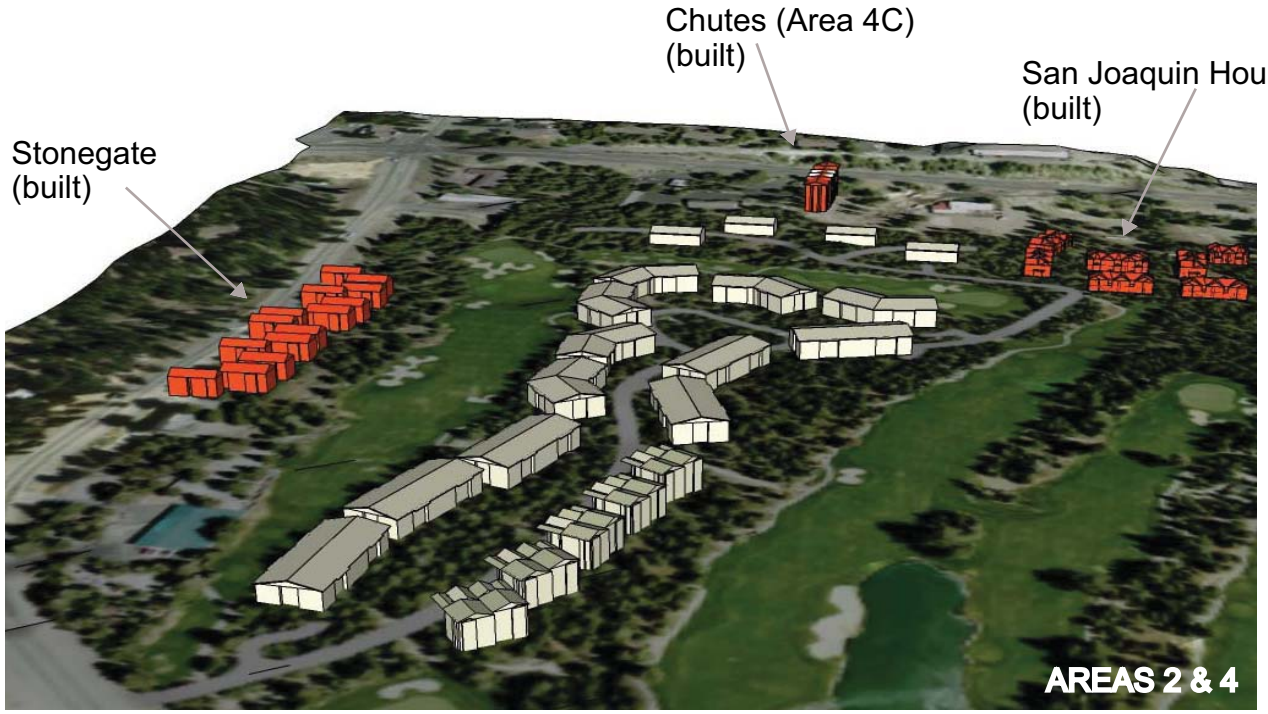
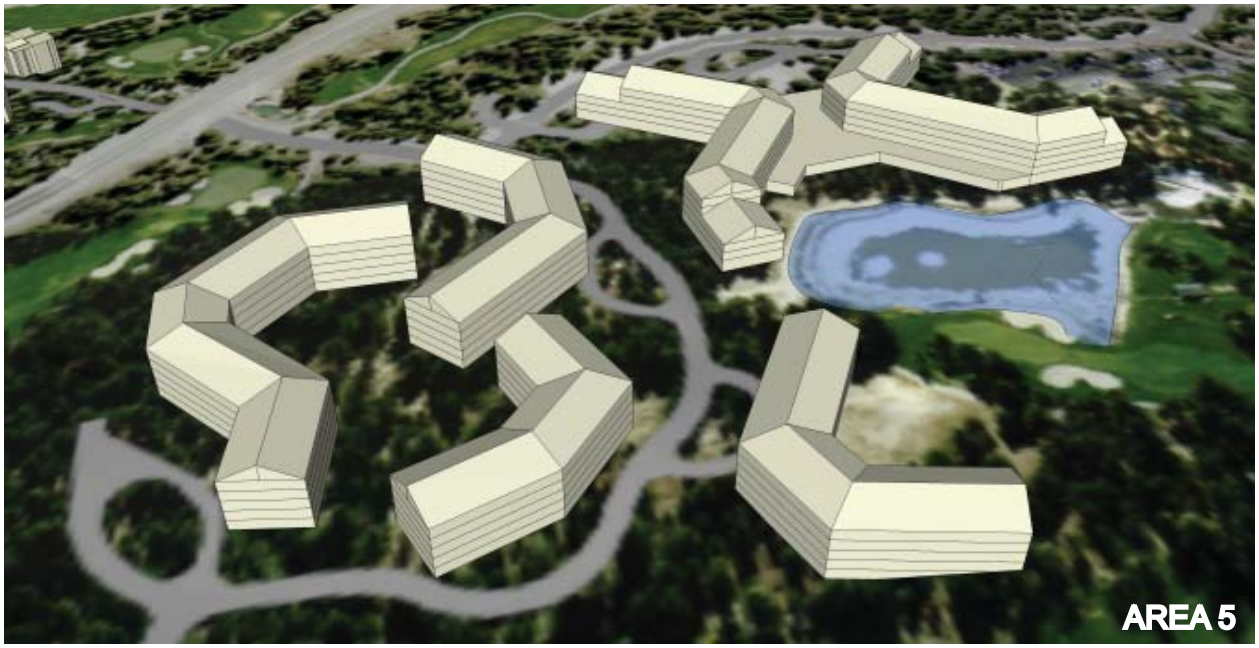
Figure VI-1
Alternative A Site Plan





Legend

Constructed Buildings

Proposed Buildings

Note: This graphic representation is a rough massing that is conceptual in nature. The actual architectural designs may vary in design and gross square footage.

Source: Perkins Design Associates, IDS, CAJA, March 2007.

Figure VI-2
Alternative A Conceptual Building Masses

The analysis of Alternative A assumes buildout of the LMP as well as development of the related Projects described in Section II.C (Related Projects). The potential environmental impacts associated with Alternative A are described below and are compared to the potentially significant environmental impacts associated with the Project. All applicable mitigation measures recommended for the Project are incorporated into Alternative A.

Table VI-1
Alternative A
No Project

Sierra Star Master Plan Development Areas[1]	Acres	Commercial Square Feet (SF)	Total Dwelling Units	Density (DU/acres)
Area 1	15.6		180	11.5
Area 2	16.7		143	8.6
Area 3	21.9		61	2.8
Area 4	8.5		112	13.2
Area 5	33.6	60,000[2]	660	19.6
Area 6[3]	7.7		67	2.5[5]
Area 7[4]	2.3	20,000[2]	40	17.4
Total Residential	**106.3**		**1,263**	**5.5**
Golf Course Acreage	111.5			
Other Acreage (Roads)	11			
Grand Total	**228.8**	**80,000**	**1,263**	**5.5**

(1) In order to provide a consistent basis for comparison among alternatives development under Alternative A is organized for relevant development area contained in the proposed SSMP rather than those contained in the LMP.
(2) Commercial/Retail/Conference can only be located in Area 5 and is therefore split between Area 5 and Area 7 as Area 7 is part of Area 5 in the 1991 LMP.
(3) Area 6 was part of Area 2 in the 1991 Lodestar Master Plan (LMP).
(4) Area 7 was part of Area 5 in the 1991 LMP.
(5) Density was calculated using 19 units/7.7 acres because 67 units were approved, but only 19 units were built. The remaining units have been sold.

Sources: 1991 LMP, 2005 SSMP, Town of Mammoth Lakes Department of Community Development, and the SSMP Alternatives, IDS, 2007.

Aesthetics

Under Alternative A, the site would be developed in accordance with the LMP and would include the associated development of the remaining residential units and commercial space on the site. Alternative A would result in changes to visual characteristics on the Project site through construction of residential and commercial buildings; open space areas; roadways; short-term parking areas; transit, pedestrian and bicycle facilities; landscaping; and lighting on the site.

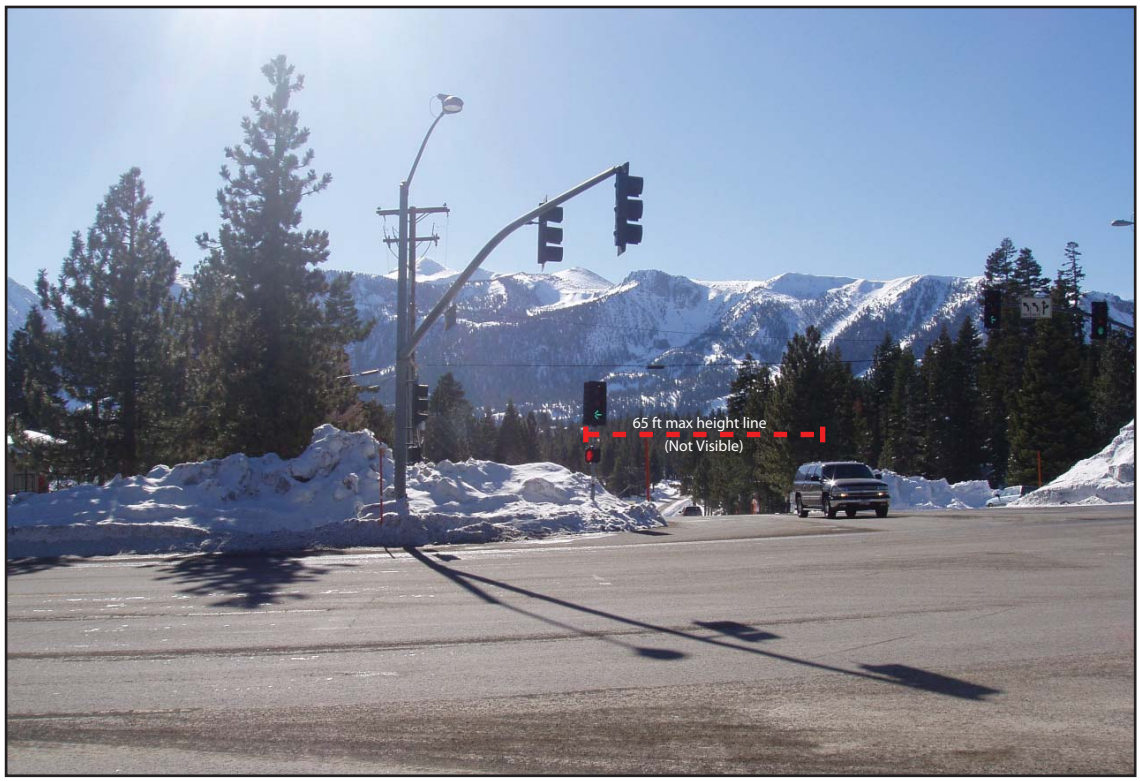
Alternative A proposes a portion of the building at or below 73 feet in height (proposed tower building would be allowed additional height beyond the permitted 65 feet due to inclusion of underground parking per the Town's Zoning Ordinance) in compliance with the height restrictions on the Project site.

Therefore, unlike the Project, Alternative A would be consistent with the applicable policies associated with aesthetics in the adopted 1987 General Plan.

