Environmental Assessment and Draft Environmental Impact Report Volume II - Technical Appendices

Eagle Lodge Base Development Project

EA Number:
California Clearinghouse Number: 2006012041

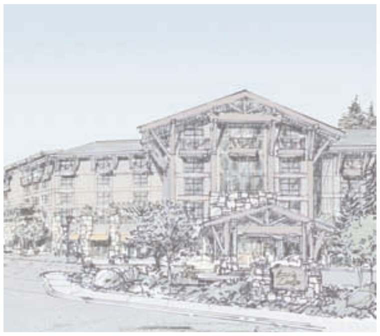
NEPA Lead Agency:
USDA Forest Service
Inyo National Forest
873 N. Main Street
Bishop, California 93514

CEQA Lead Agency
Town of Mammoth Lakes
437 Old Mammoth Road
Mammoth Lakes, California 93546

September 2006

PCR

ENVIRONMENTAL ASSESSMENT
AND DRAFT
ENVIRONMENTAL IMPACT REPORT
VOLUME II - TECHNICAL APPENDICES



EAGLE LODGE BASE DEVELOPMENT PROJECT

EA Number:
California Clearinghouse Number: 2006012041

NEPA LEAD AGENCY:
USDA FOREST SERVICE
INYO NATIONAL FOREST
873 N. MAIN STREET
BISHOP, CALIFORNIA 93514

CEQA LEAD AGENCY
TOWN OF MAMMOTH LAKES
437 OLD MAMMOTH ROAD
MAMMOTH LAKES, CALIFORNIA 93546

September 2006

VOLUME II

Appendix A

Notice of Preparation/Notice of Intent (NOP/NOI), Initial Study, and Comments on the NOP/NOI

COMMUNITY DEVELOPMENT
P.O. Box 1609, Mammoth Lakes, CA 93546
(760) 934-8989 ext. 286, fax (760) 934-8608

NOTICE OF INTENT /NOTICE OF PREPARATION JOINT ENVIRONMENTAL ASSESSMENT/DRAFT ENVIRONMENTAL IMPACT REPORT AND NOTICE OF PUBLIC SCOPING MEETNG

Date: January 6, 2006

To: Office of Planning and Research (State Clearinghouse) and Affected Resource Agencies

From: Town of Mammoth Lakes and U.S. Forest Service

PROJECT LOCATION: The Town of Mammoth Lakes is a destination resort community located in southwestern Mono County on the eastern side of the Sierra Nevada mountain range. The Town lies approximately three miles west of U.S. Highway 395, along State Route 203. The approximately 5.85-acre project site is located in the southwestern side of the developed part of Town, west of the intersection of Meridian Boulevard and Majestic Pines Road. A portion of the site, approximately 2.39 acres, is located within the Inyo National Forest. The area is locally referred to as the Juniper Springs area, or more recently the Eagle Base Area.

DESCRIPTION OF THE PROJECT: Mammoth Mountain Ski Area (MMSA) proposes to construct a permanent base lodge facility at 3256 Meridian Blvd (APN #'s 32-040-12 & 32-040-08) that would include visitor lodging and a mix of ski-related uses, including food service, rental/demo/repair shop, retail, ski school and day care, ticketing/lobby, administrative space, and restrooms. In addition, the lodge would include a convenience market, restaurant, day spa and locker club. Development is anticipated to be in one phase over a two-year timeframe beginning in Spring 2007 and ending in Spring 2009.

The project site is subject to the existing Juniper Ridge Master Plan "The Master Plan," the Mammoth Mountain Ski Area Master Development Plan "The MMSA Development Plan," and the Inyo National Forest Land and Resource Management Plan "The Inyo Forest Plan." The project would require amendments to both Plans in the areas of parking, height, density, setbacks, visual quality and land use. In addition, the project would require a General Plan amendment to rezone Lot 87 from Residential Single Family to Resort, with the majority of the lot being utilized for circulation and open space. Development of the project would be subject to further discretionary reviews that would include Use Permit, Tentative Map and Design Review Approvals. The project will be subject to environmental review and analysis under Forest Service Agency guidance and the National Environmental Policy Act. The project may require a non-significant amendment of the Inyo Forest Plan.

The more detailed project description, location, and the potential environmental effects are contained in the attached materials. A copy of the Initial Study (☒ is ☐ is not) attached.

The Town of Mammoth Lakes has determined that an Environmental Impact Report will be required to analyze the environmental effects of the proposed lodge. Environmental factors that would be potentially affected by the project include Aesthetics, Air Quality, Biological Resources, Cultural Resources, Hydrology/Water Quality, Land Use and Planning, Noise, Population and Housing, Transportation and Circulation, Utilities and Service Systems (Water, Wastewater, and Stormwater), and Mandatory Findings of Significance. The Initial Study is available for review on the Town's website (www.townofmammothlakes.org), at Town Offices (Suite R, 437 Old Mammoth Rd, Mammoth Lakes, CA), and at the Mono County Library (960 Forest Trail, Mammoth Lakes, CA).

The Forest Service has determined that an Environmental Assessment will be required to analyze the effects of the proposed lodge and ancillary facilities on National Forest System Lands. Environmental factors that would be potentially affected by the project include those described above.

FOR FURTHER INFORMATION CONTACT:

Sonja Porter, Senior Planner with the Town of Mammoth Lakes at (760) 934-8989 **OR**
Mike Schlafmann with the U.S. Forest Service at (760) 924-5503

HOW TO COMMENT ON THE NOTICE OF INTENT/NOTICE OF PREPARATION: Due to the time limits mandated by State law, your response must be sent at the earliest possible date but not later than 30 days after receipt of this notice. Therefore, written comments must be submitted **by 5:00 p.m. on February 10, 2006**.

Please send your comments to: Sonja Porter, Senior Planner, Town of Mammoth Lakes, P.O. Box 1609, Mammoth Lakes, CA 93566 or to Mike Schlafmann, U.S. Forest Service, Mammoth Ranger District Office, P.O. Box 148, Mammoth Lakes, CA 93546. Comments can also be submitted by FAX to the Town of Mammoth Lakes at (760) 934-8608 or the U.S. Forest Service at (760) 924-5537. In addition, comments can be submitted electronically to: sporter@ci.mammoth-lakes.ca.us. We will need the name of a contact person in your agency.

SCOPING MEETING: In addition, the Town of Mammoth Lakes and the U.S. Forest Service will hold a **Scoping Meeting** to receive comments on the possible environmental impacts of the proposed project so that those issues may be taken into consideration in the preparation of the joint Environmental Assessment/Draft EIR. The Scoping Meeting will be held on **Tuesday, January 31, 2006, at 6:00 P.M.** at Little Eagle Base Lodge, which is located at 3256 Meridian Boulevard, Mammoth Lakes. Participation at the public meeting is encouraged.

Project Title: Eagle Lodge Base Area Development
Project Applicant: Mammoth Mountain Ski Area

Date: January 6, 2006

Signature

Title Senior Planner

Telephone (760) 934-8989 x286

INITIAL STUDY
FOR
EAGLE LODGE BASE AREA DEVELOPMENT PROJECT

TOWN OF MAMMOTH LAKES COMMUNITY DEVELOPMENT
437 Old Mammoth Road, Suite R
Mammoth Lakes, CA 93546

Prepared By:

PCR SERVICES CORPORATION
233 Wilshire Boulevard, Suite 130
Santa Monica, California 90401

January 2006

TABLE OF CONTENTS

Page

LIST OF FIGURES AND TABLES

ENVIRONMENTAL CHECKLIST FORM

1. Project Title Eagle Lodge Base Area Development

2. Lead agency name and address: Town of Mammoth Lakes Community Development
437 Old Mammoth Road
Mammoth Lakes, CA 93546

3. Contact person and phone number: Sonja Porter, Senior Planner
(760) 934-8989 x286

4. Project location: 3256 Meridian Boulevard (APN #'s 32-040-12 & 32-040-08, Town of Mammoth Lakes, CA

5. Project sponsor's name and address: Mammoth Mountain Ski Area (MMSA)
P.O. Box 24, Mammoth Lakes, CA 93546

6. General Plan designation: Resort; Lot 87 is designated Low Density Residential

7. Zoning: The privately owned portion of the site, consisting of approximately 3.46 acres, is primarily zoned Resort (R). The remaining portion of the site, approximately 2.4 acres, is located within the Inyo National Forest and is managed by the USFS.

8. Description of project: (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.)

Please see attached Project Description

9. Surrounding land uses and setting: Briefly describe the project's surroundings:

The Summit Condominiums are located to the south of the site across Meridian Boulevard. Southwest of the site is the Juniper Springs Lodge. To the west of the Juniper Springs Lodge is multi-family residential development. Immediately to the east of the site across Majestic Pines Road is the Mammoth Community Water District Ground Water Treatment Plant No. 2. The Mammoth Loop Trail is located to the north of the Treatment Plant and runs to the west ending at Majestic Pines Road directly across from the site. Mammoth Vista I single family subdivision is located to the north and Camp High Sierra is located to the northeast.

10. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.)

U.S.D.A. Forest Service Inyo National Forest; Regional Water Quality Control Board – Lahontan Region; Great Basin United Air Pollution Control District; Mammoth Lakes Fire Protection District; Mammoth Community Water District

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☒ Aesthetics	☐ Agriculture Resources	☒ Air Quality
☒ Biological Resources	☒ Cultural Resources	☐ Geology/Soils
☐ Hazards/Hazardous Materials	☒ Hydrology/Water Quality	☒ Land Use/Planning
☐ Mineral Resources	☒ Noise	☒ Population/Housing
☐ Public Services	☐ Recreation	☒ Transportation/Traffic
☒ Utilities/Service Systems	☒ Mandatory Findings of Significance	

DETERMINATION: (To be completed by the Lead Agency)

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☒ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

______________________	January 10, 2006
Signature	Date
Sonja Porter, Senior Planner	Town of Mammoth Lakes
Printed Name	For

EVALUATION OF ENVIRONMENTAL IMPACTS:

1) A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).

2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.

3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.

4) "Negative Declaration: Less Than Significant With Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less Than Significant Impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, "Earlier Analyses," may be cross-referenced).

5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:

   a) Earlier Analysis Used. Identify and state where they are available for review.

   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.

   c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.

6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.

7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.

8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.

9) The explanation of each issue identify:

   a) the significance criteria or threshold, if any, used to evaluate each question; and

   b) the mitigation measure identified, if any, to reduce the impact to less than significance.

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
I. AESTHETICS – Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☒	☐	☐	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☒	☐	☐	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☒	☐	☐	☐
II. AGRICULTURE RESOURCES – In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a) 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?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	☐	☐	☐	☒
III. AIR QUALITY – Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
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?	☒	☐	☐	☐

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
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?	☒	☐	☐	☐
e) Create objectionable odors affecting a substantial number of people?	☒	☐	☐	☐
IV. BIOLOGICAL RESOURCES – Would the project:				
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, regulations or by the California Department of Fish and Game or US 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 or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native nursery sites?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☒	☐
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?	☐	☐	☐	☒

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
V. CULTURAL RESOURCES – Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☒	☐	☐	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☐	☒
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐
VI. GEOLOGY AND SOILS – Would the project:				
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? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
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?	☐	☐	☒	☐
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 Uniform Building Code (1994), 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?	☐	☐	☐	☒

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
VII. HAZARDS AND HAZARDOUS MATERIALS – Would the project:				
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 it 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 of a public airport or public use airport, would the project 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?	☐	☐	☒	☐
VIII. HYDROLOGY AND WATER QUALITY – Would the project:				
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)?	☒	☐	☐	☐

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
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 alternation 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?	☐	☐	☐	☒
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒
<u>IX. LAND USE AND PLANNING</u> – Would the project:				
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 (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☒	☐	☐	☐
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒
<u>X. MINERAL RESOURCES</u> – Would the project:				
a) 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?	☐	☐	☐	☒

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
b) 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?	☐	☐	☐	☒
XI. NOISE – Would the project result in:				
a) Exposure of persons to or generation of noise level in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☒	☐	☐	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne 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 vicinity above levels existing without the project?	☒	☐	☐	☐
e) For a project 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, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒
XII. POPULATION AND HOUSING – Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☒	☐	☐	☐
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
XIII. PUBLIC SERVICES				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:	☐	☐	☒	☐
Fire protection?	☐	☐	☒	☐
Police protection?	☐	☐	☒	☐
Schools?	☐	☐	☒	☐
Parks?	☐	☐	☒	☐
Other public facilities?	☐	☐	☒	☐
XIV. RECREATION				
a) Would the project 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?	☐	☐	☒	☐
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☒	☐
XV. TRANSPORTATION/TRAFFIC – Would the project:				
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 of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	☒	☐	☐	☐
b) Exceed, either individually or cumulatively, a level of service standard established by the Town 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)?	☒	☐	☐	☐

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
e) Result in inadequate emergency access?	☐	☐	☒	☐
f) Result in inadequate parking capacity?	☒	☐	☐	☐
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	☒	☐	☐	☐
XVI. UTILITIES AND SERVICE SYSTEMS – Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☒	☐	☐	☐
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☒	☐	☐	☐
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☒	☐	☐	☐
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☒	☐	☐	☐
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☒	☐	☐	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☒	☐

Issues:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporation	Less Than Significant Impact	No Impact
XVII. MANDATORY FINDINGS OF SIGNIFICANCE				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☒	☐	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☒	☐	☐	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☒	☐	☐	☐

ATTACHMENT A:
PROJECT DESCRIPTION

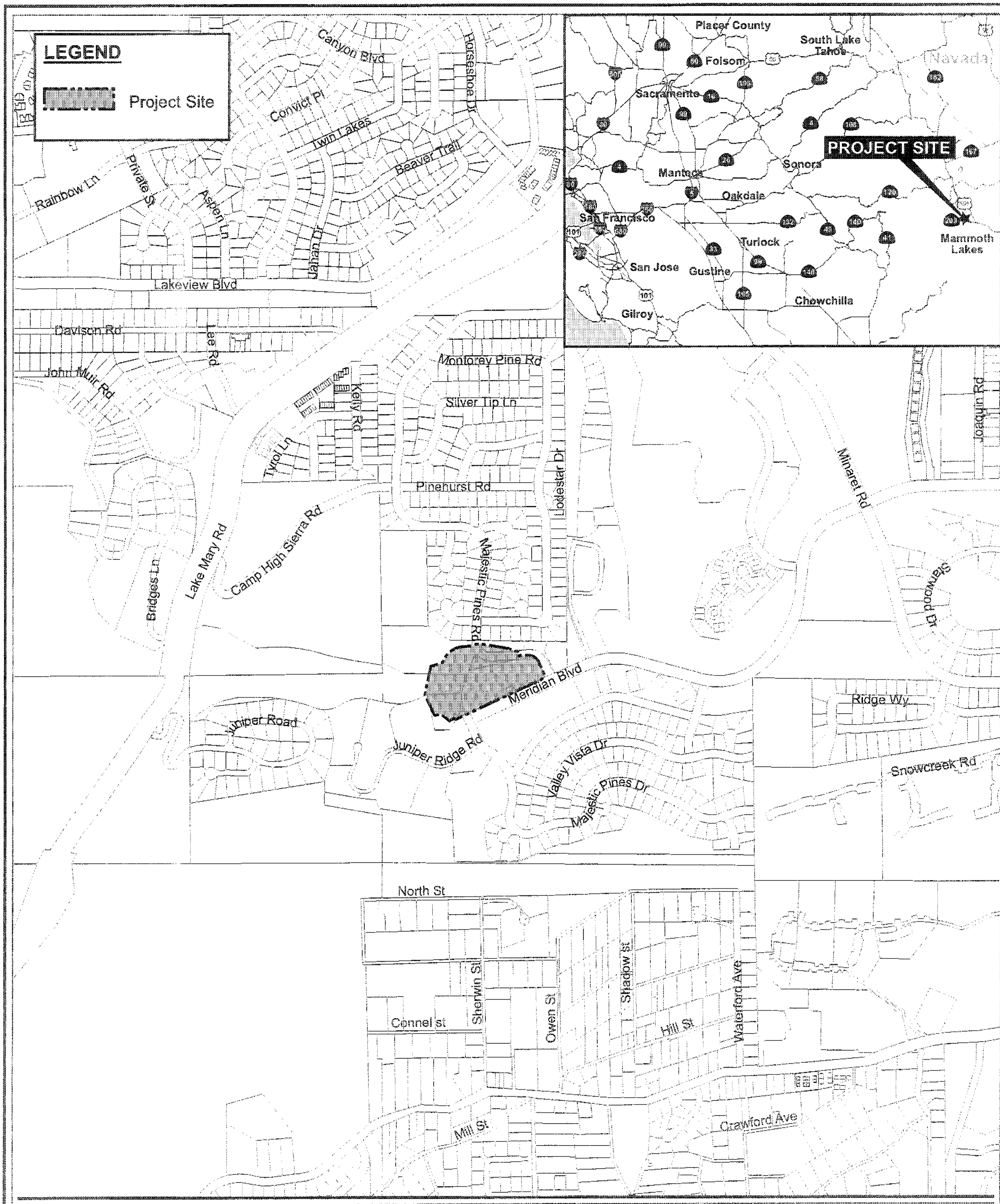
INTRODUCTION

The Project Applicant, Mammoth Mountain Ski Area (MMSA), proposes to amend the Juniper Ridge Master Plan to accommodate the proposed Eagle Lodge Base Area Development (the project). The project site is comprised of approximately 5.85 acres and is located in the southwestern side of the developed part of the Town of Mammoth Lakes. A portion of the site, approximately 2.39 acres, is located within the Inyo National Forest. The project is a mixed-use development with a hotel condominium and a mix of ski-related uses, including food service, rental/demo/repair shop, retail, ski school and day care, ticketing/lobby, administrative space, and restrooms. In addition, the lodge would include a convenience market, restaurant, day spa and locker club. Development is anticipated to be in one phase over a two-year timeframe beginning in Spring 2007 and ending in Spring 2009.

The project site is subject to the existing Juniper Ridge Master Plan "The Master Plan". The project would require amendments to the Master Plan in the areas of parking, height, density, setbacks, and land use. In addition, the project would require a General Plan amendment to rezone Lot 87 from Residential Single Family to Resort, with the majority of the lot being utilized for circulation and open space. Development of the project would be subject to further discretionary reviews that would include Use Permit, Tentative Map and Design Review Approvals. In addition, the project site is located in the Mammoth Mountain Ski Area Master Development Plan "The MMSA Development Plan," and the Inyo National Forest Land and Resource Management Plan "The Inyo Forest Plan."

PROJECT LOCATION AND SURROUNDING USES

The Town of Mammoth Lakes is a destination resort community located in southwestern Mono County on the eastern side of the Sierra Nevada mountain range. The Town lies approximately three miles west of U.S. Highway 395, along State Route 203 as shown on Figure 1 on page A-2. The project site is located in the southwestern side of the developed part of Town, west of the intersection of Meridian Boulevard and Majestic Pines Road. The area is locally referred to as the Juniper Springs area, or more recently the Eagle Base Area. The Eagle Base Area is one of four key access portals to the Mammoth Mountain ski area. The other key portals to the ski area are The Village, Canyon Lodge and Main Lodge, all of which are located within the Town of Mammoth Lakes Municipal Boundary.



N

0 1000 Feet

Scale in approximate feet

Source: PCR Services Corporation, 2005

PCR

Figure 1
Regional and Project Vicinity Map

The site is located at the base of the Eagle Express chairlift (chair 15), which is located on lands administered by the Inyo National Forest. Property to the north is developed with single family residences. The Summit Condominiums are located to the south of the site across Meridian Boulevard. Southwest of the site is the Juniper Springs Lodge. To the west of the Juniper Springs Lodge is multi-family residential development. Immediately to the east of the site across Majestic Pines Road is the Mammoth Community Water District Ground Water Treatment Plant No. 2. The Mammoth Loop Trail is located to the north of the Treatment Plan and runs to the west ending at Majestic Pines Road directly across from the site.

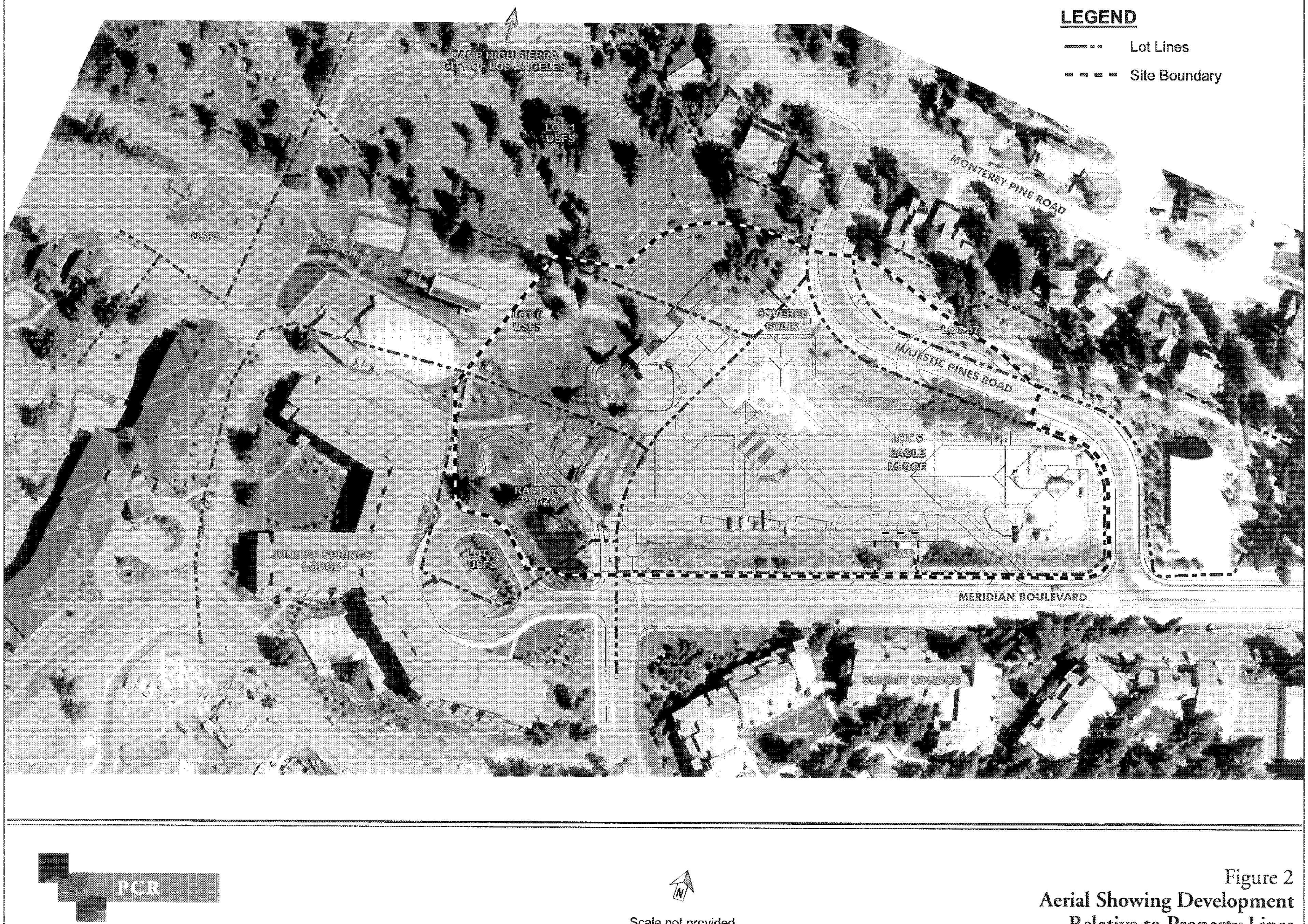
EXISTING SITE CONDITIONS

The site, which consists of private and public lands, is approximately 5.85 acres in size. As shown in Figure 2 on page A-4, the majority of the site, approximately 3.46 acres, is located on private property within the Town of Mammoth Lakes. The 3.46 acres is known as Lot 5 of the Juniper Ridge Subdivision (Area 4 of the Juniper Ridge Master Plan).[1] The 3.46 acres is within the Urban Growth Boundary (UGB) and is also within the Juniper Ridge Master Plan Area. The remainder of the project site encompasses approximately 2.39 acres of land that is located within Inyo National Forest land and is administered by the U.S.D.A. Forest Service. This portion of the project covers 3 parcels, Lot 7, Lot 6 and Lot 1 (Area 9, 8 and 3 of the Juniper Ridge Master Plan).

Existing uses on the site include a surface parking lot for skiers utilizing Eagle Express and the temporary Little Eagle Base Lodge. The surface parking lot, which is bounded by Meridian Boulevard and Majestic Pines Road, can accommodate approximately 225 vehicles, inclusive of day-skier and temporary/drop-off parking. Access to the surface parking lot is provided from Meridian Boulevard.

In the path between the parking lot to the temporary ski facilities is a statue of an eagle in flight. The temporary ski facilities consist of a temporary, white framed membrane structure with attached trailers which provide support services. Little Eagle and associated trailers provide approximately 12,000 square feet of interior space. In addition, an approximately 3,000 square foot exterior barbeque and dining deck are also located on the site. Existing services at Little Eagle include: ticketing; food and beverage service comprised of an 80 seat interior restaurant, an interior bar/coffee bar area plus the exterior barbeque and dining deck for service of up to 200 seats; limited retail and rental of approximately 600 square feet; public restrooms; and back-of-house administrative space. The existing lift facilities include a six seat ("six-pack") detachable chairlift with a current maximum uphill capacity of 2,800 skiers per hour. In addition, a single "magic carpet" conveyor belt is used for very limited ski school operations. No formal ski

[1] *The site also contains a portion of Lot 87. The acreage of Lot 87 that is part of the project site is 0.15 acres.*



Source: Gensler, 2005

Figure 2
Aerial Showing Development Relative to Property Lines

school facilities exist at Little Eagle. Currently, all guests seeking ski school services must travel to Canyon Lodge or Main Lodge to enroll.

The Mammoth Community Water District (MCWD) owns a well site parcel that is located adjacent to Meridian Boulevard within the southern portion of Lot 5. The parcel contains the vault housing MCWD Well 16.

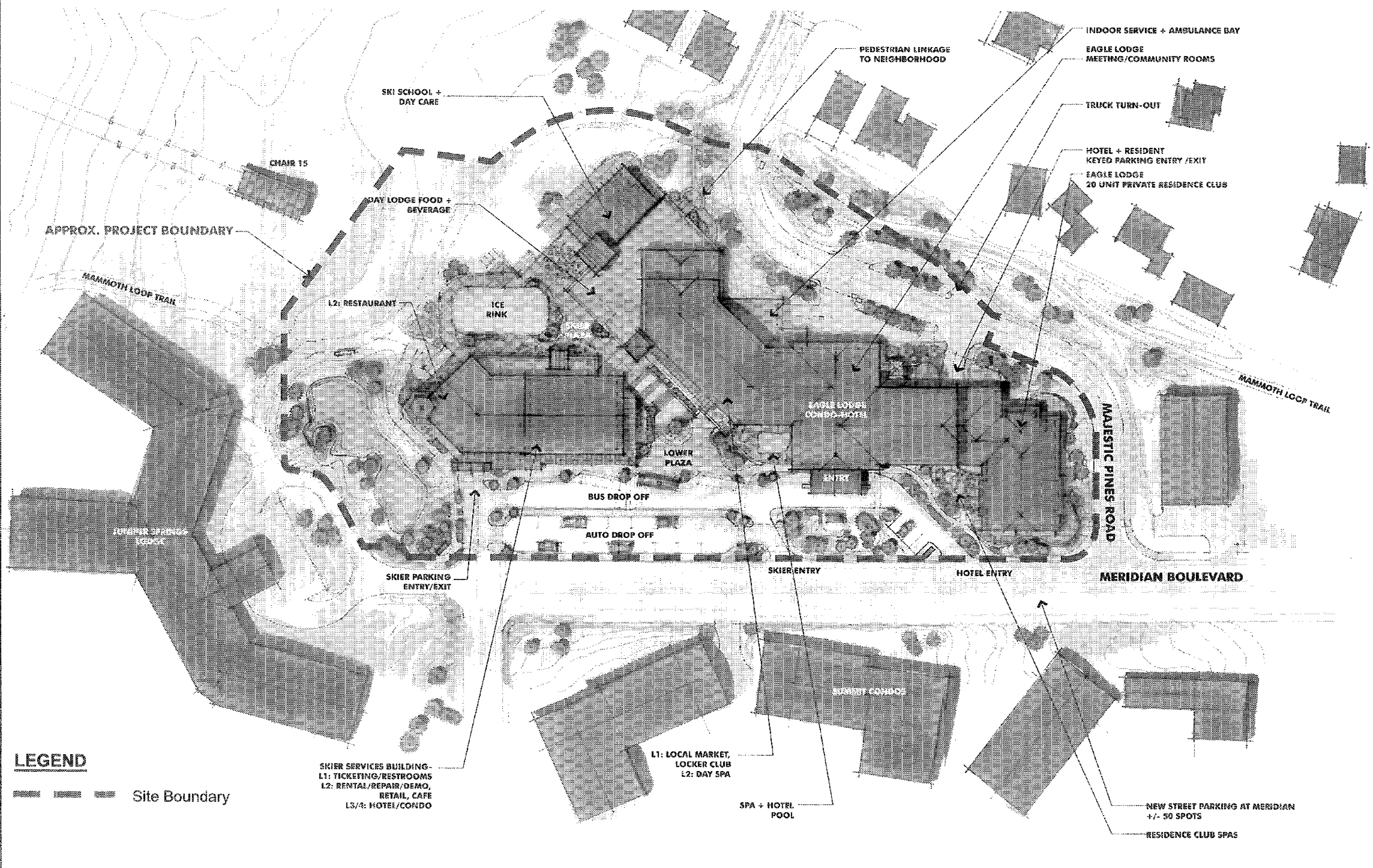
DESCRIPTION OF THE PROPOSED PROJECT

The proposed Eagle Lodge Base Area Development would develop permanent skier amenities. Figure 3 on page A-6 provides a conceptual site plan for the project. The project would include a mixed use of day skier commercial services, general commercial services and a mix of residential product type that will encourage high transient occupancy. Plaza areas and outdoor seating would connect the on-site facilities, which would be housed in two buildings. Amenities would include ticket sales, ski rental and repair, food services, lockers, retail, ski school, and day care.[2] The project is described in more detail below.

The lodge and associated commercial uses would be located within two buildings. The main building or lodge would front on Meridian Boulevard. The Skier Services Building would be located on the southwestern portion of the site while the Ski School/Day Care, contiguous with the day lodge cafeteria and hospitality lodging building would be located on the north side of the site stretching from the eastern boundary to the northwestern corner of the site adjacent to the slopes. The two buildings would be connected by outdoor plazas. An arrival or lower plaza would be created adjacent to the vehicular access to the south side of the site. The skier or upper plaza would connect the buildings and would surround the small open ice rink.

Although the majority of day lodge uses contemplated in the project are geared towards winter time use, the facilities would also lend themselves to summer uses such as a summertime outdoor performing arts venue, potential access to the summer mountain bike park, other outdoor activities such as a climbing rock or challenge ropes course, and assembly opportunities. While the peak use would be winter, the development would accommodate and provide for year-round use of the facility.

[2] *In addition, on-hill improvements are anticipated in the future and would include a new detachable four seat ("quad") beginner chair lift and beginner ski run as well as additional magic carpets located adjacent to the proposed new base lodge. These improvements would be located entirely on Inyo Forest Land and would require environmental review and approval through the U.S. Forest Service.*



N

0 100 200 Feet

Scale in approximate feet

Source: Gensler, 2005

PCR

Figure 3
Site Plan

Commercial Uses

Table 1 on page A-8 shows the proposed uses as well as approximate square footage within the facility. As shown in Table 1, the ski-related commercial uses within the facility would occupy approximately 40,000 gross square feet. Ski-related commercial uses would include a rental/demo/repair shop, retail shop, ticketing, ski school, food and beverage services and back-of-house space for administration, ski patrol, employee break room, and maintenance.

The street level would include ski school drop off and access area. The Skier Services Building, which is the southwestern portion of the building, would contain the ticketing and ski rental/demo shop as well as a retail space. The first floor of the lodge would also include administrative offices, an employee break room, ski patrol office, building maintenance shop, mechanical rooms, and a loading dock with dry and refrigerated storage.

A Ski School/Day Care facility would be located in the northwestern portion of the site adjacent to the slopes. The ski school and day care would operate from this location. The Day Care center would be a supplementary operation of the Ski School, available to guests, and would only be available during the term of the annual ski season. Generally, the Day Care center would not be available to local residents of the community but rather to patrons of the ski area and the ski school in particular.

As shown in Table 1, the lodge would contain an approximately 12,000 square foot Locker Club. The Locker Club would be located on the street level of the lodge and would have approximately 300 members. Membership to the Locker Club would include understructure parking access, exclusive members only access to the Club facilities, oversized wood lockers, men's and women's restroom and shower facilities, a business center, concierge services including a continental breakfast bar, afternoon bar services, ski tuning and other valet services.

An approximately 4,000 square foot neighborhood convenience market that would provide general food and groceries would be located on the street level of the lodge. The intent of the market would be to provide goods for users of adjacent residential developments and guests of the lodge.

The second level, or ski plaza level of the lodge would include an 8,000 square foot Day Spa, which would provide traditional full service wet/dry spa services. The Day Spa would be open to guests and the public.

The ski-plaza level would include a full-service food court (cafeteria style) located in the northern portion of the lodge. The food court would provide indoor dining for up to 250 persons. The outdoor patio would provide an additional 250 seats scattered throughout the patio area. An

Table 1

Commercial Uses and Square Footage

Description	Approximate Square Feet
Commercial Ski-Related Uses	
Skier Food Service	9,500
Dining Area (250 seats)	
Servery	
Kitchen/storage/office	
Food Prep	
Bar & Coffee Bar	
Skier Commercial Services	9,200
Rental/Demo/Repair Shop/Basket Ck	
Retail Shop	
Ski School/Day Care	
Skier Staging Facilities	6,300
Ticketing/Lobby	
Public Restrooms	
Administrative Facilities	5,000
Administrative Offices	
Employee Break Room/Locker Room	
Ski Patrol	
Maintenance / Loading Dock	
Mechanical / Cell Site	
Net Day Lodge Program	30,000
Inefficiencies @ 25%	10,000
Subtotal: Gross Day Lodge Square Footage	*40,000*
Additional Commercial Uses	
Day Spa	8,000
Locker Club	12,000
Convenience Market	4,000
Restaurant (seating for up to 200 patrons)	4,000
Meeting/Conference Room	4,000
Net Commercial Program	32,000
Inefficiencies @ 20%	8,000
Subtotal: Gross Commercial Square Footage	*40,000*
Total Commercial Square Footage	**80,000**

Source: MMSA and PCR Services Corporation, 2006

indoor/outdoor bar would also be provided as part of the food court. An incidental counter café would be provided in the Skier Services Building adjacent to the lobby and an approximately 4,000 square foot sit-down restaurant space. The restaurant would be located adjacent to the ski slope and ice rink. The restaurant operation would accommodate approximately 120 people at a time with an additional 80 seats provided on an outdoor patio. With the indoor and outdoor dining, the restaurant could accommodate up to 200 persons at one time. It is anticipated this full-service restaurant would operate year-round.

The main building would contain an approximately 4,000 square foot meeting/conference facility that would be used to support the hospitality functions of the lodge. The meeting/conference facility would be available to the general public on an as-available commercial basis. During peak ski operations, the meeting/conference facilities would not be available to the public until the close of the chairlift operations and therefore, would not generate external traffic. The conference room could accommodate up to 200 people. In general, the meeting conference facilities would be operated so as to not conflict with peak parking demand during the ski season. It is anticipated the meeting/conference facilities would create incremental off ski season demand for lodging facilities thus promoting the year-round utilization of the lodge.

Residential Uses

The proposed Eagle Lodge Base Area Development would include hotel/condominium or hospitality operations that would provide housing for transient visitors. As shown in Table 2 on page A-10, the project would include 62 condo/hotel units and 21 fractional ownership condominiums. The 62 condo/hotel units would be wholly owned, individual units and would be located on the third through fifth level of the lodge. The 21 fractional ownership condominium units would be located in the eastern portion of the main building on the first through fourth levels. On-site lodging would accommodate up to 360 people. Related program elements of the hospitality component include a front desk operation, meeting/conference room facilities, as previously mentioned, and a club room. In addition, an outdoor pool and spa for the residences would be located at the ski plaza level on the southern side of the lodge. A hotel scenario is also being considered as mentioned in the footnote of Table 2.[3]

Lodging guests would enter a porte cochere covered driveway separate from day skier traffic where they could park temporarily to check-in at the front desk. Front desk operations would be linked to the skier day lodge facilities so that guests registering at the lodging, for example, would be able to purchase lift tickets and other skier services such as ski school.

Other

In addition to the skiing related services, the proposed base lodge would include a 50 foot by 100 foot outdoor ice skating rink which would be located on the skier plaza adjacent to the ski slope. A soft-membrane shade structure, supported on poles, would be located above the ice rink. Skate rentals would be available at the base lodge rental shop. The ice skating rink could be converted to seating and a stage for use during the non-winter months. The area would be

[3] *The analysis provided in the environmental document considers the scenario that would result in the greatest level of impacts. The consequences of any combination inside the envelope of what is identified in the document would not be permitted if it were determined that impacts would be greater.*

Table 2

Residential/Hospitality Uses and Square Footage

Description	Number of Units	Square Feet per Unit	Total Square Feet
Condo Hotel (average unit)	62	925	57,365 sf
Private Residence Club (avg unit)	21	2,030	42,635 sf
Commercial Management Office	1	2,000	2,000 sf
PRC Club Room	1	1,120	1,120 sf
Back-of-House Service Areas	1	5,000	5,000 sf
Net Lodging Program			108,120 sf
Inefficiencies @ 20%			27,030 sf
Gross Lodging Program			135,150 sf

Note: Although the residential/hospitality lodging uses currently contemplate a mix of ownership type units, another scenario would be to substitute a pure hotel program within the proposed building envelope. The proposed building envelope could accommodate 213 hotel rooms. The overall intent of the hospitality mix is to encourage the highest level of transient occupancy possible given the constraints of current financial markets.

Source: MMSA, 2006

able to accommodate approximately 200 people. A portion of the shade structure may be removed for the use of the theatre area.

The project could include a climbing wall, which would be located between the trail and the ski plaza near the ice rink, for warm-weather use. The wall would be approximately 30 feet in height and would be seasonal and the structure would be removed during the winter months.

A snow management plan would be incorporated as part of the project. Snow storage would occur adjacent to the edge of the westernmost development on the site, along Majestic Pines adjacent to the vehicular access points, and just west of the site on the detention pond area.

MMSA is pursuing the opportunity to develop a geothermal production and injection well system that would meet all building heating needs as well as snow melting needs. The project site is located adjacent to the Juniper Springs Lodge, which was the site of a successful geothermal test well drilled in the early 1990s. MMSA applied to the California Energy Commission in August 2005 for a 50/50 grant to potentially implement a direct-use geothermal heating component of the project. However, given that MMSA is investigating the economic feasibility of developing this resource in conjunction with the overall development, the use of geothermal energy is uncertain. As such, this component of the project is considered as an optional element in the analysis contained in this document.

On-Site Circulation and Parking

Three primary public access points would be provided along Meridian Boulevard. The easternmost and center driveways would provide one-way westerly access along the arrival plaza, exiting at the westernmost driveway adjacent to the Juniper Springs Lodge. Lodging guests would enter a porte cochere covered driveway, which would be the easternmost driveway on Meridian Boulevard. Guests could park outside the lodge temporarily to check-in at the front desk. These guests would exit the site using the westernmost driveway, which would be a shared driveway with the day skier drop-off. The center driveway would provide site access for auto and transit drop-off. Vehicles would enter the center driveway and would drop day skiers off at the arrival plaza. The auto drop-off lane is designed to accommodate up to 16 vehicles at one time. In addition, a bus lane with pullout pockets for up to four buses at one time would be located adjacent to the arrival plaza. The cars and buses would exit the site using the westernmost driveway adjacent to the Juniper Springs Lodge. The westernmost driveway, which would be two-way, would also provide access to underground parking for day users of the facility.

Access from Majestic Pines Road would be limited to condo-hotel, private residence guests and residents as well as Locker Club members. A keyed access for these guests and residents would be located in the northeastern portion of the building. A loading dock would be located parallel to Majestic Pines Road in the north-central portion of the lodge. The loading dock would be fully enclosed. The project includes access improvements on Majestic Pines Road to provide a truck turn-out, which would allow trucks to back into the loading dock. The improvements would require land from Lot 87, which is located adjacent to Majestic Pines Road.

The project proposes a 246,250-square-foot subterranean parking garage with up to 544-spaces. The parking garage would include 2 full levels and one partial level or subterranean parking. The partial level of the parking structure located at the northwestern portion of the building would include an exclusive drop-off parking area that would provide direct access to the ski school facilities above.

The project proposes to extend the Mammoth Loop Trail through the site. The Trail would be constructed from Majestic Pines Road, across from where the Trail currently ends, along the northwest side of the lodge to the end of the site. In addition, the project would include a pedestrian link from the northern end of the lodge to the single family neighborhood to the north of the site. The trail would intersect with the Mammoth Loop Trail. Additional at grade pedestrian improvements would provide access along the southern and western boundaries of the project site to the adjacent multi-family residential developments.

Architecture

As discussed above, the facility would be constructed on multiple levels. Figure 4 and Figure 5 on pages A-13 and A-14 are renderings of the development from Meridian Boulevard and Majestic Pines Road, respectively. The structure would be articulated in order to break up the massing of the building. There would be an approximately 15 foot elevation difference between the upper skier plaza, lift loading elevation and that of the lower, east end of the site. The elevation difference between the arrival plaza and the skier plaza would provide further variation in the building massing. Story heights from the arrival plaza area would vary from three, four and five stories. However, from the skier plaza end of the development, some portions of the day lodge and commercial uses would be one story from grade.

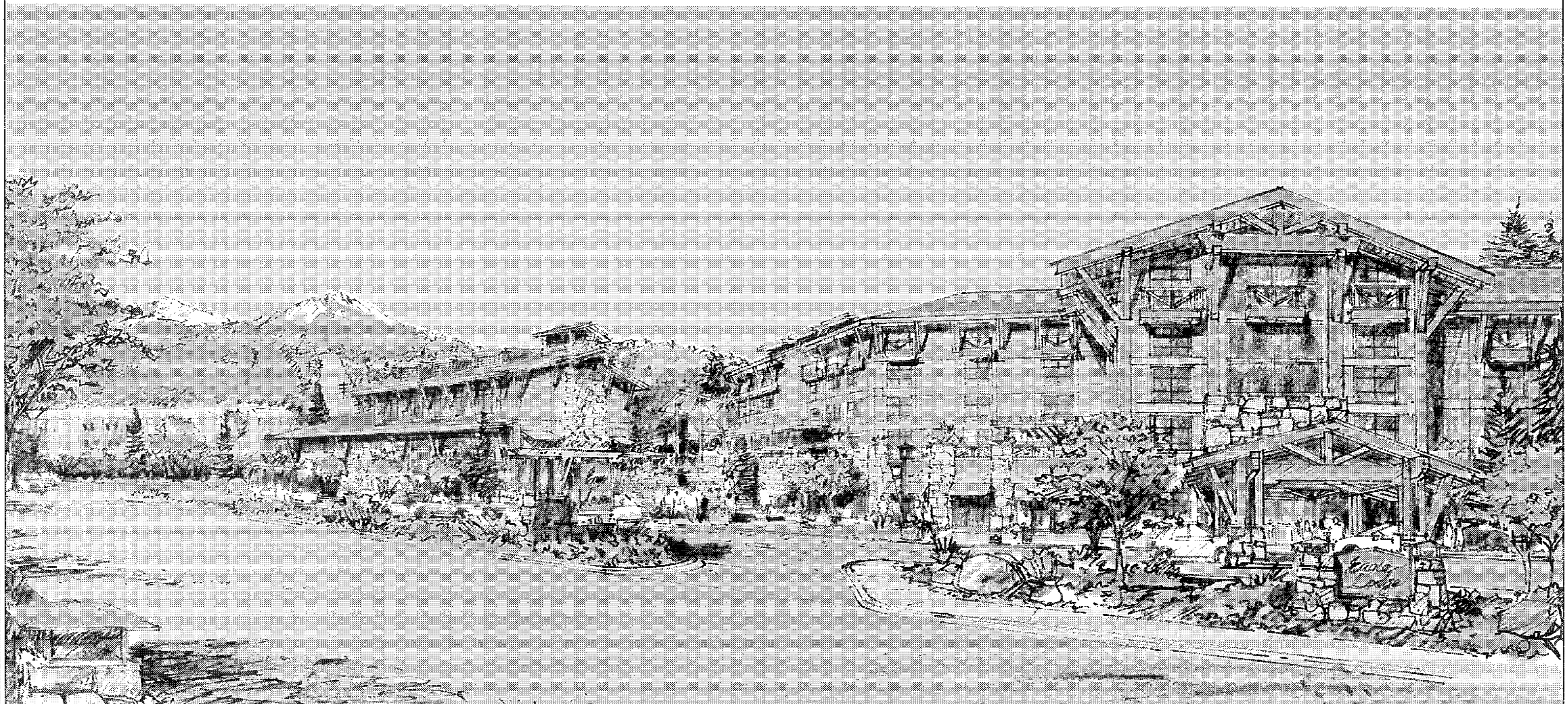
The average building height above finished grade would be 46.5 feet for the Skier Services Building. The peak building height of this building would be approximately 64 feet. The primary structure, the lodge, would have an average building height of 54 feet. The peak building height of the lodge would be approximately 77 feet.

Building materials would include heavy timbers and natural stone. The buildings would have pitched composite shingle roofs. The plazas would be finished with interlocking pavers. Landscaping would be provided on the plazas. The eagle statue that is currently on the site would be relocated to the arrival plaza at the base of the stairs.

The proposed project would be developed in accordance with the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) standards. The goal is to achieve certification level or above. LEED aims to improve occupant well being, environmental performance and economic returns of buildings using established and innovative practices, standards and technology. Major areas of evaluation include the following: Sustainable Sites, Water Efficiency, Energy & Atmosphere, Materials & Resources, Indoor Environmental Quality, Innovation & Design Process.

CONSTRUCTION

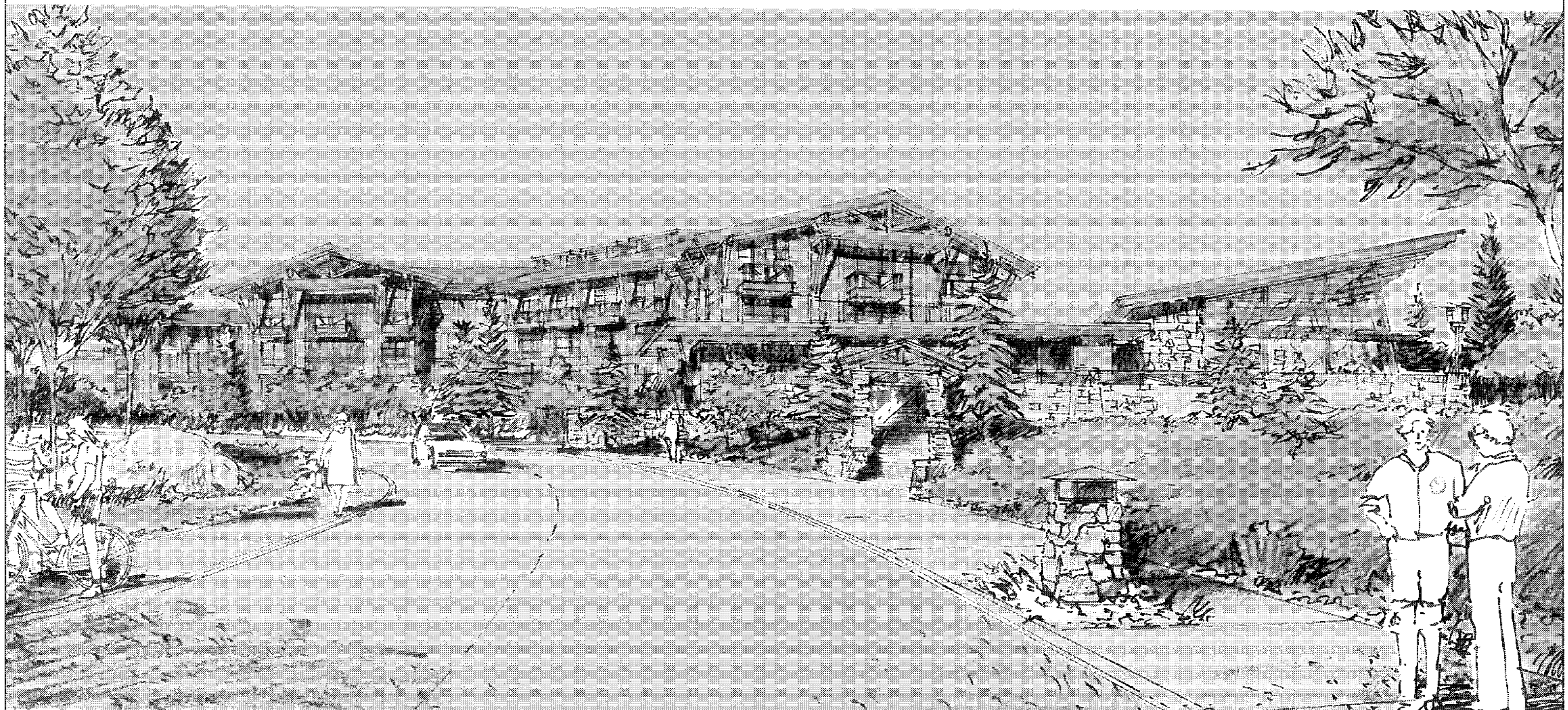
Construction of the project is expected to begin in Spring 2007 and would take approximately two years to complete. Construction would begin with the excavation of the parking garage moving from the western to the eastern portion of the site. A portion of the garage would be completed for the 2007/2008 ski season such that the usable portion of the parking garage would replace the approximately 225 surface parking spaces so as to result in no loss of parking during the interim ski season. Construction would continue through the winter months. The lodge would be completed by the 2008/2009 ski season. Final completion of the residential/hospitality portions of the project would occur in Spring 2009.



PCR

Figure 4
Rendering from Meridian Boulevard
(Front Entrance)

Source: Gensler, 2005



PCR

Figure 5
Rendering from Majestic Pines Road

Source: Gensler, 2005

NECESSARY APPROVALS

Approvals required for development of the Eagle Lodge facility would include, but not be limited to, the following from the Town of Mammoth Lakes:

- Certification of the EIR
- General Plan Amendment
  - Rezone Lot 87 from Residential Single Family to Resort
- Amendment to Juniper Ridge Master Plan
  - Land Use; the majority of the project lies on Juniper Ridge Area #4, which was designated for parking and 35,000 sq. ft of commercial within the adopted master plan. There was also an anticipated base lodge facility on USFS of approximately 80,000 sq. feet which has been incorporated into the project. The project would require amending the permitted uses of area #4 to allow for development of the mixed use base lodge facility.
  - Density; the Master Plan currently permits a total of 289 dwelling unit equivalents[4]. The project proposes an increase in density of 84 dwelling units for a total of 373 dwelling unit equivalents in a worst-case (213) hotel room development program. The proposed density is less than the maximum density permitted under existing zoning, but greater than the density being evaluated under the draft General Plan Update and EIR.
  - Height; Area #4 is current designated for a parking structure and commercial uses with a building height up to 35 feet tall for the parking structure and 45 feet as measured from street grade for commercial buildings. The project proposes an average building height above finished grade of 46.5 feet for the Skier Services Building. The peak building height of this building would be approximately 64 feet. The primary structure, the lodge, would have an average building height of 54 feet. The peak building height of the lodge would be approximately 77 feet.
  - Parking; the current Master Plan requires that all off street parking shall be provided for all uses in accordance with the requirements and design standards of Title 17. The project would require amendment to this language to allow for parking to be determined through a needs based analysis instead of an hours of use analysis. The study would be conducted by a Town selected consultant.

[4] *Studios, 1 bdrms and hotels rooms are equivalent to ½ du.*

  - Setbacks; the project crosses property lines and therefore, amendments to setback provisions of the currently adopted Juniper Ridge Master Plan will be required.

- Use Permit/Tentative Tract Map/Design Review Approvals[5]

- Grading and Building Permits

The Forest Service has determined that an Environmental Assessment will be required to analyze the effects of the proposed project on National Forest System Lands. Approvals required for development of the Eagle Lodge facility would include, but not be limited to, the following from the U.S.D.A. Forest Service:

- Decision Notice

- Finding of No Significant Impact

- Non-significant amendment of the Inyo Forest Plan

- Amendment of the MMSA Master Development Plan

[5] *These applications have not been filed with the Town of Mammoth Lakes and may require additional environmental analysis.*

ATTACHMENT B:
EXPLANATION OF CHECKLIST DETERMINATION

I. AESTHETICS. *Would the project:*

a) Have a substantial adverse effect on a scenic vista?

Potentially Significant Impact. A scenic vista is a view of a visually interesting natural or man-made feature. The project site is located at the base of Mammoth Mountain, which is the dominant view in the area. Visually, the area has dramatic changes in topography and includes native trees and rock outcroppings. The views from the project site of the upper elevations of Mammoth Mountain include the ridgeline features associated with Lincoln Knob. The lower elevations transition into a sloping, forested area that eventually comprise the existing residential/resort community associated with the Eagle Lodge Base Area.

The project site is developed with a surface parking lot for people using the temporary Little Eagle Base Lodge. The undeveloped portions of the site have a grassy terrain, with small boulders and pine tree groupings. A small portion of the western part of the site, approximately 2.39 acres, is located within the Inyo National Forest. The adjacent property to the north is developed with single-family residences and condominiums are located to the south of the site, across Meridian Boulevard. To the west of the site is the Juniper Springs Lodge. Multi-family residential development is located further to the west. Residential development is also located east of the project site.

Construction would result in exposed graded surfaces, construction debris, and the presence of construction equipment that may impact the visual character of the site. Construction of the project would occur over approximately two years. As a result, related impacts are temporary as they would cease upon completion of such activities. Project operations would result in the location of permanent recreational amenities at the Eagle Lodge Base Area, including commercial services and transient residential development. Slope improvements would include a beginner ski run located adjacent to the new lodge. The proposed lodge could be up to 77 feet in height, which would exceed the allowable 35 foot building height limit in Area 4 for parking structures and the 45 foot building height limit measured from street grade for commercial uses in Area 4 in the Juniper Ridge Master Plan. Due to the intensity and height of the proposed development, the project has the potential to affect the scenic resources associated with Mammoth Mountain. There is a prominent view of Mammoth Mountain, Mammoth Crest and the shoulder of Sherwin Ridge from Meridian Boulevard east of the project site. There is also a prominent view of the Sherwin Ridge/Mammoth Rock from Majestic Pines north of the project site. The proposed building will project substantially into both of those views. Further analysis of this issue is warranted and will be included in the Draft Environmental Impact Report (EIR)/Environmental Assessment (EA).

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. There are no local or state designated scenic highways in the immediate vicinity of the project site. The State Scenic Highway 395 provides access to the mountain community, which is located approximately 5 miles east of the project site. State Route 203, which is located approximately 1.2 miles northeast of the project site, is eligible for scenic highway designation but this designation has not been formally assigned. As Highway 395 provides access to the mountain community, vehicles for project construction and operation could utilize this roadway for access to the project site. Even so, vehicle activity would be conducted in a manner similar to current conditions and would not substantially damage scenic resources associated with Highway 395. The project would not damage scenic resources or other locally recognized desirable aesthetic natural feature within a designated scenic highway. No further analysis is warranted.

c) Substantially degrade the existing visual character or quality of the site and its surroundings?

Potentially Significant Impact. The visual setting of the project area is dominated by the alpine character associated with Mammoth Mountain and the associated resort facilities, with a mixed use of day commercial services and residential development. The project site contains the temporary lodge facility, consisting of a white pavilion-like tent structure with attached trailers, and the surface parking lot. The temporary lodge is approximately 12,000 square feet in size. The natural features include open space with pine trees, mixed with grassy meadow and rocky conditions. Project construction could result in a temporary impact to the visual character of the site. As previously discussed, construction impacts are short term as they would cease upon completion of such activities. The Eagle Lodge hotel/condominium and hospitality operations would occupy the majority of the central portion of the site. An outdoor ice rink would be located adjacent to the plaza area. Plaza areas and outdoor seating would connect the proposed facilities. The project would provide a 30 foot climbing wall, constructed seasonally for summer use.

The project would be subject to the Town of Mammoth Lakes (Town) design ordinance and guidelines, which regulate the aesthetic character of all development in the community other than single family residences (Municipal Code 17.32.120). The proposed lodge would be up to

77 feet in height, which exceeds the 35 foot building height limit in Area 4 for parking structures and the 45 foot building height limit measured from street grade for commercial uses in Area 4 in the Juniper Ridge Master Plan. Due to the intensity and height of the proposed development, the project has the potential to degrade the existing visual character or quality of the site and surrounding area. An analysis of these impacts will be conducted based on the Scenery Management System (SMS) and Scenic Integrity Objectives (SIOs) developed by the Forest Service. This information will be included in the Draft EIR/EA.

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

Potentially Significant Impact. The existing sources of light and glare include windows and outdoor lighting associated with the temporary facility and vehicle headlights using the surface parking lot during evening hours. The surface parking lot, which can accommodate approximately 225 vehicles, does not have permanent lighting. For the project area, sources of light and glare include residential and condominium structures, which cast light and glare from windows and outdoor lighting, as well as automobiles traveling along the roadways. The Town Municipal Code Chapter 17.34 regulates outdoor lighting and prevents nuisances caused by unnecessary outdoor lighting, with the goal of protecting the ability to view the night sky. The proposed structure and vehicles associated with the project would create additional sources of light and glare. The project would result in an increase in the sources of light and glare both through the uses as well as the location of the building closer to the street and the adjacent residential uses. Therefore, light and glare will be further analyzed in the Draft EIR/EA.

The temporary facility is the only manmade source of shade or shadow on-site, and the structure is approximately one-story in height. The project would increase shade and shadow conditions as the project would include a new structure with a greater building height than the existing structure (approximately 77 feet) as well as the placement of the building closer to the street and the adjacent uses. Shade and shadow can have a positive cooling effect during summer months, but may result in the loss of natural light or warming effects during the winter, prolonging icy surface conditions. Therefore, shade/shadow analysis is warranted and will be provided in the Draft EIR/EA.

II. AGRICULTURAL RESOURCES. *Would the project:*

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown the maps prepared pursuant to the Farmland Mapping Monitoring Program of the California Resources Agency, to non-agricultural uses?

No Impact. The majority of the site, approximately 3.46 acres, is located on private property. The remaining portion (approximately 2.39 acres) encompasses land within the Inyo National Forest, which is managed by the U.S. Forest Service (USFS). Existing land uses include a surface parking lot and the temporary Little Eagle Base Lodge. There are no agricultural uses or related operations within the site or surrounding area. Mono County has not been mapped as an area containing prime farmland, unique farmland, or farmland of statewide importance pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency.[1] There is no history of agricultural use on the project site. Therefore, the project would not convert such uses to non-agricultural use and no further analysis is required.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. The California Land Conservation Act (Williamson Act) was enacted as a means of preserving California's Prime agricultural lands from urbanization. As discussed in Response II.a above, there are no agricultural land uses on or in the vicinity of the project site. The privately owned portion of the site, consisting of approximately 3.46 acres, is zoned Resort (R). The remaining portion of the site, approximately 2.39 acres, is located within the Inyo National Forest and is managed by the USFS. The surrounding area is not zoned for agricultural use and no nearby lands are characterized for agricultural use under the Williamson Act. Therefore, he project would not conflict with existing zoning for agricultural uses or Williamson Act contracts and no further analysis is required.

c) 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 Impact. As previously discussed, there are no agricultural uses or related operations on or near the project site. The proposed project would not involve the conversion of farmland

---

[1] *California Department of Conservation. 2002. Map of Important Farmland in California. FMMP Survey Cycle Year 2002 Data, Map Published August 2004. Website: http://www.consrv.ca.gov/DLRP/fmmp/images/fmmp2002_200.pdf. Accessed November 2,1 2005.*

to other uses, either directly or indirectly. Project construction and operations would not convert farmland to non-agricultural use. As a result, no further analysis is necessary.

III. AIR QUALITY. *The significance criteria established by the Great Basin Unified Air Pollution Control District (GBUAPCD) may be relied upon to make the following determinations. Would the project result in:*

a) Conflict with or obstruct implementation of the applicable Air Quality Management Plan or Congestion Management Plan?

Potentially Significant Impact. The project site is located in Mono County, within a valley on the eastern slopes of the Sierra Nevada Mountain Range. The area is included in the Great Basin Valley Air Basin (Basin), which includes Mono, Inyo and Alpine Counties. The unique meteorological problems in California have resulted in the implementation of ambient standards by both the California Air Resources Board and the U.S. Environmental Protection Agency, referred to as the National and California Ambient Air Quality Standards. In general, the State standards are more stringent than the National standards. Ambient air quality standards have been promulgated for ozone (O_3), particulate matter less than 10 microns in diameter (PM_{10}) and less than 2.5 microns in diameter ($PM_{2.5}$), carbon monoxide (CO), nitrogen oxides (NOx) and lead. The Great Basin Unified Air Pollution Control District (GBUAPCD) is responsible for enforcing applicable air quality regulations and ensuring the federal and state standards are met.

Each air basin is designated either as "attainment," "nonattainment" or "unclassified", depending on whether the basin meets an ambient air quality standard. Effective in 2005, the Mono County portion of the Basin has a nonattainment designation for the State O_3 1-hour standard of 0.09 parts per million (ppm). The Basin is also nonattainment for the State PM_{10} standard of 50 micrograms per cubic meter (µg/m3). In addition, the Mammoth Lakes area of the Basin is designated as nonattainment for the federal PM_{10} standard of 150 µg/m3. The Mammoth Lakes area and Mono County are considered in attainment or are unclassified for all other federal and State standards.

The Air Quality Management Plan (AQMP) for the Town of Mammoth Lakes was adopted by the Town Council and GBUAPCD Board of Directors in 1990.[2] The AQMP is the primary document for the Town to satisfy the Clean Air Act requirements to develop a State

[2] *Great Basin Unified Air Pollution Control District and Town of Mammoth Lakes. Air Quality Management Plan for the Town of Mammoth Lakes. November 1990.*

Implementation Plan (SIP) to demonstrate how the Mammoth Lakes area will attain and maintain ambient air quality standards for PM_{10}. The AQMP includes analyses of PM_{10} sources and summarizes the effectiveness of control measures to improve PM_{10} levels. The AQMP concludes that the primary sources of PM_{10} emissions for the area are wood smoke and road cinders. Control measures in the AQMP include vacuum street sweepers for cinders and road dust, reduction in vehicle traffic, wood stove replacement, opacity limits, fees, and penalties. The road dust reduction measure in the AQMP limits peak day traffic loads to 106,600 vehicle miles traveled. This reduction measure has been incorporated into the Mammoth Lakes Municipal Code Chapter 8.30, referred to as the Particulate Matter Ordinance. The Particulate Matter Ordinance largely implements the mitigation measures identified in the AQMP.

The GBUAPCD is responsible for establishing significance criteria for construction and operational activities within the Basin. The GBUAPCD has not established numerical thresholds for criteria pollutants to determine the significance of potential impacts associated with construction and operation of development projects. Instead, the GBUAPCD requires comprehensive mitigation measures to reduce potential impacts, such as the implementation of Rule 401 to control fugitive dust emissions. A portion of the site is located within the jurisdiction of the Inyo National Forest Service. As a result, the Forest Service Standards and Guidelines for air quality require coordination with the GBUAPCD when determining air quality impacts on forest service lands.

Project construction would begin in spring 2007 and would take approximately two years to complete, continuing through the winter months. Construction has the potential to create air quality impacts with the use of construction equipment and through vehicle trips generated from construction workers traveling to and from the project site. Air toxic emissions from the combustion of diesel fuel could include small quantities of diesel particulate matter. In addition, fugitive dust emissions would result from demolition and construction activities. The potential use of geothermal power would require drilling of extraction wells, which could result in the discharge of hydrogen sulfide emissions.

Emissions from project operations would result primarily from mobile source emissions (e.g., new traffic trips). Other air pollutant emissions associated with proposed project operations could include those generated by the consumption of electricity and natural gas. In addition, the project could include the operation of wood burning stoves and fireplaces. Wood smoke contains particulates, as well as various organic and inorganic compounds. Also, the potential use of geothermal energy could result in hydrogen sulfide and carbon dioxide emissions. As the construction and operation of the project would generate air emissions that could impede implementation of the AQMP, an analysis of the project's consistency with the AQMP and applicable federal and state thresholds of significance will be provided in the Draft EIR/EA.

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

Potentially Significant Impact. As indicated above, the Mammoth Lakes area is designated as nonattainment for O_3 (State standard only) and PM_{10} (State and federal standard). The O_3 nonattainment status is primarily resulting from pollution generated in the San Joaquin Valley, transported by air currents and winds over the Sierra Nevada's into the Mammoth Lakes area, and not a condition generated by Basin activities. This condition is so extreme that O_3 exceedances would likely occur without considering Basin emission precursor (NOx and hydrocarbon) contributions. The particulate matter exceedances are primarily caused by road dust and soot from wood combustion. For project construction, air quality impacts would occur as a result of construction equipment emissions, worker trips, and fugitive dust. Operational impacts would occur from an increase in mobile source emissions (e.g. vehicle trips). Considering the nonattainment status, the standards for PM_{10} and O_3 could continue to be exceeded with the implementation of the proposed project. As the project would result in increased air emissions associated with construction and operation, the project could contribute to an existing or projected air quality violation. This issue will be analyzed in the Draft EIR/EA.

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

Potentially Significant Impact. As previously discussed, the project site is located in an area designated as nonattainment for O_3 and PM_{10}. The GBUAPCD does not have numerical thresholds for criteria pollutants to determine whether the project would result in a cumulatively considerable net increase of PM_{10} or O_3 precursors. However, construction and operation of the project would result in an increase in air emissions, such as those associated with construction equipment and vehicle trips, as compared to existing conditions. As the project would result in an increase of emissions, project implementation could result in a cumulative increase of pollutants in the Basin. As a result, a cumulative analysis of air emissions will be analyzed in the Draft EIR/EA.

d) Expose sensitive receptors to substantial pollutant concentrations?

Potentially Significant Impact. Certain segments of the population, such as children, the elderly, and those individuals with compromised respiratory systems, are more sensitive to the effects of air pollution than is the general population. Those sensitive populations that are in proximity to localized sources of fine particulates, toxics and CO are of concern and are termed sensitive receptors. Adjacent and nearby residential development could house sensitive receptors. Therefore, project construction and operation could expose sensitive receptors, such as nearby residents, to emissions above current levels. Potential impacts will be analyzed further in the Draft EIR/EA.

e) Create objectionable odors affecting a substantial number of people?

Potentially Significant Impact. The existing on-site restaurant is a potential source of objectionable odors. Sources of odor in the area include smoke from burning wood debris and wood burning fireplaces. Project activities potentially resulting in odorous emissions would include construction equipment exhaust, restaurant activities, refuse from project construction/operation, and the potential use of geothermal energy. With regard to food service, the project would include a food court and a sit-down restaurant. Restaurant operations can result in odorous emissions from activities such as the cooking of meat and other food, as well as associated refuse. Odorous emissions can also result from the solid waste associated with transient residential use if decomposing materials are not properly managed or contained. The use of geothermal power can result in the release of hydrogen sulfide to the atmosphere, which smells like rotten eggs. As project activities could result in odorous emissions, the potential impacts of the project to create objectionable odors affecting a substantial number of people will be evaluated in the Draft EIR/EA.