Visual simulations were prepared to analyze the impact of Alternative A on important views in the Town. Buildings proposed under Alternative A (and the Project) would not be visible from The Village at Mammoth, Main Street and Old Mammoth Road, Town of Mammoth Lakes Office Parking Lot, Mammoth Creek Park, Sherwin Creek Road, Lake Mary Road and Twin Lakes, or Bridges viewpoints. Visual simulations prepared for the Project show that the Project would be not visible or only minimally visible from the above viewpoints; therefore, Alternative A would not be visible from these viewpoints and this impact would be similar to the Project. As shown in Figures VI-3 through VI-5, Alternative A would not be visible from Main Street and Minaret, Meridian Boulevard and Minaret Road, and Lake Mary Road, south of the Tunnel (areas where the Project is visible). Therefore, this impact to scenic views would be less than significant and less than those under the Project.

Alternative A would result in the development of buildings on the site that would change the visual character of the site. These buildings would be increased in bulk compared to the Project to accommodate the increased number of residential units and commercial space. This would result in greater changes to the Project site and impacts to existing visual character. However, these changes would be incremental and all development would be designed using the design guidelines of the LMP. Under Alternative A, the site would be developed in accordance with the LMP with grading, tree and vegetation removal, associated landscaping, signage, and lighting similar to the proposed Project. These design guidelines would be consistent with the Town's guidelines and this impact would be less than under the Project due to the reduction in building height. Alternative A would not result in impacts to State Route 203 (Main Street). Therefore similar to the Project, Alternative A would not affect scenic resources within a State Scenic Highway.

View 3: From Main Street and Minaret Road (Summer)



View 4: From Main Street and Minaret Road (Winter)

Source: Integrated Design Studio, 2007.

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Figure VI-3
Alternative A
Views 3 & 4
From Main Street and Minaret Road

View 9: From Meridian Boulevard and Minaret Road (Summer)

View 10: From Meridian Boulevard and Minaret Road (Winter)

Source: Integrated Design Studio, 2007.

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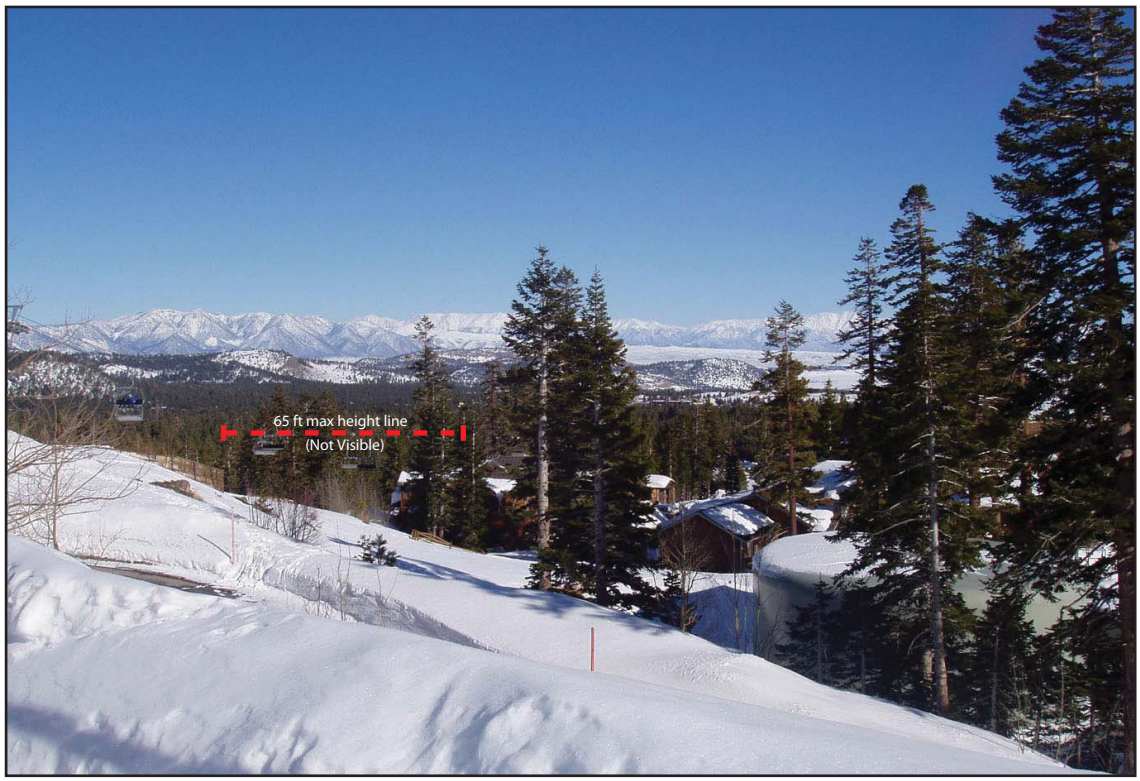
Figure VI-4
Alternative A
Views 9 & 10
From Meridian Boulevard and Minaret Road

View 15: From Lake Mary Road, South of Tunnel (Summer)



View 18: From Lake Mary Road, South of Tunnel (Winter)

Source: Integrated Design Studio, 2007.

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Figure VI-5
Alternative A
Views 15 & 18
From Lake Mary Road, South of Tunnel

Summer Solstice

Figure VI-6 (Summer Solstice Shading) illustrates the summer solstice shadows at 9:00 a.m., 12:00 p.m., and 5:00 p.m. for Alternative A. The morning summer solstice shadows are generally cast towards the northwest, then shrink as they move overhead and extend towards the east in the afternoon.

As shown in Figures VI-6, no morning shadows would be cast onto the Sierra Star Golf Course by the 9:00 a.m. shadow as the buildings are not tall enough to cast shadows this far. Afternoon shadows in would be cast onto the existing trees and would encroach minimally onto the Sierra Star golf course. Therefore, as summer solstice shadows would not cast onto any shadow-sensitive uses in the vicinity of Alternative A and summer solstice shadow impacts would be less than significant.

Winter Solstice

Figure VI-7 (Winter Solstice Shading) illustrates the winter solstice shadows at 9:00 a.m., 12:00 p.m., and 3:00 p.m. The morning winter solstice shadows are generally cast towards the northwest in the morning, then shrink as they move overhead, and extend towards the northeast in the afternoon.

As shown in Figure VI-7, winter solstice shadows from Alternative A would cast unto existing trees in the morning, but would not cast onto portions of the Sierra Star Golf Course. However, shadows would be cast onto existing trees, the Golf Course, and a small portion of Minaret Road throughout the afternoon from Area 5B, 5C, and 5D. Although the Sierra Star Golf Course is mostly used in the summer months, when there is no snow on the ground, it is used sparingly in the winter months for snowshoeing by local residents. As the Sierra Star Golf Course is only used sparingly in the winter months, it is not considered to be a "routinely usable outdoor space" and thus is not considered to be a shadow-sensitive use in the winter season. Therefore, as winter solstice shadows would not cast onto any shadow-sensitive uses in the vicinity of Alternative A, winter solstice shadow impacts would be less than significant.

Autumn and Spring Equinox Shadows

Figure VI-8 (Equinox Shading) illustrates the equinox shadows at 9:00 a.m., 1:00 p.m., and 5:00 p.m. The morning equinox shadows are generally cast towards the west in the morning, then shrink as they move overhead, and extend towards the east in the afternoon. As shown in Figure VI-8, equinox shadows from Alternative A would cast onto existing trees and minimal portions of the Sierra Star Golf Course in the morning and throughout the afternoon. Equinox shadows depicted in Figures VI-8 are for informational purposes only as there are no established thresholds of significance for equinox shadows.

Overall, impacts to visual resources (including public views, lighting and glare, and shading/shadows) would be reduced from the Project due to the reduction in height of the tower building. Therefore, overall Alternative A would result in fewer impacts to aesthetics than the Project.

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Source: The Town of Mammoth Lakes, IDS, CAJA 2007.

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NORTH

Figure VI-6
Alternative A: Summer Solstice Shading
9:00 AM - 1:00 PM - 5:00 PM
Pacific Daylight Time

Source: The Town of Mammoth Lakes, IDS, CAJA 2007.

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NORTH

Figure VI-7
Alternative A: Winter Solstice Shading
9:00 AM - 12:00 PM - 3:00 PM
Pacific Standard Time

Source: The Town of Mammoth Lakes, IDS, CAJA 2007.

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NORTH

Figure VI-8
Alternative A: Equinox Shading
9:00 AM - 1:00 PM - 5:00 PM
Pacific Standard Time

Air Quality

Under Alternative A, construction of the Project would require grading and construction activities on the site. Foreseeable construction activities for the Project would include site preparation, grading, placement of utilities and other infrastructure, placement of foundations for structures, and fabrication of structures across the entire site. Construction activities would result in the creation of fugitive dust and equipment exhaust. Alternative A would generate similar amounts of fugitive dust as the Project.

Operational emissions generated by both stationary and mobile sources would result from normal day-to-day activities on the Project site after occupation. Stationary area source emissions would be generated by the consumption of natural gas for space and water heating devices, cooking appliances, and fireplaces, the operation of landscape maintenance equipment, the use of consumer products, and the application of architectural coatings (paints). Mobile emissions would be generated by the motor vehicles traveling to and from the Project site.

Implementation of Alternative A would result in the construction of 1,263 residential units, as opposed to 1,220 units under the Project. Commercial space constructed under Alternative A would be slightly greater (1,000 square feet) than under the Project. Therefore, traffic-generated air emissions under Alternative A would be incrementally increased. However, this increase would be less than significant (approximately 3.5 percent) and this impact would only be slightly greater than under the proposed Project.

Biological Resources

Eleven special status wildlife species have a moderate or high potential to occur within the site. No special status plants are present on-site and no riparian vegetation or other sensitive communities exists within or adjacent to the Project site. Under Alternative A, the site would be developed in accordance with the LMP and would require grading activities and development of the site similar to the proposed Project. However, buildings on the site would have a larger footprint than the Project and would require increased grading on the site.

Although no special status plants are present on the site, there is the potential for special status animals, jurisdictional resources, and protected trees on the site that would be impacted by the increased grading on the site (impacts to portions of ephemeral drainages A and B from Grove Road are being permitted separately under the LMP; however, Alternative A would potentially impact different areas of wetlands than the Project.) Therefore, Alternative A, has the potential to incrementally increase impacts related to special-status species, jurisdictional resources, and protected trees over the Project. Impacts relative to wildlife movement, habitat connectivity, and habitat conservation plans would be the same as those under the Project.

Cultural Resources

Two known cultural resources are located on the site, although neither is considered a unique archaeological resource under CEQA. The area is sensitive for prehistoric and historic archaeological resources, and human remains. Additionally, buried (previously unknown or unrecorded) prehistoric and historic archaeological deposits, including human remains may be present within the site. Under Alternative A, ground-disturbing activities including grading and excavation would occur. Buildings on the site would have a larger footprint than the Project and would require increased grading and excavation on the site. Therefore, Alternative A has the potential to incrementally increase the potential for damage to known and unknown archaeological resources or known and unknown paleontological resources and human remains over the Project.

Geology/Soils

The site is not within an Earthquake Fault Zone or Alquist-Priolo Hazard Zone. However, the site is located in a Seismic Zone 4 based on 1997 Uniform Building Code and 2001 California Building Code and the site would be likely to experience at least one earthquake that may produce potentially damaging ground shaking. Under Alternative A, the site would be developed under a higher density than the Project, which would expose a larger number of people on the site to geologic hazards than under the Project. Alternative A would also require slightly more grading and excavation due to the increased size of the buildings. Therefore, impacts to soil erosion/loss of topsoil would be incrementally greater than under the Project.