IV. BIOLOGICAL RESOURCES. *Would the project:*

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?

Potentially Significant Impact. The project is located at the base of Mammoth Mountain. Due to the high degree of variation in topography and geologic conditions, the region supports diverse biological communities. The biological communities primarily consist of species that have adapted to cold, snowy winters and arid summers. Mammals that occur in the area include deer, coyote, marmot, beaver, squirrel, chipmunk, mountain lion, marten, and black bear. More than 150 bird species have been identified in the region, including bald eagle, grey owl, red-tailed hawk, sage-grouse, various woodpeckers, chickadee, nuthatch, northern goshawk, and gray crowned rosy finch. The area also supports approximately 15 species of amphibians and reptiles, including the western toad, Pacific tree frog, sagebrush lizard, and western terrestrial garter snake. The most common plant community within the region is the Mixed Conifer Fir, and the Jeffery Pine species commonly occurs on gradual slopes and lower elevation areas. The five major vegetation communities within the region are Mixed Conifer Fir, Upper Montane Mixed Shrub, Basin Sagebrush, Wet Meadow, and Alder Wouldow Riparian.

The proposed project would replace the existing surface parking lot and temporary lodge facility. Some of the proposed development would occur on currently vacant land. A literature review and preliminary site investigation indicates sensitive species could occur on-site. A portion of the site is located in the Inyo National Forest, and the Inyo beardtongue, which is on the CNPS Watch List, is a sensitive plant species that occurs in the Inyo National Forest. In addition, there is a potential for the western white-tailed jackrabbit to occur, which is considered a sensitive species by the California Department of Fish and Game. A biological field survey will be conducted to characterize the type and extent of biological communities present on the project site. The potential for the project to have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species, will be evaluated in a Draft EIR/EA.

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

Potentially Significant Impact. Riparian habitats occur in transitional zones between aquatic and terrestrial environments. There are natural drainage features on-site, as well as the manmade detention basins. A preliminary site investigation indicates the occurrence of riparian habitat on-site, associated with natural drainage areas, the manmade basin, and non-drainage areas as well. Project implementation could impact the sparse riparian habitat by removal of native vegetation in development areas as well as changes to the water table that could occur as a result of development. In addition, project implementation could result in impacts by increasing open space land usage and increased pollution of stormwater and runoff flows. Therefore, additional analysis of this issue will be included a Draft EIR/EA.

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?

Potentially Significant Impact. Section 404 defines wetlands as areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. The aquatic features on-site include the manmade detention basin and natural drainage areas. A preliminary site investigation indicates the presence of wetland habitat within the detention basin, and the potential for wetland habitat in a small wetland drainage area on-site. As a result, additional analysis with regard to federally protected wetlands as defined by Section 404 of the Clean Water Act is required and will be included in the Draft EIR/EA.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native nursery sites?

Less Than Significant Impact. There are specific areas of the Mammoth Lakes region that are utilized by migratory species, such as the Round Valley Herd of mule deer, which is a common migratory species for the area. The route used by this herd is south of the Town of Mammoth Lakes, through the Mammoth Lakes Basin, and then crosses over Mammoth Pass into the Middle Fork of the San Joaquin River drainage. The likelihood of the herd migrating on the project site is minimized by surrounding development, resulting in anthropogenic deterrence. Other migratory species include raptors and songbirds, which could nest within the trees, shrubs, and ground cover on-site. Nesting activity typically occurs from mid-February to mid-August. Active nests are protected under Fish and Game Code Section 3503. Even though activities associated with project construction and operation could impact habitat migration areas, compliance with regulations established to protect such species would reduce any potential impacts to less than significant. The project would not interfere with the movement of any native resident or wildlife species. Therefore, no additional analysis is required.

e) Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance (e.g., oak trees or California walnut woodlands)?

Less Than Significant Impact. The Town of Mammoth Lakes currently has several policies and ordinances that apply to development, providing protection to natural resources. For example, Municipal Code Chapter 6.24 prohibits feeding of wildlife, Municipal Code Chapter 8.12 requires proper refuse disposal to eliminate the availability of refuse for wildlife, and Municipal Code 17.16.050 requires the preservation of trees and other vegetation. At the project site, small lodgepole pine, jeffrey pine, as well as small stands of quaking aspen, narrow-leaved willow, and arroyo willow occur within the site boundary. The Town of Mammoth Lakes may warrant replacement of these resources if impacted during construction or operation. Consistency with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance, would reduce such impacts to less than significant. The project would comply with applicable policies and ordinances, such as the local tree preservation policy. Compliance with such policies and ordinances would assure that impacts from project implementation would be less than significant. Therefore, no additional analysis of this issue is required.

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?

No Impact. Implementation of the proposed project would not conflict with any adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or state habitat conservation plans. Conservation and recovery plans for areas which encompass or are in the vicinity of the project site include the following:

Owens Basin Wetland and Aquatic Species Recovery Plan, Inyo and Mono Counties, California, dated September, 1998, prepared by the U.S. Fish & Wildlife Service. This plan addresses the Owens pupfish, Owens tui chub, and Fish Slough milk-vetch. No conservation areas occur in the vicinity of the project site. The conservation areas for this plan include the Hot Creek Conservation Area, Little Hot Creek Conservation Area, Little Alkali Conservation Area, and Whitmore Conservation Area. These areas are located approximately 15 miles southeast of the site.

Mule Deer Herd Management Plans. A deer herd management plan was prepared by the California Department of Fish and Game for the Round Valley herd in the mid-1980s. As previously discussed, the project is not expected to impact mule deer migration as no known migration areas occur in the vicinity of the site.

Greater Sage-Grouse Conservation Plan for Nevada and Eastern California. The Greater Sage-Grouse Conservation Plan for Nevada and Eastern California first edition (Draft) was prepared June 30, 2004. An update to this document is expected to be completed at the end of 2006. The project would not interfere with the applicable conservation plan as the nearest Population Management Unit (PMU) is South Mono PMU, and the closest documented area is within the vicinity of the Mammoth Yosemite airport, approximately 8.7 miles east of the project.[3]

In summary, the project would not conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. No further analysis is required.

---

3 *Casazza, M.L., Overton, C.T. and Torregrosa, A., USGS, Ecology of Greater Sage-Grouse in the Bi-State Planning Area, Progress Report. March, 2005.*

V. CULTURAL RESOURCES. *Would the project:*

a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?

No Impact. Section 15064.5(a)(3) of the CEQA Guidelines generally defines historical resources as any object, building, structure, site, area, place, record, or manuscript determined to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California. Historical resources are further defined as being associated with significant events, important persons, or distinctive characteristics of a type, period or method of construction; representing the work of an important creative individual or possessing high artistic values. The project would be located on an area developed by a parking lot and a temporary lodge facility. There are no historical resources pursuant to Section 15064.5(a)(3) on the project area. As a result, the project would not impact historic resources and no further analysis is warranted.

b) Cause a substantial adverse change in significance of an archaeological resource pursuant to §15064.5?

Potentially Significant Impact. A preliminary cultural resource records search revealed that there is one recorded cultural resource within the project area (CA-MNO-1529) and 29 cultural resource properties within a one mile radius of the project area. In 1981, William Taylor conducted an archaeological reconnaissance of the Camp High Sierra Land Exchange area, which involved the western half of the project area. During the reconnaissance, the prehistoric archaeological site CA-MNO-1529 was recorded, containing obsidian lithic scatter and several bedrock milling features.[4] In 1982, University of California Davis (UC Davis) archaeological students conducted test excavations at CA-MNO-1529 as part of the UC Davis Field Class in Archaeology, but did not formally evaluate the site[5]. In 1997, a discussion of site CA-MNO-1529 was included in the U.S. Forest Service Environmental Assessment (EA) for the project area.[6] The EA states that the current project area was completely surveyed in conjunction with the Camp High Sierra Land Exchange, and that all potentially significant cultural resources were mitigated. However, even though impacts to site CA-MNO-1529 have already been mitigated, the California State Historic Preservation Officer (SHPO) requires survey work within five years

---

[4] *United States Department of Agriculture Forest Service, Inyo National Forest. 1997. Mammoth Mountain Ski Area Base VII Expansion Project Environmental Assessment.*

[5] *Basgall, M.E. 1984. The Archaeology of MNO-1529: A Secondary Reduction Site in Mammoth Lakes, Mono County, California.*

[6] *United States Department of Agriculture Forest Service, Inyo National Forest. 1997. Mammoth Mountain Ski Area Base VII Expansion Project Environmental Assessment.*

of proposed development. Therefore, an updated cultural resources report will be completed and analysis included in a Draft EIR/EA.

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

No Impact. There are no known paleontological resources on site and no unique geological features for the project area other than those resulting from the alpine setting. Preliminary results of a paleontological records search through the University of California Museum of Paleontology (Berkeley) indicated that there are no recorded fossil localities within the project area or within a one mile radius of the project area. The closest vertebrate fossil locality is located more than 30 miles north of the project area. Initial consultation of collection records and geologic maps indicate that the Mammoth Lake area has no history of fossil resources largely because the terrain is dominated by igneous and metamorphic rocks. As there is no record of paleontological resources in the area and no features indicative of paleontological resources, the proposed project would result in an impact to paleontological resources and no further analysis is required.

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

Less Than Significant Impact. There are no areas known to contain human remains on the project site or in the immediate vicinity. A preliminary records search revealed that there are no recorded burials within the project area or within a one mile radius of the project area. If such resources were to be encountered during construction excavation and grading activities, all work shall cease in that area. Any discovery of human remains shall be treated in accordance with Section 5097.98 of the Public Resources Code (PRC) and Section 7050.5 of the Health and Safety Code. Compliance with regulatory requirements that assure resources, if discovered, are properly mitigated would decrease potential impacts to less than significant levels. The project would not disturb human remains and impacts would be less than significant. No further analysis is required.

VI. GEOLOGY AND SOILS. *Would the project:*

a) Exposure of 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? Refer to Division of Mines and Geology Special Publication 42.

Less Than Significant Impact. The project site is located within the Sierra Nevada province, a generally north to northwesterly trending, asymmetric, and tilted fault-block, bordered on the east by the Sierra Nevada frontal-fault system. The region is one of the most active seismic regions in the United States. Seismic activity in the vicinity of the project is a result of tectonic movement along the eastern front of the Sierra Nevada Mountain Range.

For the purposes of the Alquist-Priolo Earthquake Fault Zoning Map Act, the State of California defines active faults as faults that have historically produced earthquakes or shown evidence of movement within the past 11,000 years (during the Holocene Epoch).[7] Active faults may be designated as Earthquake Fault Zones under the Alquist-Priolo Earthquake Fault Zoning Act, which includes standards regulating development adjacent to active faults. The site is not located within any Earthquake Fault Zones or Alquist-Priolo Hazard Zones.[8]

Historically active faults located in the project area that have the greatest potential to create significant ground shaking include the Hartley Springs, Hilton Creek (1980 earthquake), Owens Valley (1972 earthquake) faults and the Chalfant Valley fracture (1986 earthquake). The nearest known active regional fault is the Hartley Springs fault. The closest projected trace for this fault zone is located approximately 0.2 mi (0.4 km) north/northwest of the site. This fault could produce a magnitude 6.6 (Mw) earthquake. The Hilton Creek fault, located approximately 6.8 mi (11.0 km) from the site, could produce a magnitude 6.7 (Mw) earthquake.

The project would locate a resort facility within an area known to contain potential seismic hazards. However, the project would comply with the California Department of Conservation, California Geologic Survey Special Publications 117, *Guidelines for Evaluating*

---

[7] *California Department of Conservation, California Geologic Survey. Potentially active faults have demonstrated displacement within the last 1.6 million years (during the Pleistocene Epoch), but do not displace Holocene Strata. Inactive faults do not exhibit displacement younger than 1.6 million years before the present.*

[8] *Preliminary Geotechnical Investigation, Sierra Geotechnical Services, December 2005.*

and Mitigating Seismic Hazards in California (1997), which provides guidance for evaluation and mitigation of earthquake-related hazards. In addition, the project would comply with the seismic safety requirements in the Town of Mammoth Lakes Municipal Code, Chapter 15.04 (Building Regulations and Uniform Codes). The Code requires that all structures within the boundaries of the Town shall be designed to the requirements of Seismic Zone 4 as defined in the 2001 California Building Code. Adherence to applicable regulations would assure appropriate building design, and would reduce the potential impacts of locating people in buildings susceptible to impacts from seismic activity to a less than significant level. Therefore, further analysis of this issue is not warranted.

ii) Strong seismic ground shaking?

Less Than Significant Impact. As indicated above, active faults exist within the vicinity of the project site. The project site is located within the Sierra Nevada province, a generally north to northwesterly trending, asymmetric, and tilted fault-block, bordered on the east by the Sierra Nevada frontal-fault system. The area is one of the most active seismic regions in the United States. As a result, the fault system could produce seismic ground shaking that may affect the project site. The project would comply with applicable requirements, such as the California Geologic Survey Special Publications 117 and the Town of Mammoth Lakes Municipal Building Code, which are discussed above. Compliance with these requirements would reduce potential impacts to the project due to seismic ground shaking to less than significant levels. Therefore, no further analysis of this issue is necessary.

iii) Seismic-related ground failure, including liquefaction?

Less Than Significant Impact. Liquefaction of cohesionless soils can be caused by strong vibratory motion due to earthquakes. Research and historical data indicate that loose granular soils below a near-surface groundwater table are most susceptible to liquefaction. Liquefaction is characterized by a loss of shear strength in the affected soil layers, thereby causing the soil to behave as a viscous liquid. This effect may be manifested at the ground surface by settlement and, possibly, sand boils where insufficient confining overburden is present over layers. In order for the potential effects of liquefaction to be manifested at the ground surface, the soils generally have to be granular, loose to medium-dense and saturated relatively near the ground surface, and must be subjected to ground shaking of a sufficient magnitude and duration. The potential for liquefaction to occur is considered very low, given the very dense nature of the soils that exist on the site.[9] In addition, the project would comply with the State of California's minimum standards for structural design and construction provided in the California

[9] *Preliminary Geotechnical Investigation, Sierra Geotechnical Services, December 2005.*

Building Code (CBC). Given that the potential for liquefaction is considered very low and the project would comply with applicable requirements, potential impacts with regard to seismic-related ground failure would be less than significant. Therefore, no further analysis of this issue is necessary.

iv) Landslides?

Less Than Significant Impact. Landslides are earthquake-induced ground failure that occur primarily in areas with steep slopes, which have loose, granular soils that lose their cohesive characteristics when water-saturated. Landslides are limited primarily to areas with a combination of poorly consolidated material and slopes that exceed 30 percent. While slopes with these gradients are found in portions of Mammoth Mountain, slopes that exceed 30 percent are not located on the project site. In addition, there is no evidence of past landslides based on historic aerials and review in the field.[10] Therefore, no further analysis of this issue is necessary.

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

Less Than Significant Impact. The highest erosion potential occurs in loose and/or shallow soils on steep slopes. Currently, the project site is generally level and developed with a surface parking lot and temporary lodge facility. The majority of undeveloped land on-site is covered with grassy vegetation, as well as evergreens, and lowlying trees and scrubs. Construction of the project would produce loose soils, which are subject to erosion as the surface area were to be disturbed or vegetation were to be removed. Municipal Code Section 12.08.076 requires that a grading permit be obtained for the project. In addition, construction activities are subject to requirements of the National Pollutant Discharge Elimination System (NPDES) Construction Permit. Compliance with the NPDES permit requires the implementation of Best Management Practices (BMPs), some of which are specifically implemented to reduce soil erosion or loss of topsoil. Project operations would result in new structures and an increase in impervious surface as compared to current conditions. Increased impervious conditions can increase stormwater runoff and increase erosion conditions. Even so, the project would comply with permitting requirements and regulations to minimize the loss of topsoil or erosion conditions. Compliance with required regulations would reduce potential impacts to a less than significant level. Therefore, no further analysis regarding soil erosion or the loss of topsoil is necessary.

---

[10] *Preliminary Geotechnical Investigation, Sierra Geotechnical Services, December 2005.*

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?

Less Than Significant Impact. The preliminary geotechnical investigation included borings at the site. Based on the borings, three general soil types underlie the site, consisting of Undocumented Fill, Alluvium, and Glacial Deposits. The borings indicated that undocumented fill is located to an approximate maximum depth of 4-feet below existing grade. In general, the undocumented fill consisted of a brown to grayish-brown, moist, loose to medium dense, silty, fine to coarse-grained SAND (Unified Soil Classification Symbols: SP and SP-SM) with few cobble clasts and boulders, and minor amounts of trash and debris. This material was likely dumped and/or stockpiled during construction of the parking area. Due to the poor density as well as the presence of trash and debris this material is considered unsuitable for the support of new fill or structural loads. Below the fill are alluvial deposits to approximately 6-feet in depth. In general, the alluvium consisted of a dark gray to black, and light grayish-brown to medium brown, moist to wet, medium dense to dense, silty, fine to medium-grained SAND (SM, SP and SP-SM) with abundant cobble clasts and boulders to approximately 36-inches in diameter. Below the alluvial deposits are glacial deposits. In general, the glacial deposits consisted of a reddish-brown to grayish-brown, olive-brown to brown, and gray, moist to wet, medium dense to very dense, silty, very fine to coarse SAND (SM, SP, and SP-SM) with abundant cobble clasts and boulders. In addition, compliance with applicable building and safety requirements would assure that the project is not located on a geologic unit or soil that is unstable, or that could become unstable and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse. Therefore, no further analysis of this issue is necessary.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

Less Than Significant Impact. Expansive soils are typically those of high clay content that swell and shrink during wet and dry climatic events, respectively. As indicated above, the project would not be developed on expansive soils that would create substantial risks to life or property. Therefore, no additional analysis of this issue is required.

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?

No Impact. The site is currently connected to the municipal sewer system. The proposed project would also be connected to the Town's infrastructure. In addition, the Basin Plan for the Lahontan Regional Water Quality Control Board (LRWQCB) prohibits individual septic systems in the Mammoth Basin or within the entire drainage area of the Town. Since the Project would not involve the use of septic tanks or alternative wastewater disposal systems, no impact would occur. Therefore, no further analysis is required.

VII. HAZARDS AND HAZARDOUS MATERIALS. *Would the project:*

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Less Than Significant Impact. The project would result in the development of a resort facility with residential and commercial uses. Construction of the project would involve the use of potentially hazardous materials, including vehicle fuels, oils, and transmission fluids. Project operations would require the routine use of paints, cleaning solvents, pesticides, or other regulated chemicals during operation and maintenance. The quantity of such materials, if required, would not be to levels potentially resulting in a significant hazard to the public or the environment through the routine transport, use, or disposal. In addition, all potentially hazardous materials used during construction and operation would be contained, stored, and used in accordance with manufacturers' instructions and handled in compliance with applicable standards and regulations. Any risk associated with construction or operation would be adequately reduced to a less than significant level through compliance with these standards and regulations. As such, the project would not create a significant hazard to the public or the environment through the transport, use, or disposal of hazardous materials, and no additional analysis is necessary.

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?

Less Than Significant Impact. The existing temporary facility on the site would not contain hazardous materials that could be released during demolition. Project implementation would not result in land uses that emit or handle hazardous materials such as those related to industrial uses requiring large quantity chemical storage. The project would not create any significant hazard through the reasonable foreseeable release of hazardous materials. Numerous federal, state and local regulations oversee the management of hazardous materials to avoid the risk of the accidental release. However, the project does not require activities typical to those that may result in accidental releases of hazardous materials. Therefore, construction and operation of the project would not create a significant hazard to the public or the environment through upset and accident conditions involving the release of hazardous materials into the environment. No additional analysis is required.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No Impact. The project site is not located within one-quarter mile of an existing school. The closest school is Mammoth Elementary School, located on 2600 Meridian Boulevard, approximately 0.83 mile northeast of the project site. School expansions are proposed, but no new school locations are proposed at this time.[11] Therefore, the project would not result in hazardous emissions or the handling of hazardous or acutely hazardous materials within one-quarter mile of an existing or proposed school. No further analysis is warranted.

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?

No Impact. Government Code Section 65962.5 requires the California Environmental Protection Agency to develop at least annually an updated Cortese List, or Hazardous Waste and Substances Sites. The site is not included on the Cortese List and there are no known hazardous materials sites located on or adjacent to the subject property. In addition, proposed site activities would not generate significant amounts of hazardous waste or substances, resulting in a hazard to the public or the environment during future operations. Therefore, no additional analysis is required.

e) For a project 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, would the project result in a safety hazard for people residing or working in the project area?

No Impact. The Mammoth Yosemite Airport is located approximately 8.7 miles east of the project site. The project is not located within an airport land use plan or within two miles of a public airport or public use airport. Therefore, the project would not result in associated safety hazards for people residing or working in the project area. No additional analysis is required.

[11] *Personal communication with Stan Halperin, Superintendent of Mammoth Unified School District, November 29, 2005.*

f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for the people residing or working in the area?

No Impact. There are no private airstrips in the vicinity of the project site. As indicated above, the Mammoth Yosemite Airport is located approximately 8.7 miles from the site and the project area is not located in the Airport Land Use Plan. The proposed project would not result in airport-related safety hazards for the people residing or working in the area. Therefore, no further analysis is required.

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Less Than Significant Impact. There are two emergency evacuation routes that serve the Town year-round. SR 203 and U.S. Highway 395 are the main routes for evacuation, and a secondary evacuation option is provided by the Scenic Loop extending from Minaret Road to U.S. Highway 395. During the summer months, two additional routes are available including Sherwin Creek Road and the Sawmill cutoff, both of which are graded dirt roads.[12] The majority of construction activities for the project would be confined to the site. In addition, the construction or operation of the project would not require or result in any modifications to any roadways or other emergency routes that are considered a component of an adopted emergency response plan or emergency evacuation plan. Even though construction equipment and project related vehicles could use the roads area, the project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. No further analysis of this issue is required.

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?

Less Than Significant Impact. The Town and surrounding area have been rated as having a very high fire potential. Development in the area would increase the number and variety of potential ignition sources for wildland fires, including illegal or inappropriate burning, improper disposal of cigarettes, and other sources through an increase in population that would occur. The project would replace a temporary facility with a new structure. The project would be subject to review by the Mammoth Lakes Fire Protection District to ensure that fire regulations are met, such as ensuring adequate clearance of flammable vegetation around

[12] *Town of Mammoth Lakes, 2005. Draft Program Environmental Impact Report for the Town of Mammoth Lakes 2005 General Plan Update.*

individual structures to prevent the spread of fire between wildlands and structures. Thus, compliance with applicable provisions and fire codes pertaining to control of fires would result in a less than significant impact. No further analysis is required.

VIII. HYDROLOGY AND WATER QUALITY. *Would the project:*

a) Violate any water quality standards or waste discharge requirements?

Potentially Significant Impact. The project site is located within the jurisdiction of the Lahontan Regional Water Quality Control Board (LRWQCB). During project construction runoff from disturbed areas may contain silt and debris, which could result in short-term increases in the existing sediment load in the storm drain system. The operation of the project would increase the intensity of development on the site, which would result in an increase in surface water runoff as compared to existing conditions. Similar to existing conditions, runoff from the project site would include typical urban pollutants, i.e., gas and oil from vehicles. Project hydrology plans will be required to adhere to new regulatory requirements pertaining to on-site retention of initial storm-flows. With adherence to applicable regulations, no significant impacts are expected. However, the Draft EIR/EA will include a discussion of regulatory stormwater quality requirements, including National Pollutant Discharge Elimination System (NPDES) Permit requirements), as well as features that will be incorporated into the project to meet those 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 land uses for which permits have been granted)?

Potentially Significant Impact. The project is located in the western periphery of the Long Valley Groundwater Basin and groundwater generally flows west to east.[13] The groundwater on the site ranges from approximately 4.5 to 21 feet below grade.[14] Given that the subsurface investigation was performed in the months of October and November (after snowmelt runoff) groundwater levels and flow are not anticipated to abate. Given the depth of groundwater on the site and the proposed subterranean parking, dewatering of the site will be

[13] *LSA Associates, Inc. 1997. Environmental Assessment for Mammoth Mountain Ski Area Base VII Expansion Project. February 1997.*

[14] *Preliminary Geotechnical Investigation, Sierra Geotechnical Services, Inc., December 2005.*

necessary. In addition, the Mammoth Community Water District (MCWD) Well 16 is located on the southern portion of the project site, adjacent to Meridian Boulevard. This well provides potable water for the Mammoth Lakes Community.[15] The project would result in the increase of impervious surfaces on the site, which could substantially reduce the recharge potential. Therefore, a discussion regarding groundwater issues will be included in the Draft EIR/EA.

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?

Potentially Significant Impact. Surface water currently flows toward the existing parking lot and detention basins. There are no streams or rivers on or in the vicinity of the site. There are two existing manmade detention basins, located on U.S. Forest Service Lot 7. Project construction would alter the existing drainage pattern of the site. Erosion and runoff from construction of the project could result in a temporary impact the manmade basin. Upon completion of construction, the project would result in an increase in impervious area as compared to existing conditions. Development of the site would alter existing drainage patterns. Therefore, drainage will be analyzed in the Draft EIR/EA.

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?

Potentially Significant Impact. As previously discussed, there are no streams or rivers on or in the vicinity of the site. However, the project would alter the existing drainage pattern of the site during construction and operation. Therefore, drainage will be analyzed in the Draft EIR/EA.

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?

Potentially Significant Impact. As previously indicated, the project would alter the existing drainage pattern and could result in an increase in runoff from the site. An analysis of the amount of runoff that would occur with the project compared with existing conditions will be provided in the Draft EIR/EA. The Draft EIR/EA will identify the existing stormwater drains

[15] *Personal communication, Gary Sisson, MCWD, November 28, 2005.*

that serve the site, the capacity of these lines, and the project's contribution to flows within these lines. As indicated above, a discussion regarding water quality will be included in the Draft EIR/EA.

f) Otherwise substantially degrade water quality?

Potentially Significant Impact. As previously discussed, the construction and operation of the project could degrade water quality. Construction runoff from disturbed areas could contain silt and debris. Runoff from development could also contain pollutants from motor vehicles, such as petroleum hydrocarbons, glycol, and dissolved heavy metals. An analysis regarding water quality will be included in the Draft EIR/EA.

g) Place housing within a 100-year flood plain as mapped on federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

No Impact. The project site is not located in an area mapped as a 100-year flood corridor.[16] Therefore, the proposed project would not place housing within a 100-year flood plain. No further analysis is warranted.

h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

No Impact. As stated above in Response VIII.g, the project site is not located within a FEMA designated 100-year flood plain. Therefore, the project would not place structures within a 100-year flood plain, nor would it impede or redirect flood flows. No further analysis of this issue is required.

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?

No Impact. As stated above in Responses VIII.g and h, the project would not be located within a FEMA designated 100-year flood plain. There are no existing or future dams and levees located in close proximity to the project site. Therefore, the location of the project would not

[16] *Town of Mammoth Lakes, 2005. Draft Program Environmental Impact Report for the Town of Mammoth Lakes 2005 General Plan Update.*

expose people or structures to a significant risk of loss, injury or death involving flooding. No further analysis of this issue is required.

j) Inundation by seiche, tsunami, or mudflow?

No Impact. A seiche is an oscillation of a body of water in an enclosed or semi-enclosed basin, such as a reservoir, harbor, lake, or storage tank. A tsunami is a great sea wave, commonly referred to as a tidal wave, produced by a significant undersea disturbance such as tectonic displacement of a sea floor associated with large, shallow earthquakes. Mudflows result from the downslope movement of soil and/or rock under the influence of gravity. The project site is relatively distant from the ocean, not in the vicinity of a reservoir, harbor, lake, or storage tank capable of creating a seiche and is not positioned downslope from an area of potential mudflow. Therefore, no further analysis with regard to these issues is necessary.

IX. LAND USE AND PLANNING. *Would the project:*

a) Physically divide an established community?

Less Than Significant Impact. The majority of the site, approximately 3.46 acres, is located within the urban growth boundary (UGB) of the Town and is designated Resort in the Town's adopted General Plan. The site is zoned Resort. The remaining 2.39 acres of the site is administered by the U.S.D.A. Forest Service. Existing uses on the site include a surface parking lot and the temporary Little Eagle Base Lodge facility. The site would replace the existing temporary facility with a permanent facility. Existing land uses surrounding the site include residential and resort uses. More specifically, single-family homes are located to the north, the Juniper Springs Resort is located to the west, and multi-family residences are located to the south. The Mammoth Community Water District Ground Water Treatment Plant No. 2 is located to the east. The Mammoth Loop Trail is located to the north of the Treatment Plan and runs to the west ending at Majestic Pines Road directly across from the site. The project would not introduce buildings or infrastructure that would physically divide the existing residential and resort community. Therefore, no further analysis of this issue is necessary.

b) Conflict with applicable land use plan, policy or regulation of an agency with jurisdiction over the project (including but not limited to the general plan, specific plan, coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

Potentially Significant Impact. As indicated above, the site is located within the Town's UGB, with a small portion located on U.S.D.A. Forest Service land. The Town portion of the site is designated Resort in the adopted General Plan and zoned Resort except for Lot 87, which is designated Low Density Residential (LDR) and zone Single Family Residential. The site is proposed to retain the Resort designation with the Town's 2005 General Plan Update. However, Lot 87 would require a General Plan amendment to rezone it from Residential Singe Family to Resort. The Resort designation allows mixed visitor oriented uses, including visitor housing/lodging, tourist-oriented commercial and recreation uses. Commercial uses within the Resort designation are to be designed primarily to support residential occupancies within the same resort complex. The site is also located within the Juniper Ridge Master Plan Area. The project would require an amendment to the Juniper Ridge Master Plan with regard to intensity of development, land use, setbacks, parking, and building height.

The 2.39 acre portion of the site that is located on Forest Service land is located in the Mammoth Mountain Ski Area Master Development Plan "The MMSA Development Plan," and the Inyo National Forest Land and Resource Management Plan "The Inyo Forest Plan." Forest Plans link the requirements of laws, regulations, executive orders, policies, and the Forest Service National Strategic Plan to specific National Forests. Forest Plans describe desired resource conditions, management objectives, standards to be followed, suitable land use designations (similar to zoning), and monitoring strategies. In addition, Forest Plans provide a framework to guide site-specific project planning. The project would require non-significant amendment of the Inyo Forest Plan and an amendment of the MMSA Master Development Visual Plan.

Therefore, the Draft EIR/EA will provide a discussion of the project's consistency with applicable regional, state and local land use plans and policies, including the Town's proposed 2005 General Plan Update, if necessary. In addition, the project would result in permanent facilities that would provide for a greater intensity of use than currently exists. Given the proposed amendment to the Juniper Ridge Master Plan, the Inyo Forest Plan and the MMSA Master Development Visual Plan, the Draft EIR/EA will include an analysis of the compatibility of the proposed development and activities with the surrounding area.

c) **Conflict with any applicable habitat conservation plan or natural community conservation plan?**

No Impact. There are no habitat conservation plan(s) or natural community conservation plan(s) applicable to the project site or project area. As such, project implementation would not conflict with any habitat conservation plans. Therefore, no further analysis of this issue is necessary.

X. MINERAL RESOURCES. *Would the project:*

a) **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?**

No Impact. Mineral resources in the Mammoth Lakes region include industrial minerals (clay, aggregate, cinders, etc.) and precious metals associated with volcanic rocks and hot spring and geothermal activity. The closest deposit of aggregate and a deposit of precious metals are located north of the Mammoth Yosemite Airport, approximately 8.7 miles from the site. A defined geothermal lease area encompasses a portion of the Town's northeastern area and extends to the north of the Town. There are no mining activities at the project site or in the project vicinity. In addition, the California Geological Survey (CGS) has not classified the site as being located in a principal mineral producing locality.[17] As a result, the project would not result in the loss or availability of such resources considered to be of value to the region or the residents of the state. No additional analysis is warranted.

b) **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?**

No Impact. As previously stated, the project site is not located in an area known to contain significant mineral deposits, nor is it identified as an existing mineral resource extraction area for the State of California.[18] As previously discussed, the CGS has not classified the site as being located in a principal mineral producing locality. As the project site is not a designated

[17] *State of California Department of Conservation, California Geologic Survey, Map of California Principal Mineral Producing Localities: Accessed November 16, 2005. http://www.consrv.ca.gov/CGS/minerals/images/ YellowMap.pdf*

[18] *Town of Mammoth Lakes, Department of Land Use and Planning, Mammoth Lakes General Plan Framework, Draft Environmental Impact Report, October 2005, Figure 4.4-1 and USFS Leases.*

mineral extraction site or a regionally or locally-important significant mineral resource area, no further analysis of this issue is necessary.

XI. NOISE. *Would the project result in:*

a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Potentially Significant Impact. Existing noise sources in the project area include traffic from Meridian Boulevard, flyover aircraft from operations at the Mammoth Yosemite Airport, flyover helicopter operations at Mammoth Hospital, and intermittent noise associated with snow removal and snow grooming activities, snowmaking operations, and potential avalanche control operations. Other noise sources include the use of snowmobiles in the winter. There are existing sensitive receptors adjacent to the project site, including single family residences to the north, the Summit Condominiums to the south, the Juniper Springs Lodge to the west. Sources of noise associated with the proposed project include noise generated during construction activities and noise generated during operation of the project. Long-term operational noise could result from increased traffic volumes as well as potential on-site noise intensive activities (e.g., ski plaza outdoor area, outdoor ice rink, ticketing and ski rental area, skier pickup/dropoff area, and snow removal equipment). In addition, operational noise could occur during summertime outdoor events. Finally, operational noise could also result from mechanical equipment associated with restaurant activities and other building operations, such as the loading dock, which would be situated adjacent to the residential homes to the north of the site. Therefore, an analysis of the potential for these sources of noise to result in significant impacts associated with the exposure of persons to or generation of noise levels in excess of established standards will be included in the Draft EIR/EA.

b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Potentially Significant Impact. As indicated above in Response VI.c., the site is underlaid with glacial deposits below the undocumented fill and alluvium. In general, the glacial deposits consisted of a reddish-brown to grayish-brown, olive-brown to brown, and gray, moist to wet, medium dense to very dense, silty, very fine to coarse sand with abundant cobble clasts and boulders. Sections within this deposit were very well indurated/cemented and severely restricted in the drilling process. The material is considered marginally rippable to non-rippable using a Caterpillar D9 dozer. In general, excavations within 8-feet of the existing ground surface would be achievable using standard earthmoving equipment. However, some blasting may be necessary in the well indurated/cemented zones based on localized conditions in the mass excavation area. Due to the proximity of sensitive receptors from such construction activities, an analysis of the potential impacts associated with groundborne vibration and groundborne noise will be included in the Draft EIR/EA. With regard to project operation, the project would not include the use of equipment that would expose persons to excessive groundborne vibration or noise levels. Therefore, no further analysis of operational groundborne vibration or groundborne noise is required.

c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Potentially Significant Impact. The project would include mixed-use commercial, recreational, and residential development, resulting in an increase of existing intensity and activity levels. The implementation of the project could permanently increase ambient noise levels by adding traffic, on-site activities, such as the ski plaza outdoor area, outdoor ice rink, ticketing and ski rental area, skier pickup/dropoff area, and snow removal equipment, as well as summertime outdoor events. Long-term operational noise also could result from mechanical equipment associated with restaurant activities and other building operations. Therefore, this issue will be analyzed further in a Draft EIR/EA.

d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Potentially Significant Impact. Construction related activities and equipment used during the project's construction phase could result in a temporary or periodic increase in ambient noise levels above existing levels. During the operational phase, stationary equipment could also result in temporary or periodic increase in ambient noise levels. Therefore, further analysis of the potential impacts associated with temporary or periodic increases in ambient noise levels will be evaluated in a Draft EIR/EA.

e) For a project 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, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The project is not located within an airport land use plan area or within two miles of a public airport or public-use airport. The Mammoth Yosemite Airport is located approximately located approximately 8.7 miles east from the project site. Areas exposed to aircraft noise of CNEL 65 and higher remain within the airfield boundary of the Airport on either

Airport property or vacant land controlled by the Airport through leases or use permits. Therefore, no further analysis of this issue is required.

f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The project is not located in the vicinity of a private airstrip. Therefore, the proposed project would not expose people to excessive noise levels associated with the operation of a private airstrip, and no further analysis of this issue is necessary.

XII. POPULATION AND HOUSING. *Would the project:*

a) Induce substantial population growth in an area either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

Potentially Significant Impact. The project would result in an increase in local land development in the area. The proposed project would result in an increase in service-oriented employment opportunities and consequently an increase in the demand for housing. Therefore, an analysis of the projected increase in employment that will occur as a result of the project and the projected increase in the demand for housing will be included in the Draft EIR/EA.

b) Displace substantial numbers of existing housing necessitating the construction of replacement housing elsewhere?

No Impact. The project site is currently developed with a surface parking lot and temporary lodge facilities. Development of the proposed project would not displace any existing residences. Therefore, no further analysis of this issue is required.

c) Displace substantial numbers of people necessitating the construction of replacement housing elsewhere?

No Impact. As discussed above in Response XII.b, the project site does not currently contain residential uses. Project implementation would not displace any residents, but rather would provide transient residential units. Therefore, no further analysis of the potential impacts on the displacement of substantial numbers of people would be required.

XIII. PUBLIC SERVICES. *Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:*

a) Fire Protection?

Less Than Significant Impact. The Mammoth Lakes Fire Protection District (MLFPD) provides fire protection and emergency response to the project site. The MLFPD service area includes approximately 3,000 acres of mountain resort area in and around the Town and over 2,500 acres within the Town. The MLFPD currently responds to calls for service from two fire stations. Fire Station No.1, the primary station, is located at 3150 Main Street and is in the process of being replaced with a larger, more updated facility. The new expanded facility is expected to be completed by the summer of 2006. Fire Station No.2 is located at 1574 Old Mammoth Road and contains housing facilities for full-time employees. The location of the project site is approximately 3.0 miles from both facilities.

Fire ratings range from one to ten, with one representing the best rating.[19] The Town currently has a fire rating of three, as a result of the recent Insurance Service evaluation conducted within the Town. The project could result in an increase in the quantity of emergency calls received by the MLFPD due to the increase in activity and use in the area. The project would comply with the applicable provisions as set forth in the Town Municipal Code (MLMC). In addition, the Town currently collects between $648.00 and $1,349.00 per unit of new development and between $1.79/sq. ft. and $0.86/sq. ft. for non residential uses, which is used to fund the required fire suppression equipment. While the project could result in an increase in calls, the project would not result in development that is unique in the area. The project would be subject to review by the MLFPD to ensure that the project complies with fire requirements. Therefore, further analysis of potential impacts associated with fire protection is not required.

b) Police Protection?

Less Than Significant Impact. Police protection and law enforcement in the Town of Mammoth Lakes are provided by the Mammoth Lakes Police Department (MLPD), the Mono County Sheriff's Department (MCSD), and the California Highway Patrol (CHP). The MLPD provides all non-traffic related services for the project area. Criminal investigation calls, the primary job function of the MLPD, increase during the peak visitor months. MLPD is

[19] *Chief Harold Ritter, MLFPD, Personal Communication, November 5, 2004.*

responsible for all traffic related offences within the Town except for along SR 203 where CHP also provides traffic related services. The MLPD staff is currently comprised of 20 sworn officers, two non-sworn investigators and one Animal Control officer, all of whom operate out of a leased facility on Old Mammoth Road. Typically, two to four sworn officers are on duty at any one time. Dispatches for both the MLPD and MCSD are routed by Mono County. The MLPD plans to construct an approximately 12,500 square foot public safety facility that would be designed with a jail, holding cells, and administrative offices on land that the MLPD owns within the Town. The facility would likely be complete in 2009.[20]

The increase in visitors resulting from implementation of the project could result in a greater volume of emergency calls for police services and could potentially impact police protection and law enforcement services and facilities. The MLPD strives to provide a sworn-officer to resident ratio of 0.8 to 1,000 for permanent residents and fractional ownership units, 1.6 to 1,000 for seasonal residents, 0.4 to 1,000 for second home residents and visitors. As indicated in the Project Description, the project would either be a combination of hotel/fractional condominium units or a hotel. The two scenarios would result in a similar demand for police services, with the hotel scenario resulting in a slightly greater demand. The hotel scenario would provide 213 rooms and based on two visitors per room, the project would generate 426 visitors. Based on the MLPD ratio of 0.4 officers/1,000 visitors, the project would generate a demand for 0.17 officers. (The hotel/fractional condominium unit scenario would generate a demand of 0.1664 officers.[21]) However, the Town currently collects between $473.00 and $788.00 per residential unit and between $0.78/sq. ft. and $0.14/sq. ft. for non residential uses. The development impact fees would serve to mitigate potential impacts to police services. Therefore, no further analysis of potential impacts associated with police protection is required.

c) Schools?

Less Than Significant Impact. The Town is located within the jurisdiction of the Mammoth Unified School District (MUSD). The MUSD provides education to students in grades kindergarten (K) through grade 12 with facilities that include Mammoth High School, Mammoth Middle School, Mammoth Elementary School, Sierra High School, and the Mammoth Olympic Academy for Academic Excellence. The total current enrollment in MUSD schools is approximately 1,191 students in grades K through 12, slightly below the current estimated

---

20 *Chief Donnelly, Mammoth Lakes Police Department, Personal Communication, January 3, 2006.*

21 *The hotel/fractional condominium unit scenario would generate the following demand: 62 condo units with 4 persons/unit = 248 persons x 0.4/1,000 (248/1,000 x 0.4) = 0.0992 + 21 fractional units with 4 persons/unit = 84 persons x 0.8/1,000 (84/1,000 x 0.8) = 0.0672. The total demand under this scenario would be 0.1664 officers.*

capacity of 1,290 students.[22] The current capacity number is based on the highest number of students accommodated in a school year by the MUSD. In addition, MUSD is currently completing a land trade with the U.S. Forest Service for approximately 11 acres of land that could be used for expansion of an existing facility. The MUSD currently maintains an average pupil to teacher ratio throughout the District of 20 to one. The average per pupil spending throughout the District is approximately $7,425 per student per year, including approximately $1,400 per student in federal and state aid for categorical, special education, and support programs. Development of the project would result in an increase in employees, which would result in an indirect demand for additional housing. The additional housing could generate additional students within the MUSD service area.

However, Senate Bill 50 (SB 50), enacted in 1998, is a program for funding school facilities largely based on matching funds. SB 50 allows the MUSD to levy a fee, charge, dedication, or other requirement against any development project within its boundaries, for the purpose of funding the construction or reconstruction of school facilities. The current fees as of 2005 collected by the Town on behalf of MUSD are $2.24/sf for residential and $0.34/sf for non-residential. The payment of these fees by a developer serves to mitigate all potential impacts on school facilities that may result from implementation of a project to levels that are less than significant (Government Code Section 65995). Therefore, no further analysis of potential impacts associated with schools is required.

d) Parks?

Less Than Significant Impact. The Mammoth Mountain Ski Area is one of the nation's leading ski resorts, with 1.25 million skier visits during the 2003 ski season.[23] The project would enhance the availability of recreational facilities in the Town through the provision of a permanent lodge that would replace the existing temporary facility. The project would not result in an increase in the capacity of the portal. The project would include on-site active and passive recreational opportunities, including a pool, spas, fitness centers, and landscaped open spaces. With regard to local parks, the Town provides public recreation facilities for use by the general public. The existing park areas, which are owned and operated by the Town, equal approximately 18 acres. In addition, there are 4 acres at Mammoth Creek Park and 12.5 acres at Shady Rest Park that are not owned but are operated by the Town under a Special Use Permit from the USFS. In addition, Whitmore Park, which is 18.66 acres, is operated jointly by the Town and Mono County on land leased from the Los Angeles Department of Water and Power. In total, there are over 53 acres of park and recreation land currently developed. The project would generate employees, which could increase the Town population. However, the existing

[22] *Patricia Henderson, MUSD, Personal Communication, November 10, 2005.*

[23] *Ibid.*

park areas would not be significantly impacted from employee growth due to the recreational opportunities available in the area. Therefore, no further analysis is required.

e) Other public services?

Less Than Significant Impact. Other public services potentially impacted include public libraries, hospitals/healthcare, and public roadway maintenance. Additional discussions of roadway impacts are provided in Response XV, Transportation and Traffic. The Mammoth Lakes Branch Library, located at 960 Forest Trail next to the Mammoth Lakes Community Center, serves the Town and surrounding communities. The library is a branch of the Mono County Library and is operated in conjunction with the Mono County Office of Education under the direction of the Mono County Superintendent of Schools. The latest remodel occurred in 1996 and expanded the building to approximately 4,700 square feet. The current structure cannot be expanded further and there is no adjacent land for a new building. The library is currently at capacity with no shelf space for new materials.[24] A second library facility was opened in August 2004 in the Crowley Lakes community. Known as the Crowley Library at Hilton Creek, the library facility was not designed to expand or replace the Mammoth Lakes Branch Library and provides only limited service to Crowley Lakes residents. A parcel of land has been purchased to accommodate a new library. It is anticipated that construction of the new library could begin as early as spring of 2006. Development associated with the project would result in an increase in transient population and a potential increase in demand for library services due to an indirect demand for new housing. However, the Town currently collects between $448.00 and $2,593.00 per residential unit to mitigate potential impacts to libraries. Therefore, no further analysis of potential impacts associated with library capacity is required.

Roadway maintenance within the community is provided by the Town, and includes road repair, maintenance, and snow removal. Roadway maintenance and snow removal on private roads and private property is the responsibility of the land owners. The project would not result in an increase in the demand for roadway maintenance as the infrastructure is currently in place and use. Given that the project would not result in an increase in levels of roadway maintenance, no additional analysis is required.

[24] *Diane Hurlburt, Mammoth Lakes Branch Library, Personal Communication, November 5, 2004.*

XIV. RECREATION

a) Would the project 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?

Less Than Significant Impact. As discussed above in section XIII.d. Parks, the project would enhance the availability of recreational facilities. The Town of Mammoth Lakes is an alpine resort community located on the eastern side of the Sierra Nevada Mountains and situated in a basin at the base of Mammoth Mountain. The Mammoth Mountain Ski Area is one of the nation's leading ski resorts, with 1.25 million skier visits during the 2003 ski season.[25] The proposed project would enhance the Town's current recreational capacity by replacing the existing temporary facility with a permanent facility and improving the available resort infrastructure and related amenities. The project is proposed to include on-site active and passive recreational opportunities, including a pool, spas, fitness centers, and landscaped open spaces. Even though the project would result in an indirect demand for housing due to an increase in employees, the project would not result in a substantial increase in the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur. Therefore, no further evaluation is required.

b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

Less Than Significant Impact. As previously discussed, the project is proposed to include on-site active and passive recreational opportunities, including a ski resort, associated pool, day spa, fitness center, and landscaped open spaces. These amenities would be constructed as part of the project. In addition, as discussed in Response XIV.a, above, the project would enhance recreation facilities in the Mammoth Lakes area. Even though the project would increase the transient population for the area, the increase would not result in the need for the construction or expansion of existing recreational facilities. As such, no further analysis is required.

[25] *Ibid.*

XV. TRANSPORTATION AND CIRCULATION. *Would the project:*

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 of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?

Potentially Significant Impact. The project would result in the replacement of the existing temporary facility with a permanent facility. Given the proposed mix of uses and the proposed increase in intensity of development at the site, the project could result in potentially significant impacts associated with a substantial increase in traffic or an exceedance of level of service standards. Therefore, a traffic study will be prepared. Project-generated traffic volumes will be based on the amount and type of land uses proposed by the project. Project-generated traffic will be compared to traffic generation associated with existing facility at the site. The analysis of traffic impacts will identify key intersections, quantify existing and future traffic conditions at those locations, identify impacts caused by the addition of project-generated traffic, and identify mitigation measures to reduce any potentially significant impacts generated by the project, as appropriate and where feasible. Consistent with traffic studies that have been prepared for the Town in the past, the traffic study will be primarily based upon typical winter Saturday p.m. peak-hour traffic volumes. However, as the project is intended to be a four-season resort, a qualitative analysis of summer traffic conditions will be provided.

b) Exceed, either individually or cumulatively, a level of service standard established by the Town for designated roads or highways?

Potentially Significant Impact. As indicated above, the project would result in the replacement of the existing temporary facility with a permanent facility. Given the proposed mix of uses and the proposed increase in intensity of development at the site, the project could result in potentially significant impacts associated with a substantial increase in traffic or an exceedance of level of service standards. Therefore, project implementation could individually or cumulatively affect the LOS standard established by the Town for specific roads or highways. The traffic study will include a project and cumulative analysis, which will be included in the Draft EIR/EA.

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?

No Impact. As discussed previously, the closest airport to the project site is the Mammoth Yosemite Airport, which is located approximately 8.7 miles southwest of the project site. The project site is not located within the Planning Boundary of the Mammoth Yosemite

Airport. The project does not propose any uses that would increase the frequency of air traffic or alter air traffic patterns. As such, safety risks associated with a change in air traffic patterns would not occur and no further analysis of this issue is necessary.

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Potentially Significant Impact. There are no existing hazardous design features such as sharp curves or dangerous intersections on-site. However, Majestic Pines Road has a sharp curve within close proximity to the site. Potential traffic hazards that could occur during project construction would be short-term in nature. While the project does not include the creation of any roadway design hazards, the project would result in vehicles, including delivery trucks, crossing Majestic Pines Road in proximity to the sharp curve. The proposed circulation could result in an increase in hazards in the project vicinity. Therefore, further analysis of this issue will be included in the Draft EIR/EA.

e) Result in inadequate emergency access?

Less than Significant Impact. Two year-round emergency evacuation routes serve the Town. State Road 203 and U.S. Highway 395 are the main routes for evacuation, and a secondary evacuation option is provided by the Scenic Loop extending from Minaret Road to U.S. Highway 395. During the summer months, two additional routes are available including Sherwin Creek Road and the Sawmill cutoff, both of which are graded dirt roads.[26] The project would comply with applicable Town of Mammoth Lakes Fire Department codes for emergency vehicle access, resulting in adequate emergency access to the site. In addition, the project would not impede emergency access for adjacent or surrounding properties during construction or operation. As such, the project would result in a less than significant impact with respect to emergency access and no further analysis of this issue is necessary.

f) Result in inadequate parking capacity?

Potentially Significant Impact. The current surface parking lot provides approximately 225 parking spaces. The project proposes a 246,250-square-foot, with up to 544-spaces, 3-level, subterranean parking garage. Of the 544 underground spaces, approximately 318 would be for the commercial and day-skier parking component of the project. The remaining parking (226 spaces) would be provided for the on-site residential/hospitality uses. The Juniper Ridge Master

[26] *Communication with Bill Taylor, Town of Mammoth Lakes Community Development Department, February 2005.*

Plan requires that the project comply with Municipal Code parking requirements. Given that shared parking is anticipated due to the integration of uses, a parking analysis will be completed and will be included in the Draft EIR/EA.

g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

Potentially Significant Impact. Currently, public transportation is provided to the site. The project would include a bus drop off area parallel to Meridian Boulevard. In terms of pedestrian circulation, the project would extend the Mammoth Loop Trail through the site. The Trail would be constructed from Majestic Pines Road, across from where the Trail currently ends, along the northwest side of the lodge to the end of the site. In addition, the project would include a pedestrian link from the northern end of the lodge to the single family neighborhood to the north of the site. The trail would intersect with the Mammoth Loop Trail. The project would support alternative transportation. However, the project would include a truck turn-out that could result in conflict between trucks and the recreation loop. Therefore, further analysis of consistency with adopted policies, plans, or programs supporting alternative transportation will be included in the Draft EIR/EA.

XVI. UTILITIES AND SERVICE SYSTEMS. *Would the project:*

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

Potentially Significant Impact. The Mammoth Community Water District (MCWD) owns, operates and maintains the wastewater collection and treatment systems for the Town, including pump stations and over 35 miles of sewer mains and interceptors.[27] The wastewater treatment facility for the Town provides advanced secondary treatment, which includes biological treatment, filtration, and disinfection through utilization of chlorine. The existing wastewater treatment facility is designed to provide treatment for peak daily flows of 3.0 million gallons per day (mgd) and the current average daily flow is 1.4 mgd with a peak daily flow of 2.4

[27] *Town of Mammoth Lakes, 2005. Draft Program Environmental Impact Report for the Town of Mammoth Lakes 2005 General Plan Update.*

mgd.[28] An expansion of the wastewater treatment plant is planned for completion early 2006, increasing the design capacity of the treatment facility to 4.9 mgd.[29]

The project, which would replace the existing temporary facility with a permanent lodge, would result in an increase of wastewater generated at the site compared with existing conditions. The Draft EIR/EA will assess the proposed project's impacts with respect to wastewater treatment. The incremental quantity of wastewater generated by the proposed project will be estimated and compared with available treatment capacity. The ability of existing and proposed wastewater infrastructure to accommodate the project's incremental flow will also be assessed based on data provided by the wastewater treatment provider. The analysis will include a discussion of the wastewater infrastructure plan and improvements proposed as part of the project to adequately serve the wastewater needs of the project site.

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Potentially Significant Impact. The project would generate an increase in the demand for wastewater and water services. The project would result in an increase in the intensity of development on the site. With regard to wastewater, the incremental quantity of wastewater generated by the proposed project will be estimated and compared with available treatment capacity. The ability of existing and proposed wastewater infrastructure to accommodate the project's incremental flow will also be assessed based on data provided by the wastewater treatment provider. The analysis will include a discussion of the wastewater infrastructure plan and improvements proposed as part of the project to adequately serve the wastewater needs of the project site.

The analysis of potential impacts associated with water will quantitatively estimate the net increase in demand for water generated by the proposed uses. MCWD will be contacted to identify the adequacy of existing water supply and their ability to accommodate the demand for water generated by the project. A discussion of relevant state regulations regarding water supply will also be provided.

[28] *Ibid.*

[29] *Gary Sisson, MCWD, Personal Communication, January 5, 2006.*

c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Potentially Significant Impact. The project would result in an increase in the amount of impervious surface on the site. Therefore, the project would result in an increase in the quantity of stormwater run off. The stormwater from project construction and operations either could drain to the existing detention basins on Lot 7, percolate into the soils, or be diverted to existing infrastructure. As such, potential impacts to the existing stormwater drainage system and related capacity requirements will be analyzed in the Draft EIR/EA.

d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

Potentially Significant Impact. The Mammoth Community Water District (MCWD) is the water supplier (public water system) for the Town of Mammoth Lakes. The project would result in an increase in the level of development and intensity of uses at the site. Therefore, the project would generate an increase in the demand for water as compared with existing conditions. Further analysis with regard to water demand from the project will be included in the Draft EIR/EA.

e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

Potentially Significant Impact. The project would generate an increase in the demand for wastewater services. The project would result in an increase in the intensity of development on the site. As indicated previously, an analysis regarding wastewater will be provided in the Draft EIR/EA. The incremental quantity of wastewater generated by the proposed project will be estimated and compared with available treatment capacity. The ability of existing and proposed wastewater infrastructure to accommodate the project's incremental flow will also be assessed based on data provided by the wastewater treatment provider. The analysis will include a discussion of the wastewater infrastructure plan and improvements proposed as part of the project to adequately serve the wastewater needs of the project site.

f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Less Than Significant Impact. Solid waste disposal service for the Town of Mammoth Lakes is currently contracted to Mammoth Disposal Inc. Solid waste is disposed at the Benton

Crossing Landfill, which is located within Mono County. The landfill has a remaining capacity of 1.7 million cubic yards of compacted waste and is anticipated to have the capacity to accommodate the Town's waste generation and disposal needs for the next 20 years.[30] In addition, the Town has an option for five years at the Pumice Valley Landfill. With the existing capacity in the Benton Crossing Landfill as well as the option for disposal for five years at the Pumice Valley Landfill, there is adequate landfill capacity for the project population. While the project would generate an increase in the amount of solid waste disposed of at the landfill, the project would not result in the need to construct a new landfill or expand existing facilities to accommodate the project's solid waste disposal needs due to recycling efforts. An organized recycling program would be implemented throughout the proposed facility to include the collection and redemption of CRV plastic, glass and aluminum. Permanent recycling bays would be built into public food service areas for guest use, as well as public indoor and outdoor containers to be sited alongside trash containers, including portable containers for events. Back of house collection containers would also be sited in areas generating recyclables, including staff break rooms, offices and food service. Mixed paper and cardboard would also be collected where generated, including offices, food service and retail locations. All CRV materials, mixed paper and cardboard would be taken to Mammoth Disposal's recycling facility for regular redemption by staff or contracted recycling service provider. Maintenance areas would also have programs and containers for collecting and properly disposing of universal and hazardous wastes, such as used batteries, fluorescent lamps, motor fluids, unused cleaning and landscaping supplies, and painting materials. With the proposed recycling, the project would not generate an increase in the amount of solid waste disposed of at the landfill, such that the project would result in the need to construct a new landfill or expand existing facilities. Therefore, no additional analysis is required.

g) Comply with federal, state, and local statutes and regulations related to solid waste?

Less Than Significant Impact. Solid waste management is guided by the California Integrated Waste Management Act of 1989 that emphasizes resource conservation through reduction, recycling, and reuse of solid waste. The Act requires that localities conduct a Solid Waste Generation Study (SWGS) and develop a Source Reduction Recycling Element (SRRE). In 1989, Assembly Bill 939 (AB 939), known as the Integrated Waste Management Act, was passed because of the increase in waste stream and the decrease in landfill capacity. AB 939 mandates a reduction of waste being disposed and establishes an integrated framework for program implementation, solid waste planning, and solid waste facility and landfill compliance. The Town operates the waste collection and recycling program in accordance with AB 939, but the Town does not currently comply with AB 939 in terms of achieving a 50 percent diversion

[30] *Ibid.*

rate for solid waste. However, the project would comply with applicable federal, state, and local statutes and regulations regarding solid waste. In addition, recycling collection facilities for visitors would be included as part of the project. The amount of waste generated by the project would be reduced through the implementation of an organized recycling program targeting a variety of material types, which is discussed above. In addition, the recycling efforts would being with construction debris, which would be separated by material type for recycling at Benton Crossing Landfill. All facilities would have public and back of house collection of plastic, glass, aluminum, mixed paper and cardboard. Universal and hazardous wastes generated by routine maintenance operations would also be collected for recycling as required by law. Lastly, all rooms would contain marketing messages asking guests to recycle in the provided containers and all staff would be educated on recycling operations. The project would comply with federal, state, and local regulations related to solid waste. Therefore, no additional analysis is required.

XVII. MANDATORY FINDINGS OF SIGNIFICANCE

a) **Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?**

Potentially Significant Impact. Based on the analysis contained in this Initial Study, the project has the potential to result in significant impacts with regard to aesthetics, air quality, biological and cultural resources, hydrology/water quality, land use, noise, population/housing, transportation/traffic, and utilities. As a portion of the project is located in the Inyo National Forest, managed by the US Forest Service, a joint EIR/EA will be prepared to analyze these potentially significant impacts.

b) **Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects).**

Potentially Significant Impact. The potential for cumulative impacts occurs when the independent impacts of the project are combined with the impacts of related projects in proximity to the project site resulting in impacts that are greater than the impacts of the project alone. Located within the vicinity of the project site are other past, current and/or probable future projects, whose development, in conjunction with that of the proposed project, may contribute to potential significant cumulative impacts. In evaluating the potential for cumulative impacts, environmental issues can be grouped together, to a certain extent, based on the nature of the potential impacts as analyzed in this Initial Study. Some aspects of the proposed project have been identified as having the potential for significant environmental impacts and will be analyzed and documented in an EIR. Therefore, the potential for cumulative impacts related to aesthetics, air quality, biological resources, cultural resources, hydrology, land use and planning, noise, transportation and circulation, and utilities and service systems (water supply, wastewater, and stormwater), resulting from the project in conjunction with related projects cannot be fully determined in this Initial Study and must also be analyzed and documented in the EIR.

Cumulative impacts are concluded to be less than significant for those issues for which it has been determined that the project would have no contributory impact.

Cumulative development in the area could increase the potential for certain environmental impacts by potentially increasing the number of people exposed to such impacts. For example, cumulative development in the area would increase the overall potential for exposure to seismic hazards by potentially increasing the number of people exposed to seismic hazards. Even so, impacts associated with geologic and seismic issues are typically confined to a project site or a very localized area and do not affect off-site areas associated with the related projects or ambient growth. In addition, all projects are subject to established guidelines and regulations pertaining to seismic hazards. As such, compliance with applicable state and Town regulations would preclude significant cumulative impacts with regard to geology and soils.

Similarly, cumulative development could increase the overall potential for exposure to hazards and hazardous materials by changing site operations. However, projects are subject to established guidelines and regulations pertaining to hazards and hazardous materials. As such, compliance with applicable regulations would preclude significant cumulative impacts from hazards and hazardous materials. In summary, environmental issues meeting the criterion of less than significant and resulting in no cumulative contributory impact include agricultural resources, geology/soils, hazards and hazardous materials, mineral resources, public services and recreation.

Some aspects of the project have been identified as having the potential for significant environmental impacts and their associated potential cumulative impacts will be analyzed and documented in a draft EIR/EA. Therefore, the potential for cumulative impacts related to aesthetics, air quality, hydrology/water quality, land use, noise, population/housing, transportation/traffic, and public utilities resulting from the project in conjunction with related projects will be analyzed in the Draft EIR/EA.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Potentially Significant Impact. Based on the above discussion, construction and operation of the proposed project could potentially result in environmental impacts, which may cause adverse effects on human beings, either directly or indirectly. Further evaluation of potential impacts associated with environmental effects on human beings, including impacts related to aesthetics, air quality, biological and cultural resources, hydrology/water quality, land use, noise, population/housing, transportation and utilities/service systems, will be included in the Draft EIR/EA.

STATE OF CALIFORNIA
Governor's Office of Planning and Research
State Clearinghouse and Planning Unit

Arnold
Schwarzenegger
Governor

Sean Walsh
Director

Notice of Preparation

RECEIVED
JAN 17 2006
TOWN OF MAMMOTH
COMMUNITY DEVELOPMENT DEPARTMENT

January 11, 2006

To: Reviewing Agencies

Re: Eagle Lodge Base Area Development Project
SCH# 2006012041

Attached for your review and comment is the Notice of Preparation (NOP) for the Eagle Lodge Base Area Development Project draft Environmental Impact Report (EIR).

Responsible agencies must transmit their comments on the scope and content of the NOP, focusing on specific information related to their own statutory responsibility, within 30 days of receipt of the NOP from the Lead Agency. This is a courtesy notice provided by the State Clearinghouse with a reminder for you to comment in a timely manner. We encourage other agencies to also respond to this notice and express their concerns early in the environmental review process.

Please direct your comments to:

Sonja Porter
City of Mammoth Lakes
P.O. Box 1609
437 Old Mammoth Road
Mammoth Lakes, CA 93546

with a copy to the State Clearinghouse in the Office of Planning and Research. Please refer to the SCH number noted above in all correspondence concerning this project.

If you have any questions about the environmental document review process, please call the State Clearinghouse at (916) 445-0613.

Sincerely,

D. Driemeyer

for Scott Morgan
Project Analyst, State Clearinghouse

Attachments
cc: Lead Agency

Document Details Report
State Clearinghouse Data Base

SCH# **2006012041**
Project Title Eagle Lodge Base Area Development Project
Lead Agency Mammoth Lakes, City of

Type **NOP** Notice of Preparation

Description Mammoth Mountain Ski Area proposes to construct a permanent base lodge facility that would include visitor lodging and a mix of ski-related uses, including food service, rental/demo/repair shop, retail, ski school and day care, ticketing/lobby, administrative space, and restrooms. In addition, the lodge would include a convenience market, restaurant, day spa and locker club.

Lead Agency Contact

Name Sonja Porter
Agency City of Mammoth Lakes
Phone 760.934-8989 ext. 286 ***Fax***
email
Address P.O. Box 1609
437 Old Mammoth Road
City Mammoth Lakes ***State*** CA ***Zip*** 93546

Project Location

County Mono
City Mammoth Lakes
Region
Cross Streets Meridian Boulevard and Majestic Pines Road
Parcel No. 32-040-12, 32-040-08
Township ***Range*** ***Section*** ***Base***

Proximity to:

Highways U.S. Hwy. 395, State Route 203
Airports
Railways
Waterways
Schools
Land Use GPD: Resort, Lot 87 is designated Low Density Residential; Z: Resort

---

Project Issues Aesthetic/Visual; Biological Resources; Archaeologic-Historic; Public Services; Noise; Water Quality; Air Quality; Landuse; Population/Housing Balance; Traffic/Circulation

---

Reviewing Agencies Resources Agency; Department of Conservation; Office of Historic Preservation; Department of Parks and Recreation; Department of Water Resources; Native American Heritage Commission; Department of Health Services; Department of Fish and Game, Region 6 (Inyo & Mono Region); California Highway Patrol; Caltrans, District 9; Regional Water Quality Control Bd., Region 6 (Victorville)

Date Received 01/11/2006 ***Start of Review*** 01/11/2006 ***End of Review*** 02/09/2006

Note: Blanks in data fields result from insufficient information provided by lead agency.

NOP Distribution List

County: Mono **SCH#** 2006012041

Resources Agency

- [x] **Resources Agency** Nadell Gayou
- [ ] **Dept. of Boating & Waterways** David Johnson
- [ ] **California Coastal Commission** Elizabeth A. Fuchs
- [ ] **Colorado River Board** Gerald R. Zimmerman
- [x] **Dept. of Conservation** Roseanne Taylor
- [ ] **California Energy Commission** Roger Johnson
- [ ] **Dept. of Forestry & Fire Protection** Allen Robertson
- [x] **Office of Historic Preservation** Wayne Donaldson
- [x] **Dept of Parks & Recreation** Environmental Stewardship Section
- [ ] **Reclamation Board** DeeDee Jones
- [ ] **S.F. Bay Conservation & Dev't. Comm.** Steve McAdam
- [x] **Dept. of Water Resources** Resources Agency Nadell Gayou
- [ ] ______________ Conservancy

Fish and Game

- [ ] **Depart. of Fish & Game** Scott Flint Environmental Services Division
- [ ] **Fish & Game Region 1** Donald Koch
- [ ] **Fish & Game Region 2** Banky Curtis
- [ ] **Fish & Game Region 3** Robert Floerke
- [ ] **Fish & Game Region 4** Mike Mulligan
- [ ] **Fish & Game Region 5** Don Chadwick Habitat Conservation Program
- [ ] **Fish & Game Region 6** Gabrina Gatchel Habitat Conservation Program
- [x] **Fish & Game Region 6 I/M** Tammy Allen Inyo/Mono, Habitat Conservation Program
- [ ] **Dept. of Fish & Game M** George Isaac Marine Region

Other Departments

- [ ] **Food & Agriculture** Steve Shaffer Dept. of Food and Agriculture
- [ ] **Depart. of General Services** Public School Construction
- [ ] **Dept. of General Services** Robert Sleppy Environmental Services Section
- [x] **Dept. of Health Services** Veronica Ramerlz Dept. of Health/Drinking Water

Independent Commissions,Boards

- [ ] **Delta Protection Commission** Debby Eddy
- [ ] **Office of Emergency Services** Dennis Castrillo
- [ ] **Governor's Office of Planning & Research** State Clearinghouse
- [x] **Native American Heritage Comm.** Debbie Treadway
- [ ] **Public Utilities Commission** Ken Lewis
- [ ] **State Lands Commission** Jean Sarino
- [ ] **Tahoe Regional Planning Agency (TRPA)** Cherry Jacques

Business, Trans & Housing

- [ ] **Caltrans - Division of Aeronautics** Sandy Hesnard
- [ ] **Caltrans - Planning** Terri Pencovic
- [x] **California Highway Patrol** John Olejnik Office of Special Projects
- [ ] **Housing & Community Development** Lisa Nichols Housing Policy Division

Dept. of Transportation

- [ ] **Caltrans, District 1** Rex Jackman
- [ ] **Caltrans, District 2** Marcelino Gonzalez
- [ ] **Caltrans, District 3** Katherine Eastham
- [ ] **Caltrans, District 4** Tim Sable
- [ ] **Caltrans, District 5** David Murray
- [ ] **Caltrans, District 6** Marc Birnbaum
- [ ] **Caltrans, District 7** Cheryl J. Powell
- [ ] **Caltrans, District 8** Dan Kopulsky
- [x] **Caltrans, District 9** Gayle Rosander
- [ ] **Caltrans, District 10** Tom Dumas
- [ ] **Caltrans, District 11** Mario Orso
- [ ] **Caltrans, District 12** Bob Joseph

Cal EPA

Air Resources Board

- [ ] Airport Projects Jim Lerner
  - [ ] Transportation Projects Kurt Karperos
  - [ ] Industrial Projects Mike Tollstrup
- [ ] **California Integrated Waste Management Board** Sue O'Leary
- [ ] **State Water Resources Control Board** Jim Hockenberry Division of Financial Assistance
- [ ] **State Water Resources Control Board** Student Intern, 401 Water Quality Certification Unit Division of Water Quality
- [ ] **State Water Resouces Control Board** Steven Herrera Division of Water Rights
- [ ] **Dept. of Toxic Substances Control** CEQA Tracking Center
- [ ] **Department of Pesticide Regulation**

Regional Water Quality Control Board (RWQCB)

- [ ] **RWQCB 1** Cathleen Hudson North Coast Region (1)
- [ ] **RWQCB 2** Environmental Document Coordinator San Francisco Bay Region (2)
- [ ] **RWQCB 3** Central Coast Region (3)
- [ ] **RWQCB 4** Jonathan Bishop Los Angeles Region (4)
- [ ] **RWQCB 5S** Central Valley Region (5)
  - [ ] **RWQCB 5F** Central Valley Region (5) Fresno Branch Office
  - [ ] **RWQCB 5R** Central Valley Region (5) Redding Branch Office
- [ ] **RWQCB 6** Lahontan Region (6)
  - [x] **RWQCB 6V** Lahontan Region (6) Victorville Branch Office
- [ ] **RWQCB 7** Colorado River Basin Region (7)
- [ ] **RWQCB 8** Santa Ana Region (8)
- [ ] **RWQCB 9** San Diego Region (9)
- [ ] **Other** ______________

Last Updated on 08/10/05

DEPARTMENT OF TRANSPORTATION
District 9
500 South Main Street
Bishop, California 93514
PHONE (760) 872-0785
FAX (760) 872-0754
TTY (760) 872-9043

Flex your power!
Be energy efficient!