Up to 5.5 feet of alluvial deposits consisting of loose sand and silty sand is present at the site and perched water may develop at the site, conditions that could expose structures and people at risk from liquefaction. The potential for liquefaction on the site is considered low; however, Alternative A would expose more people to this impact and it would be slightly greater than under the Project. A small to moderate volcanic eruption could occur somewhere along the Mono-Inyo Craters volcanic chain producing pyroclastic flows and surges as well as volcanic ash and pumice fallout that could significantly impact the Project site. However, the presence of Alternative A on the site would not increase the risk of such volcanic activity affecting either existing or proposed development in the vicinity of the site. Although implementation of Alternative A would result in development that would expose a larger number of people on the site than the Project, those buildings would be subject to the same building codes as the proposed Project. Risks from cyclic densification, landslides and avalanches, carbon monoxide, soil instabilities, and expansive soils would be the same as under the Project. Therefore, overall impacts under Alternative A would be slightly greater than impacts under the Project.

Hazards and Hazardous Materials

Similar to the Project, Alternative A would not involve the routine transport, use or disposal of substantial quantities of hazardous materials, would not be located within one-quarter mile of any existing or known

proposed schools, would not be located within two miles of a public or private airport, and would not affect an emergency response plan. Similar to the Project, Alternative A is not located within an area subject to wildland fires. Based on the location of Alternative A and the lack of any known hazardous materials sites up-gradient from the site, there would have very little potential for Alternative A to be impacted by groundwater contamination from any surrounding listed hazardous materials sites. Therefore, impacts from hazards and hazardous materials under Alternative A are the same as under the Project.

Hydrology/Water Quality

Alternative A would require construction activities which have the potential for short-term construction-related stormwater pollution including: (1) the handling, storage, and disposal of construction materials containing pollutants; (2) the maintenance and operation of construction equipment; and (3) earth moving activities which, when not controlled, may generate soil erosion and transportation, via storm runoff or mechanical equipment. Similar to the Project, Alternative A would require the implementation of Best Management Practices that would be required to prevent runoff of construction related stormwater pollution. Therefore, impacts to water quality standards and short-term construction-related stormwater pollution under Alternative A would be the same as under the Project.

Activities associated with operation of Alternative A would generate substances that could degrade the quality of water runoff. Development of the currently undeveloped areas under Alternative A would result in the modification of existing drainage paths and a higher amount of surface runoff than is currently generated by these areas. Stormwater runoff and run-on (from adjacent upstream areas) under existing conditions is conveyed to three control points in the Town's storm drainage system. Under Alternative A, the site would be developed with buildings with a slightly larger footprint than the Project. Alternative A would result in incrementally more development of impervious surfaces, thereby increasing stormwater runoff to the Town's storm drainage system. Given that this alternative would result in a greater amount of impervious surface area, and thus greater potential for pollutant capture and delivery to surface waters and a greater overall amount of site runoff, impacts to hydrology under Alternative A would be slightly greater than those under the Project.

Land Use

Alternative A is within the existing development areas of the LMP and would not create a physical barrier within the community or otherwise divide contiguous land uses. Similar to the Project, Alternative A would not conflict with any applicable habitat conservation plan.

The site is currently governed by the land use policies and regulations set forth in the General Plan (adopted in 1987), the LMP (adopted in 1991 and amended in 1992), and the Zoning Ordinance. Alternative A is consistent with the permitted heights on the site is generally consistent with and

implements applicable plans and policies. This impact would be less than those under the Project, which proposes heights in excess of permitted building heights on the site.

Noise

Construction of Alternative A would require the use of heavy equipment for site grading and excavation, installation of utilities, paving, and building fabrication. Development activities would also involve the use of smaller power tools, generators, and other sources of noise. Because construction activities associated with Alternative A would be required to comply with the provisions of the Town Municipal Code and Noise Ordinance, construction activities would only occur within the hours permitted for construction within the Town and this impact would be the same as under the Project. Similar to the Project, Alternative A is not located near a public or private airport and would not expose people to excessive noise from airport operations.

The increase in traffic resulting from implementation of Alternative A would increase the ambient noise levels at sensitive off-site locations in the vicinity. Alternative A would result in a greater number of residential units and slightly more commercial space (approximately 3.5 percent) than the Project and would have the potential to increase traffic-generated noise by the same increment. Therefore, this impact would be slightly greater than those under the Project.

Population and Housing

Similar to the Project, construction of Alternative A would generate temporary construction-related jobs. The work requirements of many construction projects are highly specialized and construction workers remain at a job site only for the time frame in which their specific skills are needed to complete a particular phase of the construction process. As a result, construction workers typically work at several job sites within a particular region throughout the year. Therefore, most construction workers would not relocate their household's place of residence as a consequence of working on Alternative A and it would not result in the generation of substantial number of permanent residents during construction. Commercial and retail uses proposed on the site are not large enough that they would cause employees from surrounding areas to relocate to the Town.

Utility infrastructure associated with Alternative A would be sized to serve only the site and would not facilitate additional development as a result of increased infrastructure. Additionally, Alternative A is consistent with the 1987 General Plan population projections and would contribute housing needed for future population in the Town. Additionally, Alternative A would comply with the Affordable Housing Mitigation Regulations and would provide housing for the estimated number of its Full Time Equivalent Employee (FTEE) associated with the Project. Impacts under Alternative A would be similar to those under the Project.

Public Services

Under Alternative A, the number of potential residents on site would be slightly greater than under the Project. The additional number of people and activity on the site as a result of Alternative A could result in an increase in the need for police and fire services over the Project. According to the Mammoth Lakes Police Department, although additional police equipment and staff would be necessary to accommodate Alternative A, the additional demand for police services created by it would not require the need for new or altered police facilities other than those currently planned for future police staffing and facilities. In addition, impacts related to fire protection services, according to the Mammoth Lakes Fire Protection District, with the mutual-aid agreement with neighboring fire districts, their current staffing, and equipment, facility levels are adequate to accommodate demand for fire protection services. These impacts would be similar to those under the Project.

Alternative A would also contribute additional students to at capacity area schools and create additional demand for parks and recreation greater than the Project. However, development under Alternative A would be subject to the payment of Developer Impact Fees that would be deemed to fully mitigate the impacts of new development on school and park services. In addition, similar to the Project, Alternative A would require snow removal services on the site. However, similar to the Project, the internal roadway system would be privately owned and maintained and the management of snow at the site would be the sole responsibility of the Sierra Star Home Owners Association. Therefore, all impacts to public services under Alternative A would be similar as those under the Project.

Transportation/Traffic

Alternative A would generate trips that would be distributed to the surrounding circulation system throughout the Town. Residential units and commercial space would be greater under Alternative A than under the Project. Therefore, project trips generated by this alternative would be approximately 3.5 percent greater than those under the Project. All area intersections are forecast to operate at acceptable LOS C or D under the Project. Although Alternative A would contribute additional traffic at these intersections, this increase would not be great enough to result in changes in intersection LOS classifications. Therefore, trip generation under Alternative A would be incrementally increased compared to the Project.

Alternative A would require a greater number of parking spaces to accommodate the increase in residential units and commercial space. Similar to the Project, Alternative A would be required to provide adequate parking as part of the approval process. Alternative A would be based on the same site plan as the Project and impacts to internal circulation and access would be similar to the Project. The pedestrian and bicycle system within Alternative A would include interior trails and sidewalks fronting internal streets as well as connecting trails from recreational amenities, outdoor spaces and neighborhoods. Walkways to and from residential areas as well as trail connections that would tie into the larger Town-wide recreational trail network would be provided. Alternative A pedestrian and bicycle

facilities would be similar in design as the Project. Similar to the Project, Alternative A would potentially include a gondola that would transport patrons from Area 5 to the Little Eagle Ski Area. Although the gondola is not part of Alternative A, it is reasonable to expect that this amenity, if developed, would result in a reduction in vehicle trips to and from the Little Eagle Ski Area. Alternative A, similar to the Project, would not increase impacts to air traffic patterns, hazards, emergency access, and transit. However, trip generation under Alternative A would be incrementally increased compared to the Project and this impact would be greater.

Utilities

Alternative A would result in increased amounts of wastewater generated at the site over the Project. According to Mammoth Community Water District (MCWD), areas of deficiency have been identified in sewer collection lines on Manzanita Road from Dorrance Drive and along Center Street, the final sewer trunk lines coming into the District's wastewater treatment plant located at the corner of Meridian Boulevard and State Highway 203, and a short section of sewer line on Meridian Boulevard near the intersection with Old Mammoth Road. However, the connection fees for Alternative A would help to pay for the necessary upgrades to the sewer collection pipelines described above and this impact would be similar to the Project.

The demand for domestic water in the Town would increase as a result of Alternative A. The MCWD has developed an expected total water demand for the Town of 4,898 acre-feet per year at Town buildout utilizing the unit counts projected in the Town of Mammoth Lakes General Plan Update Draft EIR (October 2005). These figures were also used in the preparation of the 2005 Urban Water Management Plan (2005 UWMP). Alternative A (as the LMP) was included in both the General Plan Draft EIR and the 2005 UWMP. Therefore, Alternative A impacts to water supply are already accounted for in MCWD's estimates of future water use requirements for the Town. However, due to the increased number of residential units on the site, Alternative A would require more water than the Project. Therefore, impacts to water supply under Alternative A would be greater than under the Project.

During construction activities, Alternative A would generate a variety of scraps and wastes, with the majority of recyclables being wood waste, drywall, metal, paper, and cardboard. Construction solid waste would be incrementally greater than with the Project due to the increased size of Alternative A.

B. REDUCED DENSITY ALTERNATIVE (Alternative B)

Description

Alternative B proposes the development of 1,028 residential units and 79,000 square feet of commercial space on the site. Under Alternative B, residential units developed on the Project site would be decreased by approximately 15 percent from the Project (1,028 units as opposed to 1,220). Similar to the Project, Alternative B would set development standards for the approximately 228-acre site situated around the Sierra Star Golf Course (Area G, 112 acres located west of Minaret Road and north of Meridian Boulevard as well as in the southeast corner of the intersection of Minaret Road and Meridian Boulevard). Similar to the Project, Alternative B also proposes the construction of open space areas; roadways; short-term parking areas; transit, pedestrian and bicycle facilities; landscaping; and lighting on the site. Building heights would be at or below 200 feet in height.

As shown in Figure VI-9: Alternative B Site Plan, under Alternative B, building footprints would be similar to the Project. Under Alternative B, building heights would be at or below 200 feet in height. The average square footage of the units would be increased within the buildings as compared to the Project. All roadway alignments and associated grading and drainage improvements would be similar to the Project under Alternative B. Likewise, the size, massing, and design of the buildings would be similar under Alternative B to that described in Section III, Project Description. Figure VI-10: Alternative B Conceptual Building Masses shows the massing of the buildings on the site as proposed under Alternative B.

Except as described above, other characteristics (e.g., lighting, landscaping, and utility connections) are assumed to be similar to those of the Project. The analysis of Alternative B assumes development of the related projects described in Section II.C (Related Projects). The potential environmental impacts associated with this alternative are described below and are compared to the significant environmental impacts associated with the Project.