January 18, 2006

File: 09-MNO
NOI/NOP
SCH #: 200601204

RECEIVED
JAN 24 2006
TOWN OF MAMMOTH
COMMUNITY DEVELOPMENT DEPARTMENT

Ms. Sonja Porter
Senior Planner
Town of Mammoth Lakes
P.O. Box 1609
Mammoth Lakes, California 93546

Dear Ms. Porter:

Eagle Lodge Base Area Development Notice of Intent/Notice of Preparation for Joint Environmental Assessment/Draft Environmental Impact Report (January 2006)

Thank you for giving the California Department of Transportation (Caltrans) the opportunity to review and comment during the NOI/NOP phase for the Eagle Lodge Base Development Project adjacent to Meridian Boulevard in southwest Mammoth. We appreciate that both traffic and parking are slated for study. In the Traffic Study, please address/consider the following:

- The three probable State Route 203 access points need to be analyzed: Main Street/Lake Mary Road/Minaret Road, Old Mammoth Road/Main Street, and Meridian Boulevard/Main Street. If the use of any one is discovered to be an improvement in overall traffic flow, directional signage for the project could be implemented along with any other recommended mitigation.

- In general, collection of Traffic Impact Fees could be a method for the project to mitigate impacts to both the State and local transportation system.

If you have any questions, I may be contacted at (760) 872-0785. We value a cooperative working relationship in transportation and development matters with the Town of Mammoth Lakes.

Sincerely,

Gayle J Rosander

GAYLE J. ROSANDER
IGR/CEQA Coordinator

c State Clearinghouse
Terry Gess, Caltrans

California Regional Water Quality Control Board
Lahontan Region

Alan C. Lloyd Ph.D.
Agency Secretary

Victorville Office
14440 Civic Drive, Suite 200, Victorville, California 92392
(760) 241-6583 • Fax (760) 241-7308
http://www.waterboards.ca.gov/lahontan

Arnold Schwarzenegger
Governor

File: Environmental Doc Review
Mono County

Sonja Porter
City of Mammoth Lakes
P.O. Box 1609
437 Old Mammoth Road
Mammoth Lakes, CA 93546

February 3, 2006

COMMENTS ON NOTICE OF PREPARATION (NOP) FOR THE EAGLE LODGE BASE AREA DEVELOPMENT PROJECT DRAFT ENVIRONMENTAL IMPACT REPORT (EIR). SCH# 2006012041

Please refer to the items checked for staff comments on the above-referenced project:

[X] Please specifically identify features for the post-construction period that will control stormwater on-site or prevent pollutants from non-point sources from entering and degrading surface or ground waters. The foremost method of reducing impacts to watersheds from urban development is "Low Impact Development" (LID), the goals of which are maintaining a landscape functionally equivalent to predevelopment hydrologic conditions and minimal generation of nonpoint source pollutants. LID results in less surface runoff and less pollution routed receiving waters. Principles of LID include:

- Maintaining natural drainage paths and landscape features to slow and filter runoff and maximize groundwater recharge,
- Reducing the impervious cover created by development and the associated transportation network, and
- Managing runoff as close to the source as possible.

We understand that LID development practices that would maintain aquatic values could also reduce local infrastructure requirements and could benefit energy conservation, air quality, open space, and habitat. Many planning tools exist to implement the above principles, and a number of recent reports and manuals provide specific guidance regarding LID. We request you require these principles to be incorporated into the proposed project design. We request natural drainage patterns be maintained to the extent feasible.

[ ] The proposal does not provide enough information to determine the type of wastewater disposal system that will be used (i.e. septic system, sewer, etc.).

[ ] Discharge of any material other than domestic wastewater to an onsite septic tank wastewater disposal system is prohibited unless a Report of Waste Discharge is filed with the Regional Board.

[ ] The proposed project deals with a non-sewage discharge to land and may need to be regulated by the Lahontan Regional Water Quality Control Board. Therefore, the County must require the proponents to contact the Regional Board for filing of a complete report of waste discharge.

[ ] The proposed project appears to exceed the Regional Board's 500 gallon per acre per day limitation on the discharge to septic tank disposal systems. Please address how this requirement will be met in the document and proposed project design.

[ ] The proposal does not provide enough information to determine if the Regional Board's 500 gallon per acre per day limitation of the discharge to septic tank disposal systems is exceeded. Please address in the document how this requirement will be met.

[ ] The proposed project is located in an area where septic tank disposal systems are prohibited unless an exemption is requested and granted by the Regional Board. If the project proponent intends to request an exemption, the environmental document must contain the information necessary to make the findings for an exemption (Please review the exemption criteria contained in the Water Quality Control Plan for the Lahontan Region (Basin Plan) accessible on the Regional Board's homepage (www.swrcb.ca.gov/rwqcb6).

[X] The project will require development of a Stormwater Pollution Prevention Plan and a NPDES General Construction Stormwater Permit. This permit is accessible on the State Board's Homepage (www.swrcb.ca.gov). Best Management Practices must be used to mitigate project impacts. The environmental document must describe the mitigation measures or Best Management Practices.

[ ] The project may require development of a Stormwater Pollution Prevention Plan and a NPDES General Industrial Stormwater Permit. This permit is accessible on the State Board's Homepage (www.swrcb.ca.gov). Best Management Practices must be used to mitigate project impacts. The environmental document must describe the mitigation measures or Best Management Practices.

[ ] The project appears to propose a discharge of waste to surface water. Therefore an NPDES permit for the project may be necessary. Describe potential impacts to surface water quality and beneficial uses of water. Also describe measures to be taken to reduce pollutant loading to surface waters to meet numerical and narrative water quality objectives contained in the Water Quality Control Plan for the Lahontan Region (www.swrcb.ca.gov/rwqcb6).

[X] The proposed project may result in discharges of waste that may need to be regulated by the Regional Board. Please review the general permits and the Water Quality Control Plan for

the Lahontan Region (Basin Plan) accessible on the Regional Board's homepage (www.swrcb.ca.gov/rwqcb6).
(provide more specific information here on the type of waste or form of regulation)

[ ] Please require written confirmation from the project proponent that they obtain Regional Board concurrence before approving this project.

[X] The project may require a Federal Clean Water Act Section 401 Water Quality Certification from the Regional Board. Application forms can be found at our web site (www.swrcb.ca.gov/rwqcb6)

[X] Please include specific information on impacts to flood plains or wetlands (or in the Lake Tahoe Basin, Stream Environment Zones). The Environmental Document needs to quantify these impacts. Discuss purpose of project, need for stream channel or wetland disturbance, and alternatives (avoidance, minimize disturbances and mitigation). Mitigation must be identified in environmental document including timing of construction. Mitigation must replace functions and values of wetlands lost (at a minimum, 1.5 times the area disturbed should be restored)

[ ] Regional Board staff has determined that this project will not have a significant effect on water quality as proposed.

[ ] Regional Board staff will make additional comments after a more detailed review is complete.

[ ] Project may result in spills that will adversely impact ground and surface waters. Include spill contingency measures in the environmental document.

[X] Other:

- We encourage the developer to implement "Low Impact Development" (LID) principles in the design of the project.

- Please include detailed information on the dewatering of groundwater at the site, and the use or discharge of extracted water. If extracted water will be discharged to surface water or groundwater, the project should be evaluated for impacts to water quality at the discharge location.

Please note that obtaining a permit and conducting monitoring does not constitute adequate mitigation. Development and implementation of acceptable mitigation is required.

Thank you for your attention to these comments. If you have any questions, please contact Mary Dellavalle, Environmental Scientist, at (760) 241-3523.

Sincerely ______________________________
Print Name Cindi Mitton
Title Senior Engineer
Phone No. (760) 241-7413
E-Mail cmitton@waterboards.ca.gov

\\Cactus\vol2\Shared\Units\Mojave\Mary\DRAFTS\Eagle Lodge Base Area Development Project.doc

Mammoth Community Water District
P.O. Box 597, Mammoth Lakes, CA 93546
(760) 934-2596; fax (760) 934-4080

February 3, 2006

Sonja Porter
Senior Planner
Town of Mammoth Lakes
P.O. Box 1609
Mammoth Lakes, CA 93546

Re: Notice of Intent/Notice of Preparation of a Joint Environmental Assessment/Draft Environmental Impact Report for the Eagle Lodge Base Area Development Project

Dear Ms. Porter,

The District has reviewed the Initial Study for the Eagle Lodge Base Area Development Project. We appreciate the opportunity to comment on the scope of the Draft EA/EIR.

After reviewing the project description in the initial study, it appears that the project is proposing an increase of 84 dwelling units from the original Juniper Ridge Master Plan. In order to compare the changes from the original master plan, the District would like to request a description of the number and types of units (condominium, hotel, etc.) in the original master plan compared to the proposed amendments. The District would also like to confirm that the total square feet for commercial uses in the master plan are remaining consistent with the original master plan.

At the request of PCR Services Corp., who will be preparing the Draft EA/EIS, the District will be developing a water assessment for the project. This assessment will be completed before the end of February. Although there is generally enough information in the initial study to prepare a water assessment, this assessment, as well as wastewater flow analysis, would benefit from additional detail regarding proposed water-oriented facilities that may be contained in amenities such as the day spa, locker club, and on-site hotel laundry facilities. In addition, a comparison of current facilities (commercial and restaurant square footage, laundry, restroom facilities, etc.) at the existing Little Eagle Lodge versus the proposed Eagle Lodge would be useful. Any level of detail available on types of commercial uses beyond that which is shown in Table 1 on page A-8 of the initial study would further the reliability of the District's water and wastewater needs analyses.

Projected wastewater flows from the project have not yet been estimated, but the District anticipates the need for improvements in the wastewater collection system due to increased wastewater flows resulting from this project. The main collection line at Old Mammoth Road and Meridian Boulevard is already at capacity and the additional wastewater flows that will result from the project will require a new main line to be constructed from the intersection of Old Mammoth Road down Meridian Boulevard to the wastewater treatment plant at the corner of Meridian Boulevard and SR 203.

District production well 16 is located within the entryway of the proposed project in an underground vault. The District has a 50x55 foot easement for the well 16 site that District personnel will be accessing on a monthly basis, at minimum, for regular water quality testing. In addition, the well pump and about 550 feet of discharge piping may need to be pulled from the vault periodically for pump maintenance and repairs. This will involve the utilization of a well drilling rig and storage of discharge piping in 21 foot sections, which may require a work area of at least 40 square feet. In addition, an 8-inch raw water line and a 12-inch distribution line are located underneath several of the proposed Eagle Lodge facilities and will need to be realigned.

The District encourages a thorough analysis of water quality in the Draft EA/EIR, but doubts that impacts to well 16 will occur. Since this well is constructed with an annular cement seal to 60 feet, the District does not anticipate impacts from shallow groundwater disturbance. However, if the project proposes an on-site geothermal heating well, the District's production well could be effected. A study would be necessary to evaluate for potential pressure changes from pumping in the deep geothermal zone that could draw water from the cold water aquifer.

The maximum proposed building height for associated with the proposed Eagle Lodge development is 77 feet. Water pressure necessary to supply such heights may require a booster pump. The District can assist in the analysis of water pressure needs for the proposed project.

Finally, the District would also like to encourage full compliance with best management practices to control runoff and erosion during construction of the project. Such practices are essential to ensuring high water quality in the Mammoth Basin watershed.

Thank you again for the opportunity to comment on this document. The District is willing to provide any information necessary to assist in the completion of a comprehensive Draft EA/EIR. Please feel free to contact the District if you have any questions.

Sincerely,

Gary Sisson 2/3/06 Ericka Hegeman 2/3/2006

Gary Sisson, General Manager Ericka Hegeman, Environmental Specialist

THE TOWN OF MAMMOTH LAKES CALIFORNIA

POLICE DEPARTMENT

568 Old Mammoth Road • P. O. Box 2799
Mammoth Lakes, California 93546
760-934-2011 • fax: 760-934-2490

January 24, 2006

Town of Mammoth Lakes Community Development Department
437 Old Mammoth Road, Suite R
P.O. Box 1609
Mammoth Lakes, CA 93546

To Whom It May Concern:

In reviewing the initial study prepared by PCR Services Corporation surrounding the proposed development of the Eagle Lodge Base Development Project dated January 2006, there are some concerns that should be addressed surrounding the project. These concerns regard overall police response to the project and the anticipated impact such a project will have on police service levels, for this project in particular, and the community as a whole.

With the opening of the Village, it has become clear that projects of this size have an impact on the police department and place demands on our operations. Not only do the commercial businesses, typically bars/restaurants, impact our officers, but facilities associated with Mammoth Mountain Ski Area also place a higher demand on our officers as they respond to calls for service.

A primary concern from the Police Department perspective is officers responding the Eagle Lodge Base Facility for police related calls during the winter months. Currently, officers spend considerable time responding to the Mammoth Mountain Main Lodge to handle ticket fraud cite and release reports. Typically, officers respond three to four times a week, however can be requested to respond several times a day depending on the number of persons that are detained by MMSA security personnel for ticket fraud. Occasionally, we are requested to respond to the Main Lodge area for other investigations, however ticket fraud is our primary call for service. When officers respond to the Main Lodge it typically takes close to an hour by the time the officer receives the call, responds to the ski area, handles the call and is back in the center of town available for service. This response time can be dramatically increased during stormy conditions or during peak holidays. During this time the remainder of the town is usually staffed by one other patrol officer who may be required to respond to emergency calls for service with no back-up immediately available.

While the Police Department also responds the Canyon Lodge for similar calls, the proximity to Town creates fewer concerns.

Therefore, the Police Department would like this development to include a storefront type office space for police personnel in this development plan. This would allow officers to respond to calls for service and have an office to process reports and effectively deal with the public and MMSA security personnel. With the proposed gondola development that will lead to Eagle Lodge Base Facility, security department detainees could be transported via the gondola to this facility for processing by the police department, thus leaving our patrol staff closer to the center of town for emergency calls for service. Additionally, guests could access the storefront space to file other criminal reports or to have police related concerns addressed. This space could be a shared space with MMSA security personnel, as necessary.

Finally, two 'police vehicles only' parking spaces should be designated adjacent to the lodge, for convenience and emergency access for MLPD officers.

Randy Schienle

Randy Schienle
Police Lieutenant
(760) 934-2011 ext. 16

Gregory R. Applegate, MD

632 Hanley Ave
Los Angeles, Ca
90049
818-908-4937-direct
818-261-1569-cell
818-997-2895 -fax
gapplegate@insighthealth.com
local address: 507 Monterey Pine Drive

RECEIVED
FEB 01 2006
TOWN OF MAMMOTH
COMMUNITY DEVELOPMENT DEPARTMENT

January 26, 2006

Sonya Porter
Senior Planner

Town of Mammoth Lakes,
PO box 1609
Mammoth Lakes, California 935 4 6

Dear Ms. Porter

I am writing in response to your notice of intent/notice of preparation regarding the proposed Eagle Lodge Base Area Development. Almost two years ago, my wife and I purchased a single-family home at 507 Monterey Pine Drive. We love the family neighborhood atmosphere in the quiet, beautiful mountain setting. The clean-air and beautiful views of the mountains drew us to this neighborhood. We felt confident that these attributes would be preserved based on the town's height limitations, setbacks and density limitations. We are also in possession of an agreement made between Mammoth Mountain Ski Area and the homeowners on our street assigned and executed on November 15,1994 by Rusty Gregory of Mammoth Mountain Ski Area, recorded with the Mono County recorder volume 0700 Page 401. This agreement sets a limit on the proposed parking structure "not to exceed eight feet above finished grade". The current proposed base lodge facility including hotel/lodging and retail space rises 75 feet above grade. This will completely eliminate our mountain view and our neighbors view. Instead of a pristine mountain range will see the back of a tall aesthetically unappealing looming structure. The quiet surroundings and air quality will be severely compromised. The added congestion and pollution will certainly spoil the quiet neighborhood. A turnout for eighteen wheel diesel delivery trucks is planned for the back of the building necessitating moving the town bike path closer to the homes on our street. The diesel fumes and noise generated in such close proximity to residential homes is unacceptable. We currently get a lot of trash blowing to into to our backyard from the current parking lot and small base lodge/igloo. Imagine the volume of trash and water runoff flowing into the wetlands adjacent to our home. The woodpeckers, coyotes and deer that frequent the Greenbelt will be adversely affected by this proposal.

In summary, we are vehemently opposed to the Eagle Lodge Base Area Development proposal. The proposed 75 foot structure is will aesthetically ruin the neighborhood. The additional traffic will further stretch the access and egress roads, putting additional traffic path through the Mammoth Vistas I neighborhood along

Kelly Road. The proposed diagonal parking will further narrow and limit access. The diesel eighteen-wheel delivery vehicles will negatively affect the air quality and add additional noise, and necessitate moving the bike path. Can the utilities and service systems handle the additional wastewater, storm water and snow storage? The **wetlands** adjacent to our home and behind the water district building may be compromised. The local wildlife will be displaced from the Greenbelt area. While we are unable to make the scoping meeting, I'd be happy to discuss our concerns further with members of the planning committee or Forest Service.

Respectfully Submitted,

Gregory R. Applegate MD

Gregory R Applegate

Stephen C. Jones
Sharon August Jones
520 West Main Street
Tustin, CA 92780

January 23, 2006

RECEIVED
JAN 25 2006
TOWN OF MAMMOTH
COMMUNITY DEVELOPMENT DEPARTMENT

Sonja Porter, Senior Planner
Town of Mammoth Lakes
P.O. Box 1609
Mammoth Lakes, CA 93566

RE: Initial Study Eagle Lodge Base Area Development

Dear Ms. Porter:

It was disappointing to see the results of your January EIR Study. Here is my perspective on the plans for the Eagle Base area.

We are original owners of Juniper Springs Lodge. Development of a ski lodge at that site was promised when we purchased. It has not happened. I have followed the issues and understand the obstacles, but the bottom line is that the lodge has not happened. That is despite ticket sales at Eagle Lodge which are among the highest in the Mammoth Mountain Ski Area.

In the meantime, the City has approved countless other residences and developments. I think that despite the obstacles, the City and Forest Service has an obligation to finish this project.

I would suggest a moratorium on all development until the City finishes Eagle Lodge, the very first project area in the wave of development since Intrawest's arrival in Mammoth. It's only fair.

Yours truly,

Sharon August Jones

Sharon August Jones

CC: Mike Schlafmann, U.S. Forest Service, Mammoth Ranger District Office

Eagle Lodge Base Area Development Project
Environmental Impact Report – Scoping Meeting

3256 Meridian Boulevard
January 31, 2006

Written Comment Form

The purpose of the public scoping meeting is to identify the range of actions, alternatives, and significant effects to be analyzed in the Draft EIR for the Eagle Lodge Base Area Development Project. The approximately 5.85-acre project site is located just west of the intersection of Meridian Boulevard and Majestic Pines Road. A portion of the site, approximately 2.39 acres, is located within the Inyo National Forest. The area is locally referred to as the Juniper Springs area, or more recently the Eagle Base Area. The project would include visitor lodging and a mix of ski-related uses, including food service, rental/demo/repair shop, retail, ski school and day care, ticketing/lobby, administrative space, and restrooms. In addition, the lodge would include a convenience market, restaurant, day spa and locker club. Development is anticipated to be in one phase over a two-year timeframe beginning in Spring 2007 and ending in Spring 2009.

Comments can be provided verbally at the scoping meeting or in written form. In addition, written comments can be forwarded to the Town. Written comment must be received by February 10, 2006.

In the space below (and on additional pages, if necessary), please provide any written comments you may have concerning the scope of the Draft EIR/EA for the proposed project. Your comments will then be considered during preparation of the Draft EIR/EA.

There is a great need for a lodge in this area.
I think you have addressed most of the needs of the local residents but must add space for seasonal lockers into the finalized plan.
The 77' height of the building is a concern, however if built in a compatible architecture with the area will become part of the vista and will be acceptable.

Name: JOHN J KELLY
Address: 170 HOLIDAY VISTA DR.
PO BOX 100 PMB 393
MAMMOTH LAKES, CA 93546

Please leave this form in the box provided or deliver or mail it to the Town of Mammoth Lakes, Attn: Sonja Porter, P.O. Box 1609, Mammoth Lakes, CA 93566. This form can simply be folded and placed in a mailbox. Please remember to add postage.

Eagle Lodge Base Area Development Project
Environmental Impact Report – Scoping Meeting
3256 Meridian Boulevard
January 31, 2006

Written Comment Form

The purpose of the public scoping meeting is to identify the range of actions, alternatives, and significant effects to be analyzed in the Draft EIR for the Eagle Lodge Base Area Development Project. The approximately 5.85-acre project site is located just west of the intersection of Meridian Boulevard and Majestic Pines Road. A portion of the site, approximately 2.39 acres, is located within the Inyo National Forest. The area is locally referred to as the Juniper Springs area, or more recently the Eagle Base Area. The project would include visitor lodging and a mix of ski-related uses, including food service, rental/demo/repair shop, retail, ski school and day care, ticketing/lobby, administrative space, and restrooms. In addition, the lodge would include a convenience market, restaurant, day spa and locker club. Development is anticipated to be in one phase over a two-year timeframe beginning in Spring 2007 and ending in Spring 2009.

Comments can be provided verbally at the scoping meeting or in written form. In addition, written comments can be forwarded to the Town. Written comment must be received by February 10, 2006.

In the space below (and on additional pages, if necessary), please provide any written comments you may have concerning the scope of the Draft EIR/EA for the proposed project. Your comments will then be considered during preparation of the Draft EIR/EA.

See comments attached

Name: Dennis and Deanna Lamb
Address: 865 Majestic Pines Rd
Mammoth Lakes, CA 93546

Please leave this form in the box provided or deliver or mail it to the Town of Mammoth Lakes, Attn: Sonja Porter, P.O. Box 1609, Mammoth Lakes, CA 93566. This form can simply be folded and placed in a mailbox. Please remember to add postage.

Eagle Lodge Base Area Development Project
Environmental Impact Report-Scoping Meeting
Written Comments prepared by:
Dennis W. and Deanna Lamb

On January 31st we attended the "Scoping Meeting" held at Little Eagle. We have been property owners at Aspen Creek Condos for ten years. We spend significant time both winter and summer in Mammoth Lakes and are very familiar with the location under discussion. We are very frequent skiers, bicyclists, and hikers. In addition to attending the meeting we have downloaded and reviewed the 52 page information package from the Mammoth Mountain web site. We also have examined in detail the handout titled "Initial Study for Eagle Lodge Base Area Development Project". My personal background includes professional expertise in the area of air and ground quality issues and project development and mitigation issues. We would like to provide the following comments:

- We enthusiastically support the Project as presented.
- We find that the Checklist and classification of environmental issues has been appropriately completed.
- Even though we have limited expertise in some areas and professional expertise in others it appears that every issue can be resolved in analysis or mitigation without any significant change in project scope.
- In our opinion many of the issues would be dramatically improved with the project including Issues I.(c), VIII.(c) and (d), and XV.(a)(d) and (f).
- Based on our personal experience our vehicle trips will be reduced year round with the potential provision for groceries, ski school, ice rink, restaurants, and renewed bicycle access to the mountain bike park.

Out of empathy for the visual impacts expressed by one of the homeowners to the North in attendance at the Scoping meeting, we examined the impact from his viewpoint. We were surprised to find that his location has no view. The home has no second story windows facing south and the first floor windows are blocked behind the berm (without snow) on the north side of the loop trail. We also examined the view from the east along Meridian and suggest that the project would be a big improvement over the existing view of Utility building, parking lot, and tent.

Thank you for the consideration of our comments.

Dennis and Deanna Lamb
865 Majestic Pines Rd #120
Mammoth Lakes, CA 93546

Sonja Porter

From: Bill Moody [batley@nethere.com]
Sent: Monday, January 23, 2006 7:14 AM
To: Sonja Porter
Subject: Eagle Lodge Base

I am very supportive of Eagle Lodge. It is long over due for this to be built. Bill Moody I own a condo at 104 Mammoth Greens and my mailing address is 418 La Crescentia Dr., San Diego, Ca. 92106

From: Watson, Noel [mailto:Noel.Watson@Jacobs.com]
Sent: Tuesday, January 31, 2006 5:30 PM
To: Sonja Porter
Subject: permanent base lodge facility at 3256 Meridian Blvd{AAAPN #'s32-040-12 & 32-040-08}

I am in receipt of your notice of intent. We live at 546 Monterey Pines, about 500 feet from the proposed facility. We are generally in support of a permanent facility at chair 15, but would offer the following comments.

1. The environmental impact report needs to look carefully at the traffic on Majestic pines road. There is a lot of foot traffic and an increase in traffic will probably get someone killed.

2. The report needs to look carefully at the parking situation.

3. Our biggest concern is the height of the facility. The 77 foot high facility will dwarf every other building and ruin the neighborhood. It will probably destroy local property values. We believe you need to stay with current building height limitations. Anything else will be disastrous. We would prefer no new building if it is 77 feet high.

Thanks for listening.

Noel Watson

e-mail Noel.watson@Jacobs.com

MAMMOTH LAKES CALIFORNIA

Eagle Lodge Base Area Development Project
Environmental Impact Report – Scoping Meeting

3256 Meridian Boulevard
January 31, 2006

Written Comment Form

The purpose of the public scoping meeting is to identify the range of actions, alternatives, and significant effects to be analyzed in the Draft EIR for the Eagle Lodge Base Area Development Project. The approximately 5.85-acre project site is located just west of the intersection of Meridian Boulevard and Majestic Pines Road. A portion of the site, approximately 2.39 acres, is located within the Inyo National Forest. The area is locally referred to as the Juniper Springs area, or more recently the Eagle Base Area. The project would include visitor lodging and a mix of ski-related uses, including food service, rental/demo/repair shop, retail, ski school and day care, ticketing/lobby, administrative space, and restrooms. In addition, the lodge would include a convenience market, restaurant, day spa and locker club. Development is anticipated to be in one phase over a two-year timeframe beginning in Spring 2007 and ending in Spring 2009.

Comments can be provided verbally at the scoping meeting or in written form. In addition, written comments can be forwarded to the Town. Written comment must be received by February 10, 2006.

In the space below (and on additional pages, if necessary), please provide any written comments you may have concerning the scope of the Draft EIR/EA for the proposed project. Your comments will then be considered during preparation of the Draft EIR/EA.

Page B-12(a)
how do you know there is no impact?? What showed up before the construction of current parking lot & Little Eagle?

This area has many archeological resources and some could be under the parking lot. Part(b) is well written, but you cannot say there will be no impact!!

It takes TWO burials to be a cemetary!

Name: [redacted]
Address: Dr. Nancy Peterson Walter
PO Box 2383
Mammoth Lakes, CA 93546

Dr Mark Basgall is an excellent archeologist!

Please leave this form in the box provided or deliver or mail it to the Town of Mammoth Lakes, Attn: Sonja Porter, P.O. Box 1609, Mammoth Lakes, CA 93566. This form can simply be folded and placed in a mailbox. Please remember to add postage.

Sonja Porter

From: Robert Woods [RWOODS@co.kern.ca.us]
Sent: Wednesday, February 01, 2006 9:57 AM
To: Sonja Porter
Subject: Little Eagle & Golf Course

Good morning,

I am sorry I was not able to attend the recent meeting, as I wish to share some thoughts with you. I have owned a unit at The Summit for quite some time (currently Pres., Summit Owners Assoc.) hence I am impacted by the current project(s).

First, I am delighted there will be no diagonal parking. As a County employee I have first-hand knowledge of the dangers presented, as well as an appreciation of the traffic and pedestrian conflict potentials along Meridian. I understand however there is a proposal to expand the Little Eagle base lodge by adding another 84 dwelling units. As the elimination of diagonal parking will decrease the available parking and, from a look at the plans, it appears the parking at the project was pretty tight even without more units, I think traffic nightmares are foreseeable, and need to be mitigated. The project simply needs to find a way to create more parking, not only for tenants but for day (and evening) guests who are likely to visit the new facilities, restaurants and so on.

I have also been told there is a proposal for a high rise project at the Sierra Star golf course, allegedly in the range of 200 feet tall. Most projects in Mammoth, historically, have been held below tree height and ridge lines, to preserve the natural beauty and appeal.

I am old enough to have seen other venues (especially Park City) in large measure destroyed by over-building, leading to visual obstruction of the scenery, appalling traffic and overcrowded recreational areas - Too many skiers, mountain bikes and even hikers. This is especially true in Park City (& Deer Valley etc) which is now reminiscent of driving into, and skiing close by the likes of Chicago.

Mammoth is one of the few big hills that still has an open feel, and reasonable levels of people on the hill and environs (winter or summer) to allow for a relaxing and conflict-free vacation experience. That is an aspect I feel will become more precious as other areas succumb to the monetary lure of over-development: This becomes from a business perspective (let alone an individual enjoyment perspective) a matter of weighing short-term gain against long-term value. I vote for the latter. We should not allow Mammoth to become "just another ski/mountain bike area."

--Bob Woods (Rwoods@co.kern.ca.us)

COMMUNITY DEVELOPMENT
P.O. Box 1609, Mammoth Lakes, CA 93546
(760) 934-8989 ext. 286, fax (760) 934-8608

REVISED NOTICE OF INTENT /NOTICE OF PREPARATION (NOI/NOP) JOINT ENVIRONMENTAL ASSESSMENT/DRAFT ENVIRONMENTAL IMPACT REPORT

Date: March 2, 2006

To: Office of Planning and Research (State Clearinghouse) and Affected Resource Agencies

From: Town of Mammoth Lakes and U.S. Forest Service

The proposed project has been revised since the NOI/NOP dated January 6, 2006.

PROJECT LOCATION: The Town of Mammoth Lakes is a destination resort community located in southwestern Mono County on the eastern side of the Sierra Nevada mountain range. The Town lies approximately three miles west of U.S. Highway 395, along State Route 203. The approximately 5.85-acre project site is located in the southwestern side of the developed part of Town, west of the intersection of Meridian Boulevard and Majestic Pines Road. A portion of the site, approximately 2.39 acres, is located within the Inyo National Forest. The area is locally referred to as the Juniper Springs area, or more recently the Eagle Base Area.

DESCRIPTION OF THE PROJECT: Mammoth Mountain Ski Area (MMSA) proposes to construct a permanent base lodge facility at 3256 Meridian Blvd (APN #'s 32-040-12 & 32-040-08) that would include visitor lodging and a mix of ski-related uses, including food service, rental/demo/repair shop, retail, ski school and day care, ticketing/lobby, administrative space, and restrooms. In addition, the lodge would include a convenience market, restaurant, day spa and locker club. Development is anticipated to be in one phase over a two-year timeframe beginning in Spring 2007 and ending in Spring 2009.

The project site is subject to the existing Juniper Ridge Master Plan "The Master Plan," the Mammoth Mountain Ski Area Master Development Plan "The MMSA Development Plan," and the Inyo National Forest Land and Resource Management Plan "The Inyo Forest Plan." The project would require amendments to both Plans in the areas of parking, height, density, setbacks, visual quality and land use. In addition, the project would require a General Plan amendment to rezone Lot 87 from Residential Single Family to Resort, with the majority of the lot being utilized for circulation and open space. Development of the project would be subject to further discretionary reviews that would include Use Permit, Tentative Map and Design Review Approvals. The project will be subject to environmental review and analysis under Forest Service Agency guidance and the National Environmental Policy Act. The project may require a non-significant amendment of the Inyo Forest Plan.

The revisions to the site plan are with regard to the orientation of the facility and the placement of uses on the site. The main entrance to the facility would be from Majestic Pines Road rather than Meridian Boulevard. The revisions do not alter the site boundary, the size of the structures or the uses within the facility.

The location and revised site plan are attached. A copy of the Initial Study (☐ is ☒ is not) attached. The Town of Mammoth Lakes has determined that an Environmental Impact Report will be required to analyze the environmental effects of the proposed lodge. Environmental factors that would be potentially affected by the project include Aesthetics, Air Quality, Biological Resources, Cultural Resources, Hydrology/Water Quality, Land Use and Planning, Noise, Population and Housing, Transportation and Circulation, Utilities and Service Systems (Water, Wastewater, and Stormwater), and Mandatory Findings of Significance. The Initial Study that was previously prepared for the project has not been revised as the revision would not result in a change in the scope of the environmental document. The previously prepared Initial Study and the revised site plan are available for review on the Town's website (www.townofmammothlakes.org), at Town Offices (Suite R, 437 Old Mammoth Rd, Mammoth Lakes, CA), and at the Mono County Library (960 Forest Trail, Mammoth Lakes, CA).

The Forest Service has determined that an Environmental Assessment will be required to analyze the effects of the proposed lodge and ancillary facilities on National Forest System Lands. Environmental factors that would be potentially affected by the project include those described above.

FOR FURTHER INFORMATION CONTACT:

Sonja Porter, Senior Planner with the Town of Mammoth Lakes at (760) 934-8989 **OR**
Mike Schlafmann with the U.S. Forest Service at (760) 924-5503

HOW TO COMMENT ON THE NOTICE OF INTENT/NOTICE OF PREPARATION: Due to the time limits mandated by State law, your response must be sent at the earliest possible date but not later than 30 days after receipt of this notice. Therefore, written comments must be submitted **by 5:00 p.m. on Monday, April 3, 2006.**

Please send your comments to: Sonja Porter, Senior Planner, Town of Mammoth Lakes, P.O. Box 1609, Mammoth Lakes, CA 93566 or to Mike Schlafmann, U.S. Forest Service, Mammoth Ranger District Office, P.O. Box 148, Mammoth Lakes, CA 93546. Comments can also be submitted by FAX to the Town of Mammoth Lakes at (760) 934-8608 or the U.S. Forest Service at (760) 924-5537. In addition, comments can be submitted electronically to: sporter@ci.mammoth-lakes.ca.us. We will need the name of a contact person in your agency.

Project Title: Eagle Lodge Base Area Development
Project Applicant: Mammoth Mountain Ski Area

Date: March 2, 2006

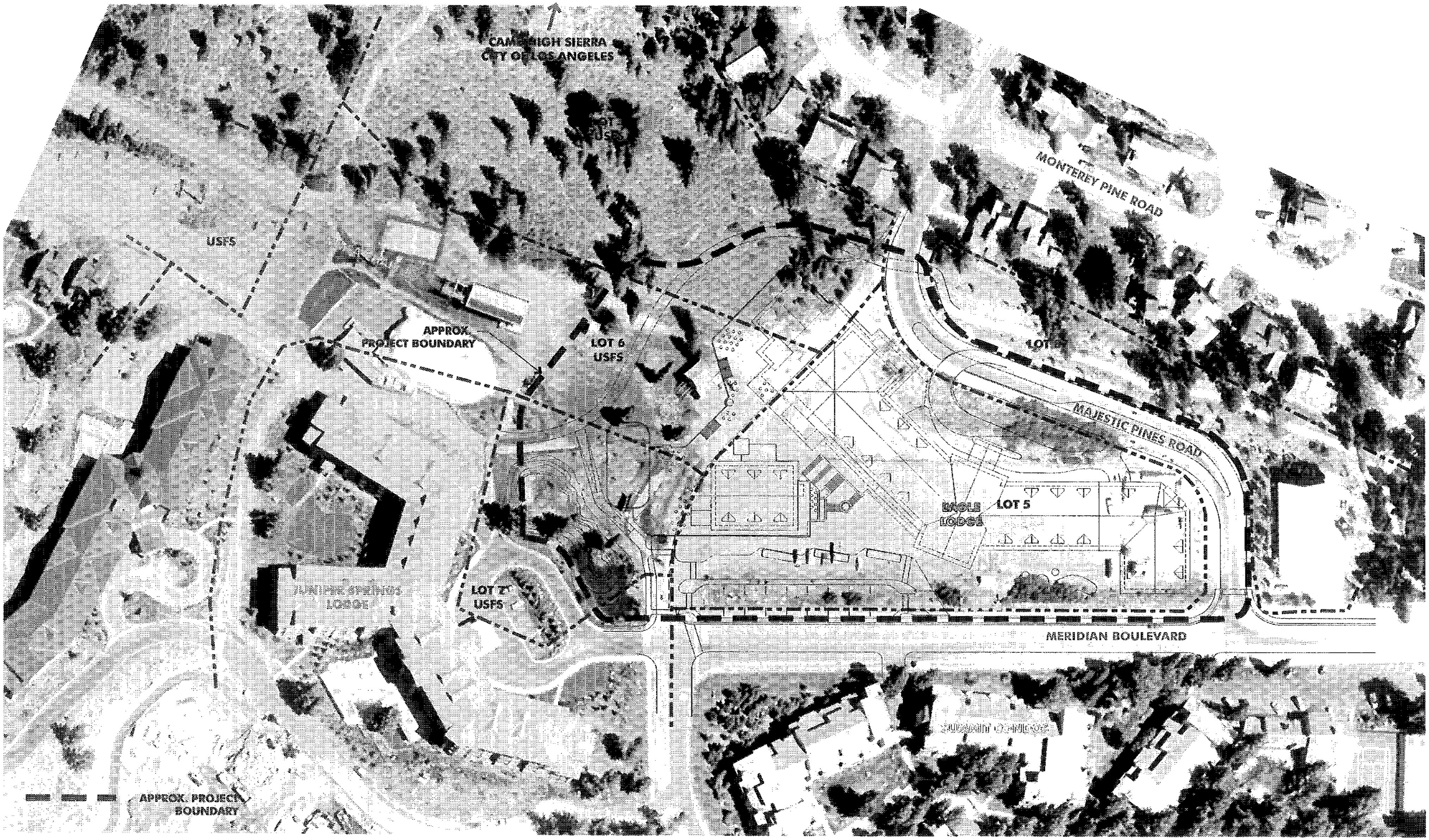
Signature ____________________

Title Senior Planner

Telephone (760) 934-8989 x286

Regional and Project Vicinity Map

Source: PCR Services Corporation, 2005



EAGLE LODGE BASE AREA

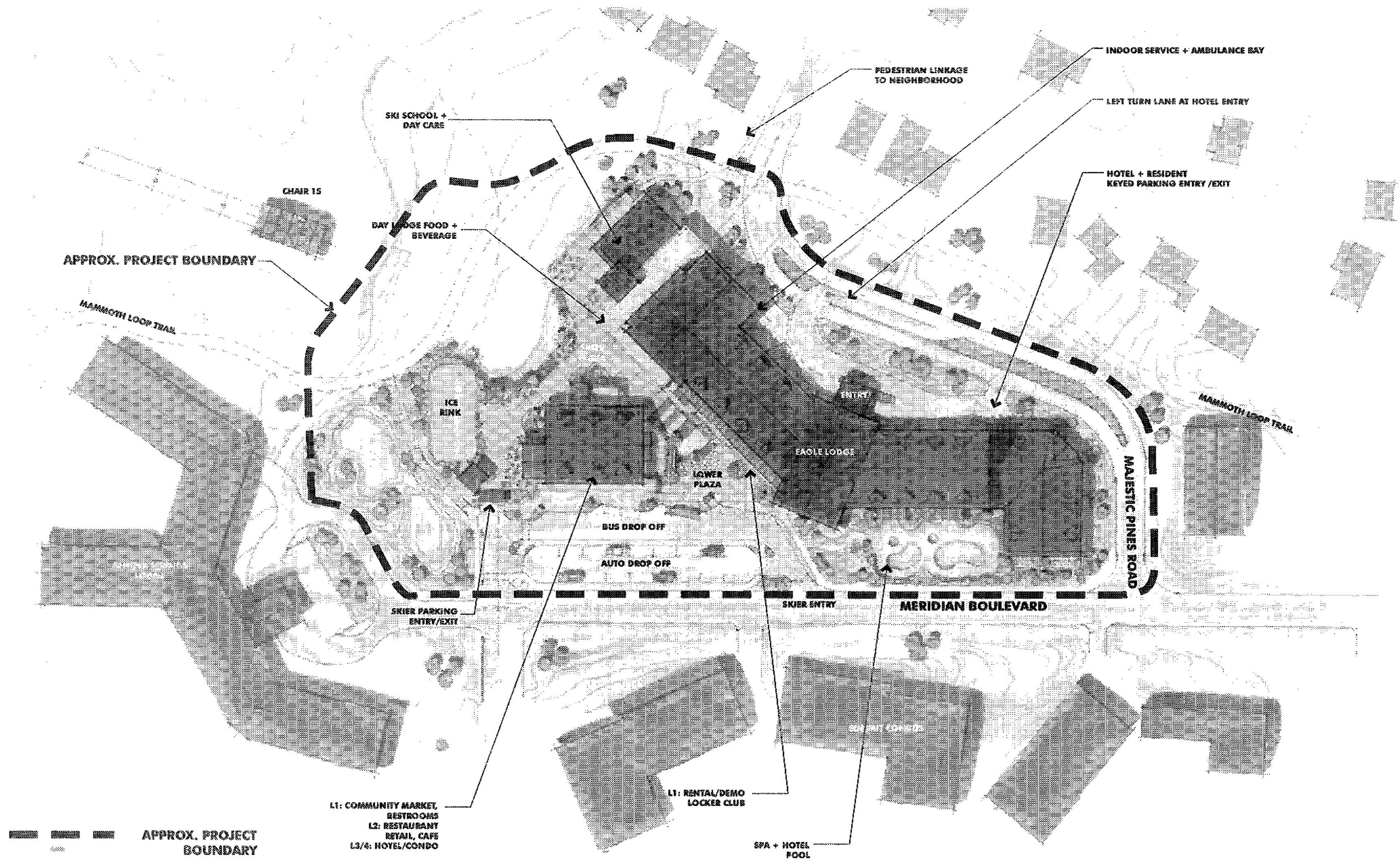
Mammoth Lakes, CA

Site Analysis

ENVIRONMENTAL OVERLAY

February 2006

Gensler



EAGLE LODGE BASE AREA

Mammoth Lakes, CA

Site Plan

February, 2006

Gensler

STATE OF CALIFORNIA Arnold Schwarzenegger, Governor

NATIVE AMERICAN HERITAGE COMMISSION

915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-4082
(916) 657-5390 - Fax

March 16, 2006

Ms. Sonja Porter
City of Mammoth Lakes
P.O. Box 1609
Mammoth Lakes, Ca 93546

Re: Eagle Lodge Base Area Development Project SCH# 2006012041

Dear Ms. Porter:

Thank you for the opportunity to comment on the above-referenced document. In order to adequately identify and mitigate project-related impacts on cultural resources in accordance with the CEQA Guidelines (15063 (d) (3), the Commission recommends that you provide evidence that all of the following actions be taken:

- Contact the appropriate California Historic Resources Information Center for a record search. The record search will determine:
  - If a part or all of the area of project effect (APE) has been previously surveyed for cultural resources.
  - If the probability is low, moderate, or high that cultural resources are located in the APE.
  - If a survey is required to determine whether previously unrecorded cultural resources are present.
- If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
  - The final report containing site forms, site significance, and mitigation measurers should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for pubic disclosure.
  - The final written report should be submitted within 3 months after work has been completed to the appropriate regional archaeological Information Center.
- Contact the Native American Heritage Commission (NAHC) for a Sacred Lands File search of the project area and information on tribal contacts in the project vicinity who may have additional cultural resource information.
  - Please provide U.S.G.S. location information for the project site, including Quadrangle, Township, Section, and Range.
  - We recommend that you contact all tribes listed on the contact list to avoid the unanticipated discovery of sensitive Native American resources after the project has begun.
- If the Initial Study identifies the presence, or the likely presence, of Native American Human remains at a project site, Section 15064.5 (d) of the CEQA Guidelines requires the lead agency to work with the Native Americans identified by the Native American Heritage Commission. The Guidelines provide for the developer and appropriate Native Americans to develop a treatment agreement in advance of such discoveries in order to assure the appropriate and dignified treatment of Native American human remains.
- Lack of surface evidence of archeological resources does not preclude their subsurface existence.
  - Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, per California Environmental Quality Act (CEQA) §15064.5 (f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities.
  - Lead agencies should include in their mitigation plan provisions for the disposition of recovered artifacts, in consultation with culturally affiliated Native Americans.
- Lead agencies should include provisions for discovery of Native American human remains or unmarked cemeteries in their mitigation plans. Health and Safety Code §7050.5, Public Resources Code §5097.98 and Sec. §15064.5 (e) of the CEQA Guidelines mandate procedures to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery.
- Lead agencies should consider avoidance, as defined in Section 15370 of the CEQA Guidelines, when significant cultural resources are discovered during the course of project planning.

Please feel free to contact me at (916) 653-6251 if you have any questions.

Sincerely,

Carol Gaubatz

Carol Gaubatz
Program Analyst

Mammoth Community Water District
P.O. Box 597
Mammoth Lakes, CA 93546
(760) 934-2596; fax (760) 934-2143

April 3, 2006

Sonja Porter
Senior Planner
Town of Mammoth Lakes
P.O. Box 1609
Mammoth Lakes, CA 93546

Re: Revised Notice of Intent/Notice of Preparation of a Joint Environmental Assessment/Draft Environmental Impact Report for the Eagle Lodge Base Area Development Project

Dear Ms. Porter,

The District has reviewed the revised Notice of Intent/Notice of Preparation for the Eagle Lodge Base Area Development Project. We appreciate the opportunity to provide comments on the scope of the Draft EA/EIR.

The District supports the revised site plan which relocates the main lodge entrance away from the District's production well #16, located on Meridian Boulevard. This change will simplify access needs that the District may have in the future when performing maintenance and repairs to the well facility.

As a follow up from the District's previous letter on the project dated March 10, 2006, the District has collected sewer flow data from pipelines located downstream from the proposed project. Preliminary flow data collected in March 2006 showed that sewer collection pipelines in the vicinity of the project are at capacity. It is unclear at this point whether this preliminary data is the result of blockage in the collection system, infiltration, or simply the result of actual flows being much higher than the sewer flow model predicted. This data will need to be confirmed through more investigation to determine the cause. The District will stay in contact with the

Town, MMSA, and PCR regarding these investigations and results can be expected within a month.

Thank you again for the opportunity to comment on this document. The District appreciates the high level of communication that has been associated with this project. Please feel free to contact the District if you have any questions.

Sincerely,

Gary Sisson 4/3/06 Ericka Hegeman 4/3/2006

Gary Sisson, General Manager Ericka Hegeman, Environmental Specialist

Gregory R. Applegate, MD

632 Hanley Ave
Los Angeles, Ca
90049
818-908-4937-direct
818-261-1569-cell
818-997-2895 -fax
gapplegate@insighthealth.com
local address: 507 Monterey Pine Drive

April 3, 2006

Sonya Porter
Senior Planner

Town of Mammoth Lakes,
PO box 1609
Mammoth Lakes, California 935 4 6

Dear Ms. Porter

I am writing in response to your notice of intent/notice of preparation regarding the proposed Eagle Lodge Base Area Development. Almost two years ago, my wife and I purchased a single-family home at 507 Monterey Pine Drive. We love the family neighborhood atmosphere in the quiet, beautiful mountain setting. The clean-air and beautiful views of the mountains drew us to this neighborhood. We felt confident that these attributes would be preserved based on the town's height limitations, setbacks and density limitations. We are also in possession of an agreement made between Mammoth Mountain Ski Area and the homeowners on our street assigned and executed on November 15,1994 by Rusty Gregory of Mammoth Mountain Ski Area, recorded with the Mono County recorder volume 0700 Page 401. This agreement sets a limit on the proposed parking structure "not to exceed eight feet above finished grade". The current proposed base lodge facility including hotel/lodging and retail space rises 75 feet above grade. This will completely eliminate our mountain view and our neighbors view. Instead of a pristine mountain range will see the back of a tall aesthetically unappealing looming structure. The quiet surroundings and air quality will be severely compromised. The added congestion and pollution will certainly spoil the quiet neighborhood. A turnout for eighteen wheel diesel delivery trucks is planned for the back of the building necessitating moving the town bike path closer to the homes on our street. The diesel fumes and noise generated in such close proximity to residential homes is unacceptable. We currently get a lot of trash blowing to into to our backyard from the current parking lot and small base lodge/igloo. Imagine the volume of trash and water runoff flowing into the wetlands adjacent to our home. The woodpeckers, coyotes and deer that frequent the Greenbelt will be adversely affected by this proposal.

In summary, we are vehemently opposed to the Eagle Lodge Base Area Development proposal. The proposed 75 foot structure is will aesthetically ruin the neighborhood. The additional traffic will further stretch the access and egress roads, putting additional traffic path through the Mammoth Vistas I neighborhood along

Kelly Road. The proposed diagonal parking will further narrow and limit access. The diesel eighteen-wheel delivery vehicles will negatively affect the air quality and add additional noise, and necessitate moving the bike path. Can the utilities and service systems handle the additional wastewater, storm water and snow storage? The **wetlands** adjacent to our home and behind the water district building may be compromised. The local wildlife will be displaced from the Greenbelt area. While we are unable to make the scoping meeting, I'd be happy to discuss our concerns further with members of the planning committee or Forest Service.

Respectfully Submitted,

Gregory R. Applegate MD

Appendix B

Traffic Study

MAMMOTH LAKES EAGLE LODGE

TRAFFIC IMPACT ANALYSIS

Prepared for the

Town of Mammoth Lakes
P.O. Box 1609
Mammoth Lakes, CA 93546
(760) 934-8989

Prepared by

LSC Transportation Consultants, Inc.
2690 Lake Forest Road, Suite 2C
P.O. Box 5875
Tahoe City, CA 96145
(530) 583-4053

August 31, 2006

LSC # 057630

EXECUTIVE SUMMARY

PURPOSE

The Eagle Lodge project proposes to construct a permanent base lodge facility at 3256 Meridian Boulevard on the north side of Meridian Boulevard between its eastern and western intersections with Majestic Pines Drive. The project would include visitor lodging and a mix of ski-related uses, including food service, rental/demo/repair shop, retail, ski school and day care, ticketing/lobby, administrative space, and restrooms. In addition, the lodge would include a convenience market, restaurant, day spa, and locker club. Access to the commercial uses would be provided at two locations on Meridian Boulevard, while access to the lodging and service uses would be provided along Majestic Pines Drive (one entrance-only drive to the west and one exit-only drive to the east). The purpose of this report is to analyze potential traffic, parking, and transit impacts associated with the development.

CONCLUSIONS

The findings of the Traffic Impact Analysis are as follows:

1. Upon project build out during a typical winter Saturday, the project would generate a total of 914 PM peak-hour vehicle-trips (320 entering and 594 exiting). The project's net impact on the site's winter trip generation is 509 PM peak-hour trips (219 entering and 290 exiting).

2. The project is expected to generate 556 PM peak-hour vehicle-trips on a summer Saturday (259 entering, 297 exiting), which is roughly 39 percent less than the levels generated in the winter.

3. The project is expected to generate 1,438 PM peak-hour VMT and 8,035 daily VMT on a typical winter Saturday.

4. The Meridian Boulevard/Minaret Road intersection will operate at LOS E in 2024 with the project.

5. The Majestic Pine Drive East/Meridian Boulevard (east) intersection will operate with a worst approach LOS of LOS F with or without the project in 2024.

6. Without mitigation, the project will result in a parking shortfall of 311 parking spaces.

RECOMMENDATIONS

The following recommendations are proposed to mitigate traffic impacts:

1. The Minaret Road/Meridian Boulevard intersection is forecast to operate at LOS E exceeding LOS thresholds with or without the project under 2024 plus project conditions. However, construction of a separate eastbound right-turn lane at this location would mitigate LOS to an acceptable LOS D.

2. The Majestic Pines Drive/Meridian Boulevard (east) intersection is forecast to operate at worst approach and total intersection LOS F with the project under 2024 plus project conditions. However, a single-lane roundabout with a 100-foot inscribed diameter would operate at worst approach LOS B and total intersection LOS A.

3. The following improvements should be provided in order to improve internal site circulation:

    a. The distance between sawtooth bus bays should be increased to 15 feet in order to provide adequate maneuvering space for buses exiting the bays.

    b. A sign with an arrow posted along the north side of Meridian Boulevard to direct skiers to the "Skier Drop-Off" zone is recommended. In addition, "Bus Only" signage should be posted at the entrance to the bus drop zone to discourage autos from entering the bus drop zone. "No Parking" signs should be posted along Meridian Boulevard adjacent to the auto drop zone, and "Do Not Enter" signs are needed at the west end of the auto and bus drop zones.

    c. A "No Left Turn" sign is recommended to be placed at the hotel exit. In addition, it is recommended that a "Do Not Enter," "No Left Turn," and "No Right Turn" signs be posted at the appropriate hotel access approaches.

    d. In order to decrease the potential for vehicular conflict in the ski school drop zone, the circulating area should be striped for one lane of traffic circulation and one-way operation.

    e. It is recommended that the curbs at the west end of the auto drop zone be modified to move the intersection of the drop zone and the main parking garage access further north.

4. The project has an overall parking shortfall of 311 parking spaces. The following are potential mitigation measures to this parking shortfall.

    a. Mitigation Option A: Transit service to the site could be expanded such that an additional 950 skiers per day would use transit to access the site on a typical winter Saturday. In addition, the project would be required to provide parking monitoring and enforcement.

    b. Mitigation Option B: To mitigate potential parking impacts, the project could also provide off-site employee parking for all employees, increased transit service to provide transit for 750 additional skiers, and provide parking monitoring and enforcement.

    c. Mitigation Option C: The project could request a zone code amendment from the Town to develop an in lieu of parking fee program. This would allow the project to pay a fee that would go towards the construction of off-site parking lots. The fee owed by the project would be calculated based upon the additional number of spaces that are required.

       If the parking structures are not provided within a reasonable 1,000-foot walking distance, a parking shuttle to provide access between the project site and the parking lots would need to be provided.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

Section 1
INTRODUCTION

This engineering report documents the findings and conclusions of a Traffic Impact Analysis (TIA) for the Eagle Lodge project proposed to be located in Mammoth Lakes, California. The Eagle Lodge project proposes to construct a permanent base lodge facility at 3256 Meridian Boulevard on the north side of Meridian Boulevard between its eastern and western intersections with Majestic Pines Drive. The project would include visitor lodging and a mix of ski-related uses, including food service, rental/demo/repair shop, retail, ski school and day care, ticketing/lobby, administrative space, and restrooms. In addition, the lodge would include a convenience market, restaurant, day spa, and locker club. Access to the commercial uses would be provided at two locations on Meridian Boulevard, while access to the lodging and service uses would be provided along Majestic Pines Drive (one entrance-only drive to the west and one exit-only drive to the east).

The study examines the site-generated traffic volumes for build out of the project only. This study also provides the technical basis for the Eagle Lodge EIR Traffic Section.

SCOPE OF STUDY

This traffic engineering study analyzes traffic data, intersection capacity and level of service, and traffic impacts of the proposed project in accordance with the requirements of the Town of Mammoth Lakes and Caltrans standards. Based upon input provided by the Town of Mammoth Lakes, the following intersections were identified for analysis:

- Old Mammoth Road/Main Street
- Old Mammoth Road/Meridian Boulevard
- Minaret Road/Meridian Boulevard
- Minaret Road/Main Street
- Lake Mary Road/Kelly Road
- Meridian Boulevard/Majestic Pines Drive (East)
- Meridian Boulevard/Majestic Pines Drive (West)
- Meridian Boulevard/Drop Off Area
- Majestic Pines Drive/Hotel Exit
- Majestic Pines Drive/Hotel Entrance

In order to accommodate two phases of development, this analysis considers the following five scenarios:

- Existing (2005) no project
- Future (2009) no project
- Future (2009) plus proposed project
- Future (2024) no project
- Future (2024) plus proposed project

The results of this traffic study are used to develop recommendations to mitigate project traffic impacts.

Section 2
EXISTING CONDITIONS

This section documents the existing setting and operational traffic conditions in the vicinity of the site, providing a foundation for comparison to future conditions. Existing roadway conditions were studied to identify if the roadways are currently operating in a safe and efficient manner. The study area and the intersections evaluated are shown in Figure 1.

EXISTING SETTING

Existing Roadways

The roadways within the study area are described below.

SR 203 (Main Street)

The major access into the Town of Mammoth Lakes is provided by State Route 203, which intersects with US Highway 395 just to the east of the Town limits. SR 203 (also named Main Street through the center of Town) is a four-lane road from US 395 through the majority of the developed portion of the Town. SR 203 returns to two lanes north of the intersection of Main Street and Minaret Road. The highway continues from the developed area of the Town to the Mammoth Mountain Ski Area Main Lodge, and terminates at the Mono-Madera county line. Portions of SR 203 are augmented by frontage roads. According to Caltrans' classification system, State Route 203 is a minor arterial for the first 8.5 miles from US 395 eastward through the Town, and a minor collector for the westernmost 0.7 miles. Mammoth Scenic Loop, a two-lane road off of SR 203, provides secondary access from the Town to US 395 to the north.

Meridian Boulevard

Meridian Boulevard is an arterial with an east-west alignment. The roadway contains a four-lane cross section west of Sierra Park Road and a two-lane cross section east of Sierra Park Road. This roadway provides access to the Cerro Coso College, commercial uses near Old Mammoth Road, residential uses, and lodging uses.

Minaret Road

Minaret Road is a two-lane arterial with a north-south alignment. It provides access to the Village area, as well as residential areas to the south. Its intersections with both Main Street and Meridian Boulevard are signalized.

Old Mammoth Road

Old Mammoth Road serves as a north-south arterial in the eastern portion of Mammoth Lakes, as well as an east-west arterial in the southern portion of Mammoth Lakes. East of Minaret Road, Old Mammoth Road is an arterial roadway that provides access to commercial, residential, and

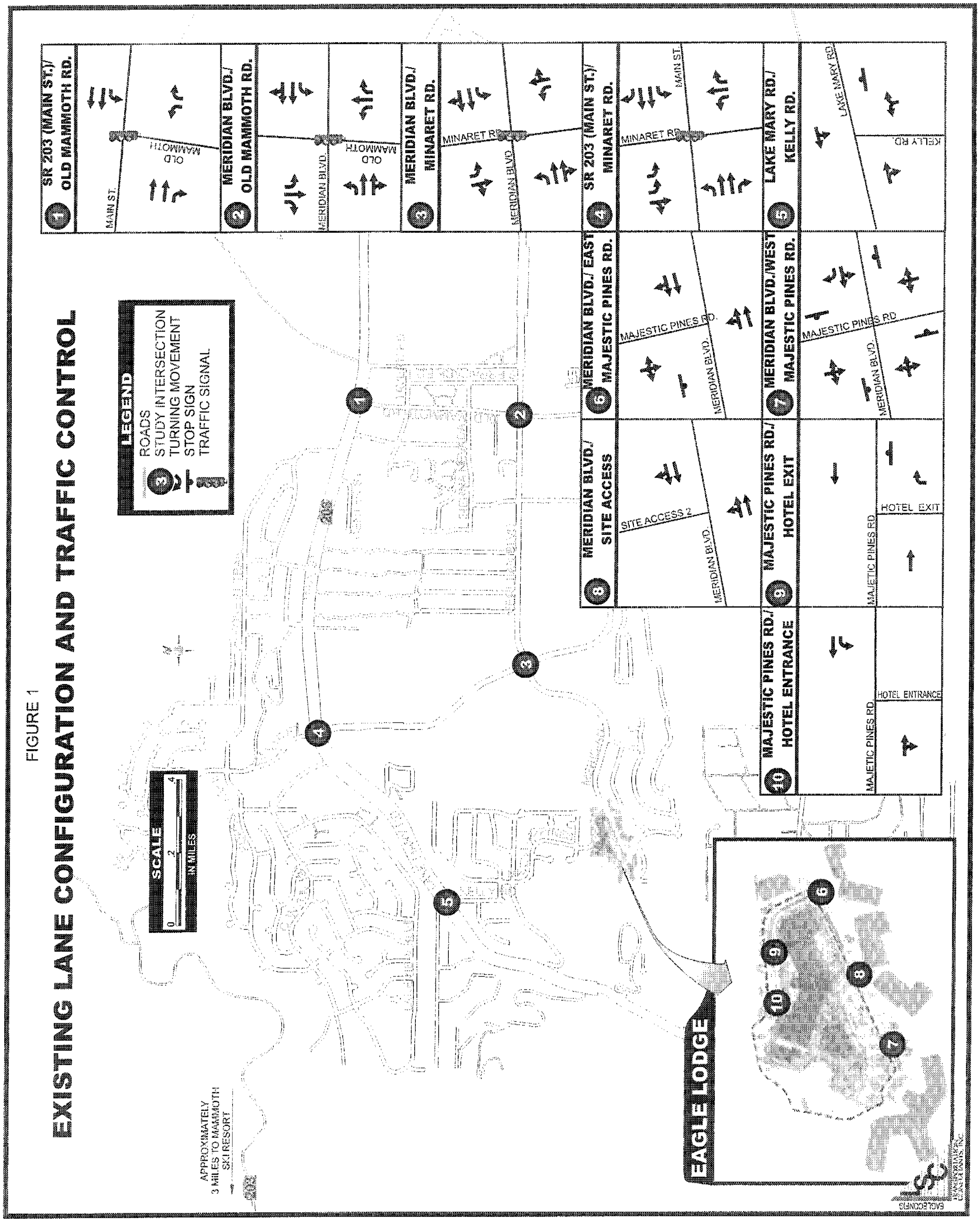


FIGURE 1

EXISTING LANE CONFIGURATION AND TRAFFIC CONTROL lodging facilities. Within the study area, the roadway is a three-lane roadway with two travel lanes and a center two-way left-turn lane.

Lake Mary Road

Lake Mary Road is a collector roadway which connects Main Street (SR 203) with the western portion of town, including the Tamarack Lodge and Twin Lakes. Within the past five years, a traffic signal was installed at its intersection with realigned Canyon Boulevard, which provides access to residential uses and a skier portal.

Majestic Pines Drive

Majestic Pines Drive is a two-lane collector roadway which connects residential uses with Meridian Boulevard. Along with Kelly Road, it provides an alternate north-south through route between Meridian Boulevard and Lake Mary Road.

Kelly Road

Kelly Road is a two-lane collector roadway connecting residential uses to Lake Mary Road. Along with Majestic Pines Drive, it provides an alternate north-south through route between Meridian Boulevard and Lake Mary Road.

Major Intersections

The major existing or proposed intersections in the study area requiring analysis are:

- Old Mammoth Road/Main Street
- Old Mammoth Road/Meridian Boulevard
- Minaret Road/Meridian Boulevard
- Minaret Road/Main Street
- Lake Mary Road/Kelly Road
- Meridian Boulevard/Majestic Pines Drive (East)
- Meridian Boulevard/Majestic Pines Drive (West)
- Meridian Boulevard/Drop Off Area
- Majestic Pines Drive/Hotel Exit
- Majestic Pines Drive/Hotel Entrance

The lane configuration of the study intersections are depicted in Figure 1.

EXISTING TRAFFIC VOLUMES

The traffic volumes throughout the Town of Mammoth Lakes vary greatly by time of day, day of week and, more importantly, by season. Particularly in areas with these high variations in traffic levels, it is important to decide what hourly traffic volumes should be used as the basis of design. To avoid the development of facilities that are only needed a relatively few days per year, the traffic engineering profession has adopted a standard procedure of basing roadway design on volumes slightly below the absolute peak volumes.

For this reason the Town of Mammoth Lakes, for example, has focused its design policies on a typical winter Saturday peak hour, rather than the highest winter peak hour. *A Policy on Geometric Design of Highways and Streets* (American Association of State Highway and Transportation Officials, 2001) indicates "*the design hourly volume for rural highways should generally be the 30th highest volume of the future year chosen for design.*" (page 61). It is true that during winter peak periods, traffic volumes occasionally exceed the resulting intersection and roadway capacity. However, to avoid the development of facilities that are only needed during peak periods on a relatively few days per year, the typical winter Saturday peak hour was analyzed, which is consistent with standard engineering design practice.

The 2005 existing winter weekday PM peak-hour traffic volumes were estimated as follows:

1. Traffic turning-movement counts were conducted at the following intersections on the following dates:

   - Old Mammoth Road/SR 203 (Main Street) (December 17, 2005)
   - Old Mammoth Road/Meridian Boulevard (December 17, 2005 and January 14, 2006)
   - Old Minaret Road/Meridian Boulevard (December 17, 2005)
   - Minaret Road/SR 203 (Main Street) (December 17, 2005 and January 14, 2006)
   - Kelly Road/Lake Mary Road (December 17, 2005)
   - Majestic Pines Drive (East)/Meridian Boulevard (December 17, 2005)
   - Majestic Pines Drive (West)/Meridian Boulevard (December 17, 2005 and January 14, 2006)

2. Next, the estimated number of skiers visiting Mammoth Mountain Ski Area (MMSA) at the Eagle Lodge portal and all other portals throughout December 2005 and January 2006 was provided by MMSA. The number of skiers accessing the mountain during the January 14, 2006 counts was slightly lower than the number that visit the mountain on a typical Saturday, and during the December 17, 2006 traffic counts, skier numbers were relatively low. Therefore, the design volumes were estimated by starting with the January 14, 2006 counts, while the December counts were used to fill in the gaps in data.

3. Typical Saturday PM peak-hour traffic volumes were estimated based upon the January 14, 2006 traffic counts by applying an adjustment to account for the additional skiers that would be on the roadway on a typical Saturday versus on January 17, 2006.

4. Next, a comparison of roadway link data for the adjusted January counts to the unadjusted December counts was made at the intersections for which count data for both days was available. A December count to typical Saturday count adjustment factor for each roadway link was then calculated in order to estimate typical Saturday traffic volumes at the remaining intersections.

5. The resulting traffic volumes were checked to make sure they reasonably balance along roadway links.

6. The traffic volumes were also compared to traffic volume counts collected as a part of the Mammoth Lakes General Plan Update, to verify that they reasonably represent typical Saturday PM peak-hour traffic volumes.

The resulting 2005 no project traffic volumes are shown in Figure 2.

2009 NO PROJECT TRAFFIC VOLUMES

The 2009 no project traffic volumes were forecasted as follows:

1. A list of projects assumed to be built by 2009 was provided by the Town of Mammoth Lakes, as described in Chapter 4 (Cumulative Effects) of the EIR.

2. These projects were added to the existing land uses defined in the Mammoth Lakes Transportation Demand Model.

3. The growth at the external nodes was estimated by straight line interpolation between the volumes at each node in the 2004 and 2024 traffic models.

4. The Mammoth Lakes Transportation Demand Model was run to estimate a set of 2009 traffic volumes, assuming development on the Eagle Lodge site.

5. The traffic volumes generated by the Eagle Lodge Transportation Analysis Zone (TAZ) in the model were then subtracted from the model-generated traffic volumes.

6. The traffic currently generated by the site (from the 2005 counts) was then added to the traffic volumes, as the no project condition assumes no change in traffic from today's current condition.

The resulting 2009 no project traffic volumes are shown in Figure 3.

2024 NO PROJECT TRAFFIC VOLUMES

The 2024 no project traffic volumes were forecasted as follows:

1. The land uses contained in the 2024 Existing General Plan Mammoth Lakes Transportation Demand Model were updated to better represent the current development proposals for the Cerro Coso College site. The need for this update was generated based upon comments received as a part of the General Plan Update process.

2. The 2024 Mammoth Lakes Transportation Demand Model was then re-run to develop a set of 2024 traffic volumes that assume development on the Eagle Lodge site consistent with the model assumptions.

3. The traffic volumes generated by the Eagle Lodge TAZ were then subtracted from the model traffic volumes.

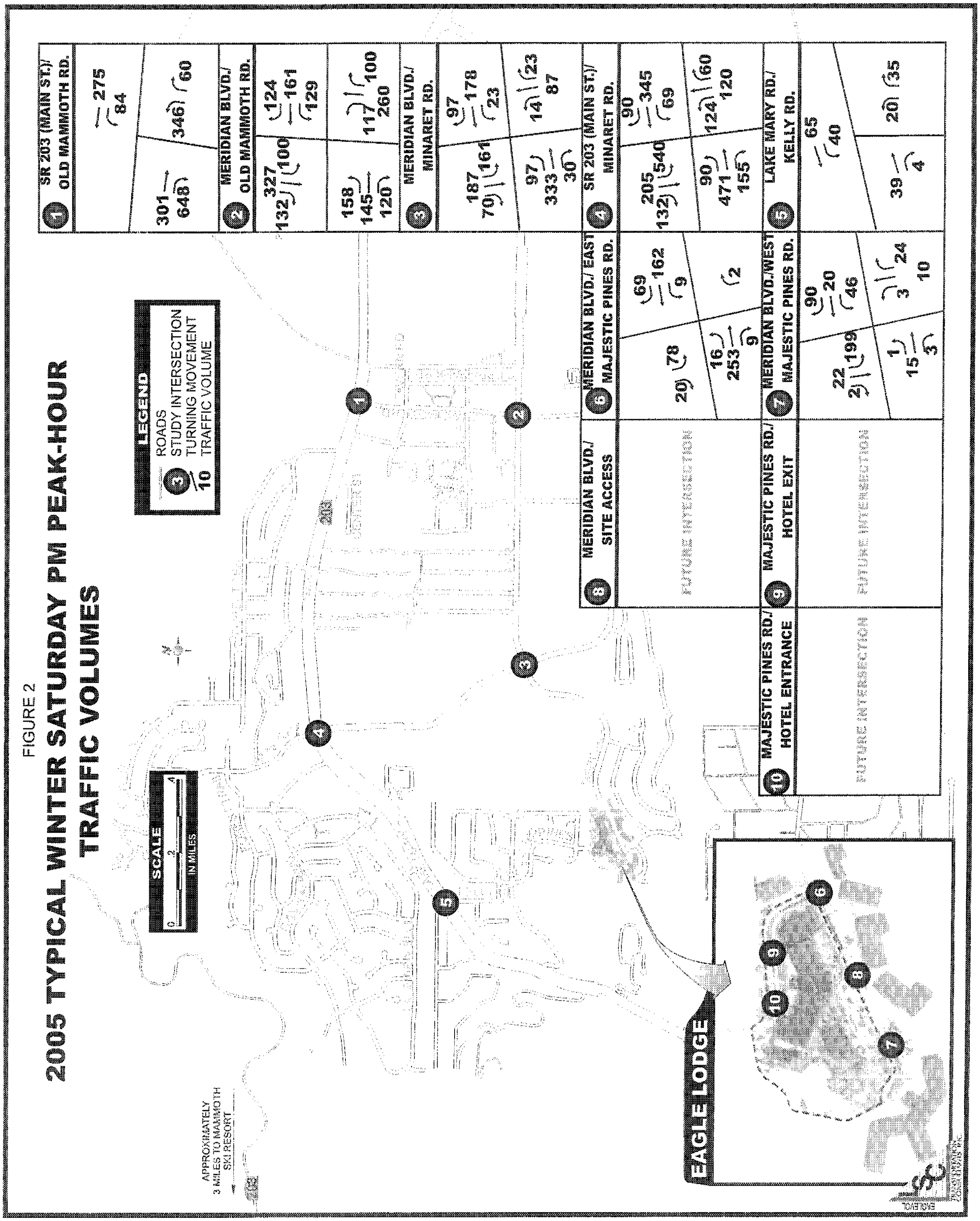
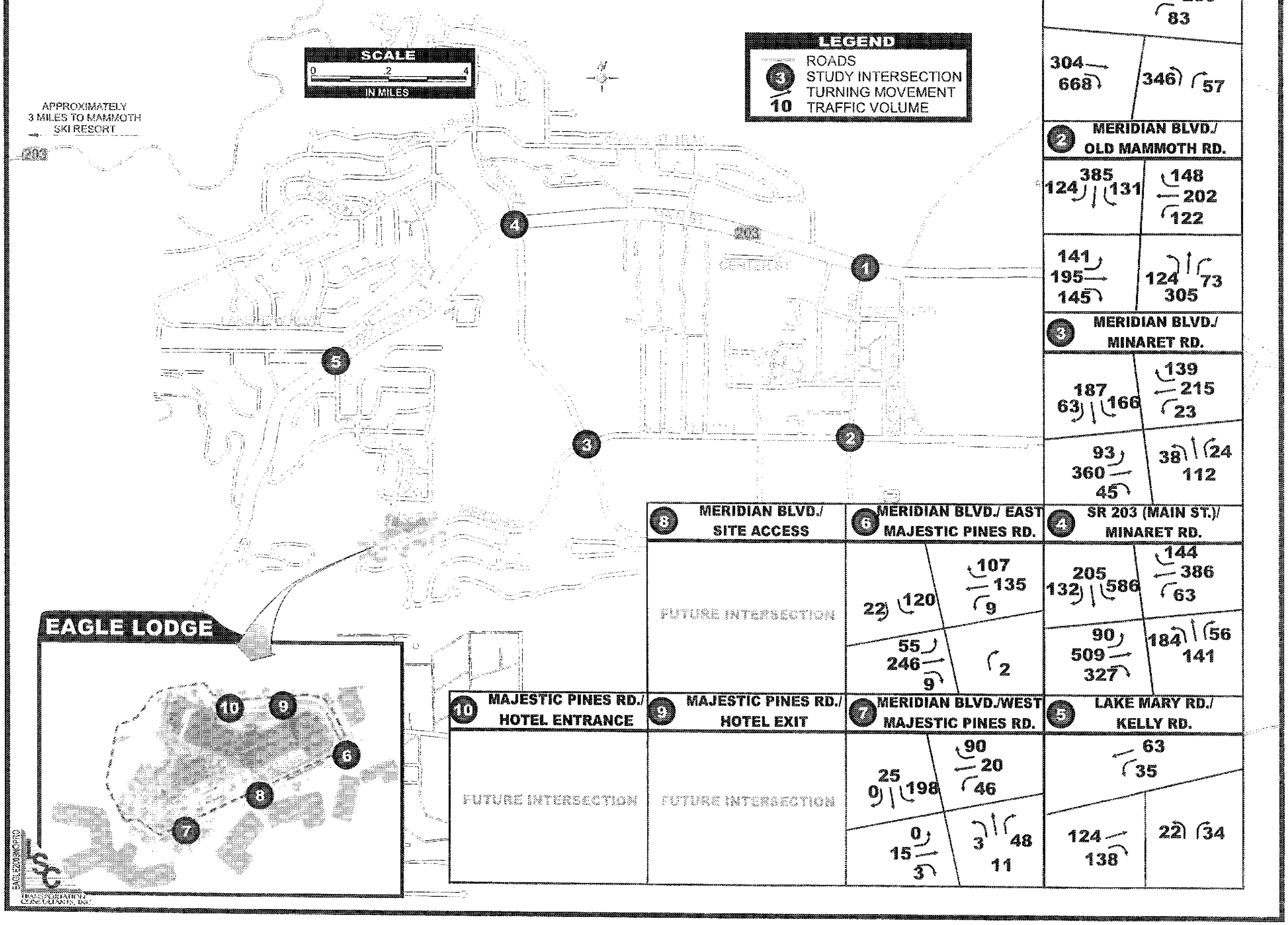


FIGURE 2
2005 TYPICAL WINTER SATURDAY PM PEAK-HOUR TRAFFIC VOLUMES
LEGEND
ROADS
STUDY INTERSECTION
TURNING MOVEMENT
TRAFFIC VOLUME
SCALE
IN MILES
EAGLE LODGE
APPROXIMATELY 3 MILES TO MAMMOTH SKI RESORT
1 SR 203 (MAIN ST.)/ OLD MAMMOTH RD.
2 MERIDIAN BLVD./ OLD MAMMOTH RD.
3 MERIDIAN BLVD./ MINARET RD.
4 SR 203 (MAIN ST.)/ MINARET RD.
5 LAKE MARY RD./ KELLY RD.
6 MERIDIAN BLVD./ EAST MAJESTIC PINES RD.
7 MERIDIAN BLVD./WEST MAJESTIC PINES RD.
8 MERIDIAN BLVD./ SITE ACCESS
9 MAJESTIC PINES RD./ HOTEL EXIT
10 MAJESTIC PINES RD./ HOTEL ENTRANCE
FUTURE INTERSECTION

FIGURE 3

2009 NO PROJECT TYPICAL WINTER SATURDAY PM PEAK-HOUR TRAFFIC VOLUMES



4. The traffic currently generated by the site was then added to the traffic volumes.

The resulting 2024 no project traffic volumes are shown in Figure 4.

EXISTING TRANSIT SERVICE

Mammoth Area Shuttle (MAS) offers several free shuttles available to anyone in the Town of Mammoth Lakes during the winter season. The following five routes operate during daytime hours:

- The **Main Lodge/Snow Creek Line (Red Line)** provides service to and from the Main Lodge and Snowcreek Athletic Club, traveling along Minaret Road, Main Street, Old Mammoth Road, and Chateau Road. At Gondola Village riders can transfer to all other lines. The Red Line service begins daily at 7:00 AM at the Snowcreek Athletic Club and ends at 5:30 PM, with 15-minute headways.

- The **Canyon Lodge Line (Blue Line)** provides service to and from Gondola Village and Canyon Lodge, traveling along Lakeview Boulevard, Canyon Boulevard, and Forest Trail. Riders can transfer to all other lines at Gondola Village. Service begins daily at Gondola Village at 7:00 AM and ends at 5:30 PM, with half-hour headways.

- The **Juniper Springs Line (Green Line)** provides service to and from Eagle Lodge and Old Mammoth Road, traveling along Azimuth, Meridian, and Sierra Nevada Boulevards. Riders can transfer to all other lines at stop #32 (the intersection of Sierra Nevada Boulevard and Old Mammoth Road). The Green Line operates daily beginning at 7:30 AM and ends at 5:30 PM, providing half-hour headways.

- The **Canyon Lodge/Juniper Springs Line (Yellow Line)** provides service to and from Canyon Lodge and Chair 15 Outpost (Juniper Springs), traveling along Canyon Boulevard, Lake Mary Road, Kelly Road, and Majestic Pines Drive. Riders can transfer to all other lines at Gondola Village. Providing up to half-hour headways, the Yellow Line operates daily from 7:30 AM to 5:30 PM.

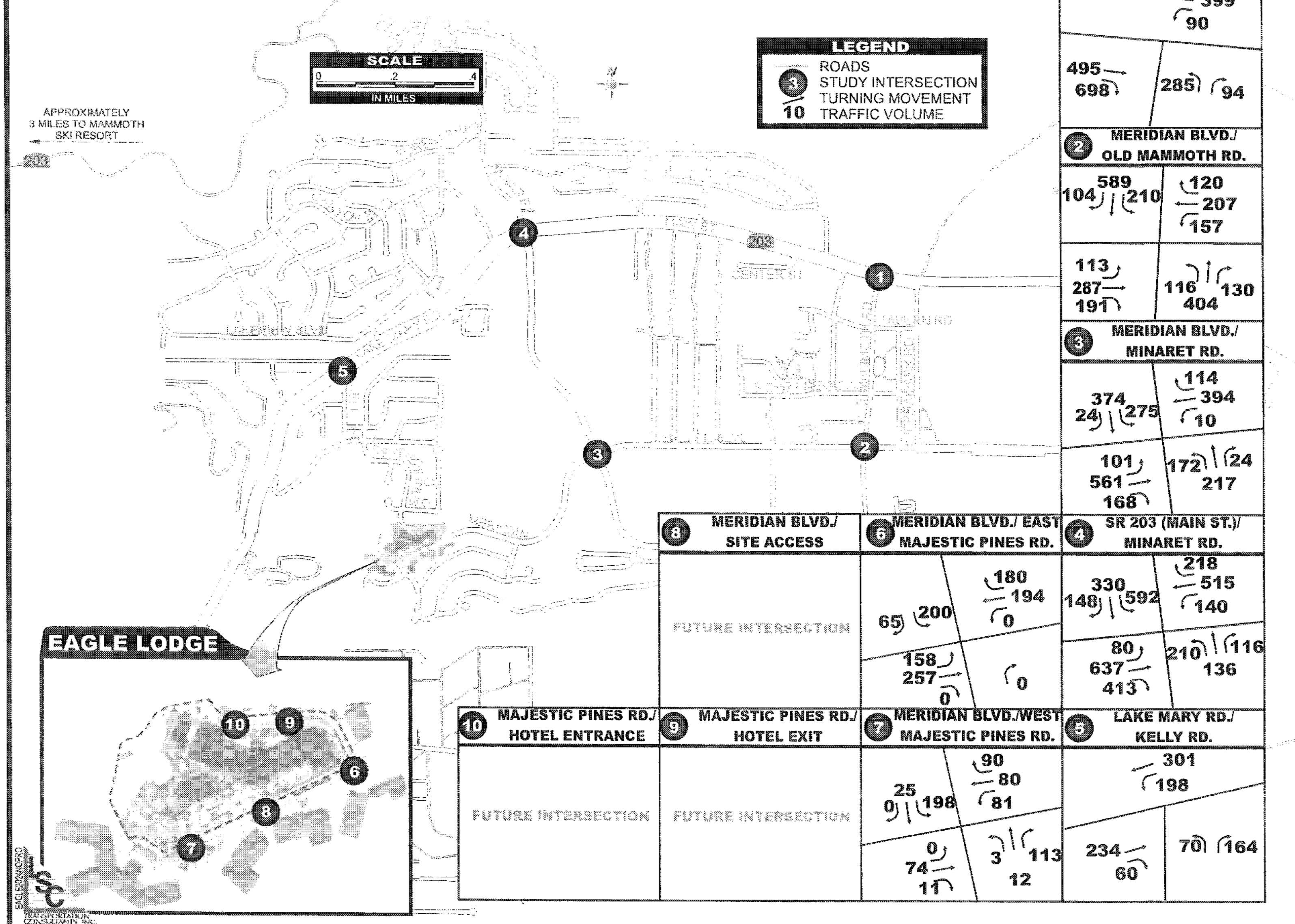
- The **Tamarack Lodge/Gondola Village Line (Orange Line)** provides service to and from Tamarack Lodge and Gondola Village, traveling along Lake Mary Road. Riders can transfer to all other lines at Gondola Village. The bus departs from Tamarack Lodge three times a day (9:00 AM, noon, and 4 PM).

There are also three "Nightline" routes which provide service during evening hours. Riders can transfer between the following four Nightlines at Gondola Village:

- The **Gondola Village/Snowcreek Nightline (Red Line)** provides service to and from Gondola Village and Snowcreek Athletic Club. The Red Line services Main Street, Old Mammoth Road, Chateau Road, and Minaret Road. Beginning at Gondola Village, the bus departs every half-hour from 5:00 PM to Midnight.

FIGURE 4

2024 NO PROJECT TYPICAL WINTER SATURDAY PM PEAK-HOUR TRAFFIC VOLUMES



- The **Canyon Lodge Nightline (Blue Line)** provides service to and from Gondola Village and Canyon Lodge. The Green Line night service operates on Friday and Saturday nights only, every half hour from 5:00 PM to Midnight.

- The **Juniper Springs Line (Green Line)** provides night service to and from Eagle Lodge and Old Mammoth Road, traveling along Azimuth, Meridian, and Sierra Nevada Boulevards. The Green Line night service operates on Friday and Saturday nights only, every half hour from 5:00 PM to Midnight.

- The **Canyon Lodge/Juniper Springs Line (Yellow Line)** provides service to and from Canyon Lodge and Chair 15 Outpost (Juniper Springs), traveling along Canyon Boulevard, Lake Mary Road, Kelly Road, and Majestic Pines Drive. The Yellow Line night service operates on Friday and Saturday nights only, every half hour from 5:00 PM to Midnight.

In addition, the Town of Mammoth Lakes, through Inyo-Mono Transit, operates "The Lift" bus service during the non-winter seasons as well as a summer-only rubber-tired Trolley program. These services do not serve the Eagle Lodge site. The entire town (including the Eagle Lodge site) is served by a Dial-A-Ride program.

EXISTING PARKING CONDITIONS

Due to snow storage and parking efficiency variations from day-to-day, the Eagle Lodge site currently contains roughly 220 to 240 parking spaces, 26 of which are designated for Juniper Springs. In addition, skiers park vehicles in parallel parking spaces along Meridian Boulevard. Parking is allowed along Meridian Boulevard from the west Majestic Pines Drive/Meridian Boulevard intersection eastward to Sierra Star Parkway. However, on most ski weekends, vehicles are parked along Meridian Boulevard from the west Majestic Pines Drive/Meridian Boulevard intersection all the way to Minaret Road. In fact, on very busy days vehicles sometimes are parked in the area that begins to widen to provide an eastbound left-turn lane at the Meridian Boulevard/Minaret Road intersection.

Section 3
PROPOSED CONDITIONS

The project location, the size of the project, and the time of the project completion are all important elements that need to be considered to determine the safety and capacity impacts of the development. It is also important to examine how the project will operate with the existing transportation system, estimate how much new traffic it will generate, and identify how traffic generated by the site will be distributed.

PROJECT DESCRIPTION

The Eagle Lodge project proposes to construct a permanent base lodge facility at 3256 Meridian Boulevard on the north side of Meridian Boulevard between its eastern and western intersection with Majestic Pines Drive. The project would include visitor lodging and a mix of ski-related uses, including food service, rental/demo/repair shop, retail, ski school and day care, ticketing/lobby, administrative space, and restrooms. In addition, the lodge would include a convenience market, restaurant, day spa, and locker club. Access to the commercial and skier uses would be provided at two locations on Meridian Boulevard, while access to the lodging and service uses would be provided along Majestic Pines Drive.

A peak maintain design capacity of 5,000-5,960 skiers per day has been estimated for the site. The traffic analysis contained in this report is based upon a maximum of 6,000 skiers per day in order to analyze the worst case scenario.

PROJECT ACCESS

Properly located access points are essential to allow for the safe and orderly movement of traffic in and out of a site. Access to the commercial and skier uses would be provided at two locations on Meridian Boulevard, while access to the lodging and service uses would be provided along Majestic Pines Drive.

TRIP GENERATION AND DISTRIBUTION

Because of the unique transportation factors impacting ski area access and the need to consider the interaction between the various uses proposed for the site, as well as the interaction with other nearby land uses, the evaluation of trip generation for the Eagle Lodge project is a relatively complicated process.

Winter Trip Generation

The vehicle trip generation associated with the project is summarized in Table 1. Details regarding the trip generation assumptions are summarized in Appendix A. As the table indicates, upon project build out during a typical winter Saturday, the project would generate a total of 914 PM peak-hour trips (320 entering and 594 exiting). However, note that this does not account for the fact that the project site already generates traffic. The project's net impact on traffic is 509 PM peak-hour trips (219 entering and 290 exiting).

TABLE 1: Eagle Lodge External Auto Trip Generation – Winter

Use	PM Peak-Hour External Trips			Reductions for External Walking Trips	PM Peak-Hour External Auto Trips			Percent Pass-By	PM Peak-Hour New External Auto Trips		
	In	Out	Total		In	Out	Total		In	Out	Total
Skiers [1]	213	415	628	--	213	415	628	0%	213	415	628
Base Lodge	0	43	43	0%	0	43	43	0%	0	43	43
Ice Rink	3	3	6	5%	3	3	6	0%	3	3	6
Commercial	175	172	347	42%	102	100	202	25%	77	75	152
Lodging	20	51	71	0%	20	51	71	0%	20	51	71
Buses	2	2	4	0%	2	2	4	0%	2	2	4
Trucks	5	5	10	0%	5	5	10	0%	5	5	10
Total	**418**	**691**	**1,109**		**345**	**619**	**964**		**320**	**594**	**914**
Existing Traffic Generated by Site									**101**	**304**	**405**
Project's Net Impact on Trip Generation									**219**	**290**	**509**

Note 1: Reduction for walking trips reflected in Table A.

Summer Trip Generation

While the traffic analysis focuses on typical winter Saturday conditions to represent the worst case, a summer trip generation analysis is also provided in this report. A portion of the summer trip generation will consist of mountain bikers. According to Dave Geirman (MMSA), approximately 25,000 bikers per year visit the mountain, a number which has been growing at a rate of 5 to 8 percent per year. The mountain bike park hopes to increase this number to 40,000 bikers per year in the next five years, which represents an annual growth rate of 9.9 percent per year. Currently, approximately 600 bikers per day visit the mountain on a typical summer weekend day. Approximately half of these bikers are downhill bikers, while the other half are cross-country bikers.

According to the existing Town of Mammoth Lakes General Plan, the number of people at one time the Town can accommodate is expected to grow at a rate of 2.6 percent a year over the next 20 years. Applying this growth rate indicates that by 2024 approximately 977 bikers per day will visit the mountain. Assuming that the number of downhill bikers will grow at twice the rate as the cross-country bikers, a total of 426 cross-country bikers and 551 downhill bikers per day will be on the mountain by 2024. As Eagle Lodge provides primary access to cross-country bikers, approximately 426 bikers will access the Eagle Lodge lift on a summer weekend day by 2024. It is also assumed that 50 percent of the bikers will bike to the site, while the remaining 50 percent will drive.

The summer trip rates for the Day Care, Mountain Biking Employees, Day Spa, Convenience Market, Sit-Down Restaurant, and Hotel land uses were assumed to equal the winter trip rates. In the off season, the community room/conference room can be rented out and used by people not residing at the lodge. The trip generation of this facility is estimated assuming a 200 person-at-one-time capacity, a maximum of two events occurring on one day, an average vehicle occupancy of 2.5 persons per vehicle, and as a worst-case one event ending and one event starting during the PM peak hour.

Without reductions for internal and walking trips and as shown in Table 2, the project is expected to generate 757 PM peak-hour trips on a summer Saturday (360 entering, 397 exiting). With reductions for internal and walking trips, the site is expected to generate 556 PM peak-hour trips on a summer Saturday (259 entering, 297 exiting), which is roughly 39 percent less than the levels generated in the winter. The project's net impact on summer PM peak-hour traffic is 523 trips, which is 3 percent higher than the winter net impact. However, as traffic volumes are greater during the winter and because the site generates 40 percent less traffic during the summer than the winter, the winter condition is analyzed in this document as the worst case.

TABLE 2: Eagle Lodge External Auto Trip Generation - Summer

Use	P.M. Peak-Hour External Trips			Reductions for External Walking Trips	P.M. Peak-Hour External Auto Trips			Percent Pass-By	P.M. Peak-Hour New External Auto Trips		
	In	Out	Total		In	Out	Total		In	Out	Total
Mountain Bikers	0	38	38	--	0	38	38	0%	0	38	38
Mountain Biking Employees	0	9	9	0%	0	9	9	0%	0	9	9
Day Spa	11	10	21	10%	10	9	19	0%	10	9	19
Convenience Market	154	154	308	50%	77	77	154	25%	58	58	116
Sit-Down Restaurant	38	28	66	10%	34	25	59	0%	34	25	59
Conference Facilities	80	80	160	0%	80	80	160	0%	80	80	160
Lodging	70	71	141	0%	70	71	141	0%	70	71	141
Buses	2	2	4	0%	2	2	4	0%	2	2	4
Trucks	5	5	10	0%	5	5	10	0%	5	5	10
Total	**360**	**397**	**757**		**278**	**316**	**594**		**259**	**297**	**556**
Existing Traffic Generated by Site									**0**	**33**	**33**
Project's Net Impact on Trip Generation									**259**	**264**	**523**

TRIP DISTRIBUTION AND ASSIGNMENT

The distribution of the site-generated traffic was estimated as follows:

1. The distribution of commercial trips was estimated based upon the location of nearby residential areas, considering the "market area" of competing convenience retail in the downtown and Village areas.

2. The distribution of lodging trips was estimated based upon the location of commercial areas and recreational areas throughout the town, as well as to regional access (SR 203 to the east).

3. The distribution of skier trips was estimated based upon the location of residential/lodging areas and the assumptions identified in Appendix A regarding percentage of people in nearby residential/lodging areas that walk or travel to other ski portals.

4. The distribution of truck traffic was based upon the location of regional access (SR 203) as well as other commercial areas in Mammoth Lakes that may also be serviced by larger delivery trucks as part of combined routes.

The project-generated traffic distribution is shown in Table 3.

TABLE 3: Eagle Lodge Trip Distribution

Area	Commercial	Lodging	Skiers	Trucks
Main to the East of Old Mammoth	1%	3%	5%	0%
Meridian to the East of Old Mammoth	4%	14%	12%	25%
Old Mammoth South of Meridian	1%	10%	2%	0%
Old Mammoth Between Main and Meridian	3%	15%	17%	25%
Main Between Minaret and Old Mammoth	3%	17%	6%	25%
Meridian Between Minaret and Old Mammoth	8%	3%	12%	0%
Minaret Between Main and Meridian	5%	3%	4%	0%
Minaret South of Meridian	7%	2%	21%	0%
Minaret North of Main	2%	22%	2%	10%
Canyon Boulevard North of Lake Mary	1%	1%	1%	15%
Lakeview Northwest of Lake Mary	5%	5%	1%	0%
Lake Mary West of Kelly Road	2%	5%	2%	0%
Meridian Between Majestic Pines and Minaret	15%	0%	2%	0%
Majestic Pines North Neighborhood	23%	0%	5%	0%
Majestic Pines to the South	20%	0%	8%	0%
Total	100%	100%	100%	100%

Using the trip generation estimates and traffic distribution pattern, traffic assignments are estimated for the winter PM peak hour of traffic activity. The impact of the project on winter traffic volumes is shown in Figure 5, while the 2009 and 2024 plus project turning-movement volumes are shown in Figures 6 and 7, respectively.

VEHICLE MILES OF TRAVEL

The PM peak-hour Vehicle Miles of Travel (VMT) generated by the project was calculated based upon the PM peak-hour trip generation, daily trip generation, and estimated trip length to distribution area. As Table 4 indicates, the project is expected to generate 1,438 PM peak-hour VMT and 8,035 daily VMT on a typical winter Saturday.

TABLE 4: Project-Generated Vehicle Miles of Travel (VMT)

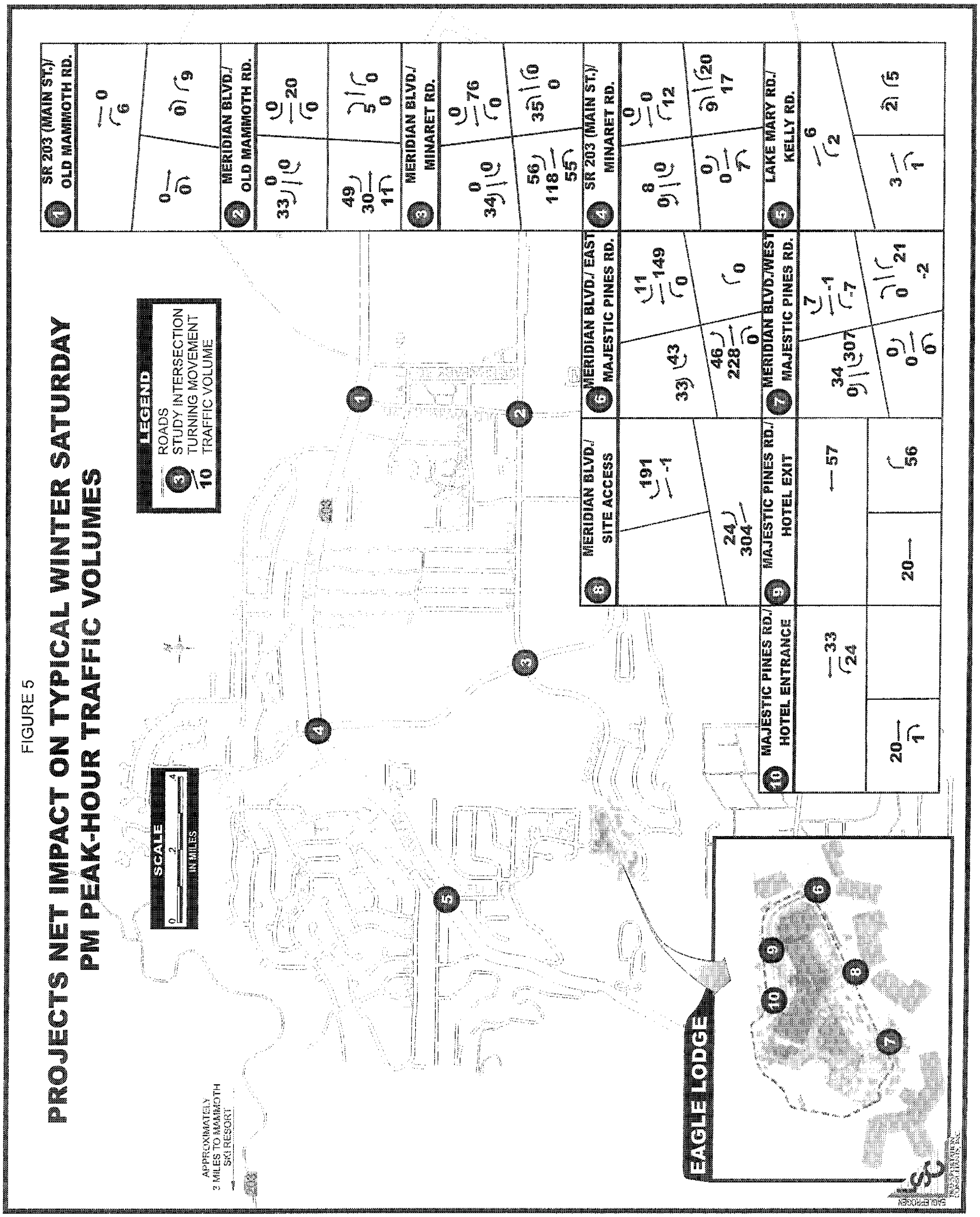
Use	PM Peak-Hour New External Auto Trips	Average Trip Length (miles)	PM Peak-Hour VMT	Daily VMT
Skiers [1]	223	4.56	1,017	3,606
Base Lodge	43	1.63	70	355
Ice Rink	6	1.67	10	154
Commercial	152	1.28	195	2,064
Lodging	71	1.73	123	1,626
Buses	4	1.75	7	70
Trucks	10	1.6	16	160
Total	**509**	**--**	**1,438**	**8,035**

Note 1: Excludes existing skier trips to the site.

Note 2: Based upon trip distribution and distance of distribution point to site.

FIGURE 5

PROJECTS NET IMPACT ON TYPICAL WINTER SATURDAY PM PEAK-HOUR TRAFFIC VOLUMES



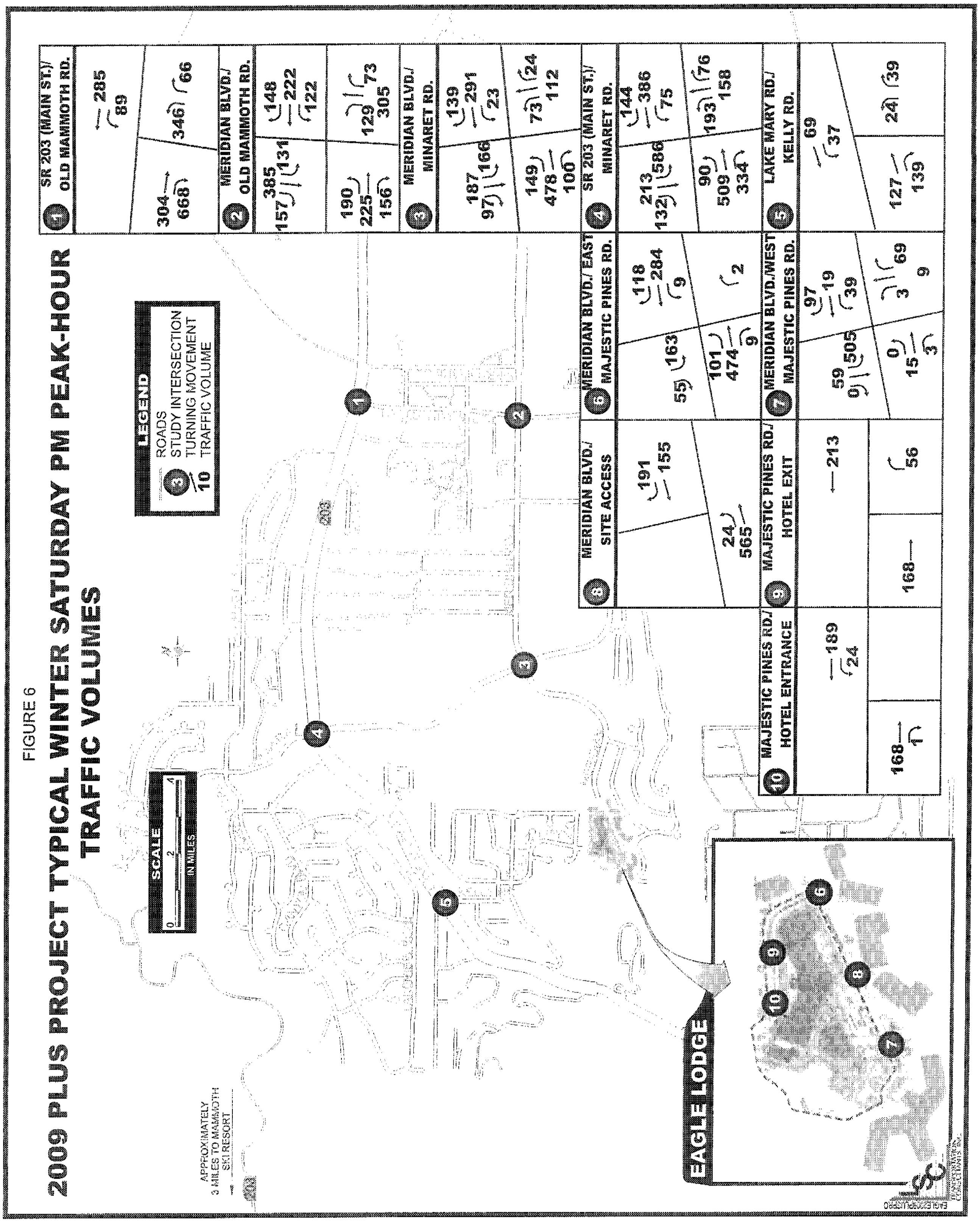
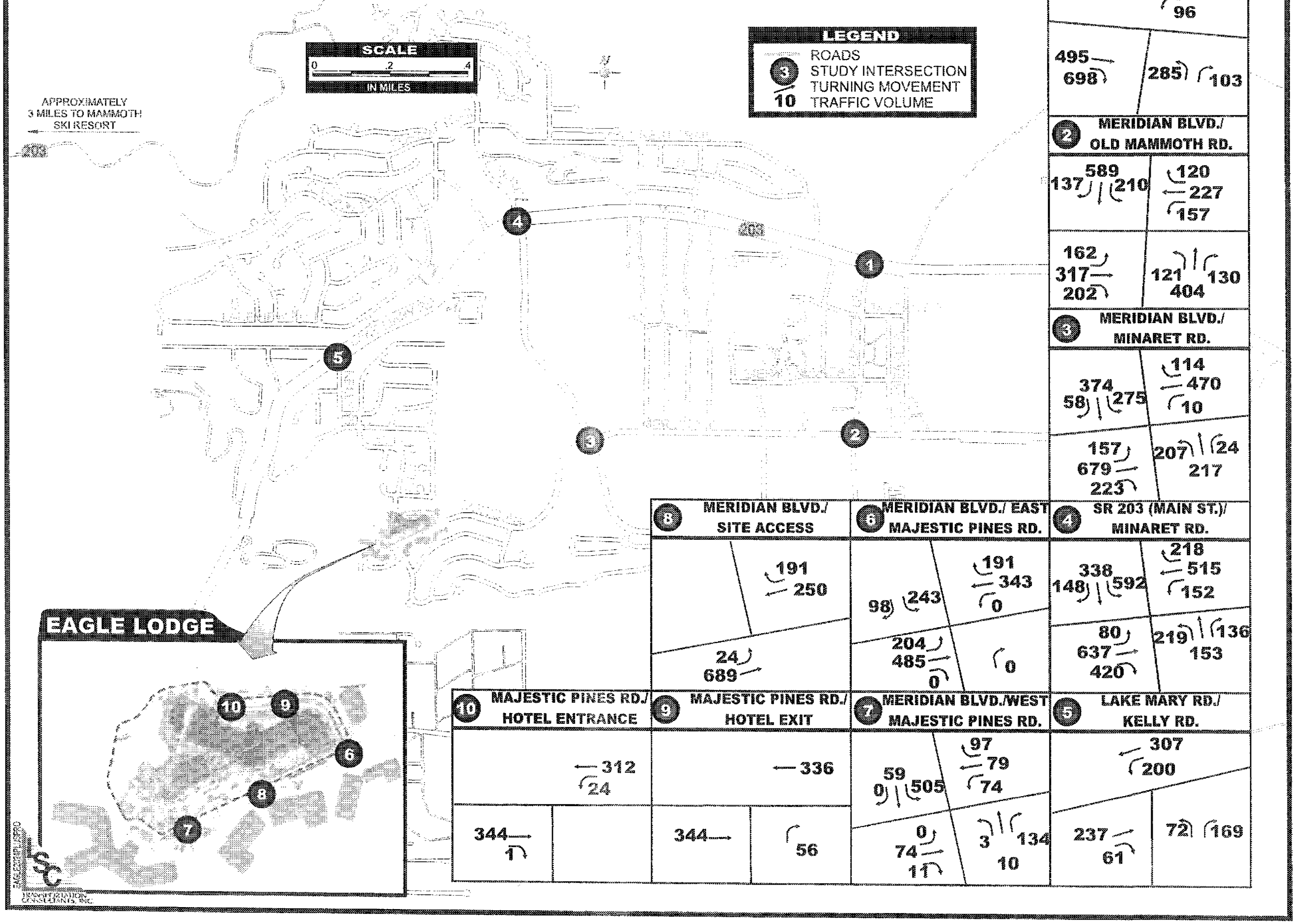


FIGURE 6
2009 PLUS PROJECT TYPICAL WINTER SATURDAY PM PEAK-HOUR TRAFFIC VOLUMES
LEGEND
ROADS
STUDY INTERSECTION
TURNING MOVEMENT
TRAFFIC VOLUME
SCALE
IN MILES
APPROXIMATELY 3 MILES TO MAMMOTH SKI RESORT
EAGLE LODGE
SR 203 (MAIN ST.)/ OLD MAMMOTH RD.
MERIDIAN BLVD./ OLD MAMMOTH RD.
MERIDIAN BLVD./ MINARET RD.
SR 203 (MAIN ST.)/ MINARET RD.
LAKE MARY RD./ KELLY RD.
MERIDIAN BLVD./ EAST MAJESTIC PINES RD.
MERIDIAN BLVD./WEST MAJESTIC PINES RD.
MERIDIAN BLVD./ SITE ACCESS
MAJESTIC PINES RD./ HOTEL EXIT
MAJESTIC PINES RD./ HOTEL ENTRANCE

FIGURE 7

2024 PLUS PROJECT TYPICAL WINTER SATURDAY PM PEAK-HOUR TRAFFIC VOLUMES



Section 4
LEVEL OF SERVICE ANALYSIS

LEVEL OF SERVICE DESCRIPTION

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

In general, the various levels of service are defined as follows for roadways (away from intersections):

Level of Service A represents free flow. Individual drivers are virtually unaffected by the presence of others in the traffic stream. Freedom to select desired speeds and to maneuver within the traffic stream is extremely high. The general level of comfort and convenience provided to the motorist, passenger, or pedestrian is excellent.

Level of Service B is in the range of stable flow, but the presence of other users in the traffic stream begins to be noticeable. Freedom to select desired speeds is relatively unaffected, but there is a slight decline in the freedom to maneuver within the traffic stream from LOS A. The level of comfort and convenience provided is somewhat less than at LOS A, because the presence of others in the traffic stream begins to affect individual behavior.

Level of Service C is in the range of stable flow, but marks the beginning of the range of flow in which the operation of individual drivers becomes significantly affected by interactions with others in the traffic stream. The selection of speed is now affected by the presence of others, and maneuvering within the traffic stream requires substantial vigilance on the part of the user. The general level of comfort and convenience declines noticeably at this level.

Level of Service D represents high density, but stable flow. Speed and freedom to maneuver are severely restricted, and the driver experiences a generally poor level of comfort and convenience. Small increases in traffic flow will generally cause operational problems at this level.

Level of Service E represents operating conditions at or near the capacity level. All speeds are reduced to a low, but relatively uniform value. Freedom to maneuver within the traffic stream is extremely difficult, and it is generally accomplished by forcing a vehicle or pedestrian to "give way" to accommodate such maneuvers. Comfort and convenience levels are extremely poor, and driver or pedestrian frustration is generally high. Operations at this level are usually unstable, because small increases in flow or minor perturbations within the traffic stream will cause breakdowns.

Level of Service F is used to define forced or breakdown flow. This condition exists wherever the amount of traffic approaching a point exceeds the amount which can traverse the point. Queues form behind such locations. Operations within the queue are characterized by stop-and-go waves, and they are extremely unstable. Vehicles may progress at reasonable speeds for several hundred feet or more, and then be required to stop in a cyclic fashion. Level of Service F is used to describe the operating conditions within the queue, as well as the point of the breakdown. It should be noted, however, that in many cases operating conditions of vehicles or pedestrians discharged from the queue may be quite good. Nevertheless, it is the point at which arrival flow exceeds discharge flow which causes the queue to form, and Level of Service F is an appropriate designation for such points.

Level of Service at signalized and unsignalized intersections in terms of delay is summarized in Table 5.

Table 5: Level of Service Criteria for Unsignalized and Signalized Intersections

LOS	**Unsignalized Intersection** Average Delay per Vehicle (sec)	**Signalized Intersection** Average Delay per Vehicle (sec)
A	≤ 10	≤ 10
B	>10 and ≤ 15	>10 and ≤ 20
C	>15 and ≤ 25	>20 and ≤ 35
D	>25 and ≤ 35	>35 and ≤ 55
E	>35 and ≤ 50	>55 and ≤ 80
F	> 50	> 80

Source: Highway Capacity Manual (TRB, 2000).

LEVEL OF SERVICE STANDARDS

The *Town of Mammoth Lakes General Plan Transportation Element*, adopted in 2001, currently contains the following Policy:

Policy 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.

Therefore, the following LOS thresholds were applied in the General Plan traffic analysis (as described in the memo contained in Appendix A):

- **For Signalized Intersections:** Total intersection LOS D or better must be maintained. Therefore, if a signalized intersection is found to operate at a total intersection LOS E or F, mitigation is required. It is assumed that this same threshold applies to roundabouts.

- **For Unsignalized Intersections:** In order to avoid the identification of a LOS failure for intersections that result in only a few vehicles experiencing a delay greater than 50 seconds (such as at a driveway serving a few homes that accesses onto a busy street), a LOS deficiency is not identified for all intersections with approach LOS E or F. Instead, a LOS deficiency is assumed to occur at an unsignalized intersection only 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 multi-lane approach. In other words, a deficiency is found to occur if the average number of vehicles queued over the peak-hour exceeds four at a single-lane approach, or exceeds five at a multi-lane approach. Traffic operations at the study intersections were assessed in terms of Level of Service (LOS) and delay. LOS is a concept that was developed by transportation engineers to quantify the level of operation of intersections and roadways (*Highway Capacity Manual*, TRB, 2000). LOS measures are classified in grades "A" through "F," indicating the range of operation. LOS "A" signifies the best level of operation, while "F" represents the worst.

For signalized intersections, LOS is primarily measured in terms of average delay per vehicle entering the intersection. LOS at unsignalized intersections is quantified in terms of delay per vehicle for each approach/movement. The unsignalized intersection LOS is based upon the theory of gap acceptance for side-street stop sign-controlled approaches, while signalized intersection LOS is based upon the assessment of volume-to-capacity ratios and control delay.

ANALYSIS METHODOLOGY

Level of Service

Signalized and two-way stop-controlled intersection LOS was evaluated using Traffix software (Version 7.7, Trafficware 2004) based on the *2000 Highway Capacity Manual* methodologies at all study intersections. LOS at roundabouts was analyzed using the aaSIDRA software.

Roadway Capacity

The capacity of the roadways within Mammoth Lakes were estimated as follows:

1. A base saturation flow rate of 1,600 vehicles per hour per directions was assumed. This figure is slightly lower than is typically observed in urban areas, representing the reduction in effective capacity that results from both visitor drivers that are unfamiliar with the area, as well as the impacts of winter driving conditions. It is consistent with observed capacity in the Tahoe Region, which is similarly affected by visitor drivers.

2. According to Chapter 10 (Urban Street Concepts) of the *Highway Capacity Manual*, the default directional lane split for roadways with two lanes per direction is 52.5 percent in one lane and 47.5 percent in the other. Therefore, as no recent count data was available to determine the actual lane split, for roadways with two lanes in each direction, it was assumed that one lane would carry 52.5 percent of the directional traffic, while the second lane would carry 47.5 percent.

3. Reductions to roadway capacity were made, as required on individual segments, to account for the presence of pedestrian crossings, on-street parking maneuvers, vehicles searching for parking spaces, and conflicting driveway turning movements.

4. The resulting roadway capacities are shown in Table 6. Please note, however, that the roadway capacities applied in this study are for planning purposes only and are only based upon estimated effects of pedestrians, parking maneuvers, and driveway turning-movement conflicts.

Table 6: Roadway Capacity Summary

Roadway Segment	Capacity (Vehicles per Hour per Peak Direction)
Main Street East of Old Mammoth Road	2,600
Main Street West of Old Mammoth Road	2,600
Main Street East of Minaret Road	2,600
Lake Mary Road West of Minaret Road	1,600
Lake Mary Road West of Kelly Road	1,600
Old Mammoth Road South of Main Street	1,600
Old Mammoth Road North of Meridian Boulevard	1,600
Old Mammoth Road South of Meridian Boulevard	1,600
Meridian Boulevard East of Old Mammoth Road	1,600
Meridian Boulevard West of Old Mammoth Road	2,600
Meridian Boulevard East of Minaret Boulevard	2,600
Meridian Boulevard West of Minaret Road	2,600
Meridian Boulevard East of Majestic Pines Road North	2,600
Meridian Boulevard West of Majestic Pines Road North	2,600
Minaret Road Main Street to Forest Trail	1,300
Minaret Road South of Main	1,600
Majestic Pines Drive North of Meridian	1,600
Majestic Pines Drive South of Meridian Boulevard	800
Kelly Road South of Lake Mary Road	800

Note: Roadway capacity for 2005 and 2024 assumed to be the same.

LEVEL OF SERVICE AND ROADWAY CAPACITY ANALYSIS

2005 No Project Conditions

2005 Intersection LOS

Study intersections were evaluated to determine existing operational conditions during the typical Saturday winter PM peak hour. Using the traffic volumes presented as part of this study, it is possible to evaluate the LOS provided during peak periods at the intersections serving the study area. Appendix B presents the actual output from each of the LOS calculations for the study intersections, and Table 7 summarizes the results for existing (2005) no project conditions. As the table indicates, the LOS at all the study intersections are within the Town of Mammoth Lakes Level of Service standards without project implementation.

2005 Roadway Capacity Analysis

As Table 8 indicates, under 2005 no project conditions, the study roadways are operating below capacity.

2009 No Project and Plus Project Conditions

2009 Intersection LOS

The study intersections were evaluated to determine existing operational conditions during the 2009 typical Saturday winter PM peak hour both with and without the project. As Table 9 indicates, intersection LOS standards are not exceeded at any of the study intersections in 2009 even after project implementation. However, it should be noted that the proposed project worsens LOS on the southbound approach to the Majestic Pine Drive East/Meridian Boulevard intersection from a LOS C to a LOS F.

2009 Roadway Capacity Analysis

As Table 10 indicates, under 2009 no project and plus project conditions, the study roadways are operating below capacity, and therefore at acceptable levels of service.

2024 No Project and Plus Project Conditions

2024 Intersection LOS

The study intersections were evaluated to determine existing operational conditions during the 2024 typical Saturday winter PM peak hour both with and without the project. As Table 11 indicates, intersection LOS standards are not exceeded at any of the study intersections in 2024, with the following exceptions:

- The Meridian Boulevard/Minaret Road intersection would operate at LOS E with the project. However, the provision of an eastbound right-turn lane at this location would mitigate LOS to an acceptable LOS D condition.

Table 7: 2005 Typical Winter Saturday Intersection LOS

Intersection	Unmitigated Traffic Control	Approach	Delay (seconds per vehicle)	LOS
Old Mammoth Road/Main Street	Traffic Signal	Total Intersection	22.9	C
Old Mammoth Road/Meridian Boulevard	Traffic Signal	Total Intersection	21.4	C
Minaret Road/Meridian Boulevard	Traffic Signal	Total Intersection	20.5	C
Minaret Road/Main Street	Traffic Signal	Total Intersection	20.8	C
Lake Mary Road/Kelly Road (North)	Two-Way Stop Controlled	Worst Approach	3.5	A
		Total Intersection	1.5	A
Meridian Boulevard/Majestic Pines Drive (East)	Two-Way Stop Controlled	Worst Approach	8.3	A
		Total Intersection	1.6	A
Meridian Boulevard/Majestic Pines Drive (West)	All-Way Stop Controlled	Worst Approach	9.7	A
		Total Intersection	8.9	A

Table 8: 2005 Roadway Capacity Summary

Roadway Segment	Capacity (Vehicles per Hour per Peak Direction)	No Project Condition: Maximum Vehicles per Direction per Hour	Volume/ Capacity	Capacity Exceeded?
Main Street East of Old Mammoth Road	2,600	361	0.14	NO
Main Street West of Old Mammoth Road	2,600	949	0.37	NO
Main Street East of Minaret Road	2,600	1,071	0.41	NO
Lake Mary Road West of Minaret Road	1,600	716	0.45	NO
Lake Mary Road West of Kelly Road	1,600	85	0.05	NO
Old Mammoth Road South of Main Street	1,600	732	0.46	NO
Old Mammoth Road North of Meridian Boulevard	1,600	559	0.35	NO
Old Mammoth Road South of Meridian Boulevard	1,600	576	0.36	NO
Meridian Boulevard East of Old Mammoth Road	1,600	414	0.26	NO
Meridian Boulevard West of Old Mammoth Road	2,600	423	0.16	NO
Meridian Boulevard East of Minaret Boulevard	2,600	517	0.20	NO
Meridian Boulevard West of Minaret Road	2,600	460	0.18	NO
Meridian Boulevard East of Majestic Pines Road North	2,600	333	0.13	NO
Meridian Boulevard West of Majestic Pines Road North	2,600	278	0.11	NO
Minaret Road Main Street to Forest Trail	1,300	877	0.67	NO
Minaret Road South of Main	1,600	429	0.27	NO
Majestic Pines Drive North of Meridian	1,600	98	0.06	NO
Majestic Pines Drive South of Meridian Boulevard	800	71	0.09	NO
Kelly Road South of Lake Mary Road	800	55	0.07	NO

Table 9: 2009 Typical Winter Saturday Intersection LOS

Intersection	Unmitigated Traffic Control	Approach	No Project: Delay (seconds per vehicle)	No Project: LOS	Plus Project: Delay (seconds per vehicle)	Plus Project: LOS	Plus Project: Approach Vehicle Hours of Delay [1]
Old Mammoth Road/Main Street	Traffic Signal	Total Intersection	20.8	C	21.1	C	--
Old Mammoth Road/Meridian Boulevard	Traffic Signal	Total Intersection	23.8	C	25.6	C	--
Minaret Road/Meridian Boulevard	Traffic Signal	Total Intersection	21.3	C	27.4	C	--
Minaret Road/Main Street	Traffic Signal	Total Intersection	26.8	C	28.5	C	--
Lake Mary Road/Kelly Road (North)	Two-Way Stop Controlled	Worst Approach	10.2	B	10.3	B	--
		Total Intersection	2.0	A	2.2	A	--
Meridian Boulevard/Majestic Pines Drive (East)	Two-Way Stop Controlled	Worst Approach	15.1	C	52.0	F	3.3
		Total Intersection	3.8	A	10.1	B	--
Meridian Boulevard/Majestic Pines Drive (West)	All-Way Stop Controlled	Worst Approach	9.5	A	21.6	C	--
		Total Intersection	8.7	A	17.7	C	--
Meridian Boulevard/Drop Off Area	Two-Way Stop Controlled	Worst Approach	--	--	9.0	A	--
		Total Intersection	--	--	0.2	A	--
Majestic Pines Drive/Hotel Exit	Two-Way Stop Controlled	Worst Approach	--	--	9.4	A	--
		Total Intersection	--	--	1.2	A	--
Majestic Pines Drive/Hotel Entrance	Two-Way Stop Controlled	Worst Approach	--	--	12.0	B	--
		Total Intersection	--	--	0.5	A	--

Note 1: Worst approach vehicles hours of delay reported only if approach LOS exceeds threshold.

Table 10: 2009 Roadway Capacity Summary

Roadway Segment	Capacity (Vehicles per Hour per Peak Direction)	No Project Condition: Maximum Vehicles per Direction per Hour	No Project Condition: Volume/ Capacity	No Project Condition: Capacity Exceeded?	Plus Project Condition: Maximum Vehicles per Direction per Hour	Plus Project Condition: Volume/ Capacity	Plus Project Condition: Capacity Exceeded?	Percent Increase in Peak-Hour Traffic Generated by Project
Main Street East of Old Mammoth Road	2,600	368	0.14	NO	374	0.14	NO	2%
Main Street West of Old Mammoth Road	2,600	972	0.37	NO	972	0.37	NO	0%
Main Street East of Minaret Road	2,600	1,151	0.44	NO	1,171	0.45	NO	2%
Lake Mary Road West of Minaret Road	1,600	926	0.58	NO	933	0.58	NO	1%
Lake Mary Road West of Kelly Road	1,600	262	0.16	NO	266	0.17	NO	2%
Old Mammoth Road South of Main Street	1,600	751	0.47	NO	757	0.47	NO	1%
Old Mammoth Road North of Meridian Boulevard	1,600	640	0.40	NO	673	0.42	NO	5%
Old Mammoth Road South of Meridian Boulevard	1,600	652	0.41	NO	663	0.41	NO	2%
Meridian Boulevard East of Old Mammoth Road	1,600	472	0.30	NO	492	0.31	NO	4%
Meridian Boulevard West of Old Mammoth Road	2,600	481	0.19	NO	571	0.22	NO	19%
Meridian Boulevard East of Minaret Boulevard	2,600	550	0.21	NO	668	0.26	NO	21%
Meridian Boulevard West of Minaret Road	2,600	498	0.19	NO	727	0.28	NO	46%
Meridian Boulevard East of Majestic Pines Road North	2,600	368	0.14	NO	639	0.25	NO	74%
Meridian Boulevard West of Majestic Pines Road North	2,600	310	0.12	NO	584	0.22	NO	88%
Minaret Road Main Street to Forest Trail	1,300	923	0.71	NO	931	0.72	NO	1%
Minaret Road South of Main	1,600	595	0.37	NO	622	0.39	NO	5%
Majestic Pines Drive North of Meridian	1,600	162	0.10	NO	219	0.14	NO	35%
Majestic Pines Drive South of Meridian Boulevard	800	74	0.09	NO	101	0.13	NO	36%
Kelly Road South of Lake Mary Road	800	173	0.22	NO	176	0.22	NO	2%

Table 11: 2024 Typical Winter Saturday Intersection LOS

Bold text indicates LOS threshold is exceeded.

Intersection	Unmitigated Traffic Control	Approach	No Project: Delay (seconds per vehicle)	No Project: LOS	No Project: Approach Vehicle Hours of Delay [1]	Plus Project: Delay (seconds per vehicle)	Plus Project: LOS	Plus Project: Approach Vehicle Hours of Delay [1]
Old Mammoth Road/Main Street	Traffic Signal	Total Intersection	17.4	B	--	17.7	B	--
Old Mammoth Road/Meridian Boulevard	Traffic Signal	Total Intersection	34.8	C	--	36.7	D	--
Minaret Road/Meridian Boulevard	Traffic Signal	Total Intersection	45.7	D	--	69.6	**E**	--
Minaret Road/Main Street	Traffic Signal	Total Intersection	49.5	D	--	53.1	D	--
Lake Mary Road/Kelly Road (North)	Two-Way Stop Controlled	Worst Approach	22.3	C	--	23.4	C	--
		Total Intersection	6.7	A	--	7.0	A	--
Meridian Boulevard/Majestic Pines Drive (East)	Two-Way Stop Controlled	Worst Approach	43.1	E	3.3	394.8	**F**	39.4
		Total Intersection	12.1	B	--	87.3	**F**	--
Meridian Boulevard/Majestic Pines Drive (West)	All-Way Stop Controlled	Worst Approach	10.7	B	--	34.6	D	--
		Total Intersection	9.7	A	--	23.6	C	--
Meridian Boulevard/Drop Off Area	Two-Way Stop Controlled	Worst Approach	--	--	--	9.0	A	--
		Total Intersection	--	--	--	0.2	A	--
Majestic Pines Drive/Hotel Exit	Two-Way Stop Controlled	Worst Approach	--	--	--	10.7	B	--
		Total Intersection	--	--	--	0.8	A	--
Majestic Pines Drive/Hotel Entrance	Two-Way Stop Controlled	Worst Approach	--	--	--	8.0	A	--
		Total Intersection	--	--	--	0.3	A	--

Note 1: Worst approach vehicles hours of delay reported only if approach LOS exceeds threshold.

- The Majestic Pine Drive East/Meridian Boulevard intersection would operate with a worst approach LOS E without the project and LOS F with the project. However, under plus project conditions, the approach delay exceeds 4 vehicle-hours, thereby warranting an improvement such as a roundabout or traffic signal. Provision of additional turn lanes while maintaining the existing Stop sign control would not mitigate this impact. However, provided with a single-lane roundabout, this intersection would operate at worst approach LOS B and total intersection LOS A.

2024 Roadway Capacity Analysis

As Table 12 indicates, under 2024 no project and plus project conditions, the study roadways are operating below capacity and thus providing adequate LOS.

Table 12: 2024 Roadway Capacity Summary

Roadway Segment	Capacity (Vehicles per Hour per Peak Direction)	No Project Condition			Plus Project Condition			Percent Increase in Peak-Hour Traffic Generated by Project
		Maximum Vehicles per Direction per Hour	Volume/ Capacity	Capacity Exceeded?	Maximum Vehicles per Direction per Hour	Volume/ Capacity	Capacity Exceeded?	
Main Street East of Old Mammoth Road	2,600	589	0.23	NO	598	0.23	NO	2%
Main Street West of Old Mammoth Road	2,600	1,193	0.46	NO	1,193	0.46	NO	0%
Main Street East of Minaret Road	2,600	1,345	0.52	NO	1,365	0.53	NO	1%
Lake Mary Road West of Minaret Road	1,600	1,130	0.71	NO	1,137	0.71	NO	1%
Lake Mary Road West of Kelly Road	1,600	371	0.23	NO	379	0.24	NO	2%
Old Mammoth Road South of Main Street	1,600	788	0.49	NO	794	0.50	NO	1%
Old Mammoth Road North of Meridian Boulevard	1,600	903	0.56	NO	936	0.59	NO	4%
Old Mammoth Road South of Meridian Boulevard	1,600	937	0.59	NO	948	0.59	NO	1%
Meridian Boulevard East of Old Mammoth Road	1,600	627	0.39	NO	657	0.41	NO	5%
Meridian Boulevard West of Old Mammoth Road [1]	2,600	591	0.23	NO	681	0.26	NO	15%
Meridian Boulevard East of Minaret Boulevard [1]	2,600	860	0.33	NO	978	0.38	NO	14%
Meridian Boulevard West of Minaret Road [1]	2,600	830	0.32	NO	1,059	0.41	NO	28%
Meridian Boulevard East of Majestic Pines Road North [1]	2,600	457	0.18	NO	728	0.28	NO	59%
Meridian Boulevard West of Majestic Pines Road North [1]	2,600	415	0.16	NO	689	0.27	NO	66%
Minaret Road Main Street to Forest Trail	1,300	1,070	0.82	NO	1,078	0.83	NO	1%
Minaret Road South of Main	1,600	883	0.55	NO	910	0.57	NO	3%
Majestic Pines Drive North of Meridian	1,600	338	0.21	NO	395	0.25	NO	17%
Majestic Pines Drive South of Meridian Boulevard	800	128	0.16	NO	147	0.18	NO	15%
Kelly Road South of Lake Mary Road	800	258	0.32	NO	261	0.33	NO	1%

Note 1: As a three-lane roadway, the capacity of Meridian would be reduced to 1,600 vehicles per hour per direction.

Section 5
PARKING ANALYSIS

PARKING DEMAND

The purpose of the parking analysis is to evaluate the demand for parking generated by the various elements of the project, assess the potential to reduce parking supply through the shared use of parking, and provide information useful in the development of parking supply strategies. With careful consideration of the individual uses to be accommodated on the site and variation in the need for parking over the day, it is possible to meet all of the parking needs while also minimizing the total amount of parking spaces that must be provided. Existing parking count data is provided in Appendix A.

The following are the primary assumptions that were used to estimate parking demand.

- In general, the Town of Mammoth Lakes parking requirements were applied in this analysis unless the parking requirement rates were found to not be applicable (as discussed below).

- As most of the uses contained in the Base Lodge are skier amenities, no customer parking is required aside from the skier parking. In other words, no additional customers would be generated by these amenities other than persons accessing the ski lifts. However, parking would be required for employees, the ice rink, and day care/ski school drop offs.

- The parking demand for Day Care drop-off was estimated based upon the Day Care AM peak-hour trip generation rate identified in the *ITE Trip Generation Manual.* It was also assumed that 40 percent of the drop off vehicles per hour would enter the site within the peak 15 minutes. Each Day Care parking space was assumed to turn over every 15 minutes. Based upon these assumptions (reflecting the relatively long time needed for the paperwork associated with first-time visitor daycare customers), it is estimated that five day care drop-off spaces are required.

- According to MMSA, the maximum drop-off activity for the ski school would occur at between 9:00 and 10:00 AM, during which time 223 students arrive at the ski school. Assuming half of these students are dropped off, an average student vehicle occupancy of 1.5 (2.5 skiers per vehicle minus the driver), 27 parking spaces would be required for ski school drop off.

- The employee schedule was used to estimate how many employees for the base lodge would park on site at one time. Assuming an average employee vehicle occupancy of 1.2, 0.83 parking spaces would be required per employee of the Base Lodge. This vehicle occupancy is consistent with journey to work vehicle occupancy of 1.14 per the 2001 National Household Travel Survey, factored up slightly to account for the fact that ski area employees are more likely to carpool. In addition, based upon a review of parking permits at the existing employee housing and the Town of Mammoth Lakes Employer/Employee Commute Survey, it was assumed that 25 percent of the employees would take transit to work. Note that this assumption is reflected in the parking analysis and not the trip generation analysis as it was identified as an appropriate assumption only after the traffic analysis was complete. As this assumption has a negligible impact on trip generation, revision of the traffic analysis was determined to not be necessary.

- As the Town does not have a parking requirement for a day spa, the *ITE Parking Generation Manual* was used to estimate a parking demand rate based upon the Health/Fitness Club land use (5.19 spaces per 1,000 square feet of floor area).

- Similarly, as the Town does not have specific parking demand rates for a convenience market, the ITE Parking Generation rate was used.

- The parking demand for a Hotel Equivalent was based upon the Mammoth parking requirements.

Based upon the base parking demand rates identified above and as shown in Table 13, the total parking demand for the site is 994 parking spaces, without reductions for internal trips, walking trips, transit trips, or shared parking.

Parking Reduction for Internal and Pedestrian/Bicycle Trips

As the Eagle Lodge is a mixed-use development project near other trip generators, there could be internal pedestrian trips that could tend to reduce parking needs as well as pedestrian trips to other nearby land uses. However, the applicable internal reductions for a parking analysis are not the same as a trip generation analysis. If, for example, a person decides to go skiing and then, afterwards, go out to dinner at the ski base, the ski area to dinner trip generates no auto trips. However, the parking demand remains on-site even though the land use generating the parking demand shifts. Therefore, it is only appropriate to make reductions in parking demand for the following two types of trips:

- Trips with one trip end internal to the site and one trip end external to the site that occur via non-auto modes. As skier walking trips between the Base Lodge and residences is already accounted for in the skier parking calculation, this reduction primarily applies to the commercial uses and is consistent with the assumptions identified in the trip generation analysis above.

- Walking trips between the lodging and commercial uses. As 95 percent of the hotel parking are assumed to be dedicated for hotel guest use only, an internal reduction is applicable for trips between lodging and other uses. A reduction of 4 to 7 percent was applied to the ice rink, skier, and commercial uses, based upon the internal trip analysis presented in Appendix A.

- Twenty-five percent of the employees are assumed to arrive via transit.