Currently, a total of 457 residential units have been developed or approved under the existing LMP. No commercial space has been developed. Alternative B would include the development of the remaining residential units and commercial space on the site. Alternative B would develop these residential uses at a total density of 4.5 dwelling units per acre. Table VI-2 shows the development under Alternative B.

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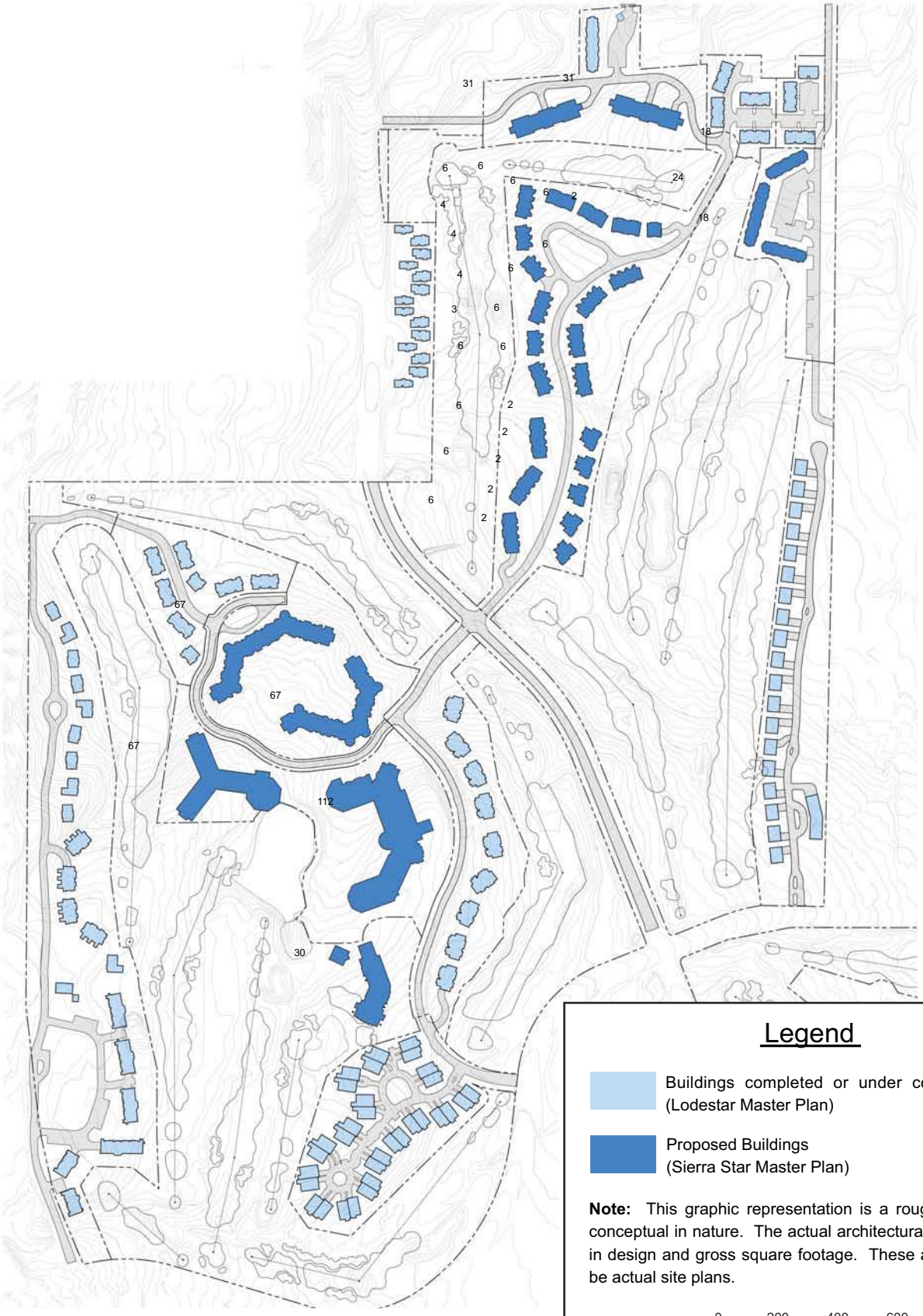

Source: Perkins Design Associates, IDS, CAJA, March 2007.

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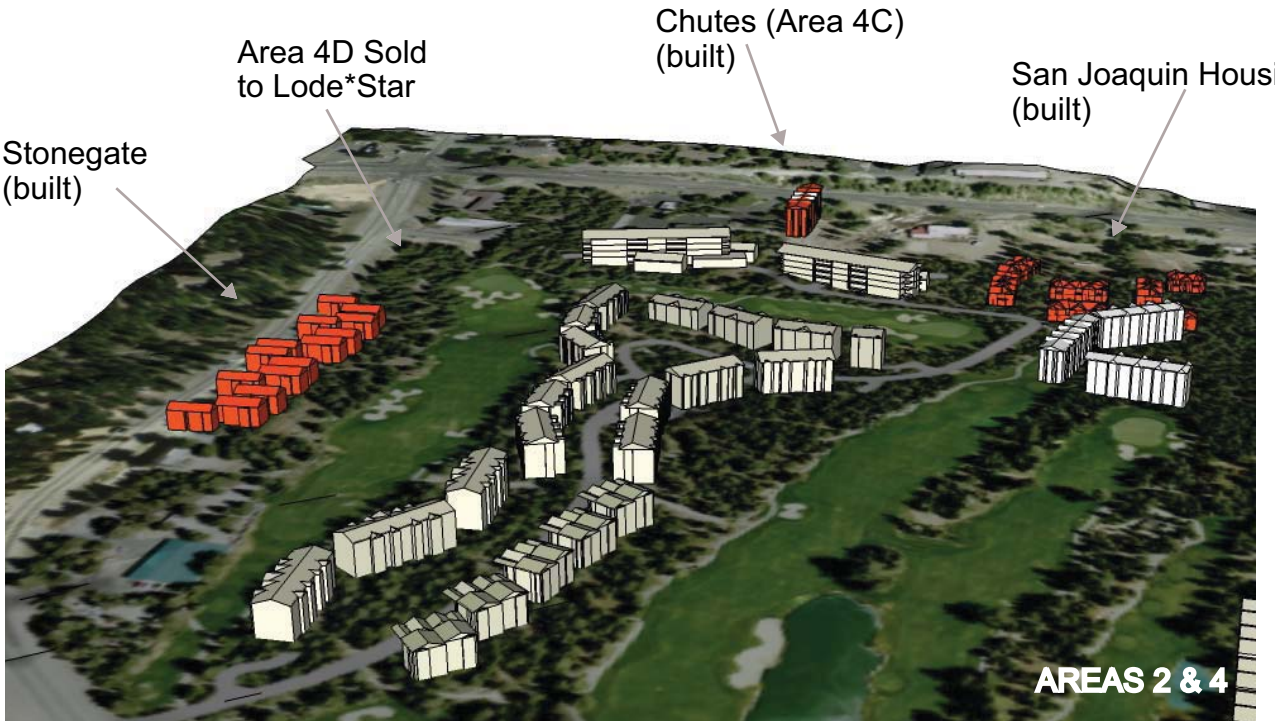
Figure VI-9
Alternative B Site Plan



Legend

Constructed Buildings

Proposed Buildings

Note: This graphic representation is a rough massing that is conceptual in nature. The actual architectural designs may vary in design and gross square footage.

Source: Perkins Design Associates, IDS, CAJA, March 2007.

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Figure VI-10
Alternative B Conceptual Building Masses

Table VI-2
Alternative B
Reduced Density

Sierra Star Master Plan Development Areas	Acres	Commercial Square Feet (SF)	Total Dwelling Units	Density (DU/acres)
Area 1	15.6		107	6.9
Area 2	16.7	30,000(1)	171	10.3
Area 3	21.9		54	2.5
Area 4	8.5	29,000(1)	168	19.8
Area 5	33.6	20,000(1)	431	12.8
Area 6(2)	7.7		67	2.5(4)
Area 7(3)	2.3		30	13
Total Residential	**106.3**		**1,028**	**4.5**
Golf Course Acreage	111.5			
Other Acreage (Roads)	11			
Grand Total	**228.8**	**79,000**	**1,028**	**4.5**

(1) Commercial/Retail/Conference located in Area 2, 4, and 5.
(2) Area 6 was part of Area 2 in the 1991 LMP.
(3) Area 7 was part of Area 5 in the 1991 LMP.(4) Density was calculated using 19 units/7.7 acres because 67 units were approved, but only 19 units were built. The remaining units have been sold.

Sources: 1991 LMP, 2005 SSMP, Town of Mammoth Lakes Department of Community Development, and the SSMP Alternatives, IDS, 2007.

Aesthetics

Alternative B would result in changes to visual characteristics on the Project site through construction of residential and commercial buildings; open space areas; roadways; short-term parking areas; transit, pedestrian and bicycle facilities; landscaping; and lighting on the site.

Alternative B proposes a portion of the building at or below 200 feet in height that would not be in compliance with the height restrictions on the Project site. Therefore, similar to the Project, Alternative B would not be consistent with the applicable policies associated with aesthetics in the adopted 1987 General Plan.

Alternative B is proposed to be the same height as the Project, therefore Figure IV.B-3 through IV.B-20 in the Aesthetics section illustrate the same representative views as those in Alternative B. The visual simulations that were prepared to analyze the impact of Alternative B (and the Project) on important views in the Town show that Alternative B (and the Project) would not be visible or only minimally visible from the following viewpoints: The Village at Mammoth, Main Street and Old Mammoth Road, Town of Mammoth Lakes Office Parking Lot, Mammoth Creek Park, or Sherwin Creek Road, viewpoints. In addition, Alternative B would be visible above the tree tops from the intersection of Minaret Road and Main Street/Lake Mary Road, but would not obscure any views of the mountains.

Therefore, Alternative B visual impacts on the views identified above would be similar to those of the Project.

Alternative B would be visible at Meridian Boulevard and Minaret Road; this would result in a substantial alteration of existing views towards Mammoth Mountain from this location. Similar to the Project, the architectural design of the proposed structures would be consistent with the Town's design guidelines and, thus "soften" this potential visual impact. However, this would still result in a significant impact with respect to visual character.

The Project as proposed under Alternative B would be visible from the Lake Mary Road viewpoint above the existing forest canopy in the Town during non-snow conditions. During snow conditions, the Project tower would be partially obstructed by intervening topography and trees. As with the Project, this is considered a significant impact to Views 15 and 18.

Alternative B would result in significant view impacts from the Lake Mary Road and Twin Lakes view during non-snow conditions as it would be the highest feature above the tree canopy. However, under snow conditions the view would be mostly obscured due to distance, trees, and topography. Thus, the view impact would be less than significant. Similar to the view from Lake Mary Road, the proposed buildings in Area 5A would be visible during both snow and non-snow conditions and impacts of Alternative B on this view would be significant.

In the vicinity of the Town, State Highway 203 is an eligible State Scenic Highway (not officially designated) and U.S. Highway 395 is an officially designated Sate Scenic Highway. Overall, Alternative B would be barely visible or not visible along State Highway 203 (also known as Main Street) and would not result in impacts to scenic views available from this route. Therefore, similar to the Project, Alternative B would not affect scenic resources within a State Scenic Highway.