TABLE 13: Base Parking Demand

Land Use	Quantity	Unit	Parking Demand Rate	Source of Rate	Parking Demand
Skiers	6,000	Skiers per Day	See Table A in Appendix A [1]		497
Base Lodge					
Food and Beverage	8.74	KSF [2]	No Incremental Parking Demand		
Bar and Coffee Bar	0.7	KSF	No Incremental Parking Demand		
Rental / Demo / Repair Shop / Basket Check	3.7	KSF	No Incremental Parking Demand		
Retail Shop	1.2	KSF	No Incremental Parking Demand		
Ski School / Day Care (Drop Off Only) [2]	4.3	KSF	7.44	LSC	32
Ticketing / Lobby	2.6	KSF	No Incremental Parking Demand		
Restrooms	4.5	KSF	No Incremental Parking Demand		
Administrative	1.03	KSF	No Incremental Parking Demand		
Employee Break Room	1.55	KSF	No Incremental Parking Demand		
Ski Patrol	0.46	KSF	No Incremental Parking Demand		
Maintenance/Loading Dock	1.5	KSF	No Incremental Parking Demand		
Mechanical / Cell Site	0.55	KSF	No Incremental Parking Demand		
Ice Rink	5	KSF	3.60	LSC	18
Maximum Employees at One Time	122	employees	0.83	LSC	101
Commercial					
Day Spa	8	KSF	5.19	ITE	42
Locker Club	12	KSF	No Incremental Parking Demand		
Convenience Market	4	KSF	3.4	ITE	14
Sit-Down Restaurant	200	Seats	0.33	Town Code	66
Lodging					
Hotel Equivalents	213	rooms	1.05	Town Code	224
TOTAL					**994**

Note 1: Includes reductions for walking, drop-off, an transit trips.

Note 2: KSF = 1,000 square feet of floor area.

Note 3: Demand parking is estimated based on the Day Care AM peak hour trip generation rate identified in the *Trip Generation Manual* (ITE, 2003). While Ski School parking demand is estimated based on the maximum number of Ski School attendees and skier vehicle occupancy. Each drop-off activity is assumed to take 15 minutes.

Shared Parking Demand Analysis

A "shared parking" analysis considers how two or more individual land uses can be provided with adequate shared parking, considering the variation in the peak accumulation of parked vehicles for different nearby land uses by time of day. This shared parking analysis is based upon the methodology for assessment of shared parking developed by the Urban Land Institute, as documented in *Shared Parking* (2005, Second Edition). This strategy recognizes the fact that some land uses (such as skiing) have peak parking needs that occur at different times than other land uses (such as lodging). Therefore, the parking supply required to accommodate the needs of both land uses is less than the sum of the peak parking needs for the individual land uses.

The basis for this analysis is an hour-by-hour assessment of parking needs for individual land uses, which can then be added to identify the peak parking needs for the total land uses, and when this peak in demand occurs. Accordingly, parking demand for each individual land use in a development block by time of day is estimated. Based on these estimates, the total number of parking spaces required for all the land uses during a particular hour is calculated by adding the parking requirements for all the land uses within the block for that hour.

The shared parking analysis included the following assumptions:

- Only five percent of the parking for lodging is not considered to be dedicated and therefore can be shared with other uses.

- The parking analysis is prepared for weekend conditions as parking demand will be higher on weekends due to high skier visitor numbers.

- The variation by time of day of skier parking spaces is based upon accumulation counts provided by the Northstar-at-Tahoe and Heavenly Valley ski areas.

- The hourly variation in the parking demand generated by the ice rink was assumed to equal that of a shopping center.

- The hourly variation in parking demand for employees was estimated based upon the employee schedule provided by MMSA.

- The hourly variation in the parking demand generated by the Day Spa was assumed to equal that of a health club.

- It was also assumed that the ski school and day care parking spaces would be available to skiers from 11:00 AM on.

- The parking demand of the restaurant was reduced by 50 percent during the noon peak hours to account for the fact that people will be less likely to travel to the site during this time period due to the fact that the area will be relatively crowded with skiers. It can be assumed that more customers would be skiers during this hour.

Table 14 presents the shared parking analysis for weekend conditions. As shown in Table 13, during the weekend a total of 829 shared parking spaces would be required upon build out of the project, assuming only 5 percent of the hotel spaces are not designated and can be shared. Note that this number does not include the 26 spaces (not including 2 charter bus spaces) required to be reserved for the Juniper Springs project, per a previous agreement. Including these spaces, the project's shared parking demand (not including drop-off zones) is 855 spaces. As the project proposes to provide 544 parking spaces, the project will result in a parking shortfall of 311 parking spaces.

Please note, however, that this assumes the development of 213 hotel units. If the project instead constructs 83 multi-family units (Alternative 1 of the NOP), the total site parking shortfall would be reduced to 263. In addition, please note that the following Town standard is applicable to the Eagle Lodge project:

"Ensure that there is adequate parking space(s) available for transients occupying the transient occupancy facility, pursuant to the requirements of this code. If the transient occupancy facility books rooms with persons who utilize tour bus*(es), the operator of the facility shall be required to furnish, or make suitable arrangements for furnishing, adequate parking for the* tour bus*(es) utilizing either onsite or offsite facilities at locations where* tour bus *parking is permitted."*

As the project provides 4 bus bays, it provides adequate parking for two charter buses and 2 MMSA buses.

TABLE 14: Cumulative Parking Demand

Land Use	Quantity	Unit	Parking Demand Rate	Source of Rate	Parking Demand	Total Reduction for Non-Auto Access [1]	Dedicated Parking	Available Spaces for Shared Parking	Parking Demand by Hour for Shared Parking Analysis: 6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM	12:00 AM	Max Required Spaces Without Shared Use	Max Required Spaces With Shared Use
Skiers	6,000	skiers per day	See Table A		497	5.0%	0	472	0	3	80	208	328	402	447	472	466	435	356	162	3	0	0	0	0	0	0	472	472
Base Lodge																													
Ice Rink	5	KSF	3.6	LSC	18	5.0%	0	17	0	1	3	7	10	12	16	17	17	17	16	15	14	13	11	9	6	3	0	17	17
Employees	122	employees	0.83	LSC	101	25.0%	0	76	26	59	71	73	76	76	74	72	72	69	68	36	24	20	19	15	8	0	0	76	72
Ski School / Day Care[2]	4.3	KSF	–	ITE	32	0.0%		0	32	32	32	32	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32	0
Commercial																													
Day Spa	8	KSF 1	5.19	ITE	42	16.0%	0	35	18	17	17	18	17	18	18	17	17	17	26	35	35	26	17	7	7	7	0	35	17
Convenience Market	4	KSF	3.4	ITE	14	54.0%	0	6	0	0	1	2	3	4	6	6	6	6	6	5	5	5	4	3	2	1	0	6	6
Sit-Down Restaurant	200	Seats	0.33	Town Code	66	16.0%	0	55	4	9	14	20	25	25	28	24	19	25	27	36	48	55	45	21	17	12	8	55	24
Lodging																													
Hotel	213	rooms	1.05	Town Code	224	0.0%	0	224																					
Hotel Parking Available for Shared Use					11			11	9	9	10	9	8	8	8	8	8	8	9	9	9	9	9	10	10	10	10	11	8
Dedicated Hotel Parking					213			0	213	213	213	213	213	213	213	213	213	213	213	213	213	213	213	213	213	213	213	213	213
TOTAL					1,005			896	302	343	441	582	712	758	810	829	818	790	721	511	351	341	318	278	263	246	231	906	829
																												Juniper Springs	26
																												Total	855
																												Total Parking Proposed to Be Constructed On Site	544
																												Parking Shortfall	-311

Note 1: Estimated walking trips from nearby residences.

Note 2: As the Ski School / Day Care parking will be provided as drop-off spaces and peak parking demand is assumed to occur during A.M. peak hour of skier traffic, all drop-off parking spaces were assumed to be utilized during A.M. peak hour and not available for shared parking.

Section 6
TRANSPORTATION IMPACTS

The following potential areas of transportation impacts are considered in this section:

- Impacts on Intersection LOS
- Internal Site Circulation
- Corner Sight Distance
- Potential to Narrow Meridian Boulevard
- Left-Turn Lane Warrants
- Parking Impacts
- Transit Facilities
- Pedestrian and Bicycle Facilities
- Emergency Access

IMPACTS ON STUDY INTERSECTIONS

As discussed in Section 4, the following two intersections are forecast to exceed LOS thresholds under 2024 plus project conditions:

- Minaret Road/Meridian Boulevard
- Meridian Boulevard/Majestic Pines Drive (East)

LOS Mitigation Measures

Minaret Road/Meridian Boulevard

The Minaret Road/Meridian Boulevard intersection is estimated to operate at LOS E and exceed LOS thresholds with the project under 2024 plus project conditions. However, construction of a separate eastbound right-turn lane at this location would mitigate LOS to an adequate LOS D. The Minaret Road/Meridian Boulevard intersection is estimated to operate at LOS E and exceed LOS thresholds with or without the project under 2024 plus project conditions. However, construction of a separate eastbound right-turn lane at this location would mitigate LOS to an adequate LOS D. (However, as the current Development Impact Fee does not include the cost associated with the addition of an eastbound right-turn lane at this intersection, the project should be required to fund and construct the additional turn lane.)

Meridian Boulevard/Majestic Pines Drive (East)

The Majestic Pines Drive/Meridian Boulevard intersection is estimated to operate at worst approach and total intersection LOS F with the project under 2024 plus project conditions. The traffic analysis that was prepared for the Mammoth Lakes Capital Improvement Program indicates that the provision of a two-way left-turn lane along Meridian Boulevard to provide for two-stage southbound left turns out of Majestic Pines onto Meridian Boulevard would mitigate LOS at this intersection. However, this mitigation does not mitigate LOS to an acceptable level under 2024 plus project conditions. The provision of a separate left-turn lane at this location would reduce the vehicle hours of delay for the southbound approach to 3.9 vehicle hours, which would no longer exceed Town thresholds. However, if Meridian Boulevard is reduced to a three-lane cross section (one lane per direction plus a center turn lane), the addition of these lanes would not provide adequate LOS.

The current Development Impact Fee includes the construction of a two-way left-turn lane along Meridian Boulevard at this intersection. However, it does not include the cost of a separate southbound left-turn lane at this location. Therefore, the project shall be required to pay its fair share toward the cost of constructing this southbound left-turn lane. If a roundabout is determined to be the best traffic mitigation option for this intersection, the Town may use the additional funds (paid by the project for the southbound left-turn lane) towards the construction of a roundabout.

Therefore, the construction of a single-lane roundabout at this location is recommended, which would also allow for the narrowing of Meridian Boulevard from four lanes to three lanes (one lane in each direction plus a center turn lane). As discussed below, adequate roadway capacity along Meridian Boulevard would still be provided with a three-lane configuration. A single-lane roundabout with a 100-foot inscribed diameter would operate at worst approach LOS B and total intersection LOS A.

INTERNAL SITE CIRCULATION

Auto and Bus Drop Zones

The proposed auto and bus drop zones were reviewed with respect to drop-off space supply and demand, and the proposed layout and circulation in these areas.

Auto Drop-Off Activity

Approximately 800 skiers per day would be dropped off at the project site. Dividing 800 skiers per day by an average vehicle occupancy of 1.5 skiers per car, about 530 vehicles are expected to use the drop-off zone over the course of a peak day. In order to determine the drop zone parking demand, it is necessary to estimate the highest number of vehicles entering the drop zone at once.

Applicable data regarding use patterns of a ski area drop-off zone are available from the Northstar-at-Tahoe Ski Area. According to the *Northstar Village Drop-Off Area Design Review* (LSC Transportation Consultants, Inc., 2003), the highest number of vehicles entering the drop zone within any 5-minute period was 22 vehicles. However, a maximum of 20 vehicles were observed in the drop zone at any one time. The total number of skiers (paid and ski pass) at Northstar-at-Tahoe on the peak day during the 2002/2003 ski season was approximately 9,732. In comparison, the total number of skiers on the peak day at the proposed Eagle Lodge site is expected to be about 6,000. Dividing this figure (6,000) by the total number of skiers at Northstar-at-Tahoe (9,732) yields a factor of approximately 0.62. This factor can be applied to the Northstar drop zone activity, in order to estimate the Eagle Lodge drop zone activity. The resulting maximum number of vehicles expected in the proposed auto drop zone at any one time is therefore 20 multiplied by 0.62, or about 12 vehicles. In view of the fact that 18 auto drop-off spaces are shown on the site plan (not including ski school drop-off spaces), the proposed auto drop zone parking supply is more than adequate.

According to the MMSA, the maximum drop off activity for the ski school would occur at 10:00 AM, during which time 223 students arrive at the ski school. Assuming half of these students are dropped off and an average student vehicle occupancy of 1.5 (2.5 people per vehicle minus the driver), 27 parking spaces would be required for ski school drop off. As the project proposes to construct 38 short-term parking spaces at the ski school, adequate ski school parking is provided.

Bus Drop-Off Activity

The proposed bus drop zone accommodates two MMSA buses and two charter buses. As a maximum of one MMSA bus in each direction (eastbound and westbound) is expected on-site at any one time, the proposed bus drop zone parking supply is adequate, so long as charter bus activity is managed to avoid more than two charter buses on-site at a time.

Drop-Off Area Layout and Circulation

One-way circulation is proposed throughout the drop zones, and a two-way drive aisle is provided at the western access point. This configuration will allow for safe and efficient operation.

Sawtooth bus bays are proposed for the bus drop zone, which is appropriate in that it reduces the total length of curb required to accommodate the four buses, while allowing buses at all bays to operate without being blocked by buses in adjacent bays. Design standards for off-street bus stations are provided in the *Designing for Transit Manual* (Monterey-Salinas Transit, 1996). The proposed 20-foot wide one-way drive aisle and 48-foot long bus bays are consistent with these standards. However, the standard distance between sawtooth spaces is 15 feet, but the proposed plan only provides 12 feet between spaces. Therefore, it is recommended that the distance between sawtooth bus bays be increased to 15 feet in order to provide adequate maneuvering space for buses exiting the bays.

The proposed auto drop zone provides parallel parking spaces along both sides of a one-way drive aisle. It is recommended that a sign with an arrow be posted along the north side of Meridian Boulevard to direct skiers to the "Skier Drop-Off" zone. In addition, "Bus Only" signage should be posted at the entrance to the bus drop zone to discourage autos from entering the bus drop zone. "No Parking" signs should be posted along Meridian Boulevard adjacent to the auto drop zone, and "Do Not Enter" signs are needed at the west end of the auto and bus drop zones.

It is recommended that the curbs at the west end of the auto drop zone be modified to move the intersection of the drop zone and the main parking garage access further north (see Appendix D). This will increase the stopping sight distance for drivers on the two-way western driveway, increase the corner sight distance for autos exiting the drop zone, and make the right-turn movement easier for drivers going from the auto drop zone to the parking structure. Without this, drivers exiting the auto drop-off zone will not be able to make an adequate left turn to approach the Meridian Boulevard/Majestic Pines (west) intersection at a right-angle, and instead will often end up at the Stop bar at an angle, potentially blocking the inbound lane to the parking structure.

Ski School Drop Zone

The proposed ski school drop-off area is located inside the parking structure at the street level. Two lanes of circulation are proposed through the ski school drop zone, providing access to 38 drop-off spaces. Due to the sharp corners at the north end of the drop zone and the two structural columns shown on the inside of the circulating lanes, it would be impossible for a driver of larger vehicles (such as SUVs) using the inside lane to stay in that lane while circulating through this area. Therefore, in order to decrease the potential for vehicular conflict in the ski school drop zone, the circulating area should be striped for one lane of traffic and one-way operation.

Hotel Access on Meridian

The hotel is provided primary access via Majestic Pines Drive. Left turns onto Majestic Pines Drive from the hotel will be prohibited. Although a raised median at this location is not recommended (due to the need to use this space for exiting truck movements), the absence of such a raised median will make it difficult to prohibit all left turns. Therefore, a "No Left Turn" sign is recommended to be placed at the hotel exit. In addition, it is recommended that a "Do Not Enter," "No Left Turn," and "No Right Turn" signs be located at the appropriate hotel access approaches.

Skier/Public Parking

A three-level parking structure is proposed to provide skier/public parking, as well as parking for hotel guests and residents. The public entrance to the parking structure is located at the western access point along Meridian Boulevard. Public parking is provided in the two subterranean levels. In addition, a keyed parking entry/exit is provided on the northeast side of the structure, with access via Majestic Pines Drive. This access point is designated for hotel guests and residents only. A review of the site plan indicates that the parking space size and aisle widths are consistent with Town standards.

Truck Access

A service yard is proposed to be located on the north side of the structure, with access provided via Majestic Pines Drive, as shown in Appendix C. The proposed truck turnaround would accommodate a 55-foot long (WB-50) truck.

Emergency Vehicle Access

An indoor ambulance bay is proposed to be located near the service bay on the north side of the structure, with access provided via Majestic Pines Drive. The Fire Department requires that emergency vehicle access be provided within 150 feet of all exterior surfaces on the project site. This requirement is not met along the northwest side of site (near the ice rink and plaza). However, the Fire Department has indicated that this is acceptable, so long as a standpipe system is provided.

Internal Site Circulation Mitigation Measures

In summary, the following improvements should be provided in order to improve internal site circulation:

- The distance between sawtooth bus bays should be increased to 15 feet in order to provide adequate maneuvering space for buses exiting the bays.

- A sign with an arrow be posted along the north side of Meridian Boulevard to direct skiers to the "Skier Drop-Off" zone is recommended. In addition, "Bus Only" signage should be posted at the entrance to the bus drop zone to discourage autos from entering the bus drop zone. "No Parking" signs should be posted along Meridian Boulevard adjacent to the auto drop zone, and "Do Not Enter" signs are needed at the west end of the auto and bus drop zones.

- A "No Left Turn" sign is recommended to be placed at the hotel exit. In addition, it is recommended that "Do Not Enter," "No Left Turn," and "No Right Turn" signs be located at the appropriate hotel access approaches.

- In order to decrease the potential for vehicular conflict in the ski school drop zone, the circulating area should be striped for one lane of traffic and one-way operation.

- It is recommended that the curbs at the west end of the auto drop zone be modified to move the intersection of the drop zone and the main parking garage access further north.

CORNER SIGHT DISTANCE

According to the Caltrans *Highway Design Manual*, at a 30 mile per hour design speed, an intersection should provide at least 330 feet of corner sight distance. Corner sight distance is measured from the minor approach at a point 15 feet back from the end of the travel way at a height of 3.5 feet to an object at a height of 4.25 feet in the center of the nearest lane to the left or to the centerline of the road to the right. LSC staff reviewed the site plan and determined that the corner sight distance from all proposed site access locations is adequate. Note that while the sight distance from the hotel exit along Majestic Pines Drive to the east may not be 330 feet or more, the prohibition of left turns at this location mitigates this as there is not a potential for drivers turning left out of the hotel access to pull out in front of westbound traffic along Majestic Pines Drive.

POTENTIAL TO NARROW MERIDIAN BOULEVARD

For some time, the Town has planned to reduce the existing Meridian Boulevard cross section from four lanes to two lanes and a center turn lane. As shown in Table 11, the volume to capacity ratio along Meridian Boulevard is less than 0.5 under 2024 plus project conditions. Therefore, reducing the capacity of this roadway by one half would not exceed the reduced roadway capacity. Therefore, under 2024 plus project conditions, Meridian Boulevard could operate adequately with a three-lane cross section. In addition, a single-lane roundabout at the Meridian Boulevard/Majestic Pines (east intersection would operate at adequate LOS).

LEFT-TURN LANE WARRANTS

A left-turn lane warrant analysis was performed for the project access point along Meridian Boulevard using the "Guidelines for Left-Turn Lanes" presented in the ITE 1990 *Compendium of Technical Papers* (1990 Compendium of Technical Papers). The analysis is summarized in Table 15 and indicates that a left-turn lane into the auto and bus drop off area on Meridian Boulevard is not warranted and, therefore, need not be provided. However, if Meridian Boulevard is reduced to one lane per direction, a left-turn lane into the site or a center two-way left-turn lane would be warranted.

TABLE 15: Left-Turn Lane Warrant Analysis

Location	Future (2024) Plus Project PM Peak Hour
On Meridian Boulevard at Auto/Bus Drop Off Entrance	
Left-Turn Volume	24
Volume Opposing	441
Volume Advancing	713
Percent Left Turns	3%
Left-Turn Lane Warrant Met?	NO

Note: If Meridian Boulevard is reduced to one travel lane per direction, a left-turn lane would be warranted.

Source: LSC Transportation Consultants, Inc.

PARKING FACILITIES

As stated in Section 5, including the 26 spaces for Juniper Springs, the project's shared parking demand (not including the skier drop off zone) is 855 spaces. As the project proposes to construct a total of 544 non-drop-off parking spaces, implementation of the project will result in a parking shortfall of 311 parking spaces.

Potential Parking Mitigation Measures

The project has an overall parking shortfall of 311 parking spaces. The following are potential mitigation measures to this parking shortfall.

- **Mitigation Option A:** Based upon the assumptions used in this analysis, an additional 950 skiers per day would be required to use transit on a typical winter Saturday to access the Eagle Lodge base in order to reduce the parking demand of the site to 544. Assuming a bus standing capacity of 60 passengers, an additional 16 bus trips would be needed to the site during a peak day, and in the afternoon an additional 16 bus trips would be needed from the site. Assuming a half-hour route cycle length and a 2.5-hour-long peak period, 4 additional buses would be needed to provide this capacity. So long as good transit ridership can be maintained on both routes, this would mitigate the parking impact. Therefore, the project applicant should be required to provide for 16 additional bus round trips to the site during each weekend day and holiday from Christmas week to the end of March. The applicant would be responsible for purchasing the additional 4 vehicles, as well as operating the additional vehicles.

In addition, as the project will result in a parking shortfall, it could be expected to increase the occurrence of illegal parking within the project vicinity. Therefore, the project applicant shall be required to provide a monitoring report to the Town of Mammoth Lakes for the first year of operation for the period from the Saturday before Christmas through the end of March. This report will provide monitoring data regarding on-street parking, conducted at a minimum two times per day on all weekends and holidays between 9:00 AM and 3:00 PM. If the report identifies illegal parking is occurring at nearby residential/lodging sites within 1,000 feet of the portal, the project applicant shall be responsible for any incremental cost necessary for enforcement. Beyond the initial monitoring period, if future complaints indicate that a parking problem is occurring generated by Eagle Lodge or ski area activities, the project applicant will be responsible for conducting additional monitoring as identified by the Town of Mammoth Lakes and be responsible for funding the necessary measures to address any identified impact.

- **Mitigation Option B:** To mitigate potential parking impacts, the project could also provide off-site employee parking, increased transit service, and provide parking monitoring and enforcement. If all Eagle Lodge employees were required to park off site the peak parking demand would be reduced by 76 spaces. The remainder of the parking demand could be reduced by adding more transit such that an additional 750 skiers arrive to the site per day on transit. Assuming a bus standing capacity of 60 passengers, an additional 13 bus trips would be needed to the site during a peak day, and in the afternoon an additional 13 bus trips would be needed from the site. Three additional buses would be needed to provide this capacity. Therefore, the project applicant should be required to provide 13 additional bus round trips to the site during each weekend day and holiday from Christmas week to the end of March. The applicant would be responsible for purchasing the additional three vehicles, as well as operating the additional vehicles.

  In addition, the project applicant shall be required to provide a monitoring report to the Town of Mammoth Lakes for the first year of operation for the period from the Saturday before Christmas through the end of March. This report will provide monitoring data regarding on-street parking, conducted at a minimum two times per day on all weekends and holidays between 9:00 AM and 3:00 PM. If the report identifies illegal parking is occurring at nearby residential/lodging sites within 1,000 feet of the portal, the project applicant shall be responsible for any incremental cost necessary for enforcement. Beyond the initial monitoring period, if future complaints indicate that a parking problem is occurring generated by Eagle Lodge or ski area activities, the project applicant will be responsible for conducting additional monitoring as identified by the Town of Mammoth Lakes and be responsible for funding the necessary measures to address any identified impact.

- **Mitigation Option C:** The project could request a zone code amendment from the Town to develop an in lieu of parking fee program. This would allow the project to pay a fee that would go towards the construction of off-site parking lots. The fee owed by the project would be calculated based upon the additional number of spaces that are required. If the parking structures are not provided within a reasonable 1,000-foot walking distance, a parking shuttle to provide access between the project site and the parking lots would need to be provided.

TRANSIT SERVICES

The proposed project is located on both the existing Yellow and Green bus routes. The project will improve service to the site with the provision of the bus drop-off area, which provides safe pedestrian access to transit. This is considered a beneficial impact to transit. However, as discussed above, the project would be required to fund additional transit service to the site.

PEDESTRIAN AND BICYCLE FACILITIES

A total of 1,580 skiers are anticipated to walk to the Eagle Lodge from nearby residences. The pedestrian plan indicates that adequate pedestrian access will be provided throughout the Eagle Lodge, and to/from other sites within the vicinity of the project site. Pedestrian connections are provided to the Mammoth Loop Trail Majestic Pines to the north, Juniper Springs, and sidewalks along Meridian Boulevard. In addition, the project proposes to construct a sidewalk along Meridian Boulevard, which is consistent with the *Sidewalk Master Plan* (Town of Mammoth Lakes, 2003). This plan calls for sidewalks on both sides of Meridian Boulevard. Therefore, the project has a beneficial impact on pedestrian and bicycle facilities.

EMERGENCY ACCESS

The project is provided access via Majestic Pines Drive and via Meridian Boulevard. Therefore, as access is provided by two streets (one being a collector and the other being an arterial), the project provides adequate emergency access.

Appendix A
Trip Generation
Parking Counts
LOS Interpretation

LSC
TRANSPORTATION CONSULTANTS, INC.

TRANSPORTATION PLANNING
& TRAFFIC ENGINEERING CONSULTANTS

2690 Lake Forest Road, Suite C
Tahoe City, California 96145
(530) 583-4053 FAX: (530) 583-5966
EMAIL: info@lsctahoe.com
www.lsctahoe.com

MEMORANDUM

DATE: Revised August 30, 2006

TO: Town of Mammoth Lakes
Mammoth Mountain Ski Area
PCR

FROM: Rebecca Bucar, PE

SUBJECT: Eagle Lodge EIR Preliminary Trip Generation Assumptions and Analysis

The purpose of this memorandum is to present LSC's analysis of the traffic and parking generation for use in the Eagle Lodge EIR analysis, including the assumptions and analysis steps. We request that everyone review these materials and indicate whether they are acceptable or provide direction on appropriate changes, as they will be used as the basis for the remainder of the traffic and parking analyses. For ease of reference, assumptions are numbered.

Skier Trip Generation

1. Per Town standards, the traffic analysis focuses on typical winter Saturday conditions. Currently, approximately 3,650 skiers visit the ski area via the Eagle Lodge portal on a typical winter Saturday, based upon skier portal data provided by Mammoth Mountain Ski Area (MMSA). On a peak winter day, 5,280 skiers access the mountain via the Eagle Lodge portal. The peak skier mountain design capacity assumed to access the skier portal on a typical Saturday upon build out of the project is equal to 6,000. (Note this is a conservative assumption as the estimated capacity range is 5,000 to 5,960 skiers per day) A comparison of the trip generation of the existing Eagle Lodge site on a peak day versus a typical Saturday is provided in Table A. The purpose of this table is to "calibrate" our assumptions to actual observed parking counts.

2. The number of skiers that are expected to reside within walking distance of the site on a typical winter Saturday is a key question in this analysis and the distance a skier is willing to walk is an important assumption. The standard acceptable walking distance used by the traffic engineering profession is 1,325 feet. In some studies we have conducted in the past, LSC has assumed a 500-foot maximum walk distance in ski area parking facilities. However, this shorter walk distance

was partially used due to the fact the walk from a parking space to a shuttle pick up is only one leg of a longer linked trip (from car to shuttle stop via walk, from shuttle stop to shuttle stop via shuttle, and shuttle stop off to chair lift via walk). It is therefore reasonable to assume that skiers whose entire trip consists of the walk trip would be willing to walk a longer distance. LSC proposes to assume that all skiers residing in units within 1,000 feet of the Eagle Lodge chairlift would potentially walk to the lift. This is a reasonable walk distance, even if done in ski boots, considering the time it takes to load up a vehicle, drive the vehicle, wait in line to park the vehicle, and then walk from the parking structure to the Gondola. This does not infer that no one would walk further, but rather that the typical person would not. This walk distance does not apply to ski in/ski out units.

Applying the 1,000-foot radius for walking distance and not including units proposed by the project or located on the Juniper Springs property, a total of 138 resident single-family units and 487 transient condo units are within walking distance of the site. In addition, there are roughly 22 single-family and 99 condo units with ski in/ski out access to the Eagle Lodge portal.

Per Town direction and based upon data collected as a part of the General Plan Update, it is assumed that there are approximately 2.4 people residing in each resident non-condo unit and 4 people residing in each transient condo unit on a typical winter Saturday. The number of people residing in a resident unit does not change on a peak day versus a typical winter Saturday. However, on a peak day the number of people per transient unit is assumed to equal 4.4, which is based upon a comparison of occupancy data on a typical winter Saturday versus a peak day provided by the Town.

3. LSC has used the assumption that approximately 61 percent of the residents ski on a given day, as derived from the Mammoth Lakes General Plan. This assumption is reasonable based on the following available data:

- A trip generation analysis of the Northstar-At-Tahoe ski area found that roughly 75 percent of the people staying in the condominiums at Northstar-At-Tahoe ski on a given day.
- A study done by the Jackson Hole Area Chamber of Commerce indicates that roughly 90 percent of the guests in the community are skiers while only 70 percent ski on any given day.

The lower percentage of skiers that ski on a given day here is appropriate as it takes into account the fact that some of the residents that are within walking distance of the site are full-time residents and less likely to ski during busy weekends.

4. Table A also includes an assumption regarding the percent of skiers that are within walking distance of the portal, but decide to drive to Eagle Lodge or another portal. It was assumed the 40 percent of the skiers that are within walking distance and are not residing in Juniper Springs or the Eagle Lodge site would drive anyway on a peak day, which was estimated based upon the calibration to actual conditions. However, on a typical Saturday it is assumed that 50 percent of these residents will drive to the site, as parking is more readily available.

5. There area also 174 condo units on the Juniper Springs site in addition to the 213 hotel equivalents proposed by the project (one hotel equivalent was assumed to equal 0.5 condo units). It was assumed the 15 percent of the skiers that are residing in Juniper Springs or the Eagle Lodge site

would drive anyway on a peak day. However, on a typical Saturday it is assumed that 25 percent of these residents will drive to the site, as parking is more readily available.

6. LSC has used the assumption provided by MMSA that 700 skiers arrive at this location via drop off on a peak day. This number is assumed to decrease on a typical winter Saturday, proportional to the total number of skiers arriving on a peak day versus a typical winter Saturday.

7. Based upon limited ridership data provided by MMSA, LSC estimated typical winter Saturday and peak day transit ridership. The peak day ridership was estimated based upon the transit ridership on December 29, 2005, a day during which more than 24,000 skiers arrived at the ski mountain. The typical Saturday ridership was based upon the level of ridership recorded on January 7, 2006 factored up based upon the number of skiers on that day versus a typical Saturday. Assumptions regarding the percent of riders that are skiers were estimated based upon the *Mammoth Lakes Transit Plan* (LSC, 2001). It was also assumed that half of the skiers riding the Yellow and Combo Routes access the Eagle Lodge portal on a peak day while 25 percent access Eagle Lodge on a typical Saturday (as parking is more available at Eagle Lodge on off-peak days). As the Eagle Lodge does not specifically propose to expand transit service, it is note appropriate to assume an increase in transit ridership with the project implementation, especially as most routes currently operate at capacity.

8. All remaining vehicles arrive via automobile and require a parking space. Assuming a skier vehicle occupancy of 2.5 skiers per vehicle (typical for a ski area), it is estimated that 476 skier vehicles currently access the ski area on a peak day. On a typical Saturday, however, only 472 skier vehicles access the site.

9. Assuming that 15 percent of the skier parking spaces turn over during a day (based on typical ski area access patterns), 414 parking spaces area needed on a peak day and 410 parking spaces are needed on a typical Saturday. The estimated parking requirements on a peak day and typical winter Saturday can be compared to parking counts provided by MMSA on a peak day, during which time vehicles park in the Eagle Lodge parking lot and along Meridian Boulevard from the Juniper Springs site eastward to Minaret Road. Comparing the estimated parking demand to the actual peak day and typical Saturday parking counts indicates a difference of only 4 percent or less. This verifies the traffic assumptions are reasonable.

10. It is also assumed that 40 percent of the skiers exit the ski area during the p.m. peak hour, which is based upon the counts recently collected at the site, the assumption that 15 percent of the skier parking spaces turn over per day, and a review of data from other similar ski areas.

11. In addition, it is assumed that 40 percent (the same proportion as that of traffic exiting the area during p.m. peak hour) of the drop-off skiers are picked up during the p.m. peak hour with a vehicle occupancy of 1.5 skiers per vehicle (2.5 vehicle occupancy minus 1 driver).

12. Applying the above assumptions to plus project conditions (third column in Table A) indicates the project will generate 415 entering peak-hour skier trips and 213 exiting peak-hour skier trips. This represents an increase of 123 entering peak-hour skier trips and 85 exiting peak-hour skier trips over no project or existing conditions.

An estimate of the total skier trip generation is provided in Table A.

Base Lodge Trip Generation

13. The *ITE Trip Generation Manual* (ITE, 2003) does not provide a Saturday trip rate for Ice Rinks. Therefore, a Saturday trip rate was estimated by comparing the ITE Ice Rink weekday trip rates to ITE weekday and Saturday trips rates for a Multi-Purpose Recreational Facility. Using these rates, it is estimated that the ice rink will generate 13 p.m. peak-hour trips on a Saturday. Approximately half of these trips are expected to be generated by skiers already on site.

14. It is assumed that the following uses located in the Base Lodge area do not generate any external trips, except for employee trips, as they are considered to be used as skier amenities:

    - Cafeteria-Type Dining Area
    - Bar and Coffee Bar
    - Rental/Demo/Repair Shop/Basket Check
    - Retail Shop
    - Ski School / Day Care
    - Ticketing/Lobby
    - Restrooms
    - Administrative
    - Employee Break Room
    - Ski Patrol
    - Maintenance/Loading Dock
    - Mechanical/Cell Site

    However, it can be assumed that each employee will generate an average of 2.2 person trips per day (assuming 10 percent leave the site once during the day). Assuming a vehicle occupancy of 1.2 employees per vehicle indicates that each employee will generate 1.83 daily vehicle trips, prior to transit reductions. Furthermore, MMSA provided an employee schedule for the above-identified uses, which was used as a basis for estimating the percent of employees that leave or enter the site during the p.m. peak hour.

The trip generation associated with the Base Lodge uses is summarized in Table C. The Base Lodge is expected to generate 57 p.m. peak-hour trips in addition to the skier trips identified in Table A.

Commercial Area Trip Generation

15. The trip generation of the commercial portion of the site is estimated in Table D, applying standard ITE rates. Note that it is assumed that the locker club is a skier amenity and does not generate any external trips. The commercial portion of the project is expected to generate 395 p.m. peak-hour trips (203 entering and 192 exiting).

Lodging Trip Generation

16. The trip generation associated with the lodging portion of the project is shown in Table E. The trip generation associated with the lodging units is based upon the calibrated Town of Mammoth Lakes traffic model daily trip rates. The percent of traffic entering and exiting the site during the Saturday peak-hour is estimated based upon the proportion of daily traffic that occurs during the peak hour, based upon ITE Hotel trip rates. Note that this analysis assumes the conference facilities will be managed such that, during peak ski conditions, the meeting/conference facilities would not generate external traffic before 7:00 p.m. In the off season (including the summer) or after 7:00 p.m. in the winter, the community room could be rented out and used by people not residing at the lodge. However, during the winter the events that occur after 7:00 p.m. would contribute to

the daily trip generation. The daily trip generation assumes one event per day, and a vehicle occupancy of 2.5.

17. The lodging portion of the project is expected to generate 141 p.m. peak-hour trips (70 entering and 71 exiting) during a typical winter Saturday.

Summer Trip Generation

18. While the traffic analysis focuses on typical winter Saturday conditions, although a summer trip generation analysis is also provided. The majority of the summer trip generation will consist of mountain bikers. According to Dave Geirman (MMSA), approximately 25,000 bikers per year visit the mountain, a number which has been growing at a rate of 5 to 8 percent per year. The mountain bike park hopes to increase this number to 40,000 bikers per year in the next five years, which represents an annual growth rate of 9.9 percent per year. Currently approximately 600 bikers per day visit the mountain on a typical summer weekend day. Approximately half of these bikers are downhill bikers, while the other half are cross-country bikers.

    According to the current Town of Mammoth Lakes General Plan, the number of people at one time the Town can accommodate is expected to grow at a rate of 2.6 percent a year over the next 20 years. Applying this growth rate indicates that by 2024 approximately 977 bikers per day will visit the mountain, which accounts for the growth projected by David Geirman, in addition to some growth generated by growth in population. Assuming that the number of downhill bikers will grow at twice the rate as the cross-country bikers, a total of 426 cross-country bikers and 551downhill bikers per day will be on the mountain by 2024. As Eagle Lodge provides primary access to cross-country bikers, approximately 426 bikers will access the Eagle Lodge lift on a summer weekend day by 2024. It is also assumed that 50 percent of the bikers will bike to the site.

19. The summer trip rates for the Day Care, Mountain Biking Employees, Day Spa, Convenience Market, Sit-Down Restaurant, and Hotel were assumed to equal the winter trip rates.

20. In the off season, the community room / conference room can be rented out and used by people not residing at the lodge. The trip generation of this facility is estimated assuming a 200 person-at-one-time capacity, a maximum of two events occurring on one day, 2.5 vehicle occupancy, and as a worst-case one event ending and one event starting during the p.m. peak hour.

Without reductions for internal and walking trips and as shown in Table F, the project is expected to generate 743 p.m. peak-hour trips on a summer Saturday (353 entering, 390 exiting) and 6,421 daily trips, which is roughly 39 percent less than the levels generated in the winter.

Trips Remaining Internal to the Site

Due to the mix of uses, some person-trips would remain internal to the site. The basic assumptions regarding trip internalization are summarized below and in Figure A.

21. It is assumed that half of the ice rink customers will consist of skiers that are already at the ski area. Therefore, roughly half of the ice rink trips remain internal to the site. These internal trips would be between the ice rink and the Base Lodge or the Lodging and would not result in external trips.

22. Based upon the ITE Trip Generation Handbook methodologies, it is assumed that roughly 9 percent of the commercial exiting trips and 5 percent of the commercial entering trips remain internal to the site due to the interaction between the commercial uses and the lodging uses.

23. An additional 5 percent of the commercial trips are also expected to occur between the skiers at the base lodge and the commercial and, therefore, remain internal to the site.

24. It was assumed that there are two people per hotel equivalent unit, as each hotel equivalent is assumed to equal one half of a transient condo. Assuming 61 percent of the hotel guests ski on a typical winter Saturday indicates that a total of 1.22 skiers per hotel equivalent enter the hotel from the ski area on a typical winter Saturday. Of these, 0.49 per unit enter during the p.m. peak hour, assuming 40 percent exit the ski area during the p.m. peak hour. Assuming that these trips would otherwise occur as vehicle trips with vehicle occupancies of 2.5 people per vehicle, 0.20 internal p.m. peak-hour trips are generated by each hotel unit. As stated above, it is assumed that 15 percent of skiers staying at the Eagle Lodge access the ski area via other portals.

Walking Trips

25. All internal trips are assumed to be walking trips, in addition to the skier-generated walking trips between residences and the ski portal. In addition, it was assumed that the majority of the customers to the convenience market would be residents in the residential areas located east of Minaret Road, south of Lake Mary Road, and north of Mammoth Creek, as residents of other areas would likely do most shopping at other commercial centers more convenient to their residences. Of these residences, roughly 65 percent are within walking distance (1,000 feet) of the proposed market. However, to provide a reasonably conservative analysis, it has been assumed that 50 percent of the convenience store customers will walk to the market, and the remaining half drive.

26. It is also assumed that approximately 10 percent of the Day Spa and Restaurant trips consist of walking trips to nearby residences.

27. Finally, it was assumed that 5 percent of the Ice Rink trips would be made as external walking trips to nearby residences.

The reductions for winter external walking trips are shown in Table G. The reductions for summer external walking trips are shown in Table H.

Pass-By Trips

28. A proportion of the commercial trips would consist of pass-by trips, or trips that are made by drivers that are already on the adjacent roadways prior to the development of the site, which (with the development of the site) can be expected to make intermediate stops at project land uses on the way from an origin to a primary trip destination. Pass-by trips are included in the site driveway movements, but are reflected as reductions in the through volumes passing the site driveway locations.

    Data regarding appropriate pass-by percentages for various land uses are available in the *Institute of Transportation Engineers Trip Generation Handbook*. Based upon the typical pass-by percentages contained in the ITE Trip Generation Handbook and considering regional access patterns, the percentage of pass-by trips generated by the convenience market is assumed to be

25 percent of the vehicle trips. This percentage is less than half of the average pass-by rate identified in the Institute of Transportation Engineers Trip Generation Handbook because the potential for pass-by trips along the low traffic volume Meridian Boulevard is less. Applying this assumption indicates that roughly 8 percent of the existing vehicles on Meridian Boulevard would divert into the market during the p.m. peak hour.

The total external auto and pass-by trip generation of the project is shown in Table G. As the table indicates, based upon the assumptions identified above the project is expected to generate 914 p.m. peak-hour trips (320 entering and 594 exiting). However, this does not take into account the existing trip generation of the project site, although the EIR analysis will.

Parking Analysis

NOTE: The following two changes of assumptions were made in the parking analysis that were not made in the trip generation analysis, as follows:

- ***25 percent of the employees are assumed to use transit to travel to/from work.***
- ***The 22-unit Altis project was assumed to be built in the project build out condition.***

These changes are not reflected in the trip generation analysis as it was determined that the changes in assumptions had a negligible impact on trip generation (less than two percent). However, these changes were reflected in the parking demand analysis.

The purpose of the parking analysis is to evaluate the demand for parking generated by the various elements of the project, assess the potential to reduce parking supply through the shared use of parking, and provide information useful in the development of parking supply strategies. With careful consideration of the individual uses to be accommodated on the site and variation in the need for parking over the day, it is possible to meet all of the parking needs while also minimizing the total amount of parking spaces that must be provided.

The following are the primary assumptions that were used to estimate parking demand.

29. In general, the Town of Mammoth Lakes parking requirements were applied in this analysis unless the parking requirement rates were found to not be applicable (as discussed below).

30. As most of the uses contained in the Base Lodge are skier amenities, no customer parking is required aside from the skier parking. However, parking would be required for employees, the ice rink, and day care/ski school drop offs.

31. The parking demand for Day Care drop-off was estimated based upon the Day Care a.m. peak-hour trip generation rate identified in *ITE Trip Generation Manual.* It was also assumed that 40 percent of the drop off vehicles per hour could enter the site within the peak 15 minutes. Each Day Care parking space was assumed to turn over every 15 minutes. Based upon these assumptions, it is estimated that 5 day care drop off spaces are required.

32. According to MMSA, the maximum drop off activity for the ski school would occur at 10:00 a.m., during which time 223 students arrive at the ski school. Assuming half of these students are dropped off, an average student vehicle occupancy of 1.5 (2.5 skiers per vehicle minus the driver), 27 parking spaces would be required for ski school drop off.

33. The employee schedule was used to estimate how many employees for the base lodge would park on site at one time. Assuming an average employee vehicle occupancy of 1.2, 0.83 parking spaces would be required per employee of the Base Lodge.

34. As the Town does not have a parking requirement for a day spa, *ITE Parking Generation* was used to estimate a parking demand rate based upon the Health/Fitness Club land use (5.19 spaces per 1,000 square feet of floor area).

35. Similarly, as the Town does not have specific parking demand rates for a convenience market, the *ITE Parking Generation* rate was used.

36. The parking demand for a Hotel Equivalent was based upon the Mammoth parking requirements.

Based upon the base parking demand rates identified above and as shown in Table I, the total parking demand for the site is 994 parking spaces, without reductions for internal trips, walking trips, or shared parking.

Parking Reduction for Internal and Pedestrian/Bicycle Trips

37. As the Eagle Lodge is a mixed use development project near other trip generators, there could be internal pedestrian trips that could tend to reduce parking needs. However, the applicable internal reductions for a parking analysis are not the same as a trip generation analysis. If, for example, a person decides to go skiing and then, afterwards, go out to dinner at the ski base, the ski area to dinner trip generates no auto trips. However, the parking demand remains on site even though the land use the parking demand is associated with shifts. Therefore, it is only appropriate to make reductions in parking demand for the following two types of trips:

    - Trips with one trip end internal to the site and one trip end external to the site that occur via non-auto modes. As skier walking trips between the Base Lodge and residences is already accounted for in the skier parking calculation, this reduction primarily applies to the commercial uses and is consistent with the assumptions identified in the trip generation analysis above.

    - Walking trips between the lodging and commercial uses. As 95 percent of the hotel parking is assumed to be dedicated for hotel guest use only, an internal reduction is applicable for trips between lodging and other uses. A reduction of 4 to 7 percent was applied to the ice rink, skier, and commercial uses based upon the internal trip analysis.

    - 25 percent of the employees are expected to take transit to/from work, based upon a review of parking permits at employee housing sites and the Mammoth Lakes Employee/Employer Commute Survey.

Shared Parking Demand Analysis

A "shared parking" analysis considers how two or more individual land uses can be provided with adequate shared parking, considering the variation in the peak accumulation of parked vehicles for different nearby land uses by time of day. This shared parking analysis is based upon the methodology for assessment of shared parking developed by the Urban Land Institute, as documented in *Shared Parking* (2005, Second Edition). This strategy recognizes the fact that some land uses (such as skiing) have peak parking needs that occur at different times than other land uses (such as lodging). Therefore, the parking supply required to accommodate the needs of both land uses is less than the sum of the peak parking needs for the individual land uses.

The basis for this analysis is an hour-by-hour assessment of parking needs for individual land uses, which can then be added to identify the peak parking needs for the total land uses, and when this peak in demand occurs. Accordingly, parking demand for each individual land use in a development block by time of day is estimated. Based on these estimates, the total number of parking spaces required for all the land uses during a particular hour is calculated by adding the parking requirements for all the land uses within the block for that hour.

The shared parking analysis included the following assumptions:

38. Only five percent of the parking for lodging is not considered to be dedicated and therefore can be shared with other uses.

39. The parking analysis is prepared for weekend conditions. as parking demand will be higher on weekends due to high skier visitor numbers.

40. The variation by time of day of skier parking spaces is based upon accumulation counts provided by the Northstar-At-Tahoe and Heavenly Valley ski areas.

41. The hourly variation in the parking demand generated by the ice rink was assumed to equal that of a shopping center.

42. The hourly variation in parking demand for employees was estimated based upon the employee schedule provided by MMSA.

43. The hourly variation in the parking demand generated by the Day Spa was assumed to equal that of a health club.

44. It was also assumed that the ski school and day care parking spaces would be available to skiers from 11:00 AM on.

45. The parking demand of the restaurant was reduced by 50 percent during the noon peak hours to account for the fact that people will be less likely to travel to the site during this time period due to the fact that the area will be relatively crowded with skiers. It can be assumed that more customers would be skiers during this hour.

Table J presents the shared parking analysis for weekend conditions. As shown in Table J, during the weekend a total of 829 shared parking spaces would be required upon build out of the project, assuming hotel spaces are not designated and can be shared. Note that this number does not include the 26 spaces required to be reserved for the Juniper Springs project, per previous agreement.

TABLE A: Skier Capacity and Parking Analysis

	Existing Peak Saturday Conditions (for Assumption Validation)	Existing Typical Saturday Conditions	Plus Project Conditions on a Typical Saturday	Estimated Impact of Project on Skier Traffic and Other Variables
Skiers per Day	5,280 [1]	3,650	**6,000**	**2,350**
Outside of Site and Juniper Springs				
Number of Non-Condo Units within 1000 feet of Lift [2]	138	138	138	--
Number of Ski In / Ski Out Non-Condos	22	22	22	--
Number of Condo Units within 1000 feet of Lift [2]	487	487	487	--
Number of Ski In / Ski Out Condos	99	99	99	--
Estimated Number of People per Non-Condo Unit	2.4	2.4	2.4	--
Estimated Number of People per Condo Unit	4.4	4.0	4.0	--
Percentage of People per Unit Skiing per Day [3]	61%	61%	61%	--
Percentage Skiers Within 1,000-Foot Walk Distance Accessing Other Portals or Driving to Eagle Lodge Portal	40%	50%	40%	--
Skiers Walking to Lift from Areas Other Than Juniper Springs and Proposed Project Site	1,080	830	1,000	170
On Site or Juniper Springs				
Number of Condo Units on Site (Juniper Springs and Proposed Project) [4]	174	174	281	107
Estimated Number of People per Condo Unit	4.4	4.0	4.0	--
Percentage of People per Unit Skiing per Day [3]	61%	61%	61%	--
Percentage Skiers Accessing Other Portals	15%	25%	15%	--
Skiers Walking to Lift from Juniper Springs or Proposed Project	400	320	580	260
Skiers Walking to Lift	1,480	1,150	1,580	430
Skiers Taking Shuttle to Lift	1,910	840	2,170	1,330
Skiers Being Dropped Off	700	480	800	320
Skiers Driving / Auto Passengers	1,190	1,180	1,450	270
Skier Vehicle Occupancy	2.5	2.5	2.5	--
Percent of Parking Spaces that Turn Over During Day	15%	15%	15%	--
Percent Parked Vehicles that Exit Lot During P.M. Peak Hour	40%	40%	40%	--
Vehicles Entering the Site Per Day	476	472	580	108
Estimated Number of Skier Parking Spaces Required	414	410	504	94
Maximum Number of Parking Spaces Currently Used on Site	237	237	--	--
Maximum Number of Parking Spaces Currently Used on Meridian Blvd.	195	183	--	--
Current Number of Parking Spaces Used per Day	432	420	--	--
Daily Skier Vehicle Trips Generated	952	944	1,160	216
Parked Vehicles Exiting During Peak Hour	166	164	202	38
Drop Off Vehicles Exiting During Peak Hour	187	128	213	85
P.M. Peak-Hour Exiting Skier Trips Generated [5]	353	292	415	123
P.M. Peak-Hour Entering Skier Trips Generated [5]	187	128	213	85

Note 1: Recorded December 27, 2005.
Note 2: Does not include Juniper Springs and Proposed Project.
Note 3: Based upon Town of Mammoth Lakes General Plan assumptions.
Note 4: Includes 213 Hotel Equivalents. One Hotel Equivalent equals 0.5 condo units.
Note 5: Assumes 40 percent of skiers leave during the p.m. peak hour.

TABLE B: MMSA Transit Ridership Summary for Peak Saturday Between 2005 and 2006 (One-Way Person Trips)

	Route		
Date	Yellow and Combo	Green	Total
Peak Saturday Ridership [1]	2,630	2,852	5,482
Typical Saturday Ridership [2]	490	1,900	2,436
Percent Skiers on Night Routes [3]	0.46%	0.46%	--
Percent Skiers on Day Routes [3]	91.00%	91.00%	--
Number of Skier Person Trips on Peak Day	2,405	2,609	5,014
Number of Skier Person Trips on Typical Saturday	448	1,738	2,186
Percent of Skier Ridership Accessing Eagle Lodge	50%	100%	--
Percent of Skier Ridership Accessing Eagle Lodge on Typical Saturday	25%	90%	--
Skier Person Trips to and from Eagle Lodge on a Peak Day	1,203	2,609	3,812
Skier Person Trips to and from Eagle Lodge on a Typical Saturday	112	1,564	1,676
Skier Person Round Trips to and from Eagle Lodge on a Peak Day	602	1,305	1,906
Skier Person Round Trips to and from Eagle Lodge on a Typical Saturday	56	782	838

Note 1: Ridership occurring on December 29, 2005, during which time the mountain was at skier capacity.

Note 2: Ridership recorded on January 7, 2006, factored up to represent typical Saturday.

Note 3: Based upon Mammoth Lakes Transit Plan (LSC, 2000).

TABLE C: Base Lodge Trip Generation

Land Use	Quantity	Unit	ITE Code	ITE Land Use	Saturday P.M. Peak-Hour Trip Rates			Saturday Trip Rate	Saturday P.M. Peak-Hour Trips			Saturday Trips
					In	Out	Total		In	Out	Total	
Food and Beverage	8.74	KSF [1]	--	--	Skier Service [2]				0	0	0	0
Bar and Coffee Bar	0.7	KSF	--	--	Skier Service				0	0	0	0
Rental / Demo / Repair Shop / Basket Check	3.7	KSF	--	--	Skier Service				0	0	0	0
Retail Shop	1.2	KSF	--	--	Skier Service				0	0	0	0
Ski School / Day Care [3]	4.3	KSF	--	--	Skier Service				0	0	0	0
Ticketing / Lobby	2.6	KSF	--	--	Skier Service				0	0	0	0
Restrooms	4.5	KSF	--	--	Skier Service				0	0	0	0
Administrative	1.03	KSF	--	--	Skier Service				0	0	0	0
Employee Break Room	1.55	KSF	--	--	Skier Service				0	0	0	0
Ski Patrol	0.46	KSF	--	--	Skier Service				0	0	0	0
Maintenance/Loading Dock	1.5	KSF	--	--	Skier Service				0	0	0	0
Mechanical / Cell Site	0.55	KSF	--	--	Skier Service				0	0	0	0
Ice Rink	5	KSF	465	Ice Rink [4]	1.15	1.40	2.55	39.93	6	7	13	200
Storage	0.55	KSF	--	--	Skier Service				0	0	0	0
Employees	122	employees	--	--	0.00	0.36	0.36	1.83	0	44	44	223
Base Lodge Total									***6***	***51***	***57***	***423***

Note 1: KSF = 1,000 square feet of floor area.

Note 2: Skier services are considered skier amenities and do not generate external trips, excepting employee trips.

Note 3: No trips are expected to be generated during p.m. peak hour since ski school lessons start and end before late afternoon.

Note 4: Ice Rink weekend trip rate estimated based upon Ice Rink weekday trip rate compared to Multi-Purpose Recreational Facility weekend and weekday trip rates.

TABLE D: Eagle Lodge Commercial Component Trip Generation

Land Use	Quantity	Unit	ITE Code	ITE Land Use	Saturday P.M. Peak-Hour Trip Rates			Saturday Trip Rate	Saturday P.M. Peak-Hour Trips			Saturday Trips
					In	Out	Total		In	Out	Total	
Day Spa	8	KSF [1]	492	Health/Fitness Club	1.33	1.27	2.60	20.87	11	10	21	167
Locker Club	12	KSF	--	--	Skier Service [2]				0	1	1	7
Convenience Market	4	KSF	852	Convenience Market (Open 24 Hours)	38.55	38.55	77.10	863.10	154	154	308	3,452
Sit-Down Restaurant	200	Seats [2]	931	Quality Restaurant	0.19	0.14	0.33	2.81	38	28	66	562
Commercial Subtotal									***203***	***192***	***395***	***4,181***

Note 1: KSF = 1,000 sf floor area.

Note 2: Skier services are considered skier amenities and do not generate external trips, excepting employee trips.

Note 3: Assumes 80 patio seats plus 120 seats inside.

TABLE E: Eagle Lodge Lodging Trip Generation

Land Use	Quantity	Unit	Saturday P.M. Peak-Hour Trip Rates			Saturday Trip Rate	Saturday P.M. Peak-Hour Trips			Saturday Trips
			In	Out	Total		In	Out	Total	
Hotel Equivalents [1]	213	rooms	0.33	0.33	0.66	8	70	71	141	1,704
Conference Room	200	people at one time	No Peak Hour Trip Gen			0.80	0	0	0	160
Commercial Property Management Unit	2	KSF	Lodging Amenity				0	0	0	0
Back-of-House Service Areas (garbage, janitors closet, furnace room)	5	KSF	Lodging Amenity				0	0	0	0
Lodging Total							***70***	***71***	***141***	***1,864***

Note 1: Daily trip rate based upon traffic model. Proportion occurring during peak hour based upon ITE Hotel trip rates.

Note 2: KSF = 1,000 sf floor area.

Note 3: These uses are considered amenities of the hotel and do not generate additional trips. Trips associated with these uses are considered to be included in the Hotel trip rate.

TABLE F: Summer Saturday Trip Generation of Eagle Lodge Site

	Quantity	Unit	ITE Code	ITE Land Use	Saturday P.M. Peak-Hour Trip Rates [2]			Saturday Trip Rate	Saturday P.M. Peak-Hour Trips			Saturday Trips
					In	Out	Total		In	Out	Total	
Mountain Bikers	426	Bikers	--	--	0.00	0.09	0.09	0.40	0	38	38	170
Mountain Biking Employees	25	Employees	--	--	0.00	0.36	0.36	1.83	0	9	9	46
Day Spa	8	KSF [1]	492	Health/Fitness Club	1.33	1.27	2.6	20.87	11	10	21	167
Convenience Market	4	KSF	852	Convenience Market (Open 24 Hours)	38.55	38.55	77.1	863.1	154	154	308	3,452
Sit-Down Restaurant	200	Seats	931	Quality Restaurant	0.19	0.14	0.33	2.81	38	28	66	562
Conference Facilities	200	People at One Time	--	--	0.4	0.4	0.8	1.6	80	80	160	320
Hotel Equivalents	213	Occupied Rooms	310	Hotel	0.33	0.33	0.66	8.00	70	71	141	1,704
Total									**353**	**390**	**743**	**6,421**

Note 1: KSF = 1,000 square feet of floor area.

Note 2: Represents peak hour of site-generated traffic.

TABLE G: Eagle Lodge External Auto Trip Generation - Winter

Use	P.M. Peak-Hour External Trips			Reductions for External Walking Trips	P.M. Peak-Hour External Auto Trips			Percent Pass-By	P.M. Peak-Hour New External Auto Trips		
	In	Out	Total		In	Out	Total		In	Out	Total
Skiers [1]	213	415	628	--	213	415	628	0%	213	415	628
Base Lodge	0	43	43	0%	0	43	43	0%	0	43	43
Ice Rink	3	3	6	5%	3	3	6	0%	3	3	6
Commercial	175	172	347	42%	102	100	202	25%	77	75	152
Lodging	20	51	71	0%	20	51	71	0%	20	51	71
Buses	2	2	4	0%	2	2	4	0%	2	2	4
Trucks	5	5	10	0%	5	5	10	0%	5	5	10
Total	**418**	**691**	**1,109**		**345**	**619**	**964**		**320**	**594**	**914**

Note 1: Reduction for walking trips reflected in Table A.

TABLE H: Eagle Lodge External Auto Trip Generation - Summer

Use	P.M. Peak-Hour External Trips			Reductions for External Walking Trips	P.M. Peak-Hour External Auto Trips			Percent Pass-By	P.M. Peak-Hour New External Auto Trips		
	In	Out	Total		In	Out	Total		In	Out	Total
Mountain Bikers	0	38	38	--	0	38	38	0%	0	38	38
Mountain Biking Employees	0	9	9	0%	0	9	9	0%	0	9	9
Day Spa	11	10	21	10%	10	9	19	0%	10	9	19
Convenience Market	154	154	308	50%	77	77	154	25%	58	58	116
Sit-Down Restaurant	38	28	66	10%	34	25	59	0%	34	25	59
Conference Facilities	80	80	160	0%	80	80	160	0%	80	80	160
Lodging	70	71	141	0%	70	71	141	0%	70	71	141
Total	**353**	**390**	**743**		**271**	**309**	**580**		**252**	**290**	**542**

TABLE I: Base Parking Demand

Land Use	Quantity	Unit	Parking Demand Rate	Source of Rate	Parking Demand
Skiers	6,000	Skiers per Day	See Table A in Appendix A [1]		497
Base Lodge					
Food and Beverage	8.74	KSF [2]	No Incremental Parking Demand		
Bar and Coffee Bar	0.7	KSF	No Incremental Parking Demand		
Rental / Demo / Repair Shop / Basket Check	3.7	KSF	No Incremental Parking Demand		
Retail Shop	1.2	KSF	No Incremental Parking Demand		
Ski School / Day Care (Drop Off Only) [2]	4.3	KSF	7.44	LSC	32
Ticketing / Lobby	2.6	KSF	No Incremental Parking Demand		
Restrooms	4.5	KSF	No Incremental Parking Demand		
Administrative	1.03	KSF	No Incremental Parking Demand		
Employee Break Room	1.55	KSF	No Incremental Parking Demand		
Ski Patrol	0.46	KSF	No Incremental Parking Demand		
Maintenance/Loading Dock	1.5	KSF	No Incremental Parking Demand		
Mechanical / Cell Site	0.55	KSF	No Incremental Parking Demand		
Ice Rink	5	KSF	3.60	LSC	18
Maximum Employees at One Time	122	employees	0.83	LSC	101
Commercial					
Day Spa	8	KSF	5.19	ITE	42
Locker Club	12	KSF	No Incremental Parking Demand		
Convenience Market	4	KSF	3.4	ITE	14
Sit-Down Restaurant	200	Seats	0.33	Town Code	66
Lodging					
Hotel Equivalents	213	rooms	1.05	Town Code	224
TOTAL					**994**

Note 1: Includes reductions for walking, drop-off, an transit trips.

Note 2: KSF = 1,000 square feet of floor area.

Note 3: Demand parking is estimated based on the Day Care AM peak hour trip generation rate identified in the *Trip Generation Manual* (ITE, 2003). While Ski School parking demand is estimated based on the maximum number of Ski School attendees and skier vehicle occupancy. Each drop-off activity is assumed to take 15 minutes.

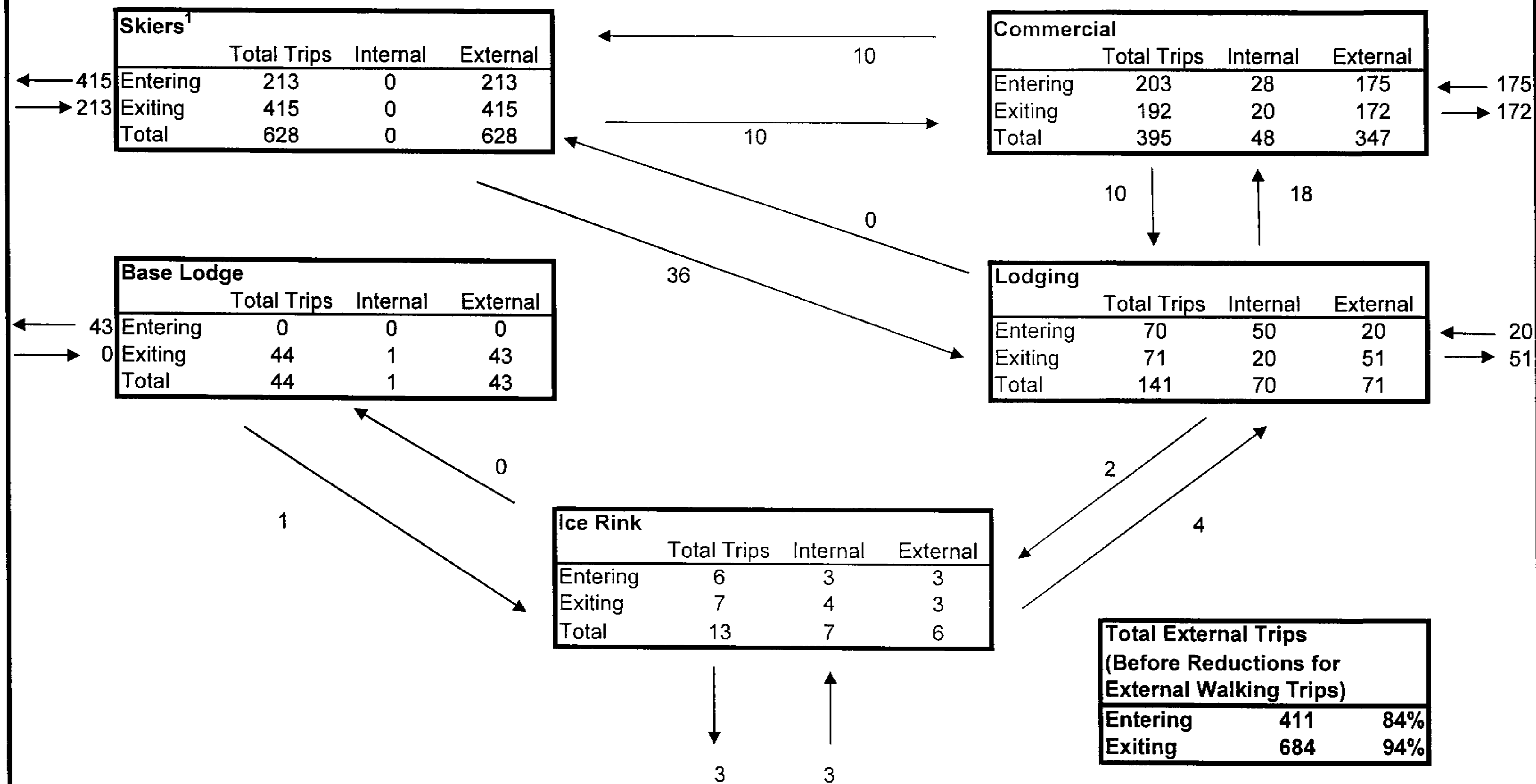
TABLE J: Cumulative Parking Demand

Land Use	Quantity	Unit	Parking Demand Rate	Source of Rate	Parking Demand	Total Reduction for Non-Auto Access [1]	Dedicated Parking	Available Spaces for Shared Parking	Parking Demand by Hour for Shared Parking Analysis: 6:00 AM	7:00 AM	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	11:00 PM	12:00 AM	Max Required Spaces Without Shared Use	Max Required Spaces With Shared Use
Skiers	6,000	skiers per day	See Table A		497	5.0%	0	472	0	3	80	208	328	402	447	472	466	435	356	162	3	0	0	0	0	0	0	472	472
Base Lodge																													
Ice Rink	5	KSF	3.6	LSC	18	5.0%	0	17	0	1	3	7	10	12	16	17	17	17	16	15	14	13	11	9	6	3	0	17	17
Employees	122	employees	0.83	LSC	101	25.0%	0	76	26	59	71	73	76	76	74	72	72	69	68	36	24	20	19	15	8	0	0	76	72
Ski School / Day Care[2]	4.3	KSF	--	ITE	32	0.0%		0	32	32	32	32	32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	32	0
Commercial																													
Day Spa	8	KSF 1	5.19	ITE	42	16.0%	0	35	18	17	17	18	17	18	18	17	17	17	26	35	35	26	17	7	7	7	0	35	17
Convenience Market	4	KSF	3.4	ITE	14	54.0%	0	6	0	0	1	2	3	4	6	6	6	6	6	5	5	5	4	3	2	1	0	6	6
Sit-Down Restaurant	200	Seats	0.33	Town Code	66	16.0%	0	55	4	9	14	20	25	25	28	24	19	25	27	36	48	55	45	21	17	12	8	55	24
Lodging																													
Hotel	213	rooms	1.05	Town Code	224	0.0%	0	224																					
Hotel Parking Available for Shared Use					11			11	9	9	10	9	8	8	8	8	8	8	9	9	9	9	9	10	10	10	10	11	8
Dedicated Hotel Parking					213			0	213	213	213	213	213	213	213	213	213	213	213	213	213	213	213	213	213	213	213	213	213
TOTAL					1,005			896	302	343	441	582	712	758	810	829	818	790	721	511	351	341	318	278	263	246	231	906	829
																												Juniper Springs	26
																												Total	855
																												Total Parking Proposed to Be Constructed On Site	544
																												Parking Shortfall	-311

Note 1: Estimated walking trips from nearby residences.

Note 2: As the Ski School / Day Care parking will be provided as drop-off spaces and peak parking demand is assumed to occur during A.M. peak hour of skier traffic, all drop-off parking spaces were assumed to be utilized during A.M. peak hour and not available for shared parking.

FIGURE A: Eagle Lodge Internal Trips - Preliminary Estimate (Subject to Change)



Skiers[1]

	Total Trips	Internal	External
Entering	213	0	213
Exiting	415	0	415
Total	628	0	628

Commercial

	Total Trips	Internal	External
Entering	203	28	175
Exiting	192	20	172
Total	395	48	347

Base Lodge

	Total Trips	Internal	External
Entering	0	0	0
Exiting	44	1	43
Total	44	1	43

Lodging

	Total Trips	Internal	External
Entering	70	50	20
Exiting	71	20	51
Total	141	70	71

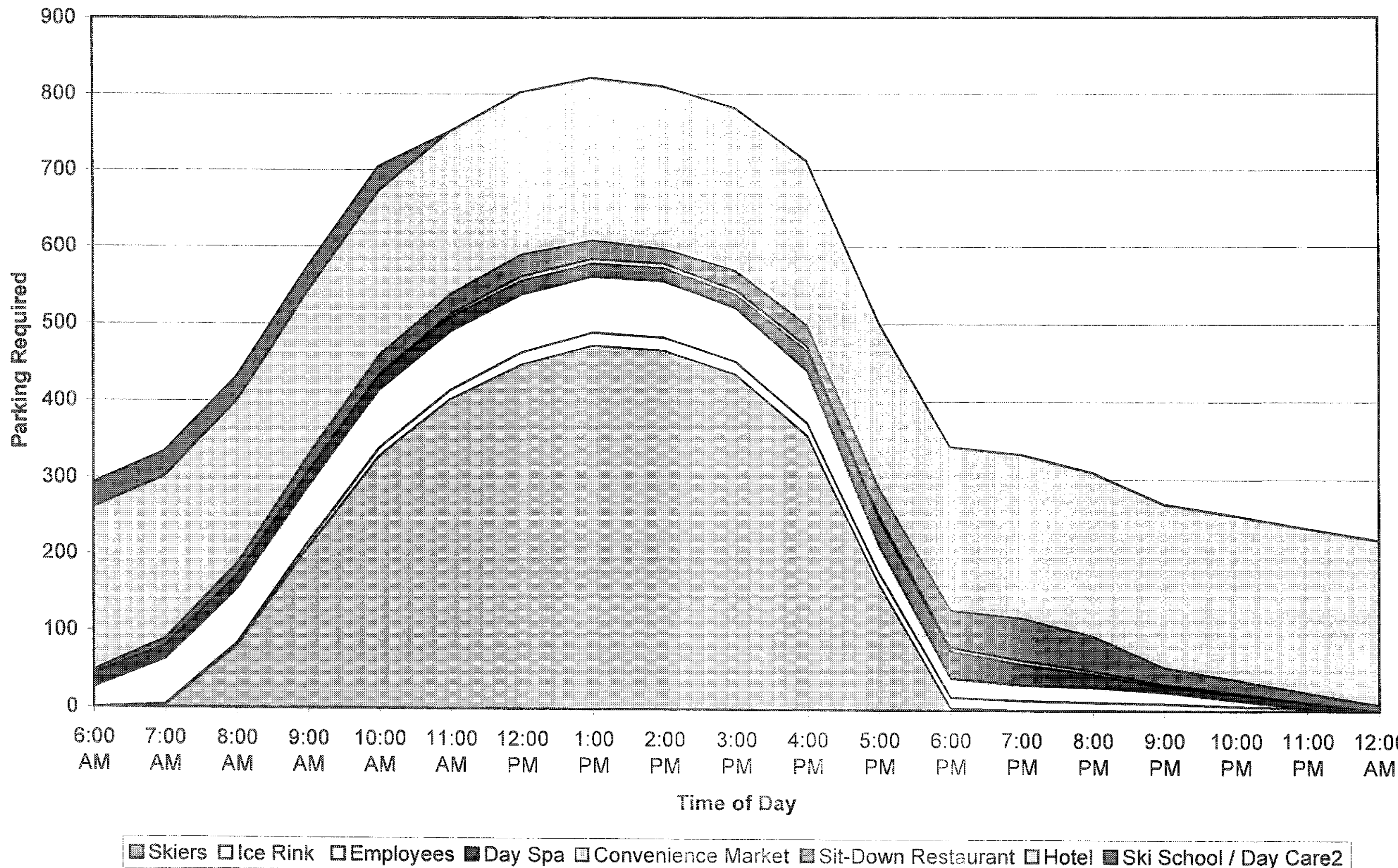
Ice Rink

	Total Trips	Internal	External
Entering	6	3	3
Exiting	7	4	3
Total	13	7	6

Total External Trips (Before Reductions for External Walking Trips)		
Entering	**411**	**84%**
Exiting	**684**	**94%**

Note 1: Trip Reductions for Skier-Lodging internal trips only taken off Lodging side, as skier trip generation already assumes a portion of skiers are within walking distance. The same is true for Skier-Commercial trips.

Figure B: Eagle Lodge Shared Parking



PARKING STUDY - FEBRUARY 2006 - *CAR COUNTS*

LITTLE EAGLE LOCATION	***2/12/2006*** (SUNDAY≈ 11am-12pm)		***2/18/2006*** (SATURDAY≈ 12pm-1pm)		***2/25/2006*** (SATURDAY≈ 12pm-1pm)	
CHAIR 15 PARKING LOT	237		219		224	
CHAIR 15 EMPLOYEE LOT	25	**271**	27	**253**	27	**260**
CHAR 15 LOADING ZONE	9		7		9	
NORTH MERIDIAN BLVD	69	**142**	79	**154**	77	**160**
SOUTH MERIDIAN BLVD	73		75		83	
COMBINED LOT & STREET PARKING	413		407		**420**	
Skier Count	14897		20225		17968	

CANYON LODGE LOCATION	***2/11/2006*** (SUNDAY-11am-12pm)		***2/18/2006*** (SATURDAY-12pm-1pm)		***2/25/2006*** (SATURDAY-12pm-1pm)	
CANYON LODGE LOT	290	**325**	275	**320**	294	**323**
CANYON LODGE LOADING ZONE	35		45		29	
NORTH CANYON BLVD			30	**70**	1	**36**
SOUTH CANYON BLVD			40		35	
EAST FOREST TRAIL	7	**7**	5	**5**	1	**3**
WEST FOREST TRAIL			0		2	
NORTH RAINBOW LANE	94	**152**	58	**128**	69	**155**
SOUTH RAINBOW LANE	58		70		86	
NORTH LAKEVIEW BLVD	58	**157**	36	**136**	32	**166**
SOUTH LAKEVIEW BLVD	99		100		134	
EAST WARMING HUT II RD	86	**86**	28	**89**	31	**96**
WEST WARMING HUT II RD			61		65	
EAST MAMMOTH SLOPES DR			7	**7**	16	**16**
WEST MAMMOTH SLOPES DR			0		0	
COMBINED LOT & STREET PARKING	727		755		**795**	
count by:	pab		pr		pr	

-----Original Message-----
From: Becky [mailto:becky@lsctahoe.com]
Sent: Wednesday, November 10, 2004 3:43 PM
To: Sonja Brynelsen; Bill Taylor; Peter Bernasconi
Cc: "Sara Hertel"@server.exwire.com
Subject: Mammoth LOS Standards

Hello all,

LSC is currently working on running the LOS calculations for the 2004 and four 2024 alternatives conditions. We propose to use the following LOS thresholds in our analysis, consistent with the Airport EIR:

For Signalized Intersections: Total intersection LOS D or better must be maintained. Therefore, if a signalized intersection is found to operate at a total intersection LOS E or F, we will assume mitigation is required.
For Unsignalized Intersections: Approach intersection LOS D or better must be maintained. For example, if the minor street approach at an unsignalized two-way stop-controlled intersection operates at LOS E or F, then mitigation will be required.

Please let us know if you see fault in this approach as soon as possible.
In the meantime, we will proceed with the LOS thresholds stated above.

Becky

Rebecca L. Bucar
Transportation Engineer
LSC Transportation Consultants, Inc.
2690 Lake Forest Rd. / PO Box 5875
Tahoe City, California 96145
P: (530)583-4053 F: (530)583-5966
becky@lsctahoe.com

Appendix B
Level of Service Calculations

2005 No Project LOS

Eagle Lodge EIR
2005 No Project

Scenario Report

Scenario:	2005
Command:	WO/ Proj
Volume:	PM
Geometry:	Default Geometry
Impact Fee:	Default Impact Fee
Trip Generation:	PM
Trip Distribution:	Default Trip Distribution
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Future

Eagle Lodge EIR
2005 No Project

Turning Movement Report
PM

Volume Type	Northbound Left	Northbound Thru	Northbound Right	Southbound Left	Southbound Thru	Southbound Right	Eastbound Left	Eastbound Thru	Eastbound Right	Westbound Left	Westbound Thru	Westbound Right	Total Volume
#1 OLDM/MAIN													
Base	346	0	60	0	0	0	0	301	648	84	275	0	1714
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	346	0	60	0	0	0	0	301	648	84	275	0	1714
#2 MERIDIAN/OLDM													
Base	117	260	100	100	327	132	158	145	120	129	161	124	1873
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	117	260	100	100	327	132	158	145	120	129	161	124	1873
#3 MINARET/MERIDIAN													
Base	14	87	23	161	187	70	97	333	30	23	178	97	1300
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	14	87	23	161	187	70	97	333	30	23	178	97	1300
#4 MINARET/MAIN													
Base	124	120	60	540	205	132	90	471	155	69	345	90	2401
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	124	120	60	540	205	132	90	471	155	69	345	90	2401
#5 KELLY/LAKE MARY													
Base	20	0	35	0	0	0	0	39	4	40	65	0	203
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	20	0	35	0	0	0	0	39	4	40	65	0	203
#6 MERIDIAN / MAJESTIC PINES (EAST)													
Base	0	0	2	78	0	20	16	253	9	9	162	69	618
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	2	78	0	20	16	253	9	9	162	69	618
#7 MERIDIAN/MAJESTIC PINES (WEST)													
Base	3	10	24	199	22	2	1	15	3	46	20	90	435
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	3	10	24	199	22	2	1	15	3	46	20	90	435

Eagle Lodge EIR
2005 No Project

Impact Analysis Report
Level Of Service

Intersection	Base LOS	Base Del/ Veh	Base V/ C	Future LOS	Future Del/ Veh	Future V/ C	Change in
# 1 OLDM/MAIN	C	22.9	0.871	C	22.9	0.871	+ 0.000 D/V
# 2 MERIDIAN/OLDM	C	21.4	0.719	C	21.4	0.719	+ 0.000 D/V
# 3 MINARET/MERIDIAN	C	20.5	0.674	C	20.5	0.674	+ 0.000 D/V
# 4 MINARET/MAIN	C	20.8	0.784	C	20.8	0.784	+ 0.000 D/V
# 5 KELLY/LAKE MARY	A	1.5	0.000	A	1.5	0.000	+ 0.000 D/V
# 6 MERIDIAN / MAJESTIC PINES (EAS	B	1.6	0.000	B	1.6	0.000	+ 0.000 D/V
# 7 MERIDIAN?MAJESTIC PINES (WEST)	A	8.9	0.323	A	8.9	0.323	+ 0.000 V/C

Eagle Lodge EIR
2005 No Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #1 OLDM/MAIN

Cycle (sec): 80 Critical Vol./Cap. (X): 0.871
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 22.9
Optimal Cycle: 88 Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 0	1	0 0	0 0	0	0 0	2 0	1	1 0	2 0	0
Volume Module:												
Base Vol:	346	0	60	0	0	0	0	301	648	84	275	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	346	0	60	0	0	0	0	301	648	84	275	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	384	0	67	0	0	0	0	334	720	93	306	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	384	0	67	0	0	0	0	334	720	93	306	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	384	0	67	0	0	0	0	334	720	93	306	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	1.00	0.83	1.00	1.00	1.00	1.00	0.90	0.81	0.90	0.90	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	1769	0	1583	0	0	0	0	3437	1537	1718	3437	0
Capacity Analysis Module:												
Vol/Sat:	0.22	0.00	0.04	0.00	0.00	0.00	0.00	0.10	0.47	0.05	0.09	0.00
Crit Moves:	****								****	****		
Green/Cycle:	0.25	0.00	0.25	0.00	0.00	0.00	0.00	0.54	0.54	0.65	0.60	0.00
Volume/Cap:	0.87	0.00	0.17	0.00	0.00	0.00	0.00	0.18	0.87	0.15	0.15	0.00
Delay/Veh:	45.6	0.0	23.7	0.0	0.0	0.0	0.0	9.5	26.0	5.4	7.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	45.6	0.0	23.7	0.0	0.0	0.0	0.0	9.5	26.0	5.4	7.0	0.0
HCM2kAvg:	13	0	1	0	0	0	0	2	19	1	2	0

Eagle Lodge EIR
2005 No Project

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 OLDM/MAIN

Cycle (sec): 80 Critical Vol./Cap. (X): 0.871
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 22.9
Optimal Cycle:OPTIMIZED Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0	0 1	0 0	0	0 0	0 0	2	0 1	1 0	2	0 0
Volume Module:												
Base Vol:	346	0	60	0	0	0	0	301	648	84	275	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	346	0	60	0	0	0	0	301	648	84	275	0
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	346	0	60	0	0	0	0	301	648	84	275	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	384	0	67	0	0	0	0	334	720	93	306	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	384	0	67	0	0	0	0	334	720	93	306	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	384	0	67	0	0	0	0	334	720	93	306	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	1.00	0.83	1.00	1.00	1.00	1.00	0.90	0.81	0.90	0.90	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	1769	0	1583	0	0	0	0	3437	1537	1718	3437	0
Capacity Analysis Module:												
Vol/Sat:	0.22	0.00	0.04	0.00	0.00	0.00	0.00	0.10	0.47	0.05	0.09	0.00
Crit Moves:	****								****	****		
Green/Cycle:	0.25	0.00	0.25	0.00	0.00	0.00	0.00	0.54	0.54	0.65	0.60	0.00
Volume/Cap:	0.87	0.00	0.17	0.00	0.00	0.00	0.00	0.18	0.87	0.15	0.15	0.00
Delay/Veh:	45.6	0.0	23.7	0.0	0.0	0.0	0.0	9.5	26.0	5.4	7.0	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	45.6	0.0	23.7	0.0	0.0	0.0	0.0	9.5	26.0	5.4	7.0	0.0
HCM2kAvg:	13	0	1	0	0	0	0	2	19	1	2	0

Eagle Lodge EIR
2005 No Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #2 MERIDIAN/OLDM

Cycle (sec):	45	Critical Vol./Cap. (X):	0.719
Loss Time (sec):	16 (Y+R = 4 sec)	Average Delay (sec/veh):	21.4
Optimal Cycle:	53	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Protected			Split Phase			Split Phase	
Rights:		Include			Include			Include			Include	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	1	1 0	1 0	1	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	117	260	100	100	327	132	158	145	120	129	161	124
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	117	260	100	100	327	132	158	145	120	129	161	124
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	130	289	111	111	363	147	176	161	133	143	179	138
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	289	111	111	363	147	176	161	133	143	179	138
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	130	289	111	111	363	147	176	161	133	143	179	138
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.98	0.83	0.93	0.98	0.83	0.93	0.87	0.87	0.93	0.87	0.87
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.09	0.91	1.00	1.13	0.87
Final Sat.:	1769	1862	1583	1769	1862	1583	1769	1804	1493	1769	1869	1439
Capacity Analysis Module:												
Vol/Sat:	0.07	0.16	0.07	0.06	0.20	0.09	0.10	0.09	0.09	0.08	0.10	0.10
Crit Moves:	****				****		****					****
Green/Cycle:	0.10	0.27	0.27	0.11	0.27	0.27	0.14	0.14	0.14	0.13	0.13	0.13
Volume/Cap:	0.72	0.58	0.26	0.58	0.72	0.34	0.72	0.65	0.65	0.61	0.72	0.72
Delay/Veh:	32.7	16.1	13.4	23.7	19.8	13.6	28.5	21.6	21.6	23.0	24.4	24.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	32.7	16.1	13.4	23.7	19.8	13.6	28.5	21.6	21.6	23.0	24.4	24.4
HCM2kAvg:	4	4	1	3	6	2	4	3	3	3	4	4

Eagle Lodge EIR
2005 No Project

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 MERIDIAN/OLDM

Cycle (sec):	45	Critical Vol./Cap. (X):	0.719
Loss Time (sec):	16 (Y+R = 4 sec)	Average Delay (sec/veh):	21.4
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Protected			Split Phase			Split Phase	
Rights:		Include			Include			Include			Include	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1 0 1			1 0 1 0 1			1 0 1 1 0			1 0 1 1 0		
Volume Module:												
Base Vol:	117	260	100	100	327	132	158	145	120	129	161	124
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	117	260	100	100	327	132	158	145	120	129	161	124
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	117	260	100	100	327	132	158	145	120	129	161	124
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	130	289	111	111	363	147	176	161	133	143	179	138
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	130	289	111	111	363	147	176	161	133	143	179	138
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	130	289	111	111	363	147	176	161	133	143	179	138
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.98	0.83	0.93	0.98	0.83	0.93	0.87	0.87	0.93	0.87	0.87
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.09	0.91	1.00	1.13	0.87
Final Sat.:	1769	1862	1583	1769	1862	1583	1769	1804	1493	1769	1869	1439
Capacity Analysis Module:												
Vol/Sat:	0.07	0.16	0.07	0.06	0.20	0.09	0.10	0.09	0.09	0.08	0.10	0.10
Crit Moves:	****				****		****					****
Green/Cycle:	0.10	0.27	0.27	0.11	0.27	0.27	0.14	0.14	0.14	0.13	0.13	0.13
Volume/Cap:	0.72	0.58	0.26	0.58	0.72	0.34	0.72	0.65	0.65	0.61	0.72	0.72
Delay/Veh:	32.7	16.1	13.4	23.7	19.8	13.6	28.5	21.6	21.6	23.0	24.4	24.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	32.7	16.1	13.4	23.7	19.8	13.6	28.5	21.6	21.6	23.0	24.4	24.4
HCM2kAvg:	4	4	1	3	6	2	4	3	3	3	4	4

```
-------------------------------------------------------------------------------
                             Eagle Lodge EIR
                             2005 No Project
-------------------------------------------------------------------------------
                    Level Of Service Computation Report
           2000 HCM Operations Method (Base Volume Alternative)
*******************************************************************************
Intersection #3 MINARET/MERIDIAN
*******************************************************************************
Cycle (sec):         45                Critical Vol./Cap. (X):        0.674
Loss Time (sec):     16 (Y+R =  4 sec) Average Delay (sec/veh):        20.5
Optimal Cycle:       50                Level Of Service:                  C
*******************************************************************************
Approach:       North Bound      South Bound       East Bound       West Bound
Movement:      L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Split Phase      Split Phase      Split Phase      Split Phase
Rights:           Include          Include          Include          Include
Min. Green:      0     0     0     0     0     0     0     0     0     0     0     0
Lanes:         1  0  0  1  0   1  0  0  1  0   1  0  1  1  0   1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       14   87    23   161  187    70    97  333    30    23  178    97
Growth Adj:   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    14   87    23   161  187    70    97  333    30    23  178    97
User Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:      0.90 0.90  0.90  0.90 0.90  0.90  0.90 0.90  0.90  0.90 0.90  0.90
PHF Volume:     16   97    26   179  208    78   108  370    33    26  198   108
Reduct Vol:      0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    16   97    26   179  208    78   108  370    33    26  198   108
PCE Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:      1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:     16   97    26   179  208    78   108  370    33    26  198   108
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:     1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:   0.93 0.95  0.95  0.93 0.94  0.94  0.93 0.92  0.92  0.93 0.88  0.88
Lanes:        1.00 0.79  0.21  1.00 0.73  0.27  1.00 1.83  0.17  1.00 1.29  0.71
Final Sat.:   1769 1427   377  1769 1299   486  1769 3206   289  1769 2169  1182
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:      0.01 0.07  0.07  0.10 0.16  0.16  0.06 0.12  0.12  0.01 0.09  0.09
Crit Moves:        ****             ****             ****             ****
Green/Cycle:  0.10 0.10  0.10  0.24 0.24  0.24  0.17 0.17  0.17  0.14 0.14  0.14
Volume/Cap:   0.09 0.67  0.67  0.43 0.67  0.67  0.36 0.67  0.67  0.11 0.67  0.67
Delay/Veh:    18.6 29.1  29.1  15.3 19.8  19.8  17.2 20.5  20.5  17.3 22.5  22.5
User DelAdj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   18.6 29.1  29.1  15.3 19.8  19.8  17.2 20.5  20.5  17.3 22.5  22.5
HCM2kAvg:        0    3     3     3    5     5     2    4     4     0    4     4
*******************************************************************************
```

```
--------------------------------------------------------------------------------
                              Eagle Lodge EIR
                              2005 No Project
--------------------------------------------------------------------------------
                    Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
********************************************************************************
Intersection #3 MINARET/MERIDIAN
********************************************************************************
Cycle (sec):          45              Critical Vol./Cap. (X):        0.674
Loss Time (sec):      16 (Y+R =  4 sec) Average Delay (sec/veh):       20.5
Optimal Cycle:OPTIMIZED               Level Of Service:                  C
********************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:      Split Phase      Split Phase      Split Phase      Split Phase
Rights:          Include          Include          Include          Include
Min. Green:    0    0     0    0    0     0    0    0     0    0    0     0
Lanes:        1  0  0  1  0   1  0  0  1  0   1  0  1  1  0   1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      14   87    23   161  187    70    97  333    30    23  178    97
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   14   87    23   161  187    70    97  333    30    23  178    97
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   14   87    23   161  187    70    97  333    30    23  178    97
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.90 0.90  0.90  0.90 0.90  0.90  0.90 0.90  0.90  0.90 0.90  0.90
PHF Volume:    16   97    26   179  208    78   108  370    33    26  198   108
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:   16   97    26   179  208    78   108  370    33    26  198   108
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:    16   97    26   179  208    78   108  370    33    26  198   108
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  0.93 0.95  0.95  0.93 0.94  0.94  0.93 0.92  0.92  0.93 0.88  0.88
Lanes:       1.00 0.79  0.21  1.00 0.73  0.27  1.00 1.83  0.17  1.00 1.29  0.71
Final Sat.:  1769 1427   377  1769 1299   486  1769 3206   289  1769 2169  1182
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.01 0.07  0.07  0.10 0.16  0.16  0.06 0.12  0.12  0.01 0.09  0.09
Crit Moves:       ****             ****             ****             ****
Green/Cycle: 0.10 0.10  0.10  0.24 0.24  0.24  0.17 0.17  0.17  0.14 0.14  0.14
Volume/Cap:  0.09 0.67  0.67  0.43 0.67  0.67  0.36 0.67  0.67  0.11 0.67  0.67
Delay/Veh:   18.6 29.1  29.1  15.3 19.8  19.8  17.2 20.5  20.5  17.3 22.5  22.5
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:  18.6 29.1  29.1  15.3 19.8  19.8  17.2 20.5  20.5  17.3 22.5  22.5
HCM2kAvg:       0    3     3     3    5     5     2    4     4     0    4     4
********************************************************************************
```

Eagle Lodge EIR
2005 No Project

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #4 MINARET/MAIN

Cycle (sec):	40	Critical Vol./Cap. (X):	0.784
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	20.8
Optimal Cycle:	50	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1 0 1			2 0 0 1 0			1 0 2 0 1			1 0 2 0 1		
Volume Module:												
Base Vol:	124	120	60	540	205	132	90	471	155	69	345	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	124	120	60	540	205	132	90	471	155	69	345	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	138	133	67	600	228	147	100	523	172	77	383	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	138	133	67	600	228	147	100	523	172	77	383	100
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	138	133	67	600	228	147	100	523	172	77	383	100
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.96	0.82	0.92	0.94	0.94	0.93	0.93	0.83	0.90	0.90	0.81
Lanes:	1.00	1.00	1.00	2.00	0.61	0.39	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1734	1825	1551	3500	1087	700	1769	3538	1583	1718	3437	1537
Capacity Analysis Module:												
Vol/Sat:	0.08	0.07	0.04	0.17	0.21	0.21	0.06	0.15	0.11	0.04	0.11	0.07
Crit Moves:	****				****			****			****	
Green/Cycle:	0.10	0.10	0.10	0.27	0.27	0.27	0.19	0.19	0.19	0.14	0.14	0.14
Volume/Cap:	0.78	0.72	0.42	0.64	0.78	0.78	0.30	0.78	0.58	0.31	0.78	0.46
Delay/Veh:	37.7	30.3	18.7	14.5	21.8	21.8	14.5	21.5	17.5	16.1	24.6	17.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	37.7	30.3	18.7	14.5	21.8	21.8	14.5	21.5	17.5	16.1	24.6	17.2
HCM2kAvg:	4	3	1	5	7	7	1	6	3	1	5	2

Eagle Lodge EIR
2005 No Project

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 MINARET/MAIN

Cycle (sec):	40	Critical Vol./Cap. (X):	0.784
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	20.8
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	1	2 0	0 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	124	120	60	540	205	132	90	471	155	69	345	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	124	120	60	540	205	132	90	471	155	69	345	90
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	124	120	60	540	205	132	90	471	155	69	345	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	138	133	67	600	228	147	100	523	172	77	383	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	138	133	67	600	228	147	100	523	172	77	383	100
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	138	133	67	600	228	147	100	523	172	77	383	100
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.96	0.82	0.92	0.94	0.94	0.93	0.93	0.83	0.90	0.90	0.81
Lanes:	1.00	1.00	1.00	2.00	0.61	0.39	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1734	1825	1551	3500	1087	700	1769	3538	1583	1718	3437	1537
Capacity Analysis Module:												
Vol/Sat:	0.08	0.07	0.04	0.17	0.21	0.21	0.06	0.15	0.11	0.04	0.11	0.07
Crit Moves:	****				****			****			****	
Green/Cycle:	0.10	0.10	0.10	0.27	0.27	0.27	0.19	0.19	0.19	0.14	0.14	0.14
Volume/Cap:	0.78	0.72	0.42	0.64	0.78	0.78	0.30	0.78	0.58	0.31	0.78	0.46
Delay/Veh:	37.7	30.3	18.7	14.5	21.8	21.8	14.5	21.5	17.5	16.1	24.6	17.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	37.7	30.3	18.7	14.5	21.8	21.8	14.5	21.5	17.5	16.1	24.6	17.2
HCM2kAvg:	4	3	1	5	7	7	1	6	3	1	5	2

```
---------------------------------------------------------------------------------
                              Eagle Lodge EIR
                              2005 No Project
---------------------------------------------------------------------------------
                     Level Of Service Computation Report
           1994 HCM Unsignalized Method (Base Volume Alternative)
*********************************************************************************
Intersection #5 KELLY/LAKE MARY
*********************************************************************************
Average Delay (sec/veh):       1.5        Worst Case Level Of Service:          A
*********************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Rights:          Include          Include          Include          Include
Lanes:        0  0  1! 0  0   0  0  0  0  0   0  0  0  1  0   0  1  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      20    0    35    0    0     0    0   39     4   40   65     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:   20    0    35    0    0     0    0   39     4   40   65     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     0.90 0.90  0.90 0.90 0.90  0.90 0.90 0.90  0.90 0.90 0.90  0.90
PHF Volume:    22    0    39    0    0     0    0   43     4   44   72     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Final Vol.:    22    0    39    0    0     0    0   43     4   44   72     0
------------|---------------||---------------||---------------||---------------|
Adjusted Volume Module:
Grade:            0%               0%               0%               0%
% Cycle/Cars:   xxxx  xxxx      xxxx  xxxx      xxxx  xxxx      xxxx  xxxx
% Truck/Comb:   xxxx  xxxx      xxxx  xxxx      xxxx  xxxx      xxxx  xxxx
PCE Adj:     1.10 1.10  1.10 1.10 1.10  1.10 1.10 1.00  1.00 1.10 1.00  1.00
Cycl/Car PCE:   xxxx  xxxx      xxxx  xxxx      xxxx  xxxx      xxxx  xxxx
Trck/Cmb PCE:   xxxx  xxxx      xxxx  xxxx      xxxx  xxxx      xxxx  xxxx
Adj Vol.:      24    0    43    0    0     0    0   43     4   49   72     0
------------|---------------||---------------||---------------||---------------|
Critical Gap Module:
MoveUp Time:  3.4 xxxx   2.6 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   2.1 xxxx xxxxx
Critical Gp:  6.5 xxxx   5.5 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   5.0 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:  162 xxxx    46  xxxx xxxx xxxxx  xxxx xxxx xxxxx    48 xxxx xxxxx
Potent Cap.:  853 xxxx  1313  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1627 xxxx xxxxx
Adj Cap:     0.97 xxxx  1.00  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1.00 xxxx xxxxx
Move Cap.:    826 xxxx  1313  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1627 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Stopped Del:  4.5 xxxx   2.8 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   2.3 xxxx xxxxx
LOS by Move:    *    *     *    *    *     *    *    *     *    A    *     *
Movement:     LT - LTR - RT   LT - LTR - RT   LT - LTR - RT   LT - LTR - RT
Shared Cap.: xxxx 1081 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1627 xxxx xxxxx
Shrd StpDel:xxxxx  3.5 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx   2.4 xxxx xxxxx
Shared LOS:     *    A     *    *    *     *    *    *     *    A    *     *
ApproachDel:         3.5           xxxxxx             0.0              0.9
ApproachLOS:          A              *                 A                A
```

```
--------------------------------------------------------------------------------
                              Eagle Lodge EIR
                              2005 No Project
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
          1994 HCM Unsignalized Method (Future Volume Alternative)
********************************************************************************
Intersection #5 KELLY/LAKE MARY
********************************************************************************
Average Delay (sec/veh):       1.5         Worst Case Level Of Service:       A
********************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Rights:          Include          Include          Include          Include
Lanes:        0  0  1! 0  0   0  0  0  0  0   0  0  0  1  0   0  1  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      20    0    35    0    0     0    0   39     4   40   65     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:   20    0    35    0    0     0    0   39     4   40   65     0
Added Vol:      0    0     0    0    0     0    0    0     0    0    0     0
PasserByVol:    0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:   20    0    35    0    0     0    0   39     4   40   65     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     0.90 0.90  0.90 0.90 0.90  0.90 0.90 0.90  0.90 0.90 0.90  0.90
PHF Volume:    22    0    39    0    0     0    0   43     4   44   72     0
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Final Vol.:    22    0    39    0    0     0    0   43     4   44   72     0
Adjusted Volume Module:
Grade:            0%               0%               0%               0%
% Cycle/Cars:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
% Truck/Comb:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
PCE Adj:     1.10 1.10  1.10 1.10 1.10  1.10 1.10 1.00  1.00 1.10 1.00  1.00
Cycl/Car PCE:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
Trck/Cmb PCE:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
Adj Vol.:      24    0    43    0    0     0    0   43     4   49   72     0
Critical Gap Module:
MoveUp Time:  3.4 xxxx   2.6 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   2.1 xxxx xxxxx
Critical Gp:  6.5 xxxx   5.5 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   5.0 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:  162 xxxx    46  xxxx xxxx xxxxx  xxxx xxxx xxxxx    48 xxxx xxxxx
Potent Cap.:  853 xxxx  1313  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1627 xxxx xxxxx
Adj Cap:     0.97 xxxx  1.00  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1.00 xxxx xxxxx
Move Cap.:    826 xxxx  1313  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1627 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Stopped Del:  4.5 xxxx   2.8 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   2.3 xxxx xxxxx
LOS by Move:    *    *     *    *    *     *    *    *     *    A    *     *
Movement:     LT - LTR - RT   LT - LTR - RT   LT - LTR - RT   LT - LTR - RT
Shared Cap.: xxxx 1081 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1627 xxxx xxxxx
Shrd StpDel:xxxxx  3.5 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx   2.4 xxxx xxxxx
Shared LOS:     *    A     *    *    *     *    *    *     *    A    *     *
ApproachDel:         3.5            xxxxxx             0.0              0.9
ApproachLOS:          A                *                A                A
```

Eagle Lodge EIR
2005 No Project

Level Of Service Computation Report
1994 HCM Unsignalized Method (Base Volume Alternative)

Intersection #6 MERIDIAN / MAJESTIC PINES (EAST)

Average Delay (sec/veh): 1.6 Worst Case Level Of Service: B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0 0 1			0 0 1! 0 0			0 1 0 1 0			0 1 0 1 0		
Volume Module:												
Base Vol:	0	0	2	78	0	20	16	253	9	9	162	69
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	2	78	0	20	16	253	9	9	162	69
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	0	0	2	87	0	22	18	281	10	10	180	77
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	2	87	0	22	18	281	10	10	180	77
Adjusted Volume Module:												
Grade:	0%			0%			0%			0%		
% Cycle/Cars:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
% Truck/Comb:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
PCE Adj:	1.10	1.10	1.10	1.10	1.10	1.10	1.10	1.00	1.00	1.10	1.00	1.00
Cycl/Car PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Trck/Cmb PCE:	xxxx	xxxx		xxxx	xxxx		xxxx	xxxx		xxxx	xxxx	
Adj Vol.:	0	0	2	95	0	24	20	281	10	11	180	77
Critical Gap Module:												
MoveUp Time:	xxxxx	xxxx	2.6	3.4	xxxx	2.6	2.1	xxxx	xxxxx	2.1	xxxx	xxxxx
Critical Gp:	xxxxx	xxxx	5.5	7.0	xxxx	5.5	5.5	xxxx	xxxxx	5.5	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	146	527	xxxx	128	257	xxxx	xxxxx	291	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	1168	487	xxxx	1192	1248	xxxx	xxxxx	1196	xxxx	xxxxx
Adj Cap:	xxxx	xxxx	1.00	0.98	xxxx	1.00	1.00	xxxx	xxxxx	1.00	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	1168	476	xxxx	1192	1248	xxxx	xxxxx	1196	xxxx	xxxxx
Level Of Service Module:												
Stopped Del:	xxxxx	xxxx	3.1	9.2	xxxx	3.1	2.9	xxxx	xxxxx	3.0	xxxx	xxxxx
LOS by Move:	*	*	A	*	*	*	A	*	*	A	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	543	xxxxx	1248	xxxx	xxxxx	1196	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	8.3	xxxxx	3.8	xxxx	xxxxx	3.6	xxxx	xxxxx
Shared LOS:	*	*	*	*	B	*	A	*	*	A	*	*
ApproachDel:		3.1			8.3			0.2			0.1	
ApproachLOS:		A			B			A			A	

```
--------------------------------------------------------------------------------
                              Eagle Lodge EIR
                              2005 No Project
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
           1994 HCM Unsignalized Method (Future Volume Alternative)
********************************************************************************
Intersection #6 MERIDIAN / MAJESTIC PINES (EAST)
********************************************************************************
Average Delay (sec/veh):       1.6          Worst Case Level Of Service:       B
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Stop Sign        Stop Sign        Uncontrolled     Uncontrolled
Rights:          Include          Include          Include          Include
Lanes:        0  0  0  0  1   0  0  1! 0  0   0  1  0  1  0   0  1  0  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     2    78    0    20    16  253     9     9  162    69
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0     2    78    0    20    16  253     9     9  162    69
Added Vol:      0    0     0     0    0     0     0    0     0     0    0     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0     2    78    0    20    16  253     9     9  162    69
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.90 0.90  0.90  0.90 0.90  0.90  0.90 0.90  0.90  0.90 0.90  0.90
PHF Volume:     0    0     2    87    0    22    18  281    10    10  180    77
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Final Vol.:     0    0     2    87    0    22    18  281    10    10  180    77
Adjusted Volume Module:
Grade:            0%               0%               0%               0%
% Cycle/Cars:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
% Truck/Comb:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
PCE Adj:     1.10 1.10  1.10  1.10 1.10  1.10  1.10 1.00  1.00  1.10 1.00  1.00
Cycl/Car PCE:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
Trck/Cmb PCE:   xxxx  xxxx       xxxx  xxxx       xxxx  xxxx       xxxx  xxxx
Adj Vol.:       0    0     2    95    0    24    20  281    10    11  180    77
Critical Gap Module:
MoveUp Time:xxxxx xxxx   2.6   3.4 xxxx   2.6   2.1 xxxx xxxxx   2.1 xxxx xxxxx
Critical Gp:xxxxx xxxx   5.5   7.0 xxxx   5.5   5.5 xxxx xxxxx   5.5 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx   146   527 xxxx   128   257 xxxx xxxxx   291 xxxx xxxxx
Potent Cap.: xxxx xxxx  1168   487 xxxx  1192  1248 xxxx xxxxx  1196 xxxx xxxxx
Adj Cap:     xxxx xxxx  1.00  0.98 xxxx  1.00  1.00 xxxx xxxxx  1.00 xxxx xxxxx
Move Cap.:   xxxx xxxx  1168   476 xxxx  1192  1248 xxxx xxxxx  1196 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Stopped Del:xxxxx xxxx   3.1   9.2 xxxx   3.1   2.9 xxxx xxxxx   3.0 xxxx xxxxx
LOS by Move:    *    *     A     *    *     *     A    *     *     A    *     *
Movement:     LT - LTR - RT   LT - LTR - RT   LT - LTR - RT   LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx  543 xxxxx  1248 xxxx xxxxx  1196 xxxx xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxxx  8.3 xxxxx   3.8 xxxx xxxxx   3.6 xxxx xxxxx
Shared LOS:     *    *     *     *    B     *     A    *     *     A    *     *
ApproachDel:       3.1              8.3              0.2              0.1
ApproachLOS:        A                B                A                A
```

```
--------------------------------------------------------------------------------
                              Eagle Lodge EIR
                              2005 No Project
--------------------------------------------------------------------------------
                       Level Of Service Computation Report
              2000 HCM 4-Way Stop Method (Base Volume Alternative)
********************************************************************************
Intersection #7 MERIDIAN?MAJESTIC PINES (WEST)
********************************************************************************
Cycle (sec):         100             Critical Vol./Cap. (X):         0.323
Loss Time (sec):       0 (Y+R =  4 sec) Average Delay (sec/veh):        8.9
Optimal Cycle:         0             Level Of Service:                  A
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign         Stop Sign        Stop Sign         Stop Sign
Rights:           Include           Include          Include           Include
Min. Green:    0     0     0    0     0     0    0     0     0    0     0     0
Lanes:        0  0  1! 0  0   0  0  1! 0  0   0  0  1! 0  0   1  0  0  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      3    10    24   199    22     2     1    15     3    46    20    90
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   3    10    24   199    22     2     1    15     3    46    20    90
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.90 0.90  0.90  0.90 0.90  0.90  0.90 0.90  0.90  0.90 0.90  0.90
PHF Volume:    3    11    27   221    24     2     1    17     3    51    22   100
Reduct Vol:    0     0     0     0     0     0     0     0     0     0     0     0
Reduced Vol:   3    11    27   221    24     2     1    17     3    51    22   100
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:    3    11    27   221    24     2     1    17     3    51    22   100
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       0.08 0.27  0.65  0.89 0.10  0.01  0.05 0.79  0.16  1.00 0.18  0.82
Final Sat.:    65  217   521   684   76     7    37  558   112   611  136   611
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.05 0.05  0.05  0.32 0.32  0.32  0.03 0.03  0.03  0.08 0.16  0.16
Crit Moves:       ****              ****                    ****        ****
Delay/Veh:    7.5  7.5   7.5   9.7  9.7   9.7   7.9  7.9   7.9   8.9  8.2   8.2
Delay Adj:   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   7.5  7.5   7.5   9.7  9.7   9.7   7.9  7.9   7.9   8.9  8.2   8.2
LOS by Move:   A    A     A     A    A     A     A    A     A     A    A     A
ApproachDel:       7.5               9.7              7.9               8.4
Delay Adj:        1.00              1.00             1.00              1.00
ApprAdjDel:        7.5               9.7              7.9               8.4
LOS by Appr:        A                 A                A                 A
********************************************************************************
```

Eagle Lodge EIR
2005 No Project

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #7 MERIDIAN?MAJESTIC PINES (WEST)

Cycle (sec): 100 Critical Vol./Cap. (X): 0.323
Loss Time (sec): 0 (Y+R = 4 sec) Average Delay (sec/veh): 8.9
Optimal Cycle: 0 Level Of Service: A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1!	0 0	0 0	1!	0 0	0 0	1!	0 0	1 0	0	1 0
Volume Module:												
Base Vol:	3	10	24	199	22	2	1	15	3	46	20	90
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	10	24	199	22	2	1	15	3	46	20	90
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	3	10	24	199	22	2	1	15	3	46	20	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
PHF Volume:	3	11	27	221	24	2	1	17	3	51	22	100
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	3	11	27	221	24	2	1	17	3	51	22	100
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	3	11	27	221	24	2	1	17	3	51	22	100
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.08	0.27	0.65	0.89	0.10	0.01	0.05	0.79	0.16	1.00	0.18	0.82
Final Sat.:	65	217	521	684	76	7	37	558	112	611	136	611
Capacity Analysis Module:												
Vol/Sat:	0.05	0.05	0.05	0.32	0.32	0.32	0.03	0.03	0.03	0.08	0.16	0.16
Crit Moves:		****			****				****		****	
Delay/Veh:	7.5	7.5	7.5	9.7	9.7	9.7	7.9	7.9	7.9	8.9	8.2	8.2
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	7.5	7.5	7.5	9.7	9.7	9.7	7.9	7.9	7.9	8.9	8.2	8.2
LOS by Move:	A	A	A	A	A	A	A	A	A	A	A	A
ApproachDel:		7.5			9.7			7.9			8.4	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		7.5			9.7			7.9			8.4	
LOS by Appr:		A			A			A			A	

2009 No Project LOS

Eagle Lodge EIR

Scenario Report

Scenario:	2009 No Project
Command:	W/ Proj
Volume:	PM
Geometry:	Default Geometry
Impact Fee:	Default Impact Fee
Trip Generation:	PM
Trip Distribution:	Default Trip Distribution
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Future

Eagle Lodge EIR

Trip Generation Report

Forecast for PM

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
2	Base Lodge (	1.00	Base Lodge	101.00	223.00	101	223	324	100.0
	Zone 2 Subtotal					101	223	324	100.0
TOTAL						101	223	324	100.0

Eagle Lodge EIR

Trip Distribution Report

Percent Of Trips Default

Zone	To Gates 1	2	5	6	7	8	9	10	11	12	14
2	11.0	0.0	1.0	2.0	5.0	4.0	11.0	2.0	9.0	18.0	14.0

Zone	To Gates 15	16	17	18	19
2	4.0	5.0	10.0	2.0	2.0

Eagle Lodge EIR

Turning Movement Report
PM

Volume Type	Northbound Left	Northbound Thru	Northbound Right	Southbound Left	Southbound Thru	Southbound Right	Eastbound Left	Eastbound Thru	Eastbound Right	Westbound Left	Westbound Thru	Westbound Right	Total Volume
#1 OLDM/MAIN													
Base	346	0	48	0	0	0	0	304	668	79	285	0	1730
Added	0	0	9	0	0	0	0	0	0	4	0	0	13
Total	346	0	57	0	0	0	0	304	668	83	285	0	1743
#2 MERIDIAN/OLDM													
Base	122	305	73	131	385	106	101	173	141	122	192	148	1999
Added	2	0	0	0	0	18	40	22	4	0	10	0	96
Total	124	305	73	131	385	124	141	195	145	122	202	148	2095
#3 MINARET/MERIDIAN													
Base	20	112	24	166	187	48	60	269	5	23	174	139	1227
Added	18	0	0	0	0	15	33	91	40	0	41	0	238
Total	38	112	24	166	187	63	93	360	45	23	215	139	1465
#4 MINARET/MAIN													
Base	176	137	45	586	203	132	90	509	323	58	386	144	2789
Added	8	4	11	0	2	0	0	0	4	5	0	0	34
Total	184	141	56	586	205	132	90	509	327	63	386	144	2823
#5 KELLY/LAKE MARY													
Base	21	0	33	0	0	0	0	123	137	34	60	0	408
Added	1	0	1	0	0	0	0	1	1	1	3	0	8
Total	22	0	34	0	0	0	0	124	138	35	63	0	416
#6 MERIDIAN / MAJESTIC PINES (EAST)													
Base	0	0	2	120	0	12	32	70	9	9	55	107	416
Added	0	0	0	0	0	10	23	176	0	0	80	0	289
Total	0	0	2	120	0	22	55	246	9	9	135	107	705
#7 MERIDIAN?MAJESTIC PINES (WEST)													
Base	3	0	48	0	0	0	0	15	3	46	20	0	135
Added	0	11	0	198	25	0	0	0	0	0	0	90	324
Total	3	11	48	198	25	0	0	15	3	46	20	90	459
#8 MERIDIAN/Bus/Auto Drop Off													
Base	0	0	0	0	0	0	0	61	0	0	62	0	123
Added	0	0	0	0	0	0	0	198	0	0	90	0	288
Total	0	0	0	0	0	0	0	259	0	0	152	0	411

Eagle Lodge EIR

Link Volume Report
PM

Volume Type	NB Link In	NB Link Out	NB Link Total	SB Link In	SB Link Out	SB Link Total	EB Link In	EB Link Out	EB Link Total	WB Link In	WB Link Out	WB Link Total	Total Volume
#1 OLDM/MAIN													
Base	394	747	1141	0	0	0	972	631	1603	364	352	716	3460
Added	9	4	13	0	0	0	0	0	0	4	9	13	26
Total	403	751	1154	0	0	0	972	631	1603	368	361	729	3486
#2 MERIDIAN/OLDM													
Base	500	648	1148	622	554	1176	415	420	835	462	377	839	3998
Added	2	4	6	18	40	58	66	30	96	10	22	32	192
Total	502	652	1154	640	594	1234	481	450	931	472	399	871	4190
#3 MINARET/MERIDIAN													
Base	156	215	371	401	311	712	334	242	576	336	459	795	2454
Added	18	40	58	15	33	48	164	74	238	41	91	132	476
Total	174	255	429	416	344	760	498	316	814	377	550	927	2930
#4 MINARET/MAIN													
Base	358	584	942	921	371	1292	922	694	1616	588	1140	1728	5578
Added	23	11	34	2	4	6	4	8	12	5	11	16	68
Total	381	595	976	923	375	1298	926	702	1628	593	1151	1744	5646
#5 KELLY/LAKE MARY													
Base	54	171	225	0	0	0	260	81	341	94	156	250	816
Added	2	2	4	0	0	0	2	4	6	4	2	6	16
Total	56	173	229	0	0	0	262	85	347	98	158	256	832
#6 MERIDIAN / MAJESTIC PINES (EAST)													
Base	2	18	20	132	139	271	111	67	178	171	192	363	832
Added	0	0	0	10	23	33	199	90	289	80	176	256	578
Total	2	18	20	142	162	304	310	157	467	251	368	619	1410
#7 MERIDIAN?MAJESTIC PINES (WEST)													
Base	51	49	100	0	0	0	18	23	41	66	63	129	270
Added	11	25	36	223	101	324	0	0	0	90	198	288	648
Total	62	74	136	223	101	324	18	23	41	156	261	417	918
#8 MERIDIAN/Bus/Auto Drop Off													
Base	0	0	0	0	0	0	61	62	123	62	61	123	246
Added	0	0	0	0	0	0	198	90	288	90	198	288	576
Total	0	0	0	0	0	0	259	152	411	152	259	411	822

Eagle Lodge EIR

Signal Warrant Summary Report

Intersection	Base Met [Del / Vol]	Future Met [Del / Vol]
# 5 KELLY/LAKE MARY	??? / ???	No / No
# 6 MERIDIAN / MAJESTIC PINES (EAST)	??? / ???	No / No
# 7 MERIDIAN?MAJESTIC PINES (WEST)	??? / ???	No / No
# 8 MERIDIAN/Bus/Auto Drop Off	??? / ???	No / No

Eagle Lodge EIR

Peak Hour Delay Signal Warrant Report

Intersection #5 KELLY/LAKE MARY

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Lanes:	0	0	1!	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0
Final Vol.:	23		0		36	0		0		0	0		131		145	37		66		0
ApproachDel:	10.2					xxxxxx					xxxxxx					xxxxxx				

Approach[northbound][lanes=1][control=Stop]
Signal Warrant Rule #1: [vehicle-hours=0.2]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=59]
FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=438]
FAIL - Total volume less than 650 for intersection
with less than four approaches.

```
-------------------------------------------------------------------------------
                               Eagle Lodge EIR
-------------------------------------------------------------------------------
                 Peak Hour Volume Signal Warrant Report [Urban]
*******************************************************************************
Intersection #5 KELLY/LAKE MARY
*******************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
-----------|---------------||---------------||---------------||---------------|
Approach:     North Bound       South Bound       East Bound        West Bound
Movement:   L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
-----------|---------------||---------------||---------------||---------------|
Control:       Stop Sign         Stop Sign       Uncontrolled      Uncontrolled
Lanes:      0  0  1! 0  0    0  0  0  0  0    0  0  0  1  0    0  1  0  0  0
Final Vol.:   23    0    36    0    0     0    0  131   145    37   66     0
-----------|---------------||---------------||---------------||---------------|
Major Street Volume:            379
Minor Approach Volume:          59
Minor Approach Volume Threshold: 478
```

```
-------------------------------------------------------------------------------
                               Eagle Lodge EIR
-------------------------------------------------------------------------------
                    Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #6 MERIDIAN / MAJESTIC PINES (EAST)
*******************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:       0  0  0  0  1    0  0  1! 0  0    0  1  0  1  0    0  1  0  1  0
Final Vol.:    0    0    2   126    0    23    58  259     9     9  142   113
ApproachDel:       9.0             15.1            xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[northbound][lanes=1][control=Stop]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=2]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=742]
   FAIL - Total volume less than 800 for intersection
          with four or more approaches.
-------------------------------------------------------------------------------
Approach[southbound][lanes=1][control=Stop]
Signal Warrant Rule #1: [vehicle-hours=0.6]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=149]
   SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=742]
   FAIL - Total volume less than 800 for intersection
          with four or more approaches.
```

```
-------------------------------------------------------------------------------
                              Eagle Lodge EIR
-------------------------------------------------------------------------------
                 Peak Hour Volume Signal Warrant Report [Urban]
*******************************************************************************
Intersection #6 MERIDIAN / MAJESTIC PINES (EAST)
*******************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:       0  0  0  0  1    0  0  1! 0  0    0  1  0  1  0    0  1  0  1  0
Final Vol.:     0    0    2  126    0    23    58  259     9     9  142   113
------------|---------------||---------------||---------------||---------------|
Major Street Volume:              591
Minor Approach Volume:            149
Minor Approach Volume Threshold: 466
```

```
---------------------------------------------------------------------------------
                                 Eagle Lodge EIR
---------------------------------------------------------------------------------
                     Peak Hour Delay Signal Warrant Report
*********************************************************************************
Intersection #8 MERIDIAN/Bus/Auto Drop Off
*********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  1! 0  0    0  0  1! 0  0    0  1  0  1  0    0  1  0  1  0
Final Vol.:     0    0     0     0    0     0     0  273     0     0  160     0
ApproachDel:    xxxxxx           xxxxxx           xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
```

Eagle Lodge EIR

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #8 MERIDIAN/Bus/Auto Drop Off

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Lanes:	0	0	1!	0	0	0	0	1!	0	0	0	1	0	1	0	0	1	0	1	0
Final Vol.:	0		0		0	0		0		0	0		273		0	0		160		0

Major Street Volume: 433
Minor Approach Volume: 0
Minor Approach Volume Threshold: 574

Eagle Lodge EIR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 OLDM/MAIN

Cycle (sec):	75	Critical Vol./Cap. (X):	0.850
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	20.8
Optimal Cycle:	80	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 0	1	0 0	0 0	0	0 0	2 0	1	1 0	2 0	0
Volume Module:												
Base Vol:	346	0	48	0	0	0	0	304	668	79	285	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	346	0	48	0	0	0	0	304	668	79	285	0
Added Vol:	0	0	9	0	0	0	0	0	0	4	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	346	0	57	0	0	0	0	304	668	83	285	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	364	0	60	0	0	0	0	320	703	87	300	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	364	0	60	0	0	0	0	320	703	87	300	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	364	0	60	0	0	0	0	320	703	87	300	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	1.00	0.83	1.00	1.00	1.00	1.00	0.90	0.81	0.90	0.90	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	1769	0	1583	0	0	0	0	3437	1537	1718	3437	0
Capacity Analysis Module:												
Vol/Sat:	0.21	0.00	0.04	0.00	0.00	0.00	0.00	0.09	0.46	0.05	0.09	0.00
Crit Moves:	****								****	****		
Green/Cycle:	0.24	0.00	0.24	0.00	0.00	0.00	0.00	0.54	0.54	0.65	0.60	0.00
Volume/Cap:	0.85	0.00	0.16	0.00	0.00	0.00	0.00	0.17	0.85	0.13	0.15	0.00
Delay/Veh:	42.0	0.0	22.6	0.0	0.0	0.0	0.0	8.9	23.1	5.0	6.7	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	42.0	0.0	22.6	0.0	0.0	0.0	0.0	8.9	23.1	5.0	6.7	0.0
HCM2kAvg:	12	0	1	0	0	0	0	2	17	1	2	0

```
----------------------------------------------------------------------------
                              Eagle Lodge EIR
----------------------------------------------------------------------------
                    Level Of Service Computation Report
          2000 HCM Operations Method (Future Volume Alternative)
****************************************************************************
Intersection #2 MERIDIAN/OLDM
****************************************************************************
Cycle (sec):           50               Critical Vol./Cap. (X):         0.751
Loss Time (sec):       16 (Y+R =  4 sec) Average Delay (sec/veh):         23.8
Optimal Cycle:         58               Level Of Service:                   C
****************************************************************************
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:         Protected        Protected       Split Phase      Split Phase
Rights:            Include          Include          Include          Include
Min. Green:     0    0     0    0    0     0    0    0     0    0    0     0
Lanes:         1  0  1  0  1   1  0  1  0  1   1  0  1  1  0   1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     122  305    73   131  385   106   101  173   141   122  192   148
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  122  305    73   131  385   106   101  173   141   122  192   148
Added Vol:      2    0     0     0    0    18    40   22     4     0   10     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:  124  305    73   131  385   124   141  195   145   122  202   148
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.95 0.95  0.95  0.95 0.95  0.95  0.95 0.95  0.95  0.95 0.95  0.95
PHF Volume:   131  321    77   138  405   131   148  205   153   128  213   156
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:  131  321    77   138  405   131   148  205   153   128  213   156
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:   131  321    77   138  405   131   148  205   153   128  213   156
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900  1900 1900  1900  1900 1900  1900  1900 1900  1900
Adjustment:  0.93 0.98  0.83  0.93 0.98  0.83  0.93 0.87  0.87  0.93 0.87  0.87
Lanes:       1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.15  0.85  1.00 1.15  0.85
Final Sat.:  1769 1862  1583  1769 1862  1583  1769 1899  1412  1769 1913  1402
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.07 0.17  0.05  0.08 0.22  0.08  0.08 0.11  0.11  0.07 0.11  0.11
Crit Moves:  ****                   ****                    ****              ****
Green/Cycle: 0.10 0.27  0.27  0.12 0.29  0.29  0.14 0.14  0.14  0.15 0.15  0.15
Volume/Cap:  0.75 0.65  0.18  0.65 0.75  0.28  0.58 0.75  0.75  0.49 0.75  0.75
Delay/Veh:   38.6 19.1  14.3  27.6 22.0  14.1  23.4 27.1  27.1  21.0 26.8  26.8
User DelAdj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:  38.6 19.1  14.3  27.6 22.0  14.1  23.4 27.1  27.1  21.0 26.8  26.8
HCM2kAvg:       4    6     1     3    8     2     3    5     5     3    5     5
****************************************************************************
```

```
------------------------------------------------------------------------------
                              Eagle Lodge EIR
------------------------------------------------------------------------------
                     Level Of Service Computation Report
            2000 HCM Operations Method (Future Volume Alternative)
******************************************************************************
Intersection #3 MINARET/MERIDIAN
******************************************************************************
Cycle (sec):          45             Critical Vol./Cap. (X):        0.696
Loss Time (sec):      16 (Y+R =  4 sec) Average Delay (sec/veh):      21.3
Optimal Cycle:OPTIMIZED              Level Of Service:                 C
******************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Split Phase      Split Phase      Split Phase      Split Phase
Rights:           Include          Include          Include          Include
Min. Green:     0     0     0    0     0     0    0     0     0    0     0     0
Lanes:        1  0  0  1  0    1  0  0  1  0    1  0  1  1  0    1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      20   112    24   166   187    48    60   269     5    23   174   139
Growth Adj:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Initial Bse:   20   112    24   166   187    48    60   269     5    23   174   139
Added Vol:     18     0     0     0     0    15    33    91    40     0    41     0
PasserByVol:    0     0     0     0     0     0     0     0     0     0     0     0
Initial Fut:   38   112    24   166   187    63    93   360    45    23   215   139
User Adj:    1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Adj:     0.95  0.95  0.95  0.95  0.95  0.95  0.95  0.95  0.95  0.95  0.95  0.95
PHF Volume:    40   118    25   175   197    66    98   379    47    24   226   146
Reduct Vol:     0     0     0     0     0     0     0     0     0     0     0     0
Reduced Vol:   40   118    25   175   197    66    98   379    47    24   226   146
PCE Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
MLF Adj:     1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Final Vol.:    40   118    25   175   197    66    98   379    47    24   226   146
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900  1900  1900  1900  1900  1900  1900  1900  1900  1900  1900  1900
Adjustment:  0.93  0.95  0.95  0.93  0.94  0.94  0.93  0.96  0.96  0.93  0.92  0.92
Lanes:       1.00  0.82  0.18  1.00  0.75  0.25  1.00  1.78  0.22  1.00  1.21  0.79
Final Sat.:  1769  1494   320  1769  1340   451  1769  3254   407  1769  2128  1376
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.02  0.08  0.08  0.10  0.15  0.15  0.06  0.12  0.12  0.01  0.11  0.11
Crit Moves:        ****                    ****        ****                    ****
Green/Cycle: 0.11  0.11  0.11  0.21  0.21  0.21  0.17  0.17  0.17  0.15  0.15  0.15
Volume/Cap:  0.20  0.70  0.70  0.47  0.70  0.70  0.33  0.70  0.70  0.09  0.70  0.70
Delay/Veh:   18.6  29.2  29.2  16.5  22.0  22.0  17.2  21.2  21.2  16.5  22.1  22.1
User DelAdj: 1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
AdjDel/Veh:  18.6  29.2  29.2  16.5  22.0  22.0  17.2  21.2  21.2  16.5  22.1  22.1
HCM2kAvg:       1     4     4     3     5     5     2     4     4     0     4     4
******************************************************************************
```

Eagle Lodge EIR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 MINARET/MAIN

Cycle (sec):	50	Critical Vol./Cap. (X):	0.842
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	26.8
Optimal Cycle:	63	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1 0 1			2 0 0 1 0			1 0 2 0 1			1 0 2 0 1		
Volume Module:												
Base Vol:	176	137	45	586	203	132	90	509	323	58	386	144
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	176	137	45	586	203	132	90	509	323	58	386	144
Added Vol:	8	4	11	0	2	0	0	0	4	5	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	184	141	56	586	205	132	90	509	327	63	386	144
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	194	148	59	617	216	139	95	536	344	66	406	152
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	194	148	59	617	216	139	95	536	344	66	406	152
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	194	148	59	617	216	139	95	536	344	66	406	152
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.96	0.82	0.95	0.94	0.94	0.93	0.98	0.83	0.90	0.95	0.81
Lanes:	1.00	1.00	1.00	2.00	0.61	0.39	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1734	1825	1551	3609	1087	700	1769	3724	1583	1718	3618	1537
Capacity Analysis Module:												
Vol/Sat:	0.11	0.08	0.04	0.17	0.20	0.20	0.05	0.14	0.22	0.04	0.11	0.10
Crit Moves:	****					****			****		****	
Green/Cycle:	0.13	0.13	0.13	0.24	0.24	0.24	0.26	0.26	0.26	0.13	0.13	0.13
Volume/Cap:	0.84	0.61	0.29	0.73	0.84	0.84	0.21	0.56	0.84	0.29	0.84	0.74
Delay/Veh:	44.6	25.1	20.3	20.7	32.4	32.4	14.8	16.8	32.1	20.2	33.8	34.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	44.6	25.1	20.3	20.7	32.4	32.4	14.8	16.8	32.1	20.2	33.8	34.1
HCM2kAvg:	6	3	1	6	8	8	1	4	8	1	6	4

```
--------------------------------------------------------------------------------
                                Eagle Lodge EIR
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
           2000 HCM Unsignalized Method (Future Volume Alternative)
********************************************************************************
Intersection #5 KELLY/LAKE MARY
********************************************************************************
Average Delay (sec/veh):      2.0   Worst Case Level Of Service:       B[ 10.2]
********************************************************************************
Approach:     North Bound      South Bound      East Bound       West Bound
Movement:    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Rights:          Include          Include          Include          Include
Lanes:       0  0  1! 0  0    0  0  0  0  0    0  0  0  1  0    0  1  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:     21    0    33     0    0     0     0  123   137    34   60     0
Growth Adj: 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:  21    0    33     0    0     0     0  123   137    34   60     0
Added Vol:     1    0     1     0    0     0     0    1     1     1    3     0
PasserByVol:   0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:  22    0    34     0    0     0     0  124   138    35   63     0
User Adj:   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:    0.95 0.95  0.95  0.95 0.95  0.95  0.95 0.95  0.95  0.95 0.95  0.95
PHF Volume:   23    0    36     0    0     0     0  131   145    37   66     0
Reduct Vol:    0    0     0     0    0     0     0    0     0     0    0     0
Final Vol.:   23    0    36     0    0     0     0  131   145    37   66     0
Critical Gap Module:
Critical Gp:  6.4 xxxx   6.2 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   4.1 xxxx xxxxx
FollowUpTim:  3.5 xxxx   3.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   2.2 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:  343 xxxx   203  xxxx xxxx xxxxx  xxxx xxxx xxxxx   276 xxxx xxxxx
Potent Cap.:  657 xxxx   843  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1287 xxxx xxxxx
Move Cap.:    643 xxxx   843  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1287 xxxx xxxxx
Volume/Cap:  0.04 xxxx  0.04  xxxx xxxx  xxxx  xxxx xxxx  xxxx  0.03 xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Queue:      xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx   0.1 xxxx xxxxx
Stopped Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx   7.9 xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     *    *     *     A    *     *
Movement:    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx  751 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx  0.3 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx   0.1 xxxx xxxxx
Shrd StpDel:xxxxx 10.2 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx   7.9 xxxx xxxxx
Shared LOS:     *    B     *     *    *     *     *    *     *     A    *     *
ApproachDel:      10.2            xxxxxx           xxxxxx           xxxxxx
ApproachLOS:        B               *                *                *
```

```
--------------------------------------------------------------------------------
                               Eagle Lodge EIR
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
        2000 HCM Unsignalized Method (Future Volume Alternative)
********************************************************************************
Intersection #6 MERIDIAN / MAJESTIC PINES (EAST)
********************************************************************************
Average Delay (sec/veh):      3.8    Worst Case Level Of Service:     C[ 15.1]
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Rights:          Include          Include          Include          Include
Lanes:        0  0  0  0  1   0  0  1! 0  0   0  1  0  1  0   0  1  0  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0     0     2   120     0    12    32    70     9     9    55   107
Growth Adj:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Initial Bse:    0     0     2   120     0    12    32    70     9     9    55   107
Added Vol:      0     0     0     0     0    10    23   176     0     0    80     0
PasserByVol:    0     0     0     0     0     0     0     0     0     0     0     0
Initial Fut:    0     0     2   120     0    22    55   246     9     9   135   107
User Adj:    1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Adj:     0.95  0.95  0.95  0.95  0.95  0.95  0.95  0.95  0.95  0.95  0.95  0.95
PHF Volume:     0     0     2   126     0    23    58   259     9     9   142   113
Reduct Vol:     0     0     0     0     0     0     0     0     0     0     0     0
Final Vol.:     0     0     2   126     0    23    58   259     9     9   142   113
Critical Gap Module:
Critical Gp:xxxxx xxxx    6.9   7.5 xxxx    6.9   4.1 xxxx xxxxx   4.1 xxxx xxxxx
FollowUpTim:xxxxx xxxx    3.3   3.5 xxxx    3.3   2.2 xxxx xxxxx   2.2 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx    134   463 xxxx    127   255 xxxx xxxxx   268 xxxx xxxxx
Potent Cap.: xxxx xxxx    896   487 xxxx    905  1322 xxxx xxxxx  1307 xxxx xxxxx
Move Cap.:   xxxx xxxx    896   466 xxxx    905  1322 xxxx xxxxx  1307 xxxx xxxxx
Volume/Cap:  xxxx xxxx   0.00  0.27 xxxx   0.03  0.04 xxxx  xxxx  0.01 xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Queue:      xxxxx xxxx    0.0 xxxxx xxxx xxxxx   0.1 xxxx xxxxx   0.0 xxxx xxxxx
Stopped Del:xxxxx xxxx    9.0 xxxxx xxxx xxxxx   7.8 xxxx xxxxx   7.8 xxxx xxxxx
LOS by Move:    *     *     A     *     *     *     A     *     *     A     *     *
Movement:     LT - LTR - RT   LT - LTR - RT   LT - LTR - RT   LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx  504 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx  1.2 xxxxx   0.1 xxxx xxxxx   0.0 xxxx xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxxx 15.1 xxxxx   7.8 xxxx xxxxx   7.8 xxxx xxxxx
Shared LOS:     *     *     *     *    C     *     A     *     *     A     *     *
ApproachDel:         9.0              15.1           xxxxxx           xxxxxx
ApproachLOS:          A                 C               *                *
```

Eagle Lodge EIR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #7 MERIDIAN?MAJESTIC PINES (WEST)

Cycle (sec):	100	Critical Vol./Cap. (X):	0.306
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	8.7
Optimal Cycle:	0	Level Of Service:	A

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0	1! 0	0	0 1	0 0	0	0 0	0 1	0	0 1	0 0	1
Volume Module:												
Base Vol:	3	0	48	0	0	0	0	15	3	46	20	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	0	48	0	0	0	0	15	3	46	20	0
Added Vol:	0	11	0	198	25	0	0	0	0	0	0	90
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	3	11	48	198	25	0	0	15	3	46	20	90
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	3	12	51	208	26	0	0	16	3	48	21	95
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	3	12	51	208	26	0	0	16	3	48	21	95
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	3	12	51	208	26	0	0	16	3	48	21	95
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.05	0.18	0.77	0.89	0.11	0.00	0.00	0.83	0.17	0.70	0.30	1.00
Final Sat.:	40	147	643	681	86	0	0	589	118	435	189	763
Capacity Analysis Module:												
Vol/Sat:	0.08	0.08	0.08	0.31	0.31	xxxx	xxxx	0.03	0.03	0.11	0.11	0.12
Crit Moves:		****			****			****				****
Delay/Veh:	7.5	7.5	7.5	9.5	9.5	0.0	0.0	7.9	7.9	8.9	8.9	7.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	7.5	7.5	7.5	9.5	9.5	0.0	0.0	7.9	7.9	8.9	8.9	7.8
LOS by Move:	A	A	A	A	A	*	*	A	A	A	A	A
ApproachDel:		7.5			9.5			7.9			8.3	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		7.5			9.5			7.9			8.3	
LOS by Appr:		A			A			A			A	

```
------------------------------------------------------------------------------
                              Eagle Lodge EIR
------------------------------------------------------------------------------
                   Level Of Service Computation Report
         2000 HCM Unsignalized Method (Future Volume Alternative)
******************************************************************************
Intersection #8 MERIDIAN/Bus/Auto Drop Off
******************************************************************************
Average Delay (sec/veh):      0.0    Worst Case Level Of Service:      A[  9.0]
******************************************************************************
Approach:      North Bound       South Bound       East Bound        West Bound
Movement:     L  -  T  -  R     L  -  T  -  R     L  -  T  -  R     L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign         Stop Sign        Uncontrolled      Uncontrolled
Rights:          Include           Include           Include           Include
Lanes:        0  0  1! 0  0    0  0  1! 0  0    0  1  0  1  0    0  1  0  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:        0    0     0     0    0     0     0   61     0     0   62     0
Growth Adj:   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:     0    0     0     0    0     0     0   61     0     0   62     0
Added Vol:       0    0     0     0    0     0     0  198     0     0   90     0
PasserByVol:     0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:     0    0     0     0    0     0     0  259     0     0  152     0
User Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:      0.95 0.95  0.95  0.95 0.95  0.95  0.95 0.95  0.95  0.95 0.95  0.95
PHF Volume:      0    0     0     0    0     0     0  273     0     0  160     0
Reduct Vol:      0    0     0     0    0     0     0    0     0     0    0     0
Final Vol.:      0    0     0     0    0     0     0  273     0     0  160     0
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Queue:      xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Stopped Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     *    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx    0 xxxxx  xxxx    0 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   0.0 xxxx xxxxx   0.0 xxxx xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   9.0 xxxx xxxxx   9.0 xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     A    *     *     A    *     *
ApproachDel:     xxxxxx            xxxxxx            xxxxxx            xxxxxx
ApproachLOS:        *                 *                 *                 *
```