Alternative B would result in the development of buildings on the site that would change the visual character of the site. Some of these buildings would be reduced in bulk compared to the Project due to the reduction in residential units. However, this would result in the same visual changes to the site and impacts to existing visual character as those of the Project. Under Alternative B, the site would be developed in requiring grading, tree and vegetation removal, associated landscaping, signage, and lighting similar to the Project. The reduction in building bulk alone would not make this impact less than that of the Project.

Impacts to visual resources (including public views, lighting and glare, and shading/shadows) would be the same as the Project due to the height of the tower building. (Height of Alternative B is the same as the Project; therefore, see the Aesthetics section for an analysis of the shade/shadow impacts of this alternative.) Overall, Alternative B would result in the same impacts to aesthetics as the Project.

Air Quality

Under Alternative B, construction of the Project would require grading and construction activities on the site. Foreseeable construction activities for the Project would include site preparation, grading, placement of utilities and other infrastructure, placement of foundations for structures, and fabrication of structures across the entire site. Construction activities would result in the creation of fugitive dust and equipment exhaust. Alternative B would generate similar amounts of fugitive dust associated with construction as the Project.

Operational emissions generated by both stationary and mobile sources would result from normal day-to-day activities on the site after occupation. Stationary area source emissions would be generated by the consumption of natural gas for space and water heating devices, cooking appliances, and fireplaces, the operation of landscape maintenance equipment, the use of consumer products, and the application of architectural coatings (paints). Mobile emissions would be generated by the motor vehicles traveling to and from the Project site.

Implementation of Alternative B would result in the construction of 1,028 residential units, as opposed to 1,220 units under the Project. Commercial space constructed under Alternative B would be the same as the Project. Therefore, traffic-generated air emissions under Alternative A would be incrementally reduced by approximately 15 percent over the Project.

Biological Resources

Eleven special status wildlife species have a moderate or high potential to occur within the site. No special status plants are present on-site and no riparian vegetation or other sensitive communities exists within or adjacent to the Project site. Under Alternative B, building footprints would be the same as the Project. Therefore, the site would be developed and would require grading activities and development of the site similar to the Project.

Due to identical grading and building footprints, impacts to special status animals, jurisdictional resources, and protected trees on the site would be the same as under the Project. Impacts relative to wildlife movement, habitat connectivity, and habitat conservation plans would be the same as those under the Project.

Cultural Resources

Two known cultural resources are located on the site, although neither is considered a unique archaeological resource under CEQA. The area is sensitive for prehistoric and historic archaeological resources, and human remains. Additionally, buried (previously unknown or unrecorded) prehistoric and historic archaeological deposits, including human remains may be present within the site. Under Alternative B ground-disturbing activities including grading and excavation would occur. Buildings on the site would have the same footprint as the Project and would require identical grading and excavation

on the site. Therefore, impacts to known and unknown archaeological resources or known and unknown paleontological resources and human remains from Alternative B would be the same as those under the Project.

Geology/Soils

The site is not within an Earthquake Fault Zone or Alquist-Priolo Hazard Zone. However, the site is located in a Seismic Zone 4 based on 1997 Uniform Building Code and 2001 California Building Code and the site would be likely to experience at least one earthquake that may produce potentially damaging ground shaking. Under Alternative B, the site would be developed with fewer residential units on the site and fewer people would be exposed to geologic hazards on the site. This impact would be incrementally reduced from the Project.

Alternative B would require the same grading and excavation and impacts to soil erosion/loss of topsoil would be the same as the Project. Potential for liquefaction on the site is considered low and this impact would be similar to the Project. The presence of Alternative B on the site would not increase the risk of volcanic activity affecting either existing or proposed development in the vicinity of the site. Risks from cyclic densification, landslides and avalanches, carbon monoxide, soil instabilities, and expansive soils would be the same as under the Project. Therefore, overall impacts under Alternative B would be incrementally reduced than those under the Project.

Hazards and Hazardous Materials

Similar to the Project, Alternative B would not involve the routine transport, use or disposal of substantial quantities of hazardous materials, would not be located within one-quarter mile of any existing or known proposed schools, would not be located within two miles of a public or private airport, and would not affect an emergency response plan. Similar to the Project, Alternative B is not located within an area subject to wildland fires. Based on the location of Alternative B and the lack of any known hazardous materials sites up-gradient from the site, there would have very little potential for Alternative B to be impacted by groundwater contamination from any surrounding listed hazardous materials sites. Therefore, impacts from hazards and hazardous materials under Alternative B are the same as those under the Project.

Hydrology/Water Quality

Alternative B would require construction activities which have the potential for short-term construction-related stormwater pollution including: (1) the handling, storage, and disposal of construction materials containing pollutants; (2) the maintenance and operation of construction equipment; and (3) earth moving activities which, when not controlled, may generate soil erosion and transportation, via storm runoff or mechanical equipment. Similar to the Project, Alternative B would require the implementation of Best Management Practices that would be required to prevent runoff of construction related stormwater

pollution. Therefore, impacts to water quality standards and short-term construction-related stormwater pollution under Alternative B would be the same as those under the Project.

Activities associated with operation of Alternative B would generate substances that could degrade the quality of water runoff. Development of the currently undeveloped areas under Alternative B would result in the modification of existing drainage paths and a higher amount of surface runoff than is currently generated by these areas. Stormwater runoff and run-on (from adjacent upstream areas) under existing conditions is conveyed to three control points in the Town's storm drainage system. Under Alternative B, the site would be developed with buildings with identical footprint to the proposed Project. Therefore, Alternative B would result in identical amounts of impervious surfaces and thus the same potential for pollutant capture and delivery to surface waters and overall amount of site runoff. Impacts to hydrology under Alternative B would be the same as those under the Project.

Land Use

Alternative B is within the existing development areas of the LMP and would not create a physical barrier within the community or otherwise divide contiguous land uses. Similar to the Project, Alternative B would not conflict with any applicable habitat conservation plan.

The site is currently governed by the land use policies and regulations set forth in the General Plan (adopted in 1987), the LMP (adopted in 1991 and amended in 1992), and the Zoning Ordinance. Because of the 200-foot tower, Alternative B would not be consistent with the permitted heights on the site. However, Alternative B is generally consistent with and implements other applicable plans and policies of the Town. Alternative B would have the same land use impacts as those of the Project.

Noise

Construction of Alternative B would require the use of heavy equipment for site grading and excavation, installation of utilities, paving, and building fabrication. Development activities would also involve the use of smaller power tools, generators, and other sources of noise. Because construction activities associated with Alternative B would be required to comply with the provisions of the Town Municipal Code and Noise Ordinance, construction activities would only occur within the hours permitted for construction within the Town and this impact would be the same as under the Project. Similar to the Project, Alternative B is not located near a public or private airport and would not expose people to excessive noise from airport operations.

Alternative B would result in a fewer number of residential units (approximately 15 percent) and the same amount of commercial space as the Project and would therefore have the potential to reduce traffic-generated noise by the same increment. Therefore, this impact would be slightly less than those under the Project.

Population and Housing

Similar to the Project, construction of Alternative B would generate temporary construction-related jobs. The work requirements of many construction projects are highly specialized and construction workers remain at a job site only for the time frame in which their specific skills are needed to complete a particular phase of the construction process. As a result, construction workers typically work at several job sites within a particular region throughout the year. Therefore, most construction workers would not relocate their household's place of residence as a consequence of working on Alternative B and it would not result in the generation of substantial number of permanent residents during construction. Commercial and retail uses proposed on the site are not large enough that they would cause employees from surrounding areas to relocate to the Town.

Utility infrastructure associated with Alternative B would be sized to serve only the site and would not facilitate additional development as a result of increased infrastructure. Additionally, Alternative B is consistent with the 1987 General Plan population projections and would contribute housing needed for future population in the Town. Additionally, Alternative B would comply with the Affordable Housing Mitigation Regulations per the vested rules of the Development Agreement and would provide housing for the estimated number of its Full Time Equivalent Employee (FTEE) associated with the Project. Impacts under Alternative B would be similar to those under the Project.

Public Services

Under Alternative B the number of potential residents on site would be slightly less than under the Project. The reduced number of people and activity on the site as a result of Alternative B could result in a decrease in the need for police and fire services over the Project. While Alternative B would increase the number of persons and level of activity on the site over existing conditions, given the type of use, it is reasonable to expect that Alternative B would not result in a meaningful increase in the amount of crime in the area. Related to fire protection services, according to the Mammoth Lakes Fire Protection District, with the mutual-aid agreement with neighboring fire districts, their current staffing, and equipment, facility levels are adequate to accommodate demand for fire protection services. These impacts would be similar to those under the Project.

Alternative B would also contribute additional students to at capacity area schools and create additional demand for parks and recreation greater than the Project. However, development under Alternative B would be subject to the payment of Developer Impact Fees that would be deemed to fully mitigate the impacts of new development on school and park services. In addition, similar to the Project, Alternative B would require snow removal services on the site. However, similar to the Project, the internal roadway system would be privately owned and maintained and the management of snow at the site would be the sole responsibility of the Sierra Star Home Owners Association. Therefore, all impacts to public services under Alternative B would be similar as those under the Project.

Transportation/Traffic

Alternative B would generate trips that would be distributed to the surrounding circulation system throughout the Town. Residential units and commercial space would be fewer than under the Project. Therefore, project trips generated by this alternative would be approximately 15 percent fewer than under the Project. Therefore, trip generation under Alternative B would be incrementally decreased compared to the Project.

Alternative B would require fewer parking spaces due to the reduction in residential units. Similar to the Project, Alternative B would be required to provide adequate parking as part of the approval process. Alternative B would be based on the same site plan as the Project and impacts to internal circulation and access would be similar to the Project. The pedestrian and bicycle system within Alternative B would include interior trails and sidewalks fronting internal streets as well as connecting trails from recreational amenities, outdoor spaces and neighborhoods. Walkways to and from residential areas as well as trail connections that would tie into the larger Town-wide recreational trail network would be provided. Alternative B pedestrian and bicycle facilities would be similar in design as the Project. Similar to the Project, Alternative B would potentially include a gondola that would transport patrons from Area 5 to the Little Eagle ski area. Although the gondola is not part of Alternative B, it is reasonable to expect that this amenity, if developed, would result in a reduction in vehicle trips to and from the Little Eagle ski area. Additionally Alternative B, similar to the Project, would not increase impacts to air traffic patterns, hazards, emergency access, and transit. Trip generation under Alternative B would be incrementally decreased compared to the Project; therefore, overall traffic impacts are less.

Utilities

Alternative B would result in increased amounts of wastewater generated at the site over existing conditions. According to Mammoth Community Water District (MCWD), areas of deficiency have been identified in sewer collection lines on Manzanita Road from Dorrance Drive and along Center Street, the final sewer trunk lines coming into the MCWD's wastewater treatment plant located at the corner of Meridian Boulevard and State Highway 203, and a short section of sewer line on Meridian Boulevard near the intersection with Old Mammoth Road. However, the connection fees for Alternative B would help to pay for the necessary upgrades to the sewer collection pipelines described above and this impact would be similar to the Project.

The demand for domestic water in the Town would increase as a result of Alternative B. The MCWD has developed an expected total water demand for the Town of 4,898 acre-feet per year at Town buildout utilizing the unit counts projected in the Town of Mammoth Lakes General Plan Update DEIR (October 2005). These figures were also used in the preparation of the 2005 Urban Water Management Plan (2005 UWMP). The LMP, which proposed a greater number of residential units was included in both the General Plan Draft EIR and the 2005 UWMP. Therefore, Alternative B impacts to water supply are already accounted for in MCWD's estimates of future water use requirements for the Town. However,

due to the reduction in the number of residential units on the site, Alternative B would require less water than the Project. Therefore, impacts to water supply under Alternative B would be less than those under the Project.