2009 Plus Project LOS

Mammoth Eagle Lodge EIR

Scenario Report

Scenario:	2009 Plus Project
Command:	W/O Proj
Volume:	PM
Geometry:	Default Geometry
Impact Fee:	Default Impact Fee
Trip Generation:	PM
Trip Distribution:	Default Trip Distribution
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Future

Mammoth Eagle Lodge EIR

Trip Generation Report

Forecast for PM

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
2	Base Lodge (	1.00	Base Lodge	80.00	323.00	80	323	403	44.1
	Zone 2 Subtotal					80	323	403	44.1
4	Hotel	1.00	Eagle Lodge	20.00	51.00	20	51	71	7.8
	Zone 4 Subtotal					20	51	71	7.8
5	Bus Auto Dr	1.00	Drop Off	215.00	215.00	215	215	430	47.0
	Zone 5 Subtotal					215	215	430	47.0
6	TRUCKS	1.00	Trucks	5.00	5.00	5	5	10	1.1
	Zone 6 Subtotal					5	5	10	1.1
TOTAL						320	594	914	100.0

Mammoth Eagle Lodge EIR

Trip Distribution Report

Percent Of Trips Default

Zone	To Gates 1	2	5	6	7	8	9	10	11	12	14
2	11.0	0.0	1.0	2.0	5.0	4.0	11.0	2.0	9.0	18.0	14.0
4	0.0	0.0	1.0	22.0	17.0	3.0	3.0	10.0	0.0	2.0	15.0
5	11.0	0.0	1.0	2.0	5.0	4.0	11.0	2.0	9.0	18.0	14.0
6	0.0	0.0	15.0	10.0	25.0	0.0	0.0	0.0	0.0	0.0	25.0

Zone	To Gates 15	16	17	18	19
2	4.0	5.0	10.0	2.0	2.0
4	3.0	0.0	14.0	5.0	5.0
5	4.0	5.0	10.0	2.0	2.0
6	0.0	0.0	25.0	0.0	0.0

Mammoth Eagle Lodge EIR

Turning Movement Report
PM

Volume Type	Northbound Left	Northbound Thru	Northbound Right	Southbound Left	Southbound Thru	Southbound Right	Eastbound Left	Eastbound Thru	Eastbound Right	Westbound Left	Westbound Thru	Westbound Right	Total Volume
#1 OLDM/MAIN													
Base	346	0	43	0	0	0	0	304	668	77	285	0	1723
Added	0	0	23	0	0	0	0	0	0	12	0	0	35
Total	346	0	66	0	0	0	0	304	668	89	285	0	1758
#2 MERIDIAN/OLDM													
Base	121	305	73	131	385	99	83	163	140	122	188	148	1958
Added	8	0	0	0	0	58	107	62	16	0	34	0	285
Total	129	305	73	131	385	157	190	225	156	122	222	148	2243
#3 MINARET/MERIDIAN													
Base	19	112	24	166	187	41	42	232	2	23	159	139	1146
Added	54	0	0	0	0	56	107	246	98	0	132	0	693
Total	73	112	24	166	187	97	149	478	100	23	291	139	1839
#4 MINARET/MAIN													
Base	168	136	39	586	202	132	90	509	320	56	386	144	2768
Added	25	22	37	0	11	0	0	0	14	19	0	0	128
Total	193	158	76	586	213	132	90	509	334	75	386	144	2896
#5 KELLY/LAKE MARY													
Base	21	0	33	0	0	0	0	122	137	34	59	0	406
Added	3	0	6	0	0	0	0	5	2	3	10	0	29
Total	24	0	39	0	0	0	0	127	139	37	69	0	435
#6 MERIDIAN / MAJESTIC PINES (EAST)													
Base	0	0	2	120	0	12	31	39	9	9	39	107	368
Added	0	0	0	56	0	30	57	422	0	0	232	24	821
In-Pro	0	0	0	-13	0	13	13	13	0	0	13	-13	26
Total	0	0	2	163	0	55	101	474	9	9	284	118	1215
#7 MERIDIAN?MAJESTIC PINES (WEST)													
Base	3	0	45	0	0	0	0	15	3	39	19	0	124
Added	0	9	24	479	59	0	0	0	0	0	0	71	642
In-Pro	0	0	0	26	0	0	0	0	0	0	0	26	52
Total	3	9	69	505	59	0	0	15	3	39	19	97	818
#8 MERIDIAN/Bus/Auto Drop Off													
Base	0	0	0	0	0	0	0	60	0	0	58	0	118
Added	0	0	0	0	0	0	24	479	0	0	71	191	765
In-Pro	0	0	0	0	0	0	0	26	0	0	26	0	52
Total	0	0	0	0	0	0	24	565	0	0	155	191	935
#9													
Base	0	0	0	0	0	0	0	138	0	0	132	0	270
Added	0	0	56	0	0	0	0	30	0	0	81	0	167
Total	0	0	56	0	0	0	0	168	0	0	213	0	437

Mammoth Eagle Lodge EIR

Volume	Northbound			Southbound			Eastbound			Westbound			Total
Type	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Volume
#10													
Base	0	0	0	0	0	0	0	138	0	0	132	0	270
Added	0	0	0	0	0	0	0	30	1	24	57	0	112
Total	0	0	0	0	0	0	0	168	1	24	189	0	382

Mammoth Eagle Lodge EIR

Link Volume Report
PM

Volume Type	NB Link In	NB Link Out	NB Link Total	SB Link In	SB Link Out	SB Link Total	EB Link In	EB Link Out	EB Link Total	WB Link In	WB Link Out	WB Link Total	Total Volume
#1 OLDM/MAIN													
Base	389	745	1134	0	0	0	972	631	1603	362	347	709	3446
Added	23	12	35	0	0	0	0	0	0	12	23	35	70
Total	412	757	1169	0	0	0	972	631	1603	374	370	744	3516
#2 MERIDIAN/OLDM													
Base	499	647	1146	615	536	1151	386	408	794	458	367	825	3916
Added	8	16	24	58	107	165	185	100	285	34	62	96	570
Total	507	663	1170	673	643	1316	571	508	1079	492	429	921	4486
#3 MINARET/MERIDIAN													
Base	155	212	367	394	293	687	276	219	495	321	422	743	2292
Added	54	98	152	56	107	163	451	242	693	132	246	378	1386
Total	209	310	519	450	400	850	727	461	1188	453	668	1121	3678
#4 MINARET/MAIN													
Base	343	578	921	920	370	1290	919	686	1605	586	1134	1720	5536
Added	84	44	128	11	22	33	14	25	39	19	37	56	256
Total	427	622	1049	931	392	1323	933	711	1644	605	1171	1776	5792
#5 KELLY/LAKE MARY													
Base	54	171	225	0	0	0	259	80	339	93	155	248	812
Added	9	5	14	0	0	0	7	13	20	13	11	24	58
Total	63	176	239	0	0	0	266	93	359	106	166	272	870
#6 MERIDIAN / MAJESTIC PINES (EAST)													
Base	2	18	20	132	138	270	79	51	130	155	161	316	736
Added	0	0	0	86	81	167	479	262	741	256	478	734	1642
In-Pro	0	0	0	0	0	0	26	26	52	0	0	0	52
Total	2	18	20	218	219	437	584	339	923	411	639	1050	2430
#7 MERIDIAN?MAJESTIC PINES (WEST)													
Base	48	42	90	0	0	0	18	22	40	58	60	118	248
Added	33	59	92	538	80	618	0	0	0	71	503	574	1284
In-Pro	0	0	0	26	26	52	0	0	0	26	26	52	104
Total	81	101	182	564	106	670	18	22	40	155	589	744	1636
#8 MERIDIAN/Bus/Auto Drop Off													
Base	0	0	0	0	0	0	60	58	118	58	60	118	236
Added	0	0	0	0	215	215	503	71	574	262	479	741	1530
In-Pro	0	0	0	0	0	0	26	26	52	26	26	52	104
Total	0	0	0	0	215	215	589	155	744	346	565	911	1870
#9													
Base	0	0	0	0	0	0	138	132	270	132	138	270	540
Added	56	0	56	0	0	0	30	81	111	81	86	167	334
Total	56	0	56	0	0	0	168	213	381	213	224	437	874

Mammoth Eagle Lodge EIR

Volume Type	NB Link In	NB Link Out	NB Link Total	SB Link In	SB Link Out	SB Link Total	EB Link In	EB Link Out	EB Link Total	WB Link In	WB Link Out	WB Link Total	Total Volume
#10													
Base	0	0	0	0	0	0	138	132	270	132	138	270	540
Added	0	25	25	0	0	0	31	57	88	81	30	111	224
Total	0	25	25	0	0	0	169	189	358	213	168	381	764

Mammoth Eagle Lodge EIR

Signal Warrant Summary Report

Intersection	Base Met [Del / Vol]	Future Met [Del / Vol]
# 5 KELLY/LAKE MARY	??? / ???	No / No
# 6 MERIDIAN / MAJESTIC PINES (EAST)	??? / ???	No / No
# 7 MERIDIAN?MAJESTIC PINES (WEST)	??? / ???	No / No
# 8 MERIDIAN/Bus/Auto Drop Off	??? / ???	No / No
# 9	??? / ???	No / No
# 10	??? / ???	No / No

```
-------------------------------------------------------------------------------
                        Mammoth Eagle Lodge EIR
-------------------------------------------------------------------------------
                 Peak Hour Delay Signal Warrant Report
*******************************************************************************
Intersection #5 KELLY/LAKE MARY
*******************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  1! 0  0    0  0  0  0  0    0  0  0  1  0    0  1  0  0  0
Final Vol.:    25    0    41     0    0     0     0  134   146    39   73     0
ApproachDel:      10.3             xxxxxx            xxxxxx           xxxxxx
------------|---------------||---------------||---------------||---------------|
Approach[northbound][lanes=1][control=Stop]
Signal Warrant Rule #1: [vehicle-hours=0.2]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=66]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=458]
   FAIL - Total volume less than 650 for intersection
          with less than four approaches.
```

Mammoth Eagle Lodge EIR

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #5 KELLY/LAKE MARY

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L		T		R	L		T		R	L		T		R	L		T		R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Lanes:	0	0	1!	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0
Final Vol.:	25		0		41	0		0		0	0		134		146	39		73		0

Major Street Volume: 392
Minor Approach Volume: 66
Minor Approach Volume Threshold: 469

Mammoth Eagle Lodge EIR

Peak Hour Delay Signal Warrant Report

Intersection #6 MERIDIAN / MAJESTIC PINES (EAST)

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Lanes:	0	0	0	0	1	0	0	1!	0	0	0	1	0	1	0	0	1	0	1	0
Final Vol.:	0		0		2	172		0		58	106		499		9	9		299		124
ApproachDel:	9.8					52.0					xxxxxx					xxxxxx				

Approach[northbound][lanes=1][control=Stop]
Signal Warrant Rule #1: [vehicle-hours=0.0]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=2]
   FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=1279]
   SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

Approach[southbound][lanes=1][control=Stop]
Signal Warrant Rule #1: [vehicle-hours=3.3]
   FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=229]
   SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule #3: [approach count=4][total volume=1279]
   SUCCEED - Total volume greater than or equal to 800 for intersection with four or more approaches.

Mammoth Eagle Lodge EIR

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #6 MERIDIAN / MAJESTIC PINES (EAST)

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Lanes:	0	0	0	0	1	0	0	1!	0	0	0	1	0	1	0	0	1	0	1	0
Final Vol.:	0		0		2	172		0		58	106		499		9	9		299		124

Major Street Volume: 1047
Minor Approach Volume: 229
Minor Approach Volume Threshold: 269

Mammoth Eagle Lodge EIR

Peak Hour Delay Signal Warrant Report

Intersection #8 MERIDIAN/Bus/Auto Drop Off

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Lanes:	0	0	1!	0	0	0	0	1!	0	0	0	1	0	1	0	0	1	0	1	0
Final Vol.:	0		0		0	0		0		0	25		595		0	0		163		201
ApproachDel:	xxxxxx					xxxxxx					xxxxxx					xxxxxx				

Mammoth Eagle Lodge EIR

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #8 MERIDIAN/Bus/Auto Drop Off

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Lanes:	0	0	1!	0	0	0	0	1!	0	0	0	1	0	1	0	0	1	0	1	0
Final Vol.:	0		0		0	0		0		0	25		595		0	0		163		201

Major Street Volume: 984
Minor Approach Volume: 0
Minor Approach Volume Threshold: 290

Mammoth Eagle Lodge EIR

Peak Hour Delay Signal Warrant Report

Intersection #9

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Lanes:	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0
Final Vol.:	0		0		59	0		0		0	0		177		0	0		224		0
ApproachDel:	9.4					xxxxxx					xxxxxx					xxxxxx				

Approach[northbound][lanes=1][control=Stop]
Signal Warrant Rule #1: [vehicle-hours=0.2]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=59]
FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=460]
FAIL - Total volume less than 650 for intersection
with less than four approaches.

```
--------------------------------------------------------------------------------
                          Mammoth Eagle Lodge EIR
--------------------------------------------------------------------------------
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #9
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|----------------||----------------||----------------||----------------|
Approach:      North Bound       South Bound       East Bound        West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|----------------||----------------||----------------||----------------|
Control:        Stop Sign         Stop Sign        Uncontrolled      Uncontrolled
Lanes:        0  0  0  0  1    0  0  0  0  0    0  0  1  0  0    0  0  1  0  0
Final Vol.:     0    0    59     0    0     0     0  177     0     0  224     0
------------|----------------||----------------||----------------||----------------|
Major Street Volume:              401
Minor Approach Volume:            59
Minor Approach Volume Threshold: 463
```

Mammoth Eagle Lodge EIR

Peak Hour Delay Signal Warrant Report

Intersection #10

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Lanes:	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	1	0	1	0	0
Final Vol.:	0		0		0	0		0		0	0		177		1	25		199		0
ApproachDel:	xxxxxx					xxxxxx					xxxxxx					xxxxxx				

Mammoth Eagle Lodge EIR

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #10

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Lanes:	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	1	0	1	0	0
Final Vol.:	0		0		0	0		0		0	0		177		1	25		199		0

Major Street Volume: 402
Minor Approach Volume: 0
Minor Approach Volume Threshold: 599

Mammoth Eagle Lodge EIR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 OLDM/MAIN

Cycle (sec): 75 Critical Vol./Cap. (X): 0.854
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 21.1
Optimal Cycle:OPTIMIZED Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0	0 1	0 0	0	0 0	0 0	2	0 1	1 0	2	0 0
Volume Module:												
Base Vol:	346	0	43	0	0	0	0	304	668	77	285	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	346	0	43	0	0	0	0	304	668	77	285	0
Added Vol:	0	0	23	0	0	0	0	0	0	12	0	0
In-Process:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	346	0	66	0	0	0	0	304	668	89	285	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	364	0	69	0	0	0	0	320	703	94	300	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	364	0	69	0	0	0	0	320	703	94	300	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	364	0	69	0	0	0	0	320	703	94	300	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	1.00	0.83	1.00	1.00	1.00	1.00	0.90	0.81	0.90	0.90	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	1769	0	1583	0	0	0	0	3437	1537	1718	3437	0
Capacity Analysis Module:												
Vol/Sat:	0.21	0.00	0.04	0.00	0.00	0.00	0.00	0.09	0.46	0.05	0.09	0.00
Crit Moves:	****								****	****		
Green/Cycle:	0.24	0.00	0.24	0.00	0.00	0.00	0.00	0.54	0.54	0.65	0.60	0.00
Volume/Cap:	0.85	0.00	0.18	0.00	0.00	0.00	0.00	0.17	0.85	0.14	0.15	0.00
Delay/Veh:	42.6	0.0	22.8	0.0	0.0	0.0	0.0	9.0	23.6	5.0	6.6	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	42.6	0.0	22.8	0.0	0.0	0.0	0.0	9.0	23.6	5.0	6.6	0.0
HCM2kAvg:	12	0	1	0	0	0	0	2	17	1	2	0

Mammoth Eagle Lodge EIR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 MERIDIAN/OLDM

Cycle (sec):	55	Critical Vol./Cap. (X):	0.751
Loss Time (sec):	16 (Y+R = 4 sec)	Average Delay (sec/veh):	25.6
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Protected			Protected			Split Phase			Split Phase	
Rights:		Include			Include			Include			Include	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:		1 0 1 0 1			1 0 1 0 1			1 0 1 1 0			1 0 1 1 0	
Volume Module:												
Base Vol:	121	305	73	131	385	99	83	163	140	122	188	148
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	121	305	73	131	385	99	83	163	140	122	188	148
Added Vol:	8	0	0	0	0	58	107	62	16	0	34	0
In-Process:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	129	305	73	131	385	157	190	225	156	122	222	148
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	136	321	77	138	405	165	200	237	164	128	234	156
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	136	321	77	138	405	165	200	237	164	128	234	156
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	136	321	77	138	405	165	200	237	164	128	234	156
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.98	0.83	0.93	0.98	0.83	0.93	0.87	0.87	0.93	0.88	0.88
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.18	0.82	1.00	1.20	0.80
Final Sat.:	1769	1862	1583	1769	1862	1583	1769	1962	1360	1769	1995	1330
Capacity Analysis Module:												
Vol/Sat:	0.08	0.17	0.05	0.08	0.22	0.10	0.11	0.12	0.12	0.07	0.12	0.12
Crit Moves:	****				****				****			****
Green/Cycle:	0.10	0.27	0.27	0.12	0.29	0.29	0.16	0.16	0.16	0.16	0.16	0.16
Volume/Cap:	0.75	0.64	0.18	0.64	0.75	0.36	0.70	0.75	0.75	0.47	0.75	0.75
Delay/Veh:	40.0	20.4	15.6	29.2	23.5	16.0	29.5	27.9	27.9	22.4	28.2	28.2
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	40.0	20.4	15.6	29.2	23.5	16.0	29.5	27.9	27.9	22.4	28.2	28.2
HCM2kAvg:	4	6	1	4	8	3	5	5	5	3	5	5

```
--------------------------------------------------------------------------------
                          Mammoth Eagle Lodge EIR
--------------------------------------------------------------------------------
                    Level Of Service Computation Report
            2000 HCM Operations Method (Future Volume Alternative)
********************************************************************************
Intersection #3 MINARET/MERIDIAN
********************************************************************************
Cycle (sec):          55               Critical Vol./Cap. (X):        0.788
Loss Time (sec):      16 (Y+R =  4 sec) Average Delay (sec/veh):       27.4
Optimal Cycle:OPTIMIZED                Level Of Service:                 C
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Split Phase      Split Phase      Split Phase      Split Phase
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0    0    0     0    0    0     0    0    0     0
Lanes:        1  0  0  1  0   1  0  0  1  0   1  0  1  1  0   1  0  1  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      19  112    24  166  187    41   42  232     2   23  159   139
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:   19  112    24  166  187    41   42  232     2   23  159   139
Added Vol:     54    0     0    0    0    56  107  246    98    0  132     0
In-Process:     0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:   73  112    24  166  187    97  149  478   100   23  291   139
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:     0.95 0.95  0.95 0.95 0.95  0.95 0.95 0.95  0.95 0.95 0.95  0.95
PHF Volume:    77  118    25  175  197   102  157  503   105   24  306   146
Reduct Vol:     0    0     0    0    0     0    0    0     0    0    0     0
Reduced Vol:   77  118    25  175  197   102  157  503   105   24  306   146
PCE Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Final Vol.:    77  118    25  175  197   102  157  503   105   24  306   146
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Sat/Lane:    1900 1900  1900 1900 1900  1900 1900 1900  1900 1900 1900  1900
Adjustment:  0.93 0.95  0.95 0.93 0.93  0.93 0.93 0.91  0.91 0.93 0.89  0.89
Lanes:       1.00 0.82  0.18 1.00 0.66  0.34 1.00 1.65  0.35 1.00 1.35  0.65
Final Sat.:  1769 1494   320 1769 1164   604 1769 2850   596 1769 2279  1089
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.04 0.08  0.08 0.10 0.17  0.17 0.09 0.18  0.18 0.01 0.13  0.13
Crit Moves:       ****                  ****      ****                ****
Green/Cycle: 0.10 0.10  0.10 0.21 0.21  0.21 0.22 0.22  0.22 0.17 0.17  0.17
Volume/Cap:  0.43 0.79  0.79 0.46 0.79  0.79 0.40 0.79  0.79 0.08 0.79  0.79
Delay/Veh:   25.0 44.4  44.4 19.7 31.0  31.0 18.8 25.6  25.6 19.3 29.1  29.1
User DelAdj: 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
AdjDel/Veh:  25.0 44.4  44.4 19.7 31.0  31.0 18.8 25.6  25.6 19.3 29.1  29.1
HCM2kAvg:       2    5     5    3    7     7    3    7     7    0    6     6
********************************************************************************
```

Mammoth Eagle Lodge EIR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 MINARET/MAIN

Cycle (sec):	55	Critical Vol./Cap. (X):	0.845
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	28.5
Optimal Cycle:	OPTIMIZED	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1 0 1			2 0 0 1 0			1 0 2 0 1			1 0 2 0 1		
Volume Module:												
Base Vol:	168	136	39	586	202	132	90	509	320	56	386	144
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	168	136	39	586	202	132	90	509	320	56	386	144
Added Vol:	25	22	37	0	11	0	0	0	14	19	0	0
In-Process:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	193	158	76	586	213	132	90	509	334	75	386	144
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	203	166	80	617	224	139	95	536	352	79	406	152
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	203	166	80	617	224	139	95	536	352	79	406	152
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	203	166	80	617	224	139	95	536	352	79	406	152
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.96	0.82	0.92	0.94	0.94	0.93	0.93	0.83	0.90	0.90	0.81
Lanes:	1.00	1.00	1.00	2.00	0.62	0.38	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1734	1825	1551	3500	1106	685	1769	3538	1583	1718	3437	1537
Capacity Analysis Module:												
Vol/Sat:	0.12	0.09	0.05	0.18	0.20	0.20	0.05	0.15	0.22	0.05	0.12	0.10
Crit Moves:	****				****				****		****	
Green/Cycle:	0.14	0.14	0.14	0.24	0.24	0.24	0.26	0.26	0.26	0.14	0.14	0.14
Volume/Cap:	0.84	0.66	0.37	0.73	0.84	0.84	0.20	0.58	0.84	0.33	0.84	0.70
Delay/Veh:	46.1	28.6	22.6	22.7	34.1	34.1	16.0	18.5	33.8	22.1	36.0	32.7
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	46.1	28.6	22.6	22.7	34.1	34.1	16.0	18.5	33.8	22.1	36.0	32.7
HCM2kAvg:	6	4	2	7	9	9	1	5	9	2	6	4

```
--------------------------------------------------------------------------------
                         Mammoth Eagle Lodge EIR
--------------------------------------------------------------------------------
                    Level Of Service Computation Report
           2000 HCM Unsignalized Method (Future Volume Alternative)
********************************************************************************
Intersection #5 KELLY/LAKE MARY
********************************************************************************
Average Delay (sec/veh):      2.2    Worst Case Level Of Service:       B[ 10.3]
********************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Rights:           Include          Include          Include          Include
Lanes:        0  0  1! 0  0    0  0  0  0  0    0  0  0  1  0    0  1  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      21    0    33     0    0     0     0  122   137    34   59     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   21    0    33     0    0     0     0  122   137    34   59     0
Added Vol:      3    0     6     0    0     0     0    5     2     3   10     0
In-Process:     0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   24    0    39     0    0     0     0  127   139    37   69     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.95 0.95  0.95  0.95 0.95  0.95  0.95 0.95  0.95  0.95 0.95  0.95
PHF Volume:    25    0    41     0    0     0     0  134   146    39   73     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Final Vol.:    25    0    41     0    0     0     0  134   146    39   73     0
Critical Gap Module:
Critical Gp:  6.4 xxxx   6.2 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   4.1 xxxx xxxxx
FollowUpTim:  3.5 xxxx   3.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   2.2 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol:  357 xxxx   207  xxxx xxxx xxxxx  xxxx xxxx xxxxx   280 xxxx xxxxx
Potent Cap.:  645 xxxx   839  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1283 xxxx xxxxx
Move Cap.:    630 xxxx   839  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1283 xxxx xxxxx
Volume/Cap:  0.04 xxxx  0.05  xxxx xxxx  xxxx  xxxx xxxx  xxxx  0.03 xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Queue:      xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx   0.1 xxxx xxxxx
Stopped Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx   7.9 xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     *    *     *     A    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx  745 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx  0.3 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx   0.1 xxxx xxxxx
Shrd StpDel:xxxxx 10.3 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx   7.9 xxxx xxxxx
Shared LOS:     *    B     *     *    *     *     *    *     *     A    *     *
ApproachDel:       10.3            xxxxxx           xxxxxx           xxxxxx
ApproachLOS:         B                *                *                *
```

```
--------------------------------------------------------------------------------
                          Mammoth Eagle Lodge EIR
--------------------------------------------------------------------------------
                    Level Of Service Computation Report
           2000 HCM Unsignalized Method (Future Volume Alternative)
********************************************************************************
Intersection #6 MERIDIAN / MAJESTIC PINES (EAST)
********************************************************************************
Average Delay (sec/veh):     10.1    Worst Case Level Of Service:       F[ 52.0]
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Rights:          Include          Include          Include          Include
Lanes:        0  0  0  0  1   0  0  1! 0  0   0  1  0  1  0   0  1  0  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:        0    0    2  120    0   12   31   39    9    9   39  107
Growth Adj:   1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
Initial Bse:     0    0    2  120    0   12   31   39    9    9   39  107
Added Vol:       0    0    0   56    0   30   57  422    0    0  232   24
In-Process:      0    0    0  -13    0   13   13   13    0    0   13  -13
Initial Fut:     0    0    2  163    0   55  101  474    9    9  284  118
User Adj:     1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.00
PHF Adj:      0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95
PHF Volume:      0    0    2  172    0   58  106  499    9    9  299  124
Reduct Vol:      0    0    0    0    0    0    0    0    0    0    0    0
Final Vol.:      0    0    2  172    0   58  106  499    9    9  299  124
Critical Gap Module:
Critical Gp:xxxxx xxxx   6.9  7.5 xxxx   6.9  4.1 xxxx xxxxx  4.1 xxxx xxxxx
FollowUpTim:xxxxx xxxx   3.3  3.5 xxxx   3.3  2.2 xxxx xxxxx  2.2 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx   254  842 xxxx   212  423 xxxx xxxxx  508 xxxx xxxxx
Potent Cap.: xxxx xxxx   751  261 xxxx   800 1147 xxxx xxxxx 1067 xxxx xxxxx
Move Cap.:   xxxx xxxx   751  238 xxxx   800 1147 xxxx xxxxx 1067 xxxx xxxxx
Volume/Cap:  xxxx xxxx  0.00 0.72 xxxx  0.07 0.09 xxxx  xxxx 0.01 xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Queue:      xxxxx xxxx   0.0 xxxxx xxxx xxxxx  0.3 xxxx xxxxx  0.0 xxxx xxxxx
Stopped Del:xxxxx xxxx   9.8 xxxxx xxxx xxxxx  8.5 xxxx xxxxx  8.4 xxxx xxxxx
LOS by Move:    *    *     A    *    *     *    A    *     *    A    *     *
Movement:     LT - LTR - RT   LT - LTR - RT   LT - LTR - RT   LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx  290 xxxxx  xxxx xxxx xxxxx xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx  6.2 xxxxx  0.3 xxxx xxxxx  0.0 xxxx xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxxx 52.0 xxxxx  8.5 xxxx xxxxx  8.4 xxxx xxxxx
Shared LOS:     *    *     *    *    F     *    A    *     *    A    *     *
ApproachDel:        9.8             52.0           xxxxxx           xxxxxx
ApproachLOS:         A                F                *                *
```

```
---------------------------------------------------------------------------------
                          Mammoth Eagle Lodge EIR
---------------------------------------------------------------------------------
                    Level Of Service Computation Report
            2000 HCM 4-Way Stop Method (Future Volume Alternative)
*********************************************************************************
Intersection #7 MERIDIAN?MAJESTIC PINES (WEST)
*********************************************************************************
Cycle (sec):         100                Critical Vol./Cap. (X):          0.779
Loss Time (sec):       0 (Y+R =  4 sec) Average Delay (sec/veh):          17.7
Optimal Cycle:         0                Level Of Service:                    C
*********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign        Stop Sign        Stop Sign
Rights:           Include          Include          Include          Include
Min. Green:     0    0     0    0    0     0    0    0     0    0    0     0
Lanes:        0  0  1! 0  0   0  1  0  0  0   0  0  0  1  0   0  1  0  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       3    0    45     0    0     0     0   15     3    39   19     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    3    0    45     0    0     0     0   15     3    39   19     0
Added Vol:      0    9    24   479   59     0     0    0     0     0    0    71
In-Process:     0    0     0    26    0     0     0    0     0     0    0    26
Initial Fut:    3    9    69   505   59     0     0   15     3    39   19    97
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.95 0.95  0.95  0.95 0.95  0.95  0.95 0.95  0.95  0.95 0.95  0.95
PHF Volume:     3    9    73   532   62     0     0   16     3    41   20   102
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Reduced Vol:    3    9    73   532   62     0     0   16     3    41   20   102
PCE Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
MLF Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Final Vol.:     3    9    73   532   62     0     0   16     3    41   20   102
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Adjustment:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Lanes:       0.04 0.11  0.85  0.90 0.10  0.00  0.00 0.83  0.17  0.67 0.33  1.00
Final Sat.:    28   83   633   683   80     0     0  474    95   351  171   614
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.11 0.11  0.11  0.78 0.78  xxxx  xxxx 0.03  0.03  0.12 0.12  0.17
Crit Moves:       ****        ****                  ****                    ****
Delay/Veh:    8.1  8.1   8.1  21.6 21.6   0.0   0.0  8.9   8.9   9.9  9.9   9.1
Delay Adj:   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
AdjDel/Veh:   8.1  8.1   8.1  21.6 21.6   0.0   0.0  8.9   8.9   9.9  9.9   9.1
LOS by Move:   A    A     A     C    C     *     *    A     A     A    A     A
ApproachDel:       8.1              21.6              8.9               9.4
Delay Adj:        1.00              1.00             1.00              1.00
ApprAdjDel:        8.1              21.6              8.9               9.4
LOS by Appr:        A                 C                 A                 A
*********************************************************************************
```

```
--------------------------------------------------------------------------------
                          Mammoth Eagle Lodge EIR
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
           2000 HCM Unsignalized Method (Future Volume Alternative)
********************************************************************************
Intersection #8 MERIDIAN/Bus/Auto Drop Off
********************************************************************************
Average Delay (sec/veh):      0.2    Worst Case Level Of Service:      A[  9.0]
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Rights:          Include          Include          Include          Include
Lanes:        0  0  1! 0  0   0  0  1! 0  0    0  1  0  1  0    0  1  0  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0     0    0     0     0   60     0     0   58     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0     0     0    0     0     0   60     0     0   58     0
Added Vol:      0    0     0     0    0     0    24  479     0     0   71   191
In-Process:     0    0     0     0    0     0     0   26     0     0   26     0
Initial Fut:    0    0     0     0    0     0    24  565     0     0  155   191
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.95 0.95  0.95  0.95 0.95  0.95  0.95 0.95  0.95  0.95 0.95  0.95
PHF Volume:     0    0     0     0    0     0    25  595     0     0  163   201
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Final Vol.:     0    0     0     0    0     0    25  595     0     0  163   201
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx xxxxx   364 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  1206 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  1206 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  xxxx  0.02 xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Queue:      xxxxx xxxx xxxxx xxxxx xxxx xxxxx   0.1 xxxx xxxxx xxxxx xxxx xxxxx
Stopped Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   8.1 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     A    *     *     *    *     *
Movement:     LT - LTR - RT   LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx     0 xxxxx  xxxx     0 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   0.1 xxxx xxxxx   0.0 xxxx xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   8.1 xxxx xxxxx   9.0 xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     A    *     *     A    *     *
ApproachDel:     xxxxxx           xxxxxx           xxxxxx           xxxxxx
ApproachLOS:        *                *                *                *
```

```
--------------------------------------------------------------------------------
                          Mammoth Eagle Lodge EIR
--------------------------------------------------------------------------------
                      Level Of Service Computation Report
           2000 HCM Unsignalized Method (Future Volume Alternative)
********************************************************************************
Intersection #9
********************************************************************************
Average Delay (sec/veh):      1.2    Worst Case Level Of Service:       A[  9.4]
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Rights:           Include          Include          Include          Include
Lanes:        0  0  0  0  1    0  0  0  0  0    0  0  1  0  0    0  0  1  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0    0    0     0     0  138     0     0  132     0
Growth Adj:  1.00 1.00  1.00 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0     0    0    0     0     0  138     0     0  132     0
Added Vol:      0    0    56    0    0     0     0   30     0     0   81     0
In-Process:     0    0     0    0    0     0     0    0     0     0    0     0
Initial Fut:    0    0    56    0    0     0     0  168     0     0  213     0
User Adj:    1.00 1.00  1.00 1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.95 0.95  0.95 0.95 0.95  0.95  0.95 0.95  0.95  0.95 0.95  0.95
PHF Volume:     0    0    59    0    0     0     0  177     0     0  224     0
Reduct Vol:     0    0     0    0    0     0     0    0     0     0    0     0
Final Vol.:     0    0    59    0    0     0     0  177     0     0  224     0
Critical Gap Module:
Critical Gp:xxxxx xxxx   6.2 xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx   3.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx   177  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx   871  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx   871  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  0.07  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Queue:      xxxxx xxxx   0.2 xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Stopped Del:xxxxx xxxx   9.4 xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     A     *    *     *     *    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:        9.4            xxxxxx           xxxxxx           xxxxxx
ApproachLOS:         A                *                *                *
```

```
--------------------------------------------------------------------------------
                          Mammoth Eagle Lodge EIR
--------------------------------------------------------------------------------
                   Level Of Service Computation Report
         2000 HCM Unsignalized Method (Future Volume Alternative)
********************************************************************************
Intersection #10
********************************************************************************
Average Delay (sec/veh):      0.5    Worst Case Level Of Service:       A[  7.6]
********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Rights:          Include          Include          Include          Include
Lanes:        0  0  0  0  0    0  0  1  0  0    0  0  0  1  0    1  0  1  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0     0    0     0     0  138     0     0  132     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0     0     0    0     0     0  138     0     0  132     0
Added Vol:      0    0     0     0    0     0     0   30     1    24   57     0
In-Process:     0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0     0     0    0     0     0  168     1    24  189     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.95 0.95  0.95  0.95 0.95  0.95  0.95 0.95  0.95  0.95 0.95  0.95
PHF Volume:     0    0     0     0    0     0     0  177     1    25  199     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Final Vol.:     0    0     0     0    0     0     0  177     1    25  199     0
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx   4.1 xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx   2.2 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx   178 xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1410 xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1410 xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  xxxx  0.02 xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Queue:      xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx   0.1 xxxx xxxxx
Stopped Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx   7.6 xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     *    *     *     A    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:     xxxxxx           xxxxxx           xxxxxx           xxxxxx
ApproachLOS:        *                *                *                *
```

2024 No Project LOS

Eagle Lodge EIR

Scenario Report

Scenario:	2024 No Project
Command:	W/ Proj
Volume:	PM
Geometry:	Default Geometry
Impact Fee:	Default Impact Fee
Trip Generation:	PM
Trip Distribution:	Default Trip Distribution
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Future

Eagle Lodge EIR

Trip Generation Report

Forecast for PM

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
2	Base Lodge (	1.00	Base Lodge	101.00	223.00	101	223	324	100.0
	Zone 2 Subtotal					101	223	324	100.0
TOTAL						101	223	324	100.0

Eagle Lodge EIR

Trip Distribution Report

Percent Of Trips Default

	To Gates										
Zone	1	2	5	6	7	8	9	10	11	12	14
2	11.0	0.0	1.0	2.0	5.0	4.0	11.0	2.0	9.0	18.0	14.0

	To Gates				
Zone	15	16	17	18	19
2	4.0	5.0	10.0	2.0	2.0

Eagle Lodge EIR

Turning Movement Report
PM

Volume Type	Northbound Left	Northbound Thru	Northbound Right	Southbound Left	Southbound Thru	Southbound Right	Eastbound Left	Eastbound Thru	Eastbound Right	Westbound Left	Westbound Thru	Westbound Right	Total Volume
#1 OLDM/MAIN													
Base	285	0	85	0	0	0	0	495	698	86	399	0	2048
Added	0	0	9	0	0	0	0	0	0	4	0	0	13
Total	285	0	94	0	0	0	0	495	698	90	399	0	2061
#2 MERIDIAN/OLDM													
Base	114	404	130	210	589	86	73	265	187	157	197	120	2532
Added	2	0	0	0	0	18	40	22	4	0	10	0	96
Total	116	404	130	210	589	104	113	287	191	157	207	120	2628
#3 MINARET/MERIDIAN													
Base	154	217	24	275	374	9	68	470	128	10	353	114	2196
Added	18	0	0	0	0	15	33	91	40	0	41	0	238
Total	172	217	24	275	374	24	101	561	168	10	394	114	2434
#4 MINARET/MAIN													
Base	202	132	105	592	328	148	80	637	409	135	515	218	3501
Added	8	4	11	0	2	0	0	0	4	5	0	0	34
Total	210	136	116	592	330	148	80	637	413	140	515	218	3535
#5 KELLY/LAKE MARY													
Base	69	0	163	0	0	0	0	233	59	197	298	0	1019
Added	1	0	1	0	0	0	0	1	1	1	3	0	8
Total	70	0	164	0	0	0	0	234	60	198	301	0	1027
#6 MERIDIAN / MAJESTIC PINES (EAST)													
Base	0	0	0	200	0	55	135	81	0	0	114	180	765
Added	0	0	0	0	0	10	23	176	0	0	80	0	289
Total	0	0	0	200	0	65	158	257	0	0	194	180	1054
#7 MERIDIAN?MAJESTIC PINES (WEST)													
Base	3	1	113	0	0	0	0	74	11	81	80	0	363
Added	0	11	0	198	25	0	0	0	0	0	0	90	324
Total	3	12	113	198	25	0	0	74	11	81	80	90	687
#8 MERIDIAN/Bus/Auto Drop Off													
Base	0	0	0	0	0	0	0	185	0	0	157	0	342
Added	0	0	0	0	0	0	0	198	0	0	90	0	288
Total	0	0	0	0	0	0	0	383	0	0	247	0	630

Eagle Lodge EIR

Link Volume Report
PM

Volume Type	NB Link In	NB Link Out	NB Link Total	SB Link In	SB Link Out	SB Link Total	EB Link In	EB Link Out	EB Link Total	WB Link In	WB Link Out	WB Link Total	Total Volume
#1 OLDM/MAIN													
Base	370	784	1154	0	0	0	1193	684	1877	485	580	1065	4096
Added	9	4	13	0	0	0	0	0	0	4	9	13	26
Total	379	788	1167	0	0	0	1193	684	1877	489	589	1078	4122
#2 MERIDIAN/OLDM													
Base	648	933	1581	885	597	1482	525	397	922	474	605	1079	5064
Added	2	4	6	18	40	58	66	30	96	10	22	32	192
Total	650	937	1587	903	637	1540	591	427	1018	484	627	1111	5256
#3 MINARET/MERIDIAN													
Base	395	512	907	658	399	1057	666	516	1182	477	769	1246	4392
Added	18	40	58	15	33	48	164	74	238	41	91	132	476
Total	413	552	965	673	432	1105	830	590	1420	518	860	1378	4868
#4 MINARET/MAIN													
Base	439	872	1311	1068	430	1498	1126	865	1991	868	1334	2202	7002
Added	23	11	34	2	4	6	4	8	12	5	11	16	68
Total	462	883	1345	1070	434	1504	1130	873	2003	873	1345	2218	7070
#5 KELLY/LAKE MARY													
Base	232	256	488	0	0	0	292	367	659	495	396	891	2038
Added	2	2	4	0	0	0	2	4	6	4	2	6	16
Total	234	258	492	0	0	0	294	371	665	499	398	897	2054
#6 MERIDIAN / MAJESTIC PINES (EAST)													
Base	0	0	0	255	315	570	216	169	385	294	281	575	1530
Added	0	0	0	10	23	33	199	90	289	80	176	256	578
Total	0	0	0	265	338	603	415	259	674	374	457	831	2108
#7 MERIDIAN?MAJESTIC PINES (WEST)													
Base	117	92	209	0	1	1	85	83	168	161	187	348	726
Added	11	25	36	223	101	324	0	0	0	90	198	288	648
Total	128	117	245	223	102	325	85	83	168	251	385	636	1374
#8 MERIDIAN/Bus/Auto Drop Off													
Base	0	0	0	0	0	0	185	157	342	157	185	342	684
Added	0	0	0	0	0	0	198	90	288	90	198	288	576
Total	0	0	0	0	0	0	383	247	630	247	383	630	1260

Eagle Lodge EIR

Signal Warrant Summary Report

Intersection	Base Met [Del / Vol]	Future Met [Del / Vol]
# 5 KELLY/LAKE MARY	??? / ???	No / No
# 6 MERIDIAN / MAJESTIC PINES (EAST)	??? / ???	No / No
# 7 MERIDIAN?MAJESTIC PINES (WEST)	??? / ???	No / No
# 8 MERIDIAN/Bus/Auto Drop Off	??? / ???	No / No

Eagle Lodge EIR

Peak Hour Delay Signal Warrant Report

Intersection #5 KELLY/LAKE MARY

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Lanes:	0	0	1!	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0
Final Vol.:	74		0		173	0		0		0	0		246		63	208		317		0
ApproachDel:	22.3					xxxxxx					xxxxxx					xxxxxx				

Approach[northbound][lanes=1][control=Stop]
Signal Warrant Rule #1: [vehicle-hours=1.5]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=246]
SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=1081]
SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

Eagle Lodge EIR

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #5 KELLY/LAKE MARY

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 1! 0 0	0 0 0 0 0	0 0 0 1 0	0 1 0 0 0
Final Vol.:	74 0 173	0 0 0	0 246 63	208 317 0

Major Street Volume: 835
Minor Approach Volume: 246
Minor Approach Volume Threshold: 268

Eagle Lodge EIR

Peak Hour Delay Signal Warrant Report

Intersection #6 MERIDIAN / MAJESTIC PINES (EAST)

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Lanes:	0	0	1!	0	0	0	0	1!	0	0	0	1	0	1	0	0	1	0	1	0
Final Vol.:	0		0		0	211		0		68	166		271		0	0		204		189
ApproachDel:	xxxxxx					43.1					xxxxxx					xxxxxx				

Approach[southbound][lanes=1][control=Stop]
Signal Warrant Rule #1: [vehicle-hours=3.3]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=279]
SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=1109]
SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

Eagle Lodge EIR

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #6 MERIDIAN / MAJESTIC PINES (EAST)

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Lanes:	0	0	1!	0	0	0	0	1!	0	0	0	1	0	1	0	0	1	0	1	0
Final Vol.:	0		0		0	211		0		68	166		271		0	0		204		189

Major Street Volume: 831
Minor Approach Volume: 279
Minor Approach Volume Threshold: 349

Eagle Lodge EIR

Peak Hour Delay Signal Warrant Report

Intersection #8 MERIDIAN/Bus/Auto Drop Off

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Lanes:	0	0	1!	0	0	0	0	1!	0	0	0	1	0	1	0	0	1	0	1	0
Final Vol.:	0		0		0	0		0		0	0		403		0	0		260		0
ApproachDel:	xxxxxx					xxxxxx					xxxxxx					xxxxxx				

Eagle Lodge EIR

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #8 MERIDIAN/Bus/Auto Drop Off

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 1! 0 0	0 0 1! 0 0	0 1 0 1 0	0 1 0 1 0
Final Vol.:	0 0 0	0 0 0	0 403 0	0 260 0

Major Street Volume: 663
Minor Approach Volume: 0
Minor Approach Volume Threshold: 426

Eagle Lodge EIR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 OLDM/MAIN

Cycle (sec):	70	Critical Vol./Cap. (X):	0.848
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	17.4
Optimal Cycle:	OPTIMIZED	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0	0 1	0 0	0	0 0	0 0	2	0 1	1 0	2	0 0
Volume Module:												
Base Vol:	285	0	85	0	0	0	0	495	698	86	399	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	285	0	85	0	0	0	0	495	698	86	399	0
Added Vol:	0	0	9	0	0	0	0	0	0	4	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	285	0	94	0	0	0	0	495	698	90	399	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	300	0	99	0	0	0	0	521	735	95	420	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	300	0	99	0	0	0	0	521	735	95	420	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	300	0	99	0	0	0	0	521	735	95	420	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	1.00	0.83	1.00	1.00	1.00	1.00	0.90	0.81	0.90	0.90	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	1769	0	1583	0	0	0	0	3437	1537	1718	3437	0
Capacity Analysis Module:												
Vol/Sat:	0.17	0.00	0.06	0.00	0.00	0.00	0.00	0.15	0.48	0.06	0.12	0.00
Crit Moves:	****								****	****		
Green/Cycle:	0.20	0.00	0.20	0.00	0.00	0.00	0.00	0.56	0.56	0.69	0.63	0.00
Volume/Cap:	0.85	0.00	0.31	0.00	0.00	0.00	0.00	0.27	0.85	0.17	0.19	0.00
Delay/Veh:	44.1	0.0	24.5	0.0	0.0	0.0	0.0	7.9	20.6	4.0	5.5	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	44.1	0.0	24.5	0.0	0.0	0.0	0.0	7.9	20.6	4.0	5.5	0.0
HCM2kAvg:	10	0	2	0	0	0	0	3	16	1	2	0

Eagle Lodge EIR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 MERIDIAN/OLDM

Cycle (sec): 70 Critical Vol./Cap. (X): 0.851
Loss Time (sec): 16 (Y+R = 4 sec) Average Delay (sec/veh): 34.8
Optimal Cycle: OPTIMIZED Level Of Service: C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	1	1 0	1 0	1	1 0	1 1	0	1 0	1 1	0
Volume Module:												
Base Vol:	114	404	130	210	589	86	73	265	187	157	197	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	114	404	130	210	589	86	73	265	187	157	197	120
Added Vol:	2	0	0	0	0	18	40	22	4	0	10	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	116	404	130	210	589	104	113	287	191	157	207	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	122	425	137	221	620	109	119	302	201	165	218	126
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	122	425	137	221	620	109	119	302	201	165	218	126
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	122	425	137	221	620	109	119	302	201	165	218	126
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.98	0.83	0.93	0.98	0.83	0.93	0.88	0.88	0.93	0.88	0.88
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.20	0.80	1.00	1.27	0.73
Final Sat.:	1769	1862	1583	1769	1862	1583	1769	1997	1329	1769	2116	1227
Capacity Analysis Module:												
Vol/Sat:	0.07	0.23	0.09	0.12	0.33	0.07	0.07	0.15	0.15	0.09	0.10	0.10
Crit Moves:	****				****			****				****
Green/Cycle:	0.08	0.31	0.31	0.17	0.39	0.39	0.18	0.18	0.18	0.12	0.12	0.12
Volume/Cap:	0.85	0.75	0.28	0.75	0.85	0.18	0.38	0.85	0.85	0.77	0.85	0.85
Delay/Veh:	67.3	27.3	18.8	37.8	28.8	14.1	26.1	39.2	39.2	45.6	45.8	45.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	67.3	27.3	18.8	37.8	28.8	14.1	26.1	39.2	39.2	45.6	45.8	45.8
HCM2kAvg:	5	10	2	7	15	2	3	8	8	6	6	6

Eagle Lodge EIR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 MINARET/MERIDIAN

Cycle (sec):	85	Critical Vol./Cap. (X):	0.896
Loss Time (sec):	16 (Y+R = 4 sec)	Average Delay (sec/veh):	45.7
Optimal Cycle:	OPTIMIZED	Level Of Service:	D

Approach:	North Bound	South Bound	East Bound	West Bound
Control:	Split Phase	Split Phase	Split Phase	Split Phase
Rights:	Include	Include	Include	Include
Lanes:	1 0 0 1 0	1 0 0 1 0	1 0 1 1 0	1 0 1 1 0

Movement:	NB L	NB T	NB R	SB L	SB T	SB R	EB L	EB T	EB R	WB L	WB T	WB R
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Volume Module:												
Base Vol:	154	217	24	275	374	9	68	470	128	10	353	114
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	154	217	24	275	374	9	68	470	128	10	353	114
Added Vol:	18	0	0	0	0	15	33	91	40	0	41	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	172	217	24	275	374	24	101	561	168	10	394	114
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	181	228	25	289	394	25	106	591	177	11	415	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	181	228	25	289	394	25	106	591	177	11	415	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	181	228	25	289	394	25	106	591	177	11	415	120
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.97	0.97	0.93	0.97	0.97	0.93	0.95	0.95	0.93	0.95	0.95
Lanes:	1.00	0.90	0.10	1.00	0.94	0.06	1.00	1.54	0.46	1.00	1.55	0.45
Final Sat.:	1769	1651	183	1769	1734	111	1769	2768	829	1769	2790	807
Capacity Analysis Module:												
Vol/Sat:	0.10	0.14	0.14	0.16	0.23	0.23	0.06	0.21	0.21	0.01	0.15	0.15
Crit Moves:			****			****		****				****
Green/Cycle:	0.15	0.15	0.15	0.25	0.25	0.25	0.24	0.24	0.24	0.17	0.17	0.17
Volume/Cap:	0.66	0.90	0.90	0.65	0.90	0.90	0.25	0.90	0.90	0.04	0.90	0.90
Delay/Veh:	39.9	63.7	63.7	31.6	50.2	50.2	26.6	43.4	43.4	29.8	50.8	50.8
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	39.9	63.7	63.7	31.6	50.2	50.2	26.6	43.4	43.4	29.8	50.8	50.8
HCM2kAvg:	6	10	10	8	14	14	2	13	13	0	10	10

Eagle Lodge EIR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 MINARET/MAIN

Cycle (sec):	80	Critical Vol./Cap. (X):	0.976
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	49.5
Optimal Cycle:	OPTIMIZED	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1 0 1			2 0 0 1 0			1 0 2 0 1			1 0 2 0 1		
Volume Module:												
Base Vol:	202	132	105	592	328	148	80	637	409	135	515	218
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	202	132	105	592	328	148	80	637	409	135	515	218
Added Vol:	8	4	11	0	2	0	0	0	4	5	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	210	136	116	592	330	148	80	637	413	140	515	218
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	221	143	122	623	347	156	84	671	435	147	542	229
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	221	143	122	623	347	156	84	671	435	147	542	229
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	221	143	122	623	347	156	84	671	435	147	542	229
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.96	0.82	0.95	0.95	0.95	0.93	0.98	0.83	0.90	0.95	0.81
Lanes:	1.00	1.00	1.00	2.00	0.69	0.31	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1734	1825	1551	3609	1251	561	1769	3724	1583	1718	3618	1537
Capacity Analysis Module:												
Vol/Sat:	0.13	0.08	0.08	0.17	0.28	0.28	0.05	0.18	0.27	0.09	0.15	0.15
Crit Moves:	****					****			****		****	
Green/Cycle:	0.13	0.13	0.13	0.28	0.28	0.28	0.28	0.28	0.28	0.15	0.15	0.15
Volume/Cap:	0.98	0.60	0.60	0.61	0.98	0.98	0.17	0.64	0.98	0.56	0.98	0.97
Delay/Veh:	87.5	37.0	37.9	25.8	61.8	61.8	21.9	26.5	64.8	34.0	65.7	84.3
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	87.5	37.0	37.9	25.8	61.8	61.8	21.9	26.5	64.8	34.0	65.7	84.3
HCM2kAvg:	10	4	4	8	18	18	2	8	16	4	11	10

```
--------------------------------------------------------------------------------
                              Eagle Lodge EIR
--------------------------------------------------------------------------------
                     Level Of Service Computation Report
            2000 HCM Unsignalized Method (Future Volume Alternative)
********************************************************************************
Intersection #5 KELLY/LAKE MARY
********************************************************************************
Average Delay (sec/veh):       6.7    Worst Case Level Of Service:      C[ 22.3]
********************************************************************************
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|----------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Rights:          Include          Include          Include          Include
Lanes:        0  0  1! 0  0    0  0  0  0  0    0  0  0  1  0    0  1  0  0  0
------------|----------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      69     0   163     0     0     0     0   233    59   197   298     0
Growth Adj:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Initial Bse:   69     0   163     0     0     0     0   233    59   197   298     0
Added Vol:      1     0     1     0     0     0     0     1     1     1     3     0
PasserByVol:    0     0     0     0     0     0     0     0     0     0     0     0
Initial Fut:   70     0   164     0     0     0     0   234    60   198   301     0
User Adj:    1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Adj:     0.95  0.95  0.95  0.95  0.95  0.95  0.95  0.95  0.95  0.95  0.95  0.95
PHF Volume:    74     0   173     0     0     0     0   246    63   208   317     0
Reduct Vol:     0     0     0     0     0     0     0     0     0     0     0     0
Final Vol.:    74     0   173     0     0     0     0   246    63   208   317     0
Critical Gap Module:
Critical Gp:  6.4  xxxx   6.2 xxxxx  xxxx xxxxx xxxxx  xxxx xxxxx   4.1  xxxx xxxxx
FollowUpTim:  3.5  xxxx   3.3 xxxxx  xxxx xxxxx xxxxx  xxxx xxxxx   2.2  xxxx xxxxx
------------|----------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: 1012  xxxx   278  xxxx  xxxx xxxxx  xxxx  xxxx xxxxx   309  xxxx xxxxx
Potent Cap.:  268  xxxx   766  xxxx  xxxx xxxxx  xxxx  xxxx xxxxx  1251  xxxx xxxxx
Move Cap.:    229  xxxx   766  xxxx  xxxx xxxxx  xxxx  xxxx xxxxx  1251  xxxx xxxxx
Volume/Cap:  0.32  xxxx  0.23  xxxx  xxxx  xxxx  xxxx  xxxx  xxxx  0.17  xxxx  xxxx
------------|----------------||---------------||---------------||---------------|
Level Of Service Module:
Queue:      xxxxx  xxxx xxxxx xxxxx  xxxx xxxxx xxxxx  xxxx xxxxx   0.6  xxxx xxxxx
Stopped Del:xxxxx  xxxx xxxxx xxxxx  xxxx xxxxx xxxxx  xxxx xxxxx   8.5  xxxx xxxxx
LOS by Move:    *     *     *     *     *     *     *     *     *     A     *     *
Movement:     LT  - LTR  - RT    LT  - LTR  - RT    LT  - LTR  - RT    LT  - LTR  - RT
Shared Cap.: xxxx   450 xxxxx  xxxx  xxxx xxxxx  xxxx  xxxx xxxxx  xxxx  xxxx xxxxx
SharedQueue:xxxxx   3.2 xxxxx xxxxx  xxxx xxxxx xxxxx  xxxx xxxxx   0.6  xxxx xxxxx
Shrd StpDel:xxxxx  22.3 xxxxx xxxxx  xxxx xxxxx xxxxx  xxxx xxxxx   8.5  xxxx xxxxx
Shared LOS:     *     C     *     *     *     *     *     *     *     A     *     *
ApproachDel:       22.3            xxxxxx            xxxxxx            xxxxxx
ApproachLOS:         C                *                 *                 *
```

```
---------------------------------------------------------------------------------
                                Eagle Lodge EIR
---------------------------------------------------------------------------------
                      Level Of Service Computation Report
             2000 HCM Unsignalized Method (Future Volume Alternative)
*********************************************************************************
Intersection #6 MERIDIAN / MAJESTIC PINES (EAST)
*********************************************************************************
Average Delay (sec/veh):     12.1    Worst Case Level Of Service:       E[ 43.1]
*********************************************************************************
Approach:      North Bound       South Bound       East Bound        West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign         Stop Sign        Uncontrolled      Uncontrolled
Rights:           Include           Include           Include           Include
Lanes:        0  0  1! 0  0    0  0  1! 0  0    0  1  0  1  0    0  1  0  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0   200    0    55   135   81     0     0  114   180
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0     0   200    0    55   135   81     0     0  114   180
Added Vol:      0    0     0     0    0    10    23  176     0     0   80     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0     0   200    0    65   158  257     0     0  194   180
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.95 0.95  0.95  0.95 0.95  0.95  0.95 0.95  0.95  0.95 0.95  0.95
PHF Volume:     0    0     0   211    0    68   166  271     0     0  204   189
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Final Vol.:     0    0     0   211    0    68   166  271     0     0  204   189
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx   6.8 xxxx   6.9   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx   3.5 xxxx   3.3   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx   767 xxxx   197   394 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx   343 xxxx   818  1176 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx   302 xxxx   818  1176 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  0.70 xxxx  0.08  0.14 xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Queue:      xxxxx xxxx xxxxx xxxxx xxxx xxxxx   0.5 xxxx xxxxx xxxxx xxxx xxxxx
Stopped Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   8.6 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     A    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx    0 xxxxx  xxxx  357 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx  6.5 xxxxx   0.5 xxxx xxxxx   0.0 xxxx xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxxx 43.1 xxxxx   8.6 xxxx xxxxx   9.0 xxxx xxxxx
Shared LOS:     *    *     *     *    E     *     A    *     *     A    *     *
ApproachDel:     xxxxxx            43.1             xxxxxx            xxxxxx
ApproachLOS:        *                E                 *                 *
```

```
-------------------------------------------------------------------------------
                              Eagle Lodge EIR
-------------------------------------------------------------------------------
                    Level Of Service Computation Report
         2000 HCM 4-Way Stop Method (Future Volume Alternative)
*******************************************************************************
Intersection #7 MERIDIAN?MAJESTIC PINES (WEST)
*******************************************************************************
Cycle (sec):         100               Critical Vol./Cap. (X):         0.349
Loss Time (sec):       0 (Y+R =  4 sec) Average Delay (sec/veh):         9.7
Optimal Cycle:         0               Level Of Service:                   A
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign        Stop Sign        Stop Sign
Rights:           Include          Include          Include          Include
Min. Green:     0     0     0    0     0     0    0     0     0    0     0     0
Lanes:        0  0  1! 0  0    0  1  0  0  0    0  0  0  1  0    0  1  0  0  1
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       3     1   113    0     0     0    0    74    11   81    80     0
Growth Adj:  1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
Initial Bse:    3     1   113    0     0     0    0    74    11   81    80     0
Added Vol:      0    11     0  198    25     0    0     0     0    0     0    90
PasserByVol:    0     0     0    0     0     0    0     0     0    0     0     0
Initial Fut:    3    12   113  198    25     0    0    74    11   81    80    90
User Adj:    1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
PHF Adj:     0.95  0.95  0.95 0.95  0.95  0.95 0.95  0.95  0.95 0.95  0.95  0.95
PHF Volume:     3    13   119  208    26     0    0    78    12   85    84    95
Reduct Vol:     0     0     0    0     0     0    0     0     0    0     0     0
Reduced Vol:    3    13   119  208    26     0    0    78    12   85    84    95
PCE Adj:     1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
MLF Adj:     1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
Final Vol.:     3    13   119  208    26     0    0    78    12   85    84    95
------------|---------------||---------------||---------------||---------------|
Saturation Flow Module:
Adjustment:  1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
Lanes:       0.02  0.09  0.89 0.89  0.11  0.00 0.00  0.87  0.13 0.50  0.50  1.00
Final Sat.:    17    69   648  598    75     0    0   562    84  302   299   714
------------|---------------||---------------||---------------||---------------|
Capacity Analysis Module:
Vol/Sat:     0.18  0.18  0.18 0.35  0.35  xxxx xxxx  0.14  0.14 0.28  0.28  0.13
Crit Moves:        ****             ****                    ****        ****
Delay/Veh:    8.5   8.5   8.5 10.7  10.7   0.0  0.0   8.9   8.9 10.6  10.6   8.2
Delay Adj:   1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00
AdjDel/Veh:   8.5   8.5   8.5 10.7  10.7   0.0  0.0   8.9   8.9 10.6  10.6   8.2
LOS by Move:    A     A     A    B     B     *    *     A     A    B     B     A
ApproachDel:        8.5              10.7               8.9              9.7
Delay Adj:         1.00              1.00              1.00             1.00
ApprAdjDel:         8.5              10.7               8.9              9.7
LOS by Appr:          A                 B                 A                A
*******************************************************************************
```

```
---------------------------------------------------------------------------------
                               Eagle Lodge EIR
---------------------------------------------------------------------------------
                      Level Of Service Computation Report
             2000 HCM Unsignalized Method (Future Volume Alternative)
*********************************************************************************
Intersection #8 MERIDIAN/Bus/Auto Drop Off
*********************************************************************************
Average Delay (sec/veh):       0.0     Worst Case Level Of Service:        A[  9.0]
*********************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Rights:          Include          Include          Include          Include
Lanes:        0  0  1! 0  0    0  0  1! 0  0    0  1  0  1  0    0  1  0  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0     0    0     0     0  185     0     0  157     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0     0     0    0     0     0  185     0     0  157     0
Added Vol:      0    0     0     0    0     0     0  198     0     0   90     0
PasserByVol:    0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:    0    0     0     0    0     0     0  383     0     0  247     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.95 0.95  0.95  0.95 0.95  0.95  0.95 0.95  0.95  0.95 0.95  0.95
PHF Volume:     0    0     0     0    0     0     0  403     0     0  260     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Final Vol.:     0    0     0     0    0     0     0  403     0     0  260     0
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Queue:      xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Stopped Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     *    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx    0 xxxxx  xxxx    0 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   0.0 xxxx xxxxx   0.0 xxxx xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   9.0 xxxx xxxxx   9.0 xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     A    *     *     A    *     *
ApproachDel:     xxxxxx           xxxxxx           xxxxxx           xxxxxx
ApproachLOS:        *                *                *                *
```

2024 Plus Project LOS

Mammoth Eagle Lodge EIR

Scenario Report

Scenario:	2024 Plus Project
Command:	W/O Proj
Volume:	PM
Geometry:	Default Geometry
Impact Fee:	Default Impact Fee
Trip Generation:	PM
Trip Distribution:	Default Trip Distribution
Paths:	Default Paths
Routes:	Default Routes
Configuration:	Future

Mammoth Eagle Lodge EIR

Trip Generation Report

Forecast for PM

Zone #	Subzone	Amount	Units	Rate In	Rate Out	Trips In	Trips Out	Total Trips	% Of Total
2	Base Lodge (	1.00	Base Lodge	80.00	323.00	80	323	403	44.1
	Zone 2 Subtotal					80	323	403	44.1
4	Hotel	1.00	Eagle Lodge	20.00	51.00	20	51	71	7.8
	Zone 4 Subtotal					20	51	71	7.8
5	Bus Auto Dr	1.00	Drop Off	215.00	215.00	215	215	430	47.0
	Zone 5 Subtotal					215	215	430	47.0
6	TRUCKS	1.00	Trucks	5.00	5.00	5	5	10	1.1
	Zone 6 Subtotal					5	5	10	1.1
TOTAL						320	594	914	100.0

Mammoth Eagle Lodge EIR

Trip Distribution Report

Percent Of Trips Default

Zone	To Gates 1	2	5	6	7	8	9	10	11	12	14
2	11.0	0.0	1.0	2.0	5.0	4.0	11.0	2.0	9.0	18.0	14.0
4	0.0	0.0	1.0	22.0	17.0	3.0	3.0	10.0	0.0	2.0	15.0
5	11.0	0.0	1.0	2.0	5.0	4.0	11.0	2.0	9.0	18.0	14.0
6	0.0	0.0	15.0	10.0	25.0	0.0	0.0	0.0	0.0	0.0	25.0

Zone	To Gates 15	16	17	18	19
2	4.0	5.0	10.0	2.0	2.0
4	3.0	0.0	14.0	5.0	5.0
5	4.0	5.0	10.0	2.0	2.0
6	0.0	0.0	25.0	0.0	0.0

Mammoth Eagle Lodge EIR

Turning Movement Report
PM

Volume	Northbound			Southbound			Eastbound			Westbound			Total
Type	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Volume
#1 OLDM/MAIN													
Base	285	0	80	0	0	0	0	495	698	84	399	0	2041
Added	0	0	23	0	0	0	0	0	0	12	0	0	35
Total	285	0	103	0	0	0	0	495	698	96	399	0	2076
#2 MERIDIAN/OLDM													
Base	113	404	130	210	589	79	55	255	186	157	193	120	2491
Added	8	0	0	0	0	58	107	62	16	0	34	0	285
Total	121	404	130	210	589	137	162	317	202	157	227	120	2776
#3 MINARET/MERIDIAN													
Base	153	217	24	275	374	2	50	433	125	10	338	114	2115
Added	54	0	0	0	0	56	107	246	98	0	132	0	693
Total	207	217	24	275	374	58	157	679	223	10	470	114	2808
#4 MINARET/MAIN													
Base	194	131	99	592	327	148	80	637	406	133	515	218	3480
Added	25	22	37	0	11	0	0	0	14	19	0	0	128
Total	219	153	136	592	338	148	80	637	420	152	515	218	3608
#5 KELLY/LAKE MARY													
Base	69	0	163	0	0	0	0	232	59	197	297	0	1017
Added	3	0	6	0	0	0	0	5	2	3	10	0	29
Total	72	0	169	0	0	0	0	237	61	200	307	0	1046
#6 MERIDIAN / MAJESTIC PINES (EAST)													
Base	0	0	0	200	0	55	134	50	0	0	98	180	717
Added	0	0	0	56	0	30	57	422	0	0	232	24	821
In-Pro	0	0	0	-13	0	13	13	13	0	0	13	-13	26
Total	0	0	0	243	0	98	204	485	0	0	343	191	1564
#7 MERIDIAN?MAJESTIC PINES (WEST)													
Base	3	1	110	0	0	0	0	74	11	74	79	0	352
Added	0	9	24	479	59	0	0	0	0	0	0	71	642
In-Pro	0	0	0	26	0	0	0	0	0	0	0	26	52
Total	3	10	134	505	59	0	0	74	11	74	79	97	1046
#8 MERIDIAN/Bus/Auto Drop Off													
Base	0	0	0	0	0	0	0	184	0	0	153	0	337
Added	0	0	0	0	0	0	24	479	0	0	71	191	765
In-Pro	0	0	0	0	0	0	0	26	0	0	26	0	52
Total	0	0	0	0	0	0	24	689	0	0	250	191	1154
#9 Majestic/Hotel Out													
Base	0	0	0	0	0	0	0	314	0	0	255	0	569
Added	0	0	56	0	0	0	0	30	0	0	81	0	167
Total	0	0	56	0	0	0	0	344	0	0	336	0	736

Mammoth Eagle Lodge EIR

Volume Type	Northbound Left	Northbound Thru	Northbound Right	Southbound Left	Southbound Thru	Southbound Right	Eastbound Left	Eastbound Thru	Eastbound Right	Westbound Left	Westbound Thru	Westbound Right	Total Volume
#10 Majestic/Hotel In													
Base	0	0	0	0	0	0	0	314	0	0	255	0	569
Added	0	0	0	0	0	0	0	30	1	24	57	0	112
Total	0	0	0	0	0	0	0	344	1	24	312	0	681

Mammoth Eagle Lodge EIR

Link Volume Report
PM

Volume Type	NB Link In	NB Link Out	NB Link Total	SB Link In	SB Link Out	SB Link Total	EB Link In	EB Link Out	EB Link Total	WB Link In	WB Link Out	WB Link Total	Total Volume
#1 OLDM/MAIN													
Base	365	782	1147	0	0	0	1193	684	1877	483	575	1058	4082
Added	23	12	35	0	0	0	0	0	0	12	23	35	70
Total	388	794	1182	0	0	0	1193	684	1877	495	598	1093	4152
#2 MERIDIAN/OLDM													
Base	647	932	1579	878	579	1457	496	385	881	470	595	1065	4982
Added	8	16	24	58	107	165	185	100	285	34	62	96	570
Total	655	948	1603	936	686	1622	681	485	1166	504	657	1161	5552
#3 MINARET/MERIDIAN													
Base	394	509	903	651	381	1032	608	493	1101	462	732	1194	4230
Added	54	98	152	56	107	163	451	242	693	132	246	378	1386
Total	448	607	1055	707	488	1195	1059	735	1794	594	978	1572	5616
#4 MINARET/MAIN													
Base	424	866	1290	1067	429	1496	1123	857	1980	866	1328	2194	6960
Added	84	44	128	11	22	33	14	25	39	19	37	56	256
Total	508	910	1418	1078	451	1529	1137	882	2019	885	1365	2250	7216
#5 KELLY/LAKE MARY													
Base	232	256	488	0	0	0	291	366	657	494	395	889	2034
Added	9	5	14	0	0	0	7	13	20	13	11	24	58
Total	241	261	502	0	0	0	298	379	677	507	406	913	2092
#6 MERIDIAN / MAJESTIC PINES (EAST)													
Base	0	0	0	255	314	569	184	153	337	278	250	528	1434
Added	0	0	0	86	81	167	479	262	741	256	478	734	1642
In-Pro	0	0	0	0	0	0	26	26	52	0	0	0	52
Total	0	0	0	341	395	736	689	441	1130	534	728	1262	3128
#7 MERIDIAN?MAJESTIC PINES (WEST)													
Base	114	85	199	0	1	1	85	82	167	153	184	337	704
Added	33	59	92	538	80	618	0	0	0	71	503	574	1284
In-Pro	0	0	0	26	26	52	0	0	0	26	26	52	104
Total	147	144	291	564	107	671	85	82	167	250	713	963	2092
#8 MERIDIAN/Bus/Auto Drop Off													
Base	0	0	0	0	0	0	184	153	337	153	184	337	674
Added	0	0	0	0	215	215	503	71	574	262	479	741	1530
In-Pro	0	0	0	0	0	0	26	26	52	26	26	52	104
Total	0	0	0	0	215	215	713	250	963	441	689	1130	2308
#9 Majestic/Hotel Out													
Base	0	0	0	0	0	0	314	255	569	255	314	569	1138
Added	56	0	56	0	0	0	30	81	111	81	86	167	334
Total	56	0	56	0	0	0	344	336	680	336	400	736	1472

Mammoth Eagle Lodge EIR

Volume Type	NB Link In	NB Link Out	NB Link Total	SB Link In	SB Link Out	SB Link Total	EB Link In	EB Link Out	EB Link Total	WB Link In	WB Link Out	WB Link Total	Total Volume
#10 Majestic/Hotel In													
Base	0	0	0	0	0	0	314	255	569	255	314	569	1138
Added	0	25	25	0	0	0	31	57	88	81	30	111	224
Total	0	25	25	0	0	0	345	312	657	336	344	680	1362

Mammoth Eagle Lodge EIR

Signal Warrant Summary Report

Intersection	Base Met [Del / Vol]	Future Met [Del / Vol]
# 5 KELLY/LAKE MARY	??? / ???	No / No
# 6 MERIDIAN / MAJESTIC PINES (EAST)	??? / ???	Yes / Yes
# 7 MERIDIAN?MAJESTIC PINES (WEST)	??? / ???	Yes / Yes
# 8 MERIDIAN/Bus/Auto Drop Off	??? / ???	No / No
# 9 Majestic/Hotel Out	??? / ???	No / No
# 10 Majestic/Hotel In	??? / ???	No / No

Mammoth Eagle Lodge EIR

Peak Hour Delay Signal Warrant Report

Intersection #5 KELLY/LAKE MARY

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 1! 0 0	0 0 0 0 0	0 0 0 1 0	0 1 0 0 0
Final Vol.:	76 0 178	0 0 0	0 249 64	211 323 0
ApproachDel:	23.4	xxxxxx	xxxxxx	xxxxxx

Approach[northbound][lanes=1][control=Stop]
Signal Warrant Rule #1: [vehicle-hours=1.7]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=254]
SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=1101]
SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

```
--------------------------------------------------------------------------------
                          Mammoth Eagle Lodge EIR
--------------------------------------------------------------------------------
                Peak Hour Volume Signal Warrant Report [Urban]
********************************************************************************
Intersection #5 KELLY/LAKE MARY
********************************************************************************
Future Volume Alternative: Peak Hour Warrant NOT Met
------------|---------------||---------------||---------------||---------------|
Approach:      North Bound      South Bound      East Bound       West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Lanes:        0  0  1! 0  0    0  0  0  0  0    0  0  0  1  0    0  1  0  0  0
Final Vol.:     76    0   178    0    0     0     0  249    64   211  323     0
------------|---------------||---------------||---------------||---------------|
Major Street Volume:             847
Minor Approach Volume:           254
Minor Approach Volume Threshold: 264
```

Mammoth Eagle Lodge EIR

Peak Hour Delay Signal Warrant Report

Intersection #6 MERIDIAN / MAJESTIC PINES (EAST)

Future Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0 0	1!	0 0	0 0	1!	0 0	0 1	0	1 0	0 1	0	1 0
Final Vol.:	0	0	0	256	0	103	215	511	0	0	361	201
ApproachDel:	xxxxxx			394.8			xxxxxx			xxxxxx		

Approach[southbound][lanes=1][control=Stop]
Signal Warrant Rule #1: [vehicle-hours=39.4]
SUCCEED - Vehicle-hours greater than or equal to 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=359]
SUCCEED - Approach volume greater than or equal to 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=1646]
SUCCEED - Total volume greater than or equal to 650 for intersection
with less than four approaches.