During construction activities, Alternative B would generate a variety of scraps and wastes, with the majority of recyclables being wood waste, drywall, metal, paper, and cardboard. Construction solid waste would be incrementally reduced due to the reduced building masses under Alternative B as compared to the Project.

C. REDUCED BUILDING HEIGHT ALTERNATIVE (Alternative C)

Description

Alternative C proposes the development of 1,220 residential units and 79,000 square feet of commercial space. Under Alternative C, total development (number of units and commercial square footage) on the Project site would the same as the Project. However, building heights would be lower and the average square footage of some residential units would be increased and others reduced to accommodate changes to the tower height. Similar to the Project, Alternative C would set development standards for the approximately 228-acre site situated around the Sierra Star Golf Course (Area G, 112 acres located west of Minaret Road and north of Meridian Boulevard as well as in the southeast corner of the intersection of Minaret Road and Meridian Boulevard). Similar to the Project, Alternative C also proposes the construction of open space areas; roadways; short-term parking areas; transit, pedestrian and bicycle facilities; landscaping; and lighting on the site. Building heights would be at or below 120 feet in height.

As shown in Figure VI-11 Alternative C Site Plan, under Alternative C, building footprints would be similar to the Project. However, to accommodate the decrease in height from the Project, the number of units in the tower would be reduced and the average square footage of some units would be increased and others decreased within the buildings. All roadway alignments and associated grading and drainage improvements would be similar to the Project under Alternative C. Likewise, the size, massing, and design of the buildings would be similar under Alternative C to that described in Section III, Project Description. Figure VI-12: Alternative C Conceptual Building Masses shows the massing of the buildings on the site under Alternative C.

Except as described above, other characteristics (e.g., lighting, landscaping, and utility connections) are assumed to be generally similar to those of the Project, for the purpose of analyzing this alternative. The analysis of Alternative C assumes development of the related projects described in Section II.C (Related Projects). The potential environmental impacts associated with this alternative are described below and are compared to the significant environmental impacts associated with the proposed Project.

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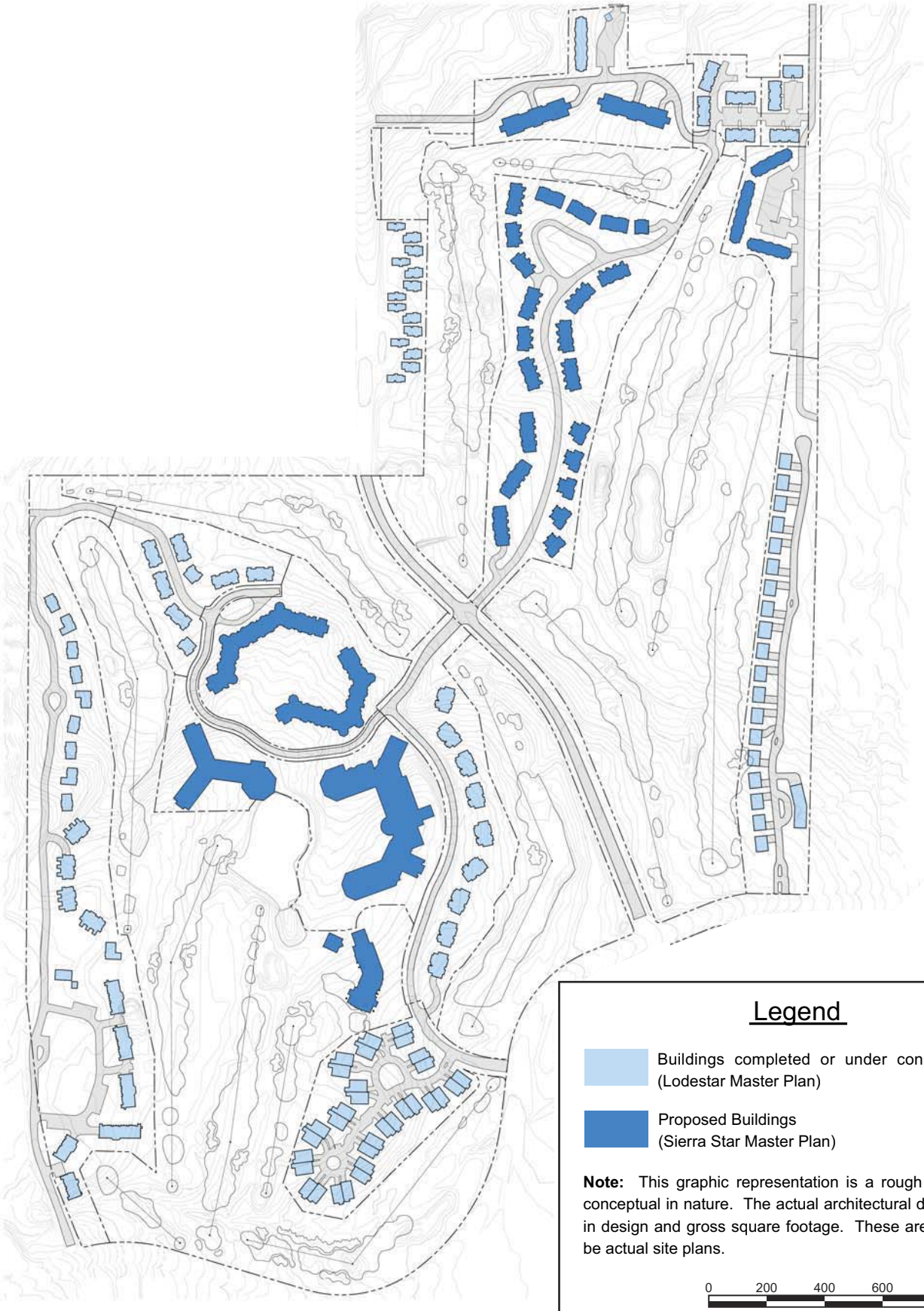

Source: Perkins Design Associates, IDS, CAJA, March 2007.

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Figure VI-11
Alternative C Site Plan

Legend

Constructed Buildings

Proposed Buildings

Note: This graphic representation is a rough massing that is conceptual in nature. The actual architectural designs may vary in design and gross square footage.

Source: Perkins Design Associates, IDS, CAJA, March 2007.

Figure VI-12
Alternative C Conceptual Building Masses

Currently, a total of 457 residential units have been developed or approved under the existing LMP. No commercial space has been developed. Alternative C would include the development of the remaining residential units and commercial space on the site. Similar to the Project, Alternative C would develop these residential uses at a total density of 5.3 dwelling units per acre. Table VI-3 shows the development under Alternative C.

Table VI-3
Alternative C
Reduced Height

Sierra Star Master Plan Development Areas	Acres	Commercial Square Feet (SF))	Total Dwelling Units	Density (DU/acres)
Area 1	15.6		113	7.2
Area 2	16.7	30,000(1)	223	13.4
Area 3	21.9		54	2.5
Area 4	8.5	29,000(1)	188	22.1
Area 5	33.6		535(4)	15.9
Area 6(2)	7.7		67	2.5(5)
Area 7(3)	2.3	20,000(1)	40	17.4
Total Residential	**106.3**		**1,220**	**5.3**
Golf Course Acreage	111.5			
Other Acreage (Roads)	11			
Grand Total	**228.8**	**79,000**	**1,220**	**5.3**

(1) Commercial/Retail/Conference located in Area 2, 4, and 5.
(2) Area 6 was part of Area 2 in the 1991 LMP.
(3) Area 7 was part of Area 5 in the 1991 LMP.
(4) 357 residences and 356 hotel rooms proposed. Based on Town code, 1 studio or 1 bedroom is equal to ½ DU; thus, 356 hotel rooms are equivalent to 178 DU. The representative DU for the hotel rooms (178) plus the DU for the residences (357) equals a total of 535 DU.
(5) Density was calculated using 19 units/7.7 acres because 67 units were approved, but only 19 units were built. The remaining units have been sold.

Sources: 1991 LMP, 2005 SSMP, Town of Mammoth Lakes Department of Community Development, and the SSMP Alternatives, IDS, 2007.

Aesthetics

Alternative C would result in changes to visual characteristics on the Project site through construction of residential and commercial buildings; open space areas; roadways; short-term parking areas; transit, pedestrian and bicycle facilities; landscaping; and lighting on the site.

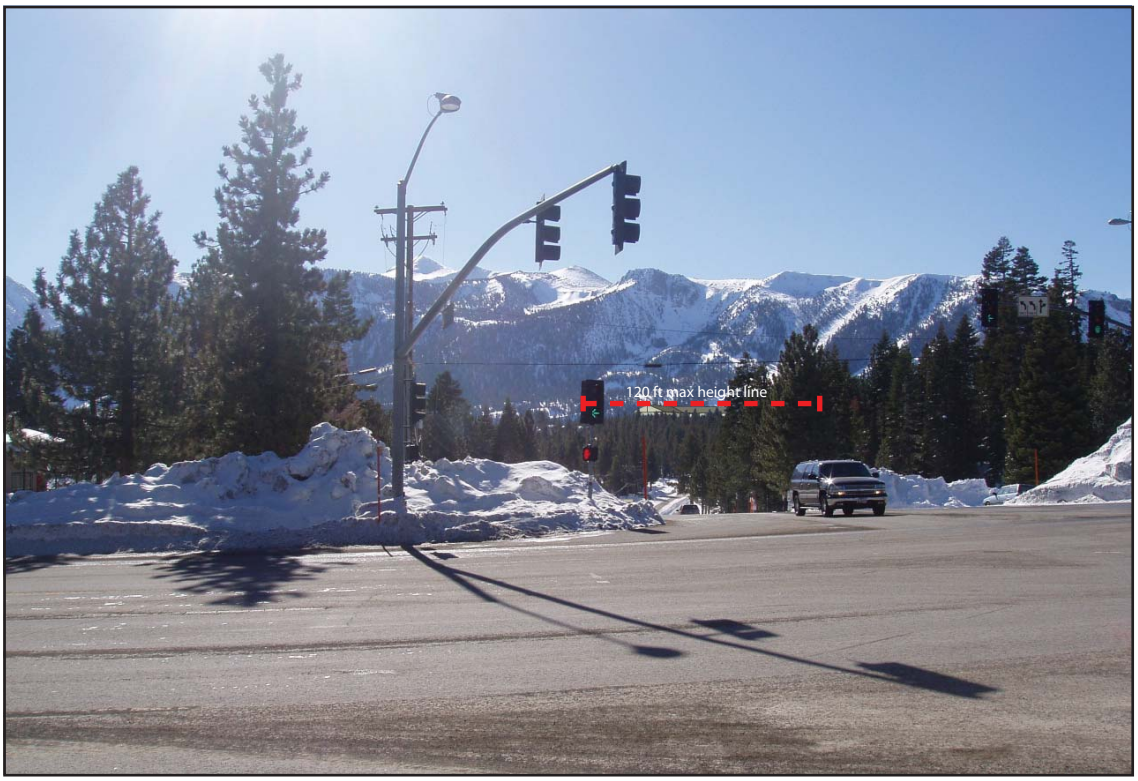
Alternative C proposes a tower building at or below 120 feet in height that would not be in compliance with the height restrictions on the Project site. Therefore, similar to the Project, Alternative C would not be consistent with the applicable policies associated with aesthetics in the adopted 1987 General Plan.

Visual simulations were prepared to analyze the impact of Alternative C on important views in the Town (See Figures VI-13 through VI-15). Buildings proposed under Alternative C would not be visible from The Village at Mammoth, Main Street and Old Mammoth Road, Town of Mammoth Lakes Office Parking Lot, Mammoth Creek Park, Sherwin Creek Road, Lake Mary Road and Twin Lakes, or Bridges viewpoints. Visual simulations prepared for the Project show that the Project would be not visible or only minimally visible from the above viewpoints; therefore, Alternative C would not be visible from these viewpoints and this impact would be similar to the Project. Alternative C would be minimally visible above the tree canopy from Main Street and Minaret Road, but would not obscure any views of the mountains. Alternative C would be visible at Meridian Boulevard and Minaret Road, but would be screened by trees on the golf course and would not obstruct any views. Additionally, Alternative C would be visible from Lake Mary Road south of the tunnel during summer conditions, but would not be visible from views accessible during winter conditions. Therefore, this impact to scenic views would be less than significant and less than those under the Project.

In the vicinity of the Town, State Highway 203 is an eligible State Scenic Highway (not officially designated) and U.S. Highway 395 is an officially designated Sate Scenic Highway. Overall, Alternative C would be barely visible or not visible along State Highway 203 (also known as Main Street) and would not result in impacts to this route. Therefore, similar to the Project, Alternative C would not affect scenic resources within a State Scenic Highway.

Alternative C would result in the development of buildings on the site that would change the visual character of the site. Some of these buildings would be reduced in height compared to the Project due to the reduction in residential units. This would result in fewer visual changes to the Project site and impacts to existing visual character. Under Alternative C, the site would be developed requiring grading, tree and vegetation removal, associated landscaping, signage, and lighting similar to the Project. The reduction in building bulk and height would reduce the level of this visual impact to a less-than-significant level.

View 3: From Main Street and Minaret (Summer)



View 4: From Main Street and Minaret (Winter)

Source: Integrated Design Studio, 2007.

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Figure VI-13
Alternative C
Views 3 & 4
From Main Street and Minaret

View 9: From Meridian Boulevard and Minaret Road (Summer)

View 10: From Meridian Boulevard and Minaret Road (Winter)

Source: Integrated Design Studio, 2007.

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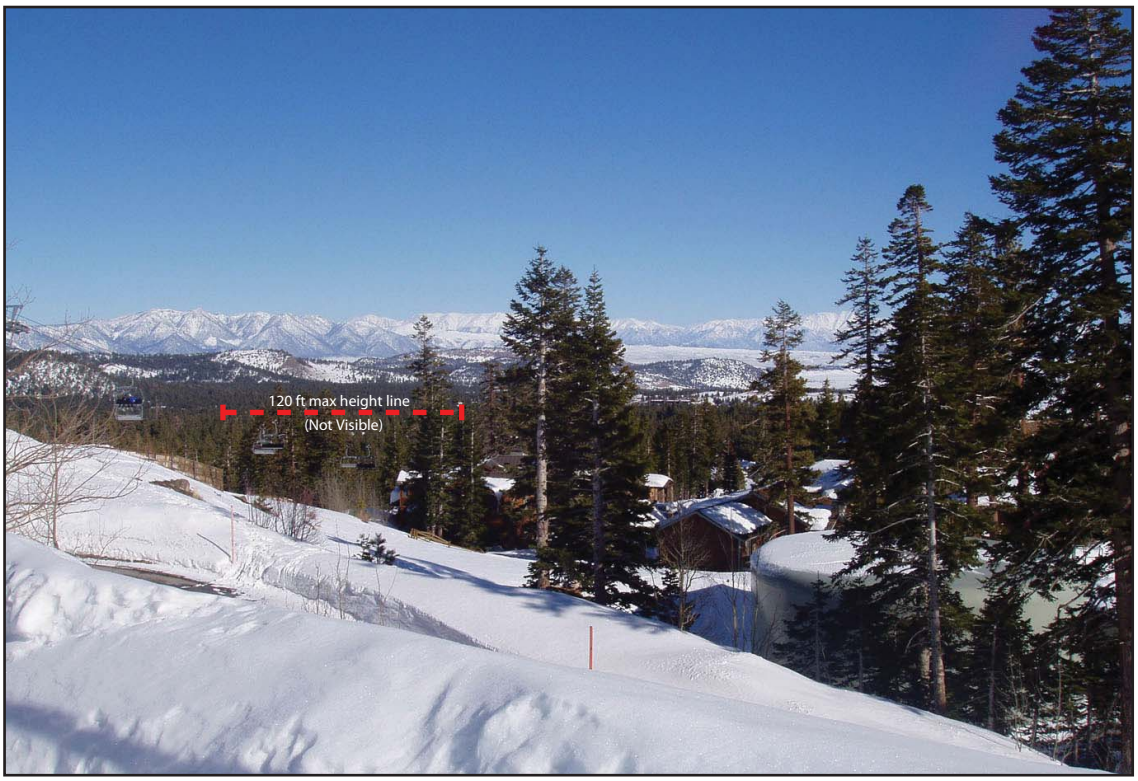
Figure VI-14
Alternative C
Views 9 & 10
From Meridian Boulevard and Minaret Road

View 15: From Lake Mary Road, South of Tunnel (Summer)



View 18: From Lake Mary Road, South of Tunnel (Winter)

Source: Integrated Design Studio, 2007.

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Figure VI-15
Alternative C
Views 15 & 18
From Lake Mary Road, South of Tunnel

Summer Solstice

Figure VI-15 (Summer Solstice Shading) illustrates the summer solstice shadows at 9:00 a.m., 12:00 p.m., and 5:00 p.m. for Alternative C. The morning summer solstice shadows are generally cast towards the northwest, then shrink as they move overhead and extend towards the east in the afternoon.

As shown in Figures VI-15, morning shadows at the southwestern portion of the 9:00 a.m. shadow would cast onto existing trees and only minimal portions of the Sierra Star Golf Course. The afternoon shadows would be cast onto the existing trees and interior roadways and would not cast directly onto Minaret Road or the Sierra Star golf course. Therefore, as summer solstice shadows would not cast onto any shadow-sensitive uses in the vicinity of Alternative C, summer solstice shadow impacts would be less than significant.

Winter Solstice

Figure VI-16 (Winter Solstice Shading) illustrates the winter solstice shadows at 9:00 a.m., 12:00 p.m., and 3:00 p.m. for Alternative C. The morning winter solstice shadows are generally cast towards the northwest in the morning, then shrink as they move overhead, and extend towards the northeast in the afternoon.

As shown in Figure VI-16, winter solstice shadows from Alternative C would cast onto existing trees and small portions of the Sierra Star Golf Course in the morning and throughout the afternoon. Although the Sierra Star Golf Course is mostly used in the summer months, when there is no snow on the ground, it is used sparingly in the winter months for snowshoeing by local residents. As the Sierra Star Golf Course is only used sparingly in the winter months, it is not considered to be a "routinely usable outdoor space" and thus is not considered to be a shadow-sensitive use in the winter season.

Winter solstice shadows in the late afternoon would cast onto portions of Minaret Road. However, these shaded areas would be minor and would have not affect significantly affect pedestrian areas for long periods of time. Therefore, as winter solstice shadows would not cast onto any shadow-sensitive uses in the Project vicinity, winter solstice shadow impacts would be less than significant.

Autumn and Spring Equinox Shadows

Figure VI-17 (Equinox Shading) illustrates the equinox shadows at 9:00 a.m., 1:00 p.m., and 5:00 p.m. for Alternative C. The morning equinox shadows are generally cast towards the west in the morning, then shrink as they move overhead, and extend towards the east in the afternoon.

As shown in Figure VI-17 equinox shadows from Alternative C would cast onto existing trees, interior roadways, and portions of the Sierra Star Golf Course in the morning and throughout the afternoon. Afternoon shadows would not extend to Minaret Road. Equinox shadows depicted in Figures VI-17 are for informational purposes only. There are no established thresholds of significance for equinox shadows.

Impacts to visual resources (including public views, lighting and glare, and shading/shadows) would be reduced from the Project due to the reduction in height of the tower building. Overall, Alternative C would result in fewer impacts to aesthetics than the Project.

Air Quality

Under Alternative C, construction of the Project would require grading and construction activities on the site Foreseeable construction activities for the Project would include site preparation, grading, placement of utilities and other infrastructure, placement of foundations for structures, and fabrication of structures across the entire site. Construction activities would result in the creation of fugitive dust and equipment exhaust. Alternative C would generate similar amounts of fugitive dust associated with construction as the Project.

Operational emissions generated by both stationary and mobile sources would result from normal day-to-day activities on the site after occupation. Stationary area source emissions would be generated by the consumption of natural gas for space and water heating devices, cooking appliances, and fireplaces, the operation of landscape maintenance equipment, the use of consumer products, and the application of architectural coatings (paints). Mobile emissions would be generated by the motor vehicles traveling to and from the Project site.

Implementation of Alternative C would result in the construction of the same number of residential units as the Project (1,220 units). Commercial space constructed under Alternative C would be the same as the Project (79,000 square feet). Therefore, traffic-generated air emissions under Alternative C would be the same and air quality impacts would be the same as the Project.

Biological Resources

Eleven special status wildlife species have a moderate or high potential to occur within the site. No special status plants are present on-site and no riparian vegetation or other sensitive communities exists within or adjacent to the Project site. Under Alternative C, building footprints would be the same as the Project. Therefore, the site would be developed and would require grading activities and development of the site similar to the Project.

Due to identical grading and building footprints, impacts to special status animals, jurisdictional resources, and protected trees on the site would be the same as under the Project. Impacts relative to wildlife movement, habitat connectivity, and habitat conservation plans would be the same as those under the Project.

Source: The Town of Mammoth Lakes, IDS, CAJA 2007.

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NORTH

Figure VI-16
Alternative C: Summer Solstice Shading
9:00 AM - 1:00 PM - 5:00 PM
Pacific Daylight Time

Source: The Town of Mammoth Lakes, IDS, CAJA 2007.

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NORTH

Figure VI-17
Alternative C: Winter Solstice Shading
9:00 AM - 12:00 PM - 3:00 PM
Pacific Standard Time

Source: The Town of Mammoth Lakes, IDS, CAJA 2007.

CHRISTOPHER A. JOSEPH & ASSOCIATES
Environmental Planning and Research

NORTH

Figure VI-18
Alternative C: Equinox Shading
9:00 AM - 1:00 PM - 5:00 PM
Pacific Standard Time

Cultural Resources

Two known cultural resources are located on the site, although neither is considered a unique archaeological resource under CEQA. The area is sensitive for prehistoric and historic archaeological resources, and human remains. Additionally, buried (previously unknown or unrecorded) prehistoric and historic archaeological deposits, including human remains may be present within the site. Under Alternative C ground-disturbing activities including grading and excavation would occur. Buildings on the site would have the same footprint as the Project and would require identical grading and excavation on the site. Therefore, impacts to known and unknown archaeological resources or known and unknown paleontological resources and human remains from Alternative C would be the same as those under the Project.

Geology/Soils

The site is not within an Earthquake Fault Zone or Alquist-Priolo Hazard Zone. However, the site is located in a Seismic Zone 4 based on 1997 Uniform Building Code and 2001 California Building Code and the site would be likely to experience at least one earthquake that may produce potentially damaging ground shaking. Under Alternative C, the site would be developed with the same number of residential units on the site and the same number of people would be exposed to geologic hazards on the site. This impact would be the same as those the Project.

Alternative C would require the same grading and excavation and impacts to soil erosion/loss of topsoil would be the same as the proposed Project. Potential for liquefaction on the site is considered low and this impact would be similar to the Project. The presence of Alternative C on the site would not increase the risk of volcanic activity affecting either existing or proposed development in the vicinity of the site. Risks from cyclic densification, landslides and avalanches, carbon monoxide, soil instabilities, and expansive soils would be the same as under the Project. Therefore, overall impacts under Alternative C would be the same as those under the Project.

Hazards and Hazardous Materials

Similar to the Project, Alternative C would not involve the routine transport, use or disposal of substantial quantities of hazardous materials, would not be located within one-quarter mile of any existing or known proposed schools, would not be located within two miles of a public or private airport, and would not affect an emergency response plan. Similar to the Project, Alternative C is not located within an area subject to wildland fires. Based on the location of Alternative C and the lack of any known hazardous materials sites up-gradient from the site, there would have very little potential for Alternative C to be impacted by groundwater contamination from any surrounding listed hazardous materials sites. Therefore, impacts from hazards and hazardous materials under Alternative C are the same as those under the Project.

Hydrology/Water Quality

Alternative C would require construction activities which have the potential for short-term construction-related stormwater pollution including: (1) the handling, storage, and disposal of construction materials containing pollutants; (2) the maintenance and operation of construction equipment; and (3) earth moving activities which, when not controlled, may generate soil erosion and transportation, via storm runoff or mechanical equipment. Similar to the Project, Alternative C would require the implementation of Best Management Practices that would be required to prevent runoff of construction related stormwater pollution. Therefore, impacts to water quality standards and short-term construction-related stormwater pollution under Alternative C would be the same as those under the Project.

Activities associated with operation of Alternative C would generate substances that could degrade the quality of water runoff. Development of the currently undeveloped areas under Alternative C would result in the modification of existing drainage paths and a higher amount of surface runoff than is currently generated by these areas. Stormwater runoff and run-on (from adjacent upstream areas) under existing conditions is conveyed to three control points in the Town's storm drainage system. Under Alternative C, the site would be developed with buildings with identical footprints to the proposed Project. Therefore, Alternative C would result in identical amounts of impervious surfaces and thus the same potential for pollutant capture and delivery to surface waters and a overall amount of site runoff. Impacts to hydrology under Alternative C would be the same as those under the Project.

Land Use

Alternative C is within the existing development areas of the LMP and would not create a physical barrier within the community or otherwise divide contiguous land uses. Similar to the Project, Alternative C would not conflict with any applicable habitat conservation plan.

The site is currently governed by the land use policies and regulations set forth in the General Plan (adopted in 1987), the LMP (adopted in 1991 and amended in 1992), and the Town's Zoning Ordinance. Because of the 120-foot tower, Alternative C would not be consistent with the permitted heights on the site. However, Alternative C is generally consistent with and implements other applicable plans and policies of the Town. The Project proposes a tower of 200 feet in height. Alternative C, while not being consistent with the permitted heights on the site, would be shorter than the Project and visual impacts would be less than those under the Project.

Noise

Construction of Alternative C would require the use of heavy equipment for site grading and excavation, installation of utilities, paving, and building fabrication. Development activities would also involve the use of smaller power tools, generators, and other sources of noise. Because construction activities associated with Alternative C would be required to comply with the provisions of the Town Municipal Code and Noise Ordinance, construction activities would only occur within the hours permitted for

construction within the Town and this impact would be the same as under the Project. Similar to the Project, Alternative C is not located near a public or private airport and would not expose people to excessive noise from airport operations.

Alternative C would result in the same number of residential units and the same amount of commercial space as the Project and would therefore have the potential to reduce traffic-generated noise by the same increment. Therefore, this impact would be slightly less than those under the Project.

Population and Housing

Similar to the Project, construction of Alternative C would generate temporary construction-related jobs. The work requirements of many construction projects are highly specialized and construction workers remain at a job site only for the time frame in which their specific skills are needed to complete a particular phase of the construction process. As a result, construction workers typically work at several job sites within a particular region throughout the year. Therefore, most construction workers would not relocate their household's place of residence as a consequence of working on Alternative C and it would not result in the generation of substantial number of permanent residents during construction. Commercial and retail uses proposed on the site are not large enough that they would cause employees from surrounding areas to relocate to the Town.

Utility infrastructure associated with Alternative C would be sized to serve only the site and would not facilitate additional development as a result of increased infrastructure. Additionally, Alternative C is consistent with the 1987 General Plan population projections and would contribute housing needed for future population in the Town. Additionally, Alternative C would comply with the Affordable Housing Mitigation Regulations per the vested rules of the Development Agreement and would provide housing for the estimated number of its Full Time Equivalent Employee (FTEE) associated with the Project. Impacts under Alternative C would be similar to those under the Project.

Public Services

Under Alternative C the number of potential residents on site would be the same as under the Project. The reduced number of people and activity on the site as a result of Alternative C could result in an decrease in the need for police and fire services over the Project. According to the Mammoth Lakes Police Department, although additional police equipment and staff would be necessary to accommodate Alternative C, the additional demand for police services created by it would not require the need for new or altered police facilities other than those currently planned for future police staffing and facilities. Related to fire protection services, according to the Mammoth Lakes Fire Protection District, with the mutual-aid agreement with neighboring fire districts, their current staffing, and equipment, facility levels are adequate to accommodate demand for fire protection services. These impacts would be similar to those under the Project.

Alternative C would also contribute additional students to at capacity area schools and create additional demand for parks and recreation greater than the Project. However, development under Alternative C would be subject to the payment of Developer Impact Fees that would be deemed to fully mitigate the impacts of new development on school and park services. In addition, similar to the Project, Alternative C would require snow removal services on the site. However, similar to the Project, the internal roadway system would be privately owned and maintained and the management of snow at the site would be the sole responsibility of the Sierra Star Home Owners Association. Therefore, all impacts to public services under Alternative C would be similar as those under the Project.

Transportation/Traffic

Alternative C would generate trips that would be distributed to the surrounding circulation system throughout the Town. Residential units and commercial space would be the same as under the Project and project trips generated by this alternative would be the same as the Project.

Alternative C would require the same number of parking spaces. Similar to the Project, Alternative C would be required to provide adequate parking as part of the approval process. Alternative C would be based on the same site plan as the Project and impacts to internal circulation and access would be similar to the Project. The pedestrian and bicycle system within Alternative C would include interior trails and sidewalks fronting internal streets as well as connecting trails from recreational amenities, outdoor spaces and neighborhoods. Walkways to and from residential areas as well as trail connections that would tie into the larger Town-wide recreational trail network would be provided. Alternative C pedestrian and bicycle facilities would be similar in design as the Project. Similar to the Project, Alternative C would potentially include a gondola that would transport patrons from Area 5 to the Little Eagle Ski Area. Although the gondola is not part of Alternative C, it is reasonable to expect that this amenity, if developed, would result in a reduction in vehicle trips to and from the Little Eagle Ski Area. Additionally Alternative C, similar to the Project, would not increase impacts to air traffic patterns, hazards, emergency access, and transit.

Utilities

Alternative C would result in increased amounts of wastewater generated at the site over existing conditions. According to Mammoth Community Water District (MCWD), areas of deficiency have been identified in sewer collection lines on Manzanita Road from Dorrance Drive and along Center Street, the final sewer trunk lines coming into the MCWD's wastewater treatment plant located at the corner of Meridian Boulevard and State Highway 203, and a short section of sewer line on Meridian Boulevard near the intersection with Old Mammoth Road. However, the connection fees for Alternative C would help to pay for the necessary upgrades to the sewer collection pipelines described above and this impact would be similar to those under the Project.

The demand for domestic water in the Town would increase as a result of Alternative C. The MCWD has developed an expected total water demand for the Town of 4,898 acre-feet per year at Town buildout utilizing the unit counts projected in the Town of Mammoth Lakes General Plan Update Draft EIR (October 2005). These figures were also used in the preparation of the 2005 Urban Water Management Plan (2005 UWMP). The LMP, which proposed a greater number of residential units was included in both the General Plan Draft EIR and the 2005 UWMP. Therefore, Alternative C impacts to water supply are already accounted for in MCWD's estimates of future water use requirements for the Town. Alternative C would require the same amount of water as the Project. Therefore, impacts to water supply under Alternative C would be the same as those under the Project.

During construction activities, Alternative C would generate a variety of scraps and wastes, with the majority of recyclables being wood waste, drywall, metal, paper, and cardboard. Construction solid waste generation would be the same as compared to the Project. Overall, impacts to utilities would be the same as those under the Project.

D. ENVIRONMENTALLY SUPERIOR ALTERNATIVE

In addition to the discussion and comparison of impacts of the Project and the alternatives, Section 15126.6 of the CEQA Guidelines requires that an "environmentally superior" alternative be selected and the reasons for such a selection disclosed. In general, the environmentally superior alternative is the alternative that would be expected to generate the least amount of significant impacts. Identification of the environmentally superior alternative is an informational procedure and the alternative selected may not be the alternative that best meets the goals or needs of the Town.

Table IV-4 summarizes the comparative impacts of each of the alternatives when compared to the Project (the table does not list cumulative impacts). The table lists the level of significance of the impacts of the Project to each environmental topic analyzed in Chapter IV and shows whether the impacts anticipated under each proposed alternative would be lesser, similar, or greater than the Project. Table IV-4 provides a comparison of the ability of each alternative to avoid or substantially reduce the significant impacts of the Project.

The Project under consideration cannot be identified as the Environmentally Superior Alternative. Alternative C (Reduced Height) is the Environmentally Superior Alternative as it would reduce significant impacts to aesthetics, while creating similar impacts as the Project to air quality, geology and soils, noise, transportation/traffic, and utilities. Although Alternative B (Reduced Density) would further reduce less-than-significant (with or without mitigation) impacts to air quality, geology and soils, noise, transportation/traffic, and utilities as compared to the Project, Alternative B would not reduce significant and unavoidable impacts to aesthetics.

Table VI-4
Alternatives Comparison

IMPACT AREA	PROPOSED PROJECT	ALTERNATIVE A (No Project)	ALTERNATIVE B (Reduced Density)	ALTERNATIVE C (Reduced Height)
Aesthetics	S	—	=	—
Air Quality	LTS/M	+	—	=
Biological Resources	LTS/M	+	=	=
Cultural Resources	LTS/M	+	=	=
Geology & Soils	LTS/M	+	—	=
Hazards and Hazardous Materials	LTS	=	=	=
Hydrology & Water Quality	LTS/M	+	=	=
Land Use	LTS	—	=	=
Noise	LTS/M	+	—	=
Population and Housing	LTS	=	=	=
Public Services	LTS/M	=	=	=
Transportation/Traffic	LTS/M	+	—	=
Utilities	LTS/M	+	—	=

Key:
S = Significant Impact
LTS = Less-than-Significant Impact
LTS/M = Less-than-Significant Impact with Mitigation
\+ = Impact greater than the Project
= = Impact similar to the Project
— = Impact less than the Project

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