Mammoth Eagle Lodge EIR

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #6 MERIDIAN / MAJESTIC PINES (EAST)

Future Volume Alternative: Peak Hour Warrant Met

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Lanes:	0	0	1!	0	0	0	0	1!	0	0	0	1	0	1	0	0	1	0	1	0
Final Vol.:	0		0		0	256		0		103	215		511		0	0		361		201

Major Street Volume: 1287
Minor Approach Volume: 359
Minor Approach Volume Threshold: 198

Mammoth Eagle Lodge EIR

Peak Hour Delay Signal Warrant Report

Intersection #8 MERIDIAN/Bus/Auto Drop Off

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Lanes:	0	0	1!	0	0	0	0	1!	0	0	0	1	0	1	0	0	1	0	1	0
Final Vol.:	0		0		0	0		0		0	25		725		0	0		263		201
ApproachDel:	xxxxxx					xxxxxx					xxxxxx					xxxxxx				

Mammoth Eagle Lodge EIR

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #8 MERIDIAN/Bus/Auto Drop Off

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
Control:	Stop Sign	Stop Sign	Uncontrolled	Uncontrolled
Lanes:	0 0 1! 0 0	0 0 1! 0 0	0 1 0 1 0	0 1 0 1 0
Final Vol.:	0 0 0	0 0 0	25 725 0	0 263 201

Major Street Volume: 1215
Minor Approach Volume: 0
Minor Approach Volume Threshold: 218

Mammoth Eagle Lodge EIR

Peak Hour Delay Signal Warrant Report

Intersection #9 Majestic/Hotel Out

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0 0	0 0	1	0 0	0 0	0	0 0	1 0	0	0 0	1 0	0
Final Vol.:	0	0	59	0	0	0	0	362	0	0	354	0
ApproachDel:	10.7			xxxxxx			xxxxxx			xxxxxx		

Approach[northbound][lanes=1][control=Stop]
Signal Warrant Rule #1: [vehicle-hours=0.2]
FAIL - Vehicle-hours less than 4 for one lane approach.
Signal Warrant Rule #2: [approach volume=59]
FAIL - Approach volume less than 100 for one lane approach.
Signal Warrant Rule #3: [approach count=3][total volume=775]
SUCCEED - Total volume greater than or equal to 650 for intersection with less than four approaches.

Mammoth Eagle Lodge EIR

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #9 Majestic/Hotel Out

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Lanes:	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0
Final Vol.:	0		0		59	0		0		0	0		362		0	0		354		0

Major Street Volume: 716
Minor Approach Volume: 59
Minor Approach Volume Threshold: 309

Mammoth Eagle Lodge EIR

Peak Hour Delay Signal Warrant Report

Intersection #10 Majestic/Hotel In

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Lanes:	0 0	0	0 0	0 0	1	0 0	0 0	0	1 0	1 0	1	0 0
Final Vol.:	0	0	0	0	0	0	0	362	1	25	328	0
ApproachDel:	xxxxxx			xxxxxx			xxxxxx			xxxxxx		

Mammoth Eagle Lodge EIR

Peak Hour Volume Signal Warrant Report [Urban]

Intersection #10 Majestic/Hotel In

Future Volume Alternative: Peak Hour Warrant NOT Met

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Stop Sign					Stop Sign					Uncontrolled					Uncontrolled				
Lanes:	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	1	0	1	0	0
Final Vol.:	0		0		0	0		0		0	0		362		1	25		328		0

Major Street Volume: 717
Minor Approach Volume: 0
Minor Approach Volume Threshold: 400

Mammoth Eagle Lodge EIR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #1 OLDM/MAIN

Cycle (sec):	70	Critical Vol./Cap. (X):	0.852
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	17.7
Optimal Cycle:	OPTIMIZED	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0 0	1	0 0	0 0	0	0 0	2 0	1	1 0	2 0	0
Volume Module:												
Base Vol:	285	0	80	0	0	0	0	495	698	84	399	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	285	0	80	0	0	0	0	495	698	84	399	0
Added Vol:	0	0	23	0	0	0	0	0	0	12	0	0
In-Process:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	285	0	103	0	0	0	0	495	698	96	399	0
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	300	0	108	0	0	0	0	521	735	101	420	0
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	300	0	108	0	0	0	0	521	735	101	420	0
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	300	0	108	0	0	0	0	521	735	101	420	0
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	1.00	0.83	1.00	1.00	1.00	1.00	0.90	0.81	0.90	0.90	1.00
Lanes:	1.00	0.00	1.00	0.00	0.00	0.00	0.00	2.00	1.00	1.00	2.00	0.00
Final Sat.:	1769	0	1583	0	0	0	0	3437	1537	1718	3437	0
Capacity Analysis Module:												
Vol/Sat:	0.17	0.00	0.07	0.00	0.00	0.00	0.00	0.15	0.48	0.06	0.12	0.00
Crit Moves:	****								****	****		
Green/Cycle:	0.20	0.00	0.20	0.00	0.00	0.00	0.00	0.56	0.56	0.69	0.63	0.00
Volume/Cap:	0.85	0.00	0.34	0.00	0.00	0.00	0.00	0.27	0.85	0.18	0.19	0.00
Delay/Veh:	44.8	0.0	24.8	0.0	0.0	0.0	0.0	8.0	21.1	4.1	5.5	0.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	44.8	0.0	24.8	0.0	0.0	0.0	0.0	8.0	21.1	4.1	5.5	0.0
HCM2kAvg:	10	0	2	0	0	0	0	3	17	1	2	0

Mammoth Eagle Lodge EIR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #2 MERIDIAN/OLDM

Cycle (sec):	75	Critical Vol./Cap. (X):	0.862
Loss Time (sec):	16 (Y+R = 4 sec)	Average Delay (sec/veh):	36.7
Optimal Cycle:	OPTIMIZED	Level Of Service:	D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Protected			Protected			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0 1 0 1			1 0 1 0 1			1 0 1 1 0			1 0 1 1 0		
Volume Module:												
Base Vol:	113	404	130	210	589	79	55	255	186	157	193	120
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	113	404	130	210	589	79	55	255	186	157	193	120
Added Vol:	8	0	0	0	0	58	107	62	16	0	34	0
In-Process:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	121	404	130	210	589	137	162	317	202	157	227	120
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	127	425	137	221	620	144	171	334	213	165	239	126
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	127	425	137	221	620	144	171	334	213	165	239	126
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	127	425	137	221	620	144	171	334	213	165	239	126
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.98	0.83	0.93	0.98	0.83	0.93	0.88	0.88	0.93	0.88	0.88
Lanes:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.22	0.78	1.00	1.31	0.69
Final Sat.:	1769	1862	1583	1769	1862	1583	1769	2036	1297	1769	2194	1160
Capacity Analysis Module:												
Vol/Sat:	0.07	0.23	0.09	0.12	0.33	0.09	0.10	0.16	0.16	0.09	0.11	0.11
Crit Moves:	****				****				****		****	
Green/Cycle:	0.08	0.30	0.30	0.17	0.39	0.39	0.19	0.19	0.19	0.13	0.13	0.13
Volume/Cap:	0.86	0.75	0.28	0.75	0.86	0.24	0.51	0.86	0.86	0.74	0.86	0.86
Delay/Veh:	71.0	29.2	20.2	40.2	31.6	15.7	28.5	41.0	41.0	43.9	48.4	48.4
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	71.0	29.2	20.2	40.2	31.6	15.7	28.5	41.0	41.0	43.9	48.4	48.4
HCM2kAvg:	6	11	3	7	16	2	4	9	9	6	7	7

Mammoth Eagle Lodge EIR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #3 MINARET/MERIDIAN

Cycle (sec):	110	Critical Vol./Cap. (X):	0.989
Loss Time (sec):	16 (Y+R = 4 sec)	Average Delay (sec/veh):	69.6
Optimal Cycle:	180	Level Of Service:	E

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Split Phase			Split Phase			Split Phase			Split Phase	
Rights:		Include			Include			Include			Include	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:		1 0 0 1 0			1 0 0 1 0			1 0 1 1 0			1 0 1 1 0	
Volume Module:												
Base Vol:	153	217	24	275	374	2	50	433	125	10	338	114
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	153	217	24	275	374	2	50	433	125	10	338	114
Added Vol:	54	0	0	0	0	56	107	246	98	0	132	0
In-Process:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	207	217	24	275	374	58	157	679	223	10	470	114
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	218	228	25	289	394	61	165	715	235	11	495	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	218	228	25	289	394	61	165	715	235	11	495	120
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	218	228	25	289	394	61	165	715	235	11	495	120
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.93	0.97	0.97	0.93	0.96	0.96	0.93	0.90	0.90	0.93	0.90	0.90
Lanes:	1.00	0.90	0.10	1.00	0.87	0.13	1.00	1.51	0.49	1.00	1.61	0.39
Final Sat.:	1769	1651	183	1769	1580	245	1769	2565	842	1769	2765	671
Capacity Analysis Module:												
Vol/Sat:	0.12	0.14	0.14	0.16	0.25	0.25	0.09	0.28	0.28	0.01	0.18	0.18
Crit Moves:			****			****			****		****	
Green/Cycle:	0.14	0.14	0.14	0.25	0.25	0.25	0.28	0.28	0.28	0.18	0.18	0.18
Volume/Cap:	0.88	0.99	0.99	0.65	0.99	0.99	0.33	0.99	0.99	0.03	0.99	0.99
Delay/Veh:	74.8	100	100.2	40.2	80.0	80.0	31.7	65.6	65.6	37.2	78.1	78.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	74.8	100	100.2	40.2	80.0	80.0	31.7	65.6	65.6	37.2	78.1	78.1
HCM2kAvg:	11	13	13	10	21	21	5	22	22	0	15	15

Mammoth Eagle Lodge EIR

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #4 MINARET/MAIN

Cycle (sec): 80 Critical Vol./Cap. (X): 1.003
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 53.1
Optimal Cycle: OPTIMIZED Level Of Service: D

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Split Phase			Split Phase			Split Phase			Split Phase		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	1 0	1	2 0	0 1	0	1 0	2 0	1	1 0	2 0	1
Volume Module:												
Base Vol:	194	131	99	592	327	148	80	637	406	133	515	218
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	194	131	99	592	327	148	80	637	406	133	515	218
Added Vol:	25	22	37	0	11	0	0	0	14	19	0	0
In-Process:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	219	153	136	592	338	148	80	637	420	152	515	218
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	231	161	143	623	356	156	84	671	442	160	542	229
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	231	161	143	623	356	156	84	671	442	160	542	229
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	231	161	143	623	356	156	84	671	442	160	542	229
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.91	0.96	0.82	0.92	0.95	0.95	0.93	0.93	0.83	0.90	0.90	0.81
Lanes:	1.00	1.00	1.00	2.00	0.70	0.30	1.00	2.00	1.00	1.00	2.00	1.00
Final Sat.:	1734	1825	1551	3500	1260	552	1769	3538	1583	1718	3437	1537
Capacity Analysis Module:												
Vol/Sat:	0.13	0.09	0.09	0.18	0.28	0.28	0.05	0.19	0.28	0.09	0.16	0.15
Crit Moves:	****				****				****		****	
Green/Cycle:	0.13	0.13	0.13	0.28	0.28	0.28	0.28	0.28	0.28	0.16	0.16	0.16
Volume/Cap:	1.00	0.67	0.70	0.63	1.00	1.00	0.17	0.68	1.00	0.59	1.00	0.95
Delay/Veh:	94.8	39.9	43.1	26.5	69.3	69.3	22.0	27.6	72.4	34.8	73.1	77.1
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	94.8	39.9	43.1	26.5	69.3	69.3	22.0	27.6	72.4	34.8	73.1	77.1
HCM2kAvg:	11	5	5	8	19	19	2	9	17	5	12	10

```
-------------------------------------------------------------------------------
                           Mammoth Eagle Lodge EIR
-------------------------------------------------------------------------------
                      Level Of Service Computation Report
              2000 HCM Unsignalized Method (Future Volume Alternative)
*******************************************************************************
Intersection #5 KELLY/LAKE MARY
*******************************************************************************
Average Delay (sec/veh):       7.0     Worst Case Level Of Service:       C[ 23.4]
*******************************************************************************
Approach:      North Bound      South Bound       East Bound       West Bound
Movement:     L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign       Uncontrolled     Uncontrolled
Rights:          Include          Include          Include          Include
Lanes:        0  0  1! 0  0   0  0  0  0  0   0  0  0  1  0   0  1  0  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:      69    0   163     0    0     0     0  232    59   197  297     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:   69    0   163     0    0     0     0  232    59   197  297     0
Added Vol:      3    0     6     0    0     0     0    5     2     3   10     0
In-Process:     0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:   72    0   169     0    0     0     0  237    61   200  307     0
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.95 0.95  0.95  0.95 0.95  0.95  0.95 0.95  0.95  0.95 0.95  0.95
PHF Volume:    76    0   178     0    0     0     0  249    64   211  323     0
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Final Vol.:    76    0   178     0    0     0     0  249    64   211  323     0
Critical Gap Module:
Critical Gp:  6.4 xxxx   6.2 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   4.1 xxxx xxxxx
FollowUpTim:  3.5 xxxx   3.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx   2.2 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: 1026 xxxx   282  xxxx xxxx xxxxx  xxxx xxxx xxxxx   314 xxxx xxxxx
Potent Cap.:  262 xxxx   762  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1247 xxxx xxxxx
Move Cap.:    224 xxxx   762  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1247 xxxx xxxxx
Volume/Cap:  0.34 xxxx  0.23  xxxx xxxx  xxxx  xxxx xxxx  xxxx  0.17 xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Queue:       xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx   0.6 xxxx xxxxx
Stopped Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx   8.5 xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     *    *     *     A    *     *
Movement:     LT - LTR - RT   LT - LTR - RT   LT - LTR - RT   LT - LTR - RT
Shared Cap.: xxxx  443 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx xxxx xxxx xxxxx
SharedQueue:xxxxx  3.5 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx   0.6 xxxx xxxxx
Shrd StpDel:xxxxx 23.4 xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx   8.5 xxxx xxxxx
Shared LOS:     *    C     *     *    *     *     *    *     *     A    *     *
ApproachDel:        23.4           xxxxxx           xxxxxx           xxxxxx
ApproachLOS:          C               *                *                *
```

```
---------------------------------------------------------------------------------
                          Mammoth Eagle Lodge EIR
---------------------------------------------------------------------------------

                     Level Of Service Computation Report
           2000 HCM Unsignalized Method (Future Volume Alternative)
*********************************************************************************
Intersection #6 MERIDIAN / MAJESTIC PINES (EAST)
*********************************************************************************
Average Delay (sec/veh):     87.3   Worst Case Level Of Service:       F[394.8]
*********************************************************************************
Approach:      North Bound      South Bound       East Bound        West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:       Stop Sign        Stop Sign        Uncontrolled      Uncontrolled
Rights:         Include          Include          Include           Include
Lanes:        0  0  1! 0  0    0  0  1! 0  0    0  1  0  1  0    0  1  0  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0     0     0   200     0    55   134    50     0     0    98   180
Growth Adj:  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
Initial Bse:    0     0     0   200     0    55   134    50     0     0    98   180
Added Vol:      0     0     0    56     0    30    57   422     0     0   232    24
In-Process:     0     0     0   -13     0    13    13    13     0     0    13   -13
Initial Fut:    0     0     0   243     0    98   204   485     0     0   343   191
User Adj:    1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00  1.00
PHF Adj:     0.95  0.95  0.95  0.95  0.95  0.95  0.95  0.95  0.95  0.95  0.95  0.95
PHF Volume:     0     0     0   256     0   103   215   511     0     0   361   201
Reduct Vol:     0     0     0     0     0     0     0     0     0     0     0     0
Final Vol.:     0     0     0   256     0   103   215   511     0     0   361   201
Critical Gap Module:
Critical Gp:xxxxx  xxxx xxxxx   6.8  xxxx   6.9   4.1  xxxx xxxxx xxxxx  xxxx xxxxx
FollowUpTim:xxxxx  xxxx xxxxx   3.5  xxxx   3.3   2.2  xxxx xxxxx xxxxx  xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx  xxxx xxxxx  1146  xxxx   281   562  xxxx xxxxx  xxxx  xxxx xxxxx
Potent Cap.: xxxx  xxxx xxxxx   196  xxxx   722  1019  xxxx xxxxx  xxxx  xxxx xxxxx
Move Cap.:   xxxx  xxxx xxxxx   160  xxxx   722  1019  xxxx xxxxx  xxxx  xxxx xxxxx
Volume/Cap:  xxxx  xxxx  xxxx  1.60  xxxx  0.14  0.21  xxxx  xxxx  xxxx  xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Queue:      xxxxx  xxxx xxxxx xxxxx  xxxx xxxxx   0.8  xxxx xxxxx xxxxx  xxxx xxxxx
Stopped Del:xxxxx  xxxx xxxxx xxxxx  xxxx xxxxx   9.5  xxxx xxxxx xxxxx  xxxx xxxxx
LOS by Move:    *     *     *     *     *     *     A     *     *     *     *     *
Movement:     LT  - LTR - RT    LT  - LTR - RT    LT  - LTR - RT    LT  - LTR - RT
Shared Cap.: xxxx     0 xxxxx  xxxx   206 xxxxx  xxxx  xxxx xxxxx  xxxx  xxxx xxxxx
SharedQueue:xxxxx  xxxx xxxxx xxxxx  24.6 xxxxx   0.8  xxxx xxxxx   0.0  xxxx xxxxx
Shrd StpDel:xxxxx  xxxx xxxxx xxxxx   395 xxxxx   9.5  xxxx xxxxx   9.0  xxxx xxxxx
Shared LOS:     *     *     *     *     F     *     A     *     *     A     *     *
ApproachDel:      xxxxxx            394.8            xxxxxx            xxxxxx
ApproachLOS:         *                F                 *                 *
```

Mammoth Eagle Lodge EIR

Level Of Service Computation Report
2000 HCM 4-Way Stop Method (Future Volume Alternative)

Intersection #7 MERIDIAN?MAJESTIC PINES (WEST)

Cycle (sec):	100	Critical Vol./Cap. (X):	0.886
Loss Time (sec):	0 (Y+R = 4 sec)	Average Delay (sec/veh):	23.6
Optimal Cycle:	0	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:		Stop Sign			Stop Sign			Stop Sign			Stop Sign	
Rights:		Include			Include			Include			Include	
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	0 0 1! 0 0			0 1 0 0 0			0 0 0 1 0			0 1 0 0 1		
Volume Module:												
Base Vol:	3	1	110	0	0	0	0	74	11	74	79	0
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	1	110	0	0	0	0	74	11	74	79	0
Added Vol:	0	9	24	479	59	0	0	0	0	0	0	71
In-Process:	0	0	0	26	0	0	0	0	0	0	0	26
Initial Fut:	3	10	134	505	59	0	0	74	11	74	79	97
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	3	11	141	532	62	0	0	78	12	78	83	102
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	3	11	141	532	62	0	0	78	12	78	83	102
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	3	11	141	532	62	0	0	78	12	78	83	102
Saturation Flow Module:												
Adjustment:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Lanes:	0.02	0.07	0.91	0.90	0.10	0.00	0.00	0.87	0.13	0.48	0.52	1.00
Final Sat.:	13	43	582	600	70	0	0	457	68	243	260	580
Capacity Analysis Module:												
Vol/Sat:	0.24	0.24	0.24	0.89	0.89	xxxx	xxxx	0.17	0.17	0.32	0.32	0.18
Crit Moves:			****	****					****		****	
Delay/Veh:	9.8	9.8	9.8	34.6	34.6	0.0	0.0	10.6	10.6	12.5	12.5	9.8
Delay Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	9.8	9.8	9.8	34.6	34.6	0.0	0.0	10.6	10.6	12.5	12.5	9.8
LOS by Move:	A	A	A	D	D	*	*	B	B	B	B	A
ApproachDel:		9.8			34.6			10.6			11.4	
Delay Adj:		1.00			1.00			1.00			1.00	
ApprAdjDel:		9.8			34.6			10.6			11.4	
LOS by Appr:		A			D			B			B	

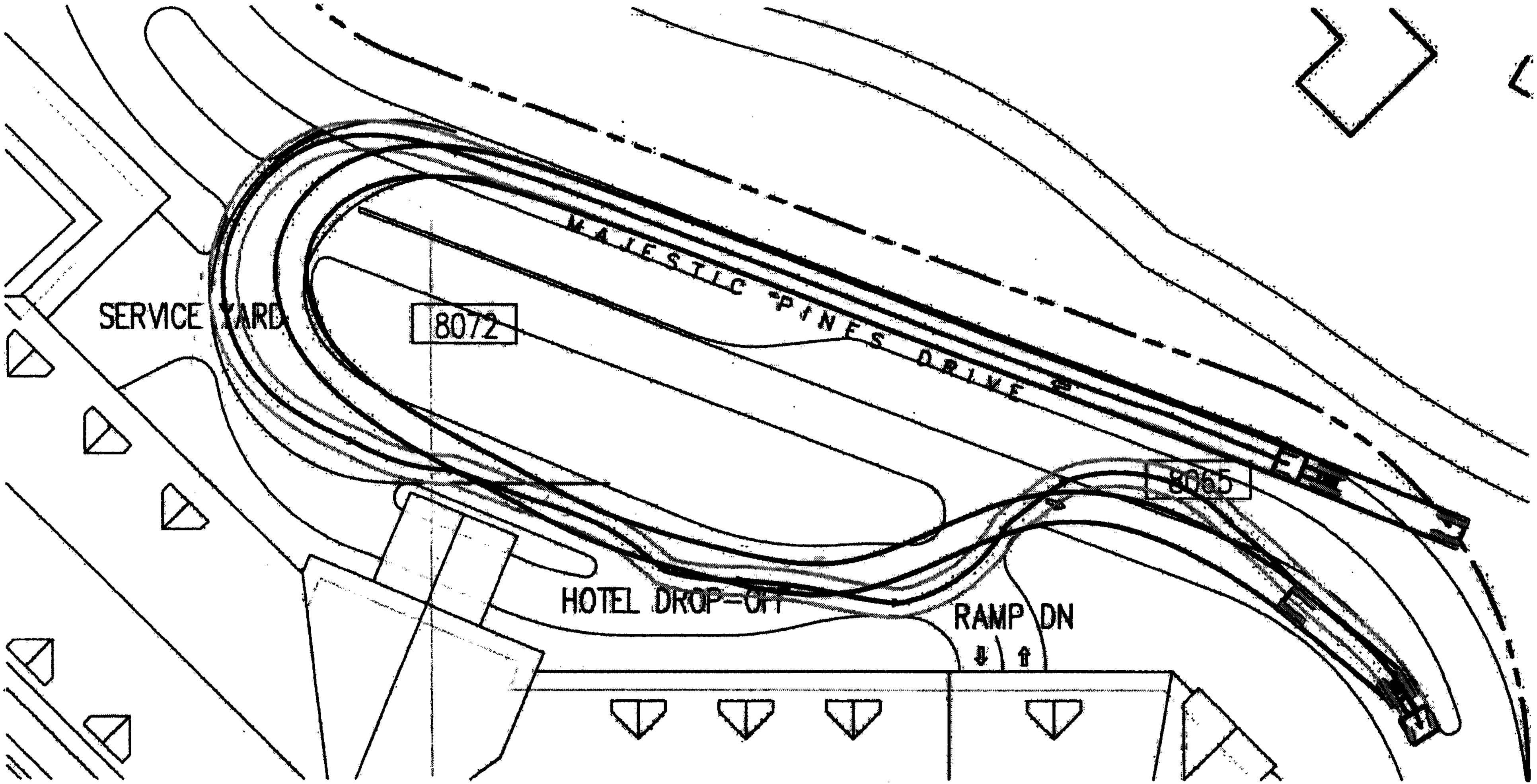
```
-----------------------------------------------------------------------------------
                              Mammoth Eagle Lodge EIR
-----------------------------------------------------------------------------------
                        Level Of Service Computation Report
             2000 HCM Unsignalized Method (Future Volume Alternative)
***********************************************************************************
Intersection #8 MERIDIAN/Bus/Auto Drop Off
***********************************************************************************
Average Delay (sec/veh):        0.2    Worst Case Level Of Service:        A[  9.0]
***********************************************************************************
Approach:      North Bound       South Bound       East Bound        West Bound
Movement:     L  -  T  -  R    L  -  T  -  R    L  -  T  -  R    L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign         Stop Sign        Uncontrolled      Uncontrolled
Rights:          Include           Include           Include           Include
Lanes:        0  0  1! 0  0    0  0  1! 0  0    0  1  0  1  0    0  1  0  1  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:       0    0     0     0    0     0     0  184     0     0  153     0
Growth Adj:  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:    0    0     0     0    0     0     0  184     0     0  153     0
Added Vol:      0    0     0     0    0     0    24  479     0     0   71   191
In-Process:     0    0     0     0    0     0     0   26     0     0   26     0
Initial Fut:    0    0     0     0    0     0    24  689     0     0  250   191
User Adj:    1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:     0.95 0.95  0.95  0.95 0.95  0.95  0.95 0.95  0.95  0.95 0.95  0.95
PHF Volume:     0    0     0     0    0     0    25  725     0     0  263   201
Reduct Vol:     0    0     0     0    0     0     0    0     0     0    0     0
Final Vol.:     0    0     0     0    0     0    25  725     0     0  263   201
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   4.1 xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   2.2 xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx xxxxx   464 xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  1108 xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  1108 xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  xxxx  0.02 xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Queue:      xxxxx xxxx xxxxx xxxxx xxxx xxxxx   0.1 xxxx xxxxx xxxxx xxxx xxxxx
Stopped Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   8.3 xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:    *    *     *     *    *     *     A    *     *     *    *     *
Movement:     LT - LTR - RT    LT - LTR - RT    LT - LTR - RT    LT - LTR - RT
Shared Cap.: xxxx    0 xxxxx  xxxx    0 xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   0.1 xxxx xxxxx   0.0 xxxx xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx   8.3 xxxx xxxxx   9.0 xxxx xxxxx
Shared LOS:     *    *     *     *    *     *     A    *     *     A    *     *
ApproachDel:     xxxxxx            xxxxxx            xxxxxx            xxxxxx
ApproachLOS:        *                 *                 *                 *
```

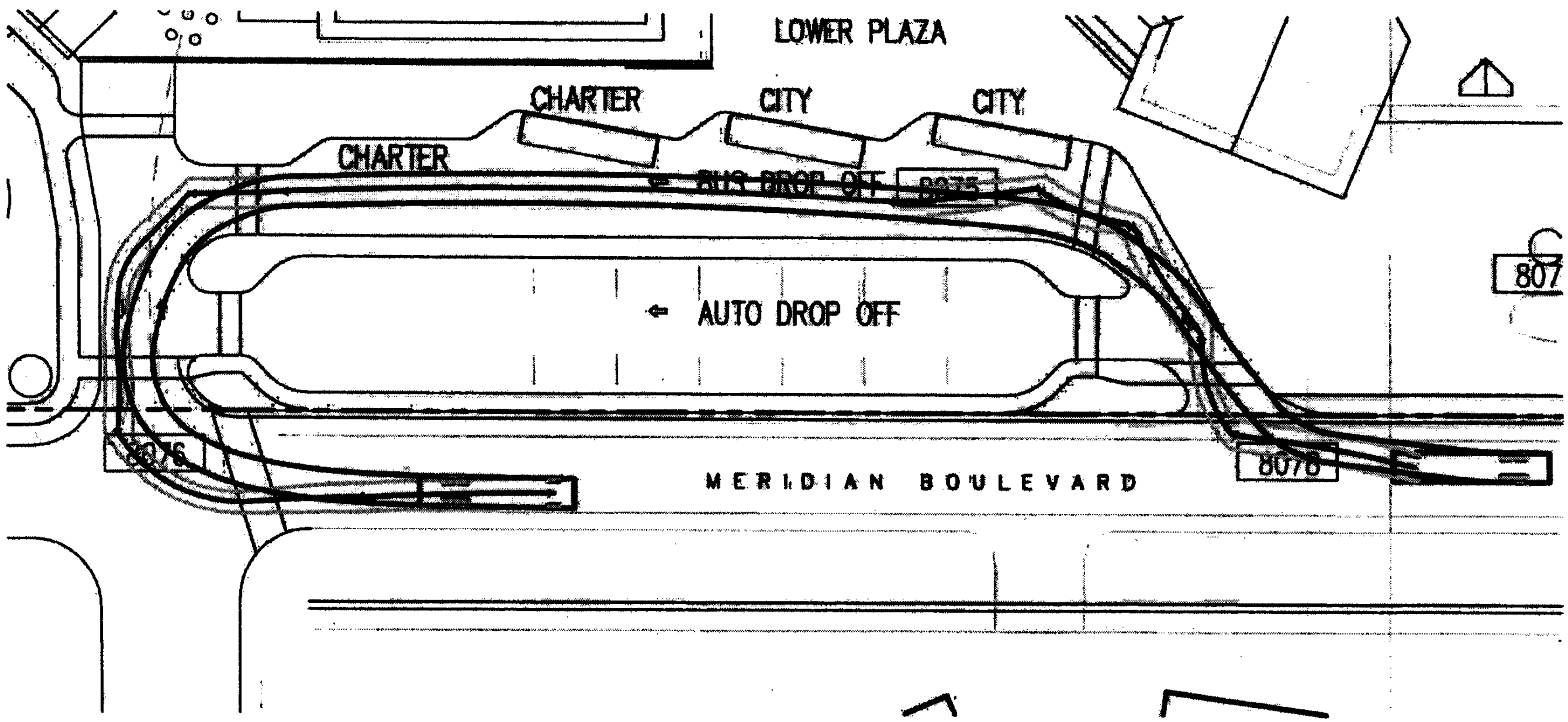
```
---------------------------------------------------------------------------------
                          Mammoth Eagle Lodge EIR
---------------------------------------------------------------------------------

                    Level Of Service Computation Report
          2000 HCM Unsignalized Method (Future Volume Alternative)
*********************************************************************************
Intersection #9 Majestic/Hotel Out
*********************************************************************************
Average Delay (sec/veh):       0.8    Worst Case Level Of Service:       B[ 10.7]
*********************************************************************************
Approach:       North Bound      South Bound       East Bound       West Bound
Movement:      L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:        Stop Sign        Stop Sign      Uncontrolled     Uncontrolled
Rights:          Include          Include          Include          Include
Lanes:         0  0  0  0  1   0  0  0  0  0   0  0  1  0  0   0  0  1  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:        0    0     0     0    0     0     0  314     0     0  255     0
Growth Adj:   1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
Initial Bse:     0    0     0     0    0     0     0  314     0     0  255     0
Added Vol:       0    0    56     0    0     0     0   30     0     0   81     0
In-Process:      0    0     0     0    0     0     0    0     0     0    0     0
Initial Fut:     0    0    56     0    0     0     0  344     0     0  336     0
User Adj:     1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00  1.00 1.00  1.00
PHF Adj:      0.95 0.95  0.95  0.95 0.95  0.95  0.95 0.95  0.95  0.95 0.95  0.95
PHF Volume:      0    0    59     0    0     0     0  362     0     0  354     0
Reduct Vol:      0    0     0     0    0     0     0    0     0     0    0     0
Final Vol.:      0    0    59     0    0     0     0  362     0     0  354     0
Critical Gap Module:
Critical Gp:xxxxx xxxx    6.2 xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
FollowUpTim:xxxxx xxxx    3.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx    362  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Potent Cap.: xxxx xxxx    687  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Move Cap.:   xxxx xxxx    687  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
Volume/Cap:  xxxx xxxx   0.09  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Queue:      xxxxx xxxx    0.3 xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Stopped Del:xxxxx xxxx   10.7 xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
LOS by Move:     *    *     B     *    *     *     *    *     *     *    *     *
Movement:      LT - LTR - RT   LT - LTR - RT   LT - LTR - RT   LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:      *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:        10.7            xxxxxx           xxxxxx           xxxxxx
ApproachLOS:          B                *                *                *
```

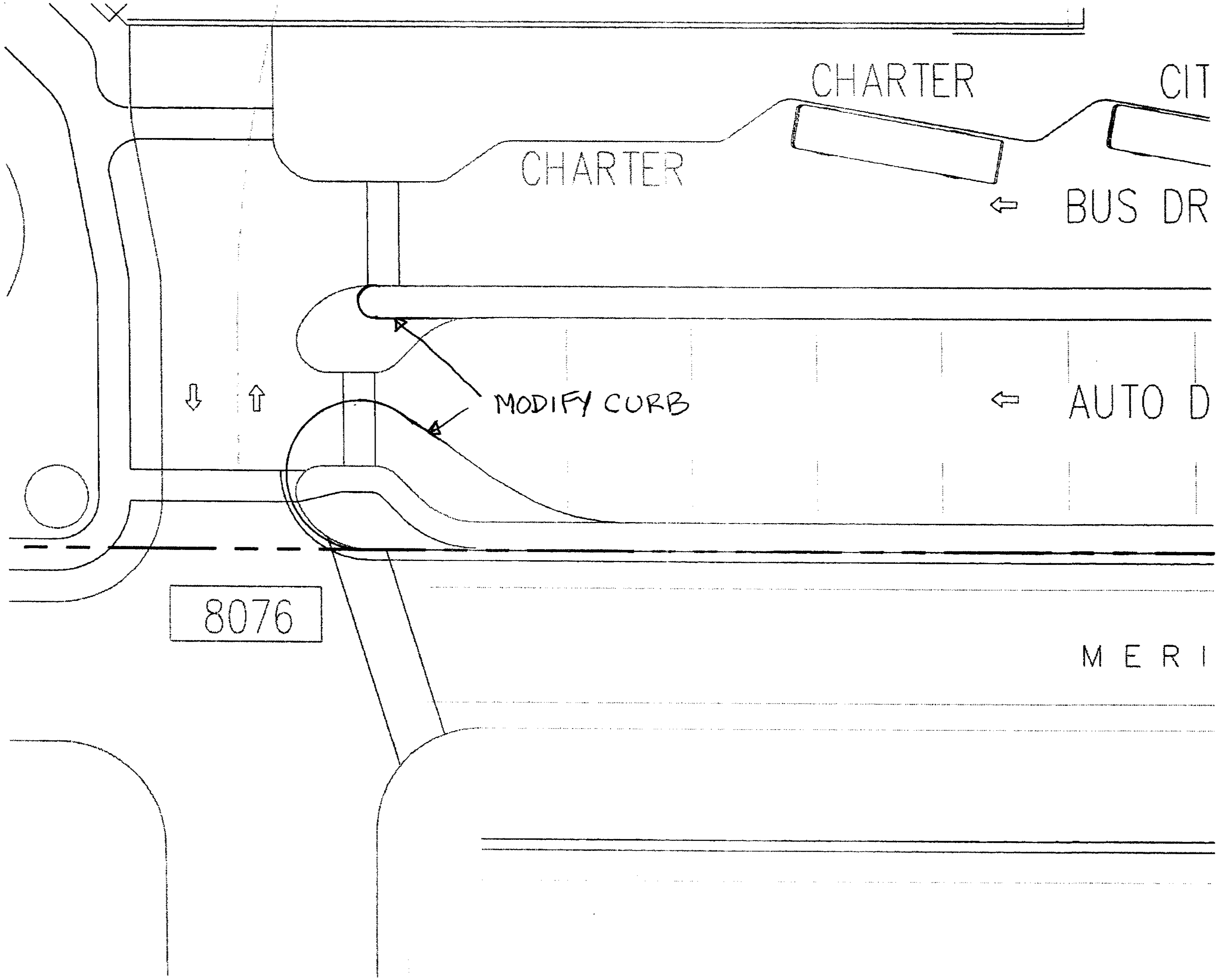
```
-------------------------------------------------------------------------------
                           Mammoth Eagle Lodge EIR
-------------------------------------------------------------------------------
                     Level Of Service Computation Report
          2000 HCM Unsignalized Method (Future Volume Alternative)
*******************************************************************************
Intersection #10 Majestic/Hotel In
*******************************************************************************
Average Delay (sec/veh):      0.3    Worst Case Level Of Service:      A[  8.0]
*******************************************************************************
Approach:       North Bound      South Bound      East Bound       West Bound
Movement:      L  -  T  -  R   L  -  T  -  R   L  -  T  -  R   L  -  T  -  R
------------|---------------||---------------||---------------||---------------|
Control:         Stop Sign        Stop Sign      Uncontrolled     Uncontrolled
Rights:           Include          Include          Include          Include
Lanes:         0  0  0  0  0   0  0  1  0  0   0  0  0  1  0   1  0  1  0  0
------------|---------------||---------------||---------------||---------------|
Volume Module:
Base Vol:        0    0     0    0    0     0    0  314     0    0  255     0
Growth Adj:   1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
Initial Bse:     0    0     0    0    0     0    0  314     0    0  255     0
Added Vol:       0    0     0    0    0     0    0   30     1   24   57     0
In-Process:      0    0     0    0    0     0    0    0     0    0    0     0
Initial Fut:     0    0     0    0    0     0    0  344     1   24  312     0
User Adj:     1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00 1.00 1.00  1.00
PHF Adj:      0.95 0.95  0.95 0.95 0.95  0.95 0.95 0.95  0.95 0.95 0.95  0.95
PHF Volume:      0    0     0    0    0     0    0  362     1   25  328     0
Reduct Vol:      0    0     0    0    0     0    0    0     0    0    0     0
Final Vol.:      0    0     0    0    0     0    0  362     1   25  328     0
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx   4.1 xxxx xxxxx
FollowUpTim:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx   2.2 xxxx xxxxx
------------|---------------||---------------||---------------||---------------|
Capacity Module:
Cnflict Vol: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx   363 xxxx xxxxx
Potent Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1207 xxxx xxxxx
Move Cap.:   xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  1207 xxxx xxxxx
Volume/Cap:  xxxx xxxx  xxxx  xxxx xxxx  xxxx  xxxx xxxx  xxxx  0.02 xxxx  xxxx
------------|---------------||---------------||---------------||---------------|
Level Of Service Module:
Queue:      xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx   0.1 xxxx xxxxx
Stopped Del:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx   8.0 xxxx xxxxx
LOS by Move:     *    *     *     *    *     *     *    *     *     A    *     *
Movement:      LT - LTR - RT   LT - LTR - RT   LT - LTR - RT   LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx  xxxx xxxx xxxxx
SharedQueue:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS:      *    *     *     *    *     *     *    *     *     *    *     *
ApproachDel:      xxxxxx           xxxxxx           xxxxxx           xxxxxx
ApproachLOS:         *                *                *                *
```

Appendix C
Truck Circulation Analysis


MAJESTIC PINES DRIVE
SERVICE YARD
8072
8065
HOTEL DROP-OFF
RAMP DN


LOWER PLAZA
CHARTER
CITY
CITY
CHARTER
BUS DROP OFF
8075
AUTO DROP OFF
807
8076
8078
MERIDIAN BOULEVARD

Appendix D
Modify Curb Improvement


CHARTER
CIT
CHARTER
BUS DR
MODIFY CURB
AUTO D
8076
M E R I

Appendix C

Air Quality Technical Worksheets

Eagle Lodge

Draft Environmental Impact Report

Air Quality Assessment Files

Provided by PCR Services Corporation

September 2006

C-1	Project Construction Emissions
C-2	Project Operation Emissions
C-3	Alternatives Operation Emissions

Appendix C-1

- Construction Emissions Inventory
    - Regional Construction Emissions
        - URBEMIS2002 Output Files

URBEMIS 2002 For Windows 8.7.0

File Name: V:\AQNOI SE DIVISIO N\Active Pr ojects\Eag le Lodge\C onstructio
n\Construction (090507).urb
Project Name: Eagle Lo dge Constr uction (Max Day)
Project Location: Mountain Counties and Rural C ounties
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2. 2

DETAIL REPORT
(Tons/ Year)

Construction Start Month and Ye ar: Janua "ry, 2007"
Construction Duration: 24
Total Land Use Area to be Devel oped: 4 a cres
Maximum Acreage Disturbed Per D ay: 4 acr es
Single Family Units: 21 Multi-F amily Uni ts: 62
Retail/Office/Institutional/Ind ustrial S quare Foot age: 88000

CONSTRUCTION EMISSION ESTIMATES				MITIGATE		D (tons/ye		ar)	
				PM10	P	M10	PM10		
Source ROG	NOx	CO	SO2	TOTAL	EX	HAUST	DUST		
*** 2007***									
Phase 1 - Demolition Emissions									
Fugitive Dust	-	-	-	-	0.09	-	0.09		
Off-Road Diesel		0.05	0.29	0.42	-	0.01	0.01	0	
On-Road Diesel	0.02	0.31	0.06	0	0.01	0.01	0		
Worker Trips	0	0	0.02	0	0	0	0		
Total tons/year		0.07	0.6	0.5	0	0.11	0.02	0.09	
Phase 2 - Site Grading Emission				s					
Fugitive Dust	-	-	-	-	4.11	-	4.11		
Off-Road Diesel		1.26	8.6	10.06	-	0.34	0.34	0	
On-Road Diesel	0.06	1.15	0.22	0	0.03	0.03	0		
Worker Trips	0.01	0	0.06	0	0	0	0		
Total tons/year		1.33	9.75	10.34	0	4.48	0.37	4.11	
Phase 3 - Building Construction									
Bldg Const Off-Road Diesel			0.14	0.96	1.05	-	0.04	0.04	0
Bldg Const Worker Trips			0.01	0.01	0.13	0	0	0	0
Arch Coatings Off-Gas		0	-	-	-	-	-	-	
Arch Coatings Worker Trips			0	0	0	0	0	0	0
Asphalt Off-Gas		0	-	-	-	-	-	-	
Asphalt Off-Road Diesel			0	0	0	-	0	0	0
Asphalt On-Road Diesel		0	0	0	0	0	0	0	
Asphalt Worker Trips		0	0	0	0	0	0	0	
Total tons/year		0.15	0.97	1.18	0	0.04	0.04	0	
Total all phases tons/yr			1.55	11.32	12.02	0	4.63	0.43	4.2
*** 2008***									
Phase 1 - Demolition Emissions									
Fugitive Dust	-	-	-	-	0	-	0		
Off-Road Diesel		0	0	0	-	0	0	0	
On-Road Diesel	0	0	0	0	0	0	0		
Worker Trips	0	0	0	0	0	0	0		
Total tons/year		0	0	0	0	0	0	0	
Phase 2 - Site Grading Emission				s					
Fugitive Dust	-	-	-	-	0	-	0		
Off-Road Diesel		0	0	0	-	0	0	0	
On-Road Diesel	0	0	0	0	0	0	0		
Worker Trips	0	0	0	0	0	0	0		
Total tons/year		0	0	0	0	0	0	0	
Phase 3 - Building Construction									
Bldg Const Off-Road Diesel			0.81	5.54	6.42	-	0.22	0.22	0
Bldg Const Worker Trips			0.05	0.03	0.66	0	0.02	0	0.02
Arch Coatings Off-Gas		3.89	-	-	-	-	-	-	

Arch Coatings Worker Trips	0.03	0.02	0.33	0	0.01	0	0.01
Asphalt Off-Gas	0	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.18	1.3	1.38	-	0.06	0.06	0
Asphalt On-Road Diesel	0	0	0	0	0	0	0
Asphalt Worker Trips	0	0	0.02	0	0	0	0
Total tons/year	4.96	6.89	8.81	0	0.31	0.28	0.03

Total all phases tons/yr 4.96 6.89 8.81 0 0.31 0.28 0.03

Construction-Related Mitigation Measures

Phase 2: Soil Disturbance: App ly water to exposed surfaces 2 x daily

Percent Reduction(ROG 0.0% N Ox 0.0% C O 0.0% SO2 0.0% PM10 50%)
Phase 1 - Demolition Assumption s
Start Month/Year for Phase 1: J an '07
Phase 1 Duration: 1 months
Building Volume Total (cubic fe et): 7875 0
Building Volume Daily (cubic fe et): 1968 7
On-Road Truck Travel (VMT): 109 5
Off-Road Equipment
No. Type Horse power Lo ad Factor Hours/ Day
1 Excavators 18 0 0.58 8
2 Rubber Tired Loaders 16 5 0.465 8

Phase 2 - Site Grading Assumpti ons
Start Month/Year for Phase 2: F eb '07
Phase 2 Duration: 9 months
On-Road Truck Travel (VMT): 461 0.23087098
Off-Road Equipment
No. Type Horse power Lo ad Factor Hours/ Day
1 Cranes 19 0 0.43 8
1 Excavators 18 0 0.58 8
1 Graders 17 4 0.575 8
1 Other Equipment 19 0 0.62 8
1 Rubber Tired Dozers 35 2 0.59 8
1 Rubber Tired Loaders 16 5 0.465 8
1 Tractor/Loaders/Backh oes 7 9 0.465 8

Phase 3 - Building Construction Assumpti ons
Start Month/Year for Phase 3: N ov '07
Phase 3 Duration: 14 months
Start Month/Year for SubPhase Building : Nov '07
SubPhase Building Duration: 1 4 months
Off-Road Equipment
No. Type Horse power Lo ad Factor Hours/ Day
1 Excavators 18 0 0.58 8
1 Rubber Tired Dozers 35 2 0.59 8
1 Tractor/Loaders/Backh oes 7 9 0.465 8
Start Month/Year for SubPhase Architec tural Coat ings: Jul ' 8
SubPhase Architectural Coatin gs Durati on: 6 mont hs
Start Month/Year for SubPhase Asphalt: Jul '08
SubPhase Asphalt Duration: 6 months
Acres to be Paved: 0.5
Off-Road Equipment
No. Type Horse power Lo ad Factor Hours/ Day
2 Paving Equipment 11 1 0.53 8
1 Tractor/Loaders/Backh oes 7 9 0.465 8

Appendix C-2

- Operation Emissions Inventory
    - Regional Operation Emissions
        - Regional Emission Summary Sheet
        - Stationary Source Emissions
        - Area Source Emissions
        - URBEMIS2002 Output Files
    - Local Operation Emissions (CO Hotspots)
        - One-hour CO Summary Sheet
        - Eight-hour CO Summary Sheet
        - CALINE4 Output Files
        - EMFAC2002 Emission Rates
    - Local Operation Emissions (PM_{10} Hotspots)
        - GBUAPCD PM_{10} Hotspot Spreadsheet Model

Eagle Lodge (Hotel Option)

Regional Emission Calculations (tons/year)

	CO	NOx	PM10	ROC	SOx
Existing					
Mobile	25.3	3.4	2.5	2.1	<0.1
Area	0.2	<0.1	<0.1	<0.1	<0.1
Stationary	<0.1	<0.1	0.4	<0.1	<0.1
Total Existing	**25.5**	**3.5**	**2.9**	**2.1**	**<0.1**
Project (Winter Operations)					
Mobile	51.3	7.1	6.4	4.2	<0.1
Area	2.4	0.5	0.3	1.8	<0.1
Stationary	0.4	<0.1	2.4	<0.1	0.2
Project (Summer Operations)					
Mobile	48.2	6.6	6.0	4.0	<0.1
Area	0.5	0.4	<0.1	0.4	<0.1
Stationary	0.4	<0.1	2.4	<0.1	0.2
Net Project					
Net Mobile	74.3	10.3	9.9	6.2	<1
Net Area	2.8	<1	<1	2.1	<1
Net Stationary	<1	<1	4.3	<1	<1
Total Net	77.8	11.2	14.5	8.4	0.5

Electricity Usage

Land Use	1,000 Sqft	Electricity Usage Rate [a] (kWh\sq.ft\yr)	Total Electricity Usage (KWh\year)	Total Electricity Usage (MWh\Day)	CO 0.2	ROC 0.01	NOx 1.15	PM10 0.04	SOx 0.12
					Emission Factors (lbs/MWh) [b]				
Existing					Emissions from Electricity Consumption (lbs/day)				
Retail	0.6	13.55	8,130	0.022	0.004	0.000	0.026	0.001	0.003
Hotel/Motel	12.0	9.95	119,400	0.327	0.065	0.003	0.376	0.013	0.039
Total Existing			**127,530**	**0.349**	**0.07**	**0.00**	**0.40**	**0.01**	**0.04**
Project									
Hotel/Motel	88.1	9.95	876,595	2.402	0.480	0.024	2.762	0.096	0.288
Total Project			**876,595**	**2.402**	**0.48**	**0.02**	**2.76**	**0.10**	**0.29**
Net Emissions From Electricity Usage					**0.41**	**0.02**	**2.36**	**0.08**	**0.25**

Summary of Stationary Emissions

	CO	ROC	NOx	PM10	SOx
Total Existing Emissions (lbs/day)	0.07	0.00	0.40	0.01	0.04
Total Project Emissions (lbs/day)	0.48	0.02	2.76	0.10	0.29
Total Net Emissions (lbs/day)	**0.41**	**0.02**	**2.36**	**0.08**	**0.25**

[a] Electricity Usage Rates from Table A9-11-A, CEQA Air Quality Handbook, SCAQMD, 1993.

[b] Emission Factors from Table A9-11-B, CEQA Air Quality Handbook, SCAQMD, 1993.

07/17/2006 1:49 PM

URBEMIS 2002 For Windows 8.7.0

File Name: V:\AQNOISE DIVISION\Active Projects\Eagle Lodge\Operations\Operations (Existing).urb
Project Name: Eagle Lodge Operations Existing Use
Project Location: Mountain Counties and Rural Counties
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Tons/Year)

AREA SOURCE EMISSION ESTIMATES (Tons per Year, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.00	0.03	0.02	0.00	0.00
Hearth	0.00	0.00	0.00	0.00	0.00
Landscaping	0.02	0.00	0.14	0.00	0.00
Consumer Prdcts	0.00	-	-	-	-
Architectural Coatings	0.01	-	-	-	-
TOTALS (tpy, unmitigated)	0.04	0.03	0.16	0.00	0.00

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Hotel	2.05	3.44	25.25	0.02	2.47
Convenience market (24 ho	0.00	0.00	0.00	0.00	0.00
TOTAL EMISSIONS (tons/yr)	2.05	3.44	25.25	0.02	2.47

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2006 Season: Annual

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Hotel		106.04 trips/1000 sq. ft.	12.00	1,272.50
Convenience market (24 ho		0.00 trips/1000 sq. ft.	0.60	0.00

Sum of Total Trips 1,272.50
Total Vehicle Miles Traveled 8,913.87

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	55.60	2.20	97.30	0.50
Light Truck < 3,750 lbs	15.10	4.00	93.40	2.60
Light Truck 3,751- 5,750	15.90	1.90	96.90	1.20
Med Truck 5,751- 8,500	7.00	1.40	95.70	2.90
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.30	0.00	66.70	33.30
Med-Heavy 14,001-33,000	1.00	10.00	20.00	70.00
Heavy-Heavy 33,001-60,000	0.90	0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.10	0.00	0.00	100.00
Motorcycle	1.70	82.40	17.60	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.20	0.00	91.70	8.30

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.8	7.3	7.5	9.5	7.4	7.4
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip Speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Hotel				5.0	2.5	92.5
Convenience market (24 hour)				2.0	1.0	97.0

Changes made to the default values for Land Use Trip Percentages

The Primary Trip % for City park changed from 70 to 100
The Diverted Trip % for City park changed from 25 to 0
The Pass-By Trip % for City park changed from 5 to 0
The Primary Trip % for Quality resturant changed from 50 to 100
The Diverted Trip % for Quality resturant changed from 40 to 0
The Pass-By Trip % for Quality resturant changed from 10 to 0

Changes made to the default values for Area

The landscape year changed from 2005 to 2006.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2006.
The operational winter selection item changed from 2 to 1.
The operational summer temperature changed from 60 to 70.

07/17/2006 3:38 PM

URBEMIS 2002 For Windows 8.7.0

File Name: V:\AQNOISE DIVISION\Active Projects\Eagle Lodge\Operations\Operations (Winter) - 2009.urb
Project Name: Eagle Lodge Operations (Winter) - 2009
Project Location: Mountain Counties and Rural Counties
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Tons/Year)

AREA SOURCE EMISSION ESTIMATES (Tons per Year, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.07	1.00	0.79	0.00	0.00
Hearth	1.93	0.05	3.53	0.01	0.53
Landscaping	0.07	0.00	0.48	0.00	0.00
Consumer Prdcts	0.74	-	-	-	-
Architectural Coatings	0.77	-	-	-	-
TOTALS (tpy, unmitigated)	3.59	1.05	4.79	0.01	0.53

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Fireplace Emissions (assu	0.03	0.00	0.00	0.00	0.00
Conference Room	0.26	0.33	2.42	0.00	0.30
Base Lodge Employee Trips	0.55	0.95	6.78	0.01	0.91
Day Spa	0.21	0.36	2.61	0.00	0.32
Ice Rink	0.25	0.43	3.12	0.00	0.39
High turnover (sit-down)	0.77	1.21	8.77	0.01	1.09
Hotel	2.20	3.66	26.60	0.02	3.30
Convenience market (24 ho	4.20	7.19	52.24	0.04	6.46
TOTAL EMISSIONS (tons/yr)	8.46	14.14	102.54	0.07	12.78

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2009 Season: Annual

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Fireplace Emissions (assu	1.30	0.00 trips/dwelling unit	83.00	0.00
Conference Room		0.80 trips/people	200.00	160.00
Base Lodge Employee Trips		1.83 trips/employees	122.00	223.26
Day Spa		20.87 trips/1000 sq. ft.	8.00	166.96
Ice Rink		39.93 trips/1000 sq. ft.	5.00	199.65
High turnover (sit-down)		2.81 trips/seats	200.00	562.00
Hotel		8.00 trips/rooms	213.00	1,704.00
Convenience market (24 ho		863.10 trips/1000 sq. ft.	4.00	3,452.40

Sum of Total Trips 6,468.27
Total Vehicle Miles Traveled 46,150.40

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	54.90	1.30	98.40	0.30
Light Truck < 3,750 lbs	15.10	2.60	95.40	2.00
Light Truck 3,751- 5,750	16.10	1.20	98.10	0.70
Med Truck 5,751- 8,500	7.30	1.40	95.90	2.70
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.30	0.00	66.70	33.30
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.90	0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.20	0.00	50.00	50.00
Motorcycle	1.60	75.00	25.00	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.40	7.10	85.70	7.20

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.8	7.3	7.5	9.5	7.4	7.4
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip Speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Conference Room				2.0	1.0	97.0
Base Lodge Employee Trips				100.0	0.0	0.0
Day Spa				5.0	2.5	92.5
Ice Rink				5.0	2.5	92.5
High turnover (sit-down) rest.				5.0	2.5	92.5
Hotel				5.0	2.5	92.5
Convenience market (24 hour)				2.0	1.0	97.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Condominium/townhouse high rise have changed from the defaults 5.26/1.3 to 0/1.3
The Primary Trip % for City park changed from 70 to 100
The Diverted Trip % for City park changed from 25 to 0
The Pass-By Trip % for City park changed from 5 to 0
The Primary Trip % for Quality resturant changed from 50 to 100
The Diverted Trip % for Quality resturant changed from 40 to 0
The Pass-By Trip % for Quality resturant changed from 10 to 0

Changes made to the default values for Area

The landscape year changed from 2005 to 2009.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2009.
The operational winter selection item changed from 2 to 1.
The operational summer temperature changed from 60 to 70.

07/17/2006 1:51 PM

URBEMIS 2002 For Windows 8.7.0

File Name: V:\AQNOISE DIVISION\Active Projects\Eagle Lodge\Operations\Operations (Summer) - 2009.urb
Project Name: Eagle Lodge Operations (Summer) - 2009
Project Location: Mountain Counties and Rural Counties
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Tons/Year)

AREA SOURCE EMISSION ESTIMATES (Tons per Year, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.06	0.87	0.73	0.00	0.00
Hearth	0.00	0.00	0.00	0.00	0.00
Landscaping	0.05	0.00	0.36	0.00	0.00
Consumer Prdcts	0.00	-	-	-	-
Architectural Coatings	0.59	-	-	-	-
TOTALS (tpy, unmitigated)	0.70	0.87	1.09	0.00	0.00

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Conference Room	0.45	0.67	4.84	0.00	0.60
Mountain Biking Employees	0.11	0.20	1.40	0.00	0.19
Day Spa	0.21	0.36	2.61	0.00	0.32
High turnover (sit-down)	0.77	1.21	8.77	0.01	1.09
Hotel	2.20	3.66	26.60	0.02	3.30
Convenience market (24 ho	4.20	7.19	52.24	0.04	6.46
TOTAL EMISSIONS (tons/yr)	7.94	13.29	96.46	0.07	11.97

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2009 Season: Annual

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Conference Room		1.60 trips/people	200.00	320.00
Mountain Biking Employees		1.84 trips/employees	25.00	46.00
Day Spa		20.87 trips/1000 sq. ft.	8.00	166.96
High turnover (sit-down)		2.81 trips/seats	200.00	562.00
Hotel		8.00 trips/rooms	213.00	1,704.00
Convenience market (24 ho		863.10 trips/1000 sq. ft.	4.00	3,452.40

Sum of Total Trips 6,251.36
Total Vehicle Miles Traveled 43,228.05

Vehicle Assumptions:

Fleet Mix:

Vehicle Type		Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto		54.90	1.30	98.40	0.30
Light Truck	< 3,750 lbs	15.10	2.60	95.40	2.00
Light Truck	3,751- 5,750	16.10	1.20	98.10	0.70
Med Truck	5,751- 8,500	7.30	1.40	95.90	2.70
Lite-Heavy	8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy	10,001-14,000	0.30	0.00	66.70	33.30
Med-Heavy	14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy	33,001-60,000	0.90	0.00	11.10	88.90
Line Haul	> 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus		0.20	0.00	50.00	50.00
Motorcycle		1.60	75.00	25.00	0.00
School Bus		0.10	0.00	0.00	100.00
Motor Home		1.40	7.10	85.70	7.20

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.8	7.3	7.5	9.5	7.4	7.4
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip Speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Conference Room				2.0	1.0	97.0
Mountain Biking Employees				100.0	0.0	0.0
Day Spa				5.0	2.5	92.5
High turnover (sit-down) rest.				5.0	2.5	92.5
Hotel				5.0	2.5	92.5
Convenience market (24 hour)				2.0	1.0	97.0

Changes made to the default values for Land Use Trip Percentages

The Primary Trip % for City park changed from 70 to 100
The Diverted Trip % for City park changed from 25 to 0
The Pass-By Trip % for City park changed from 5 to 0
The Primary Trip % for Quality resturant changed from 50 to 100
The Diverted Trip % for Quality resturant changed from 40 to 0
The Pass-By Trip % for Quality resturant changed from 10 to 0

Changes made to the default values for Area

The landscape year changed from 2005 to 2009.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2009.
The operational winter selection item changed from 2 to 1.
The operational summer temperature changed from 60 to 70.

Eagle Lodge (Condo Option)

Regional Emission Calculations (tons/year)

	CO	NOx	PM10	ROC	SOx
Existing					
Mobile	25.3	3.4	2.5	2.1	<0.1
Area	0.2	<0.1	<0.1	<0.1	<0.1
Stationary	<0.1	<0.1	0.4	<0.1	<0.1
Total Existing	**25.5**	**3.5**	**2.9**	**2.1**	**<0.1**
Project					
Mobile	115.3	15.9	14.5	9.3	<0.1
Area	4.3	0.6	0.5	3.4	<0.1
Stationary	0.3	<0.1	1.5	<0.1	0.2
Total Project	**119.9**	**16.4**	**16.5**	**12.7**	**0.2**
Net Project					
Net Mobile	90.0	12.4	12.0	7.3	<0.1
Net Area	4.2	0.5	0.5	3.3	<0.1
Net Stationary	0.2	<0.1	1.1	<0.1	0.1
Total Net	94.4	13.0	13.6	10.6	0.2

Electricity Usage

Land Use	1,000 Sqft	Electricity Usage Rate [a] (kWh\sq.ft\yr)	Total Electricity Usage (KWh\year)	Total Electricity Usage (MWh\Day)	CO	ROC	NOx	PM10	SOx
				Emission Factors (lbs/MWh) [b]	0.2	0.01	1.15	0.04	0.12
Existing					Emissions from Electricity Consumption (lbs/day)				
Retail	0.6	13.55	8,130	0.022	0.004	0.000	0.026	0.001	0.003
Hotel/Motel	12.0	9.95	119,400	0.327	0.065	0.003	0.376	0.013	0.039
	Total Existing		**127,530**	**0.349**	**0.07**	**0.00**	**0.40**	**0.01**	**0.04**
Project									
Residential (DU)	83.0	5,627	467,000	1.279	0.256	0.013	1.471	0.051	0.154
	Total Project		**467,000**	**1.279**	**0.26**	**0.01**	**1.47**	**0.05**	**0.15**
	Net Emissions From Electricity Usage				**0.19**	**0.01**	**1.07**	**0.04**	**0.11**

Summary of Stationary Emissions

	CO	ROC	NOx	PM10	SOx
Total Existing Emissions (lbs/day)	0.07	0.00	0.40	0.01	0.04
Total Project Emissions (lbs/day)	0.26	0.01	1.47	0.05	0.15
Total Net Emissions (lbs/day)	**0.19**	**0.01**	**1.07**	**0.04**	**0.11**

[a] Electricity Usage Rates from Table A9-11-A, CEQA Air Quality Handbook, SCAQMD, 1993.

[b] Emission Factors from Table A9-11-B, CEQA Air Quality Handbook, SCAQMD, 1993.

09/06/2006 5:46 PM

URBEMIS 2002 For Windows 8.7.0

File Name: V:\AQNOISE DIVISION\Active Projects\Eagle Lodge\Operations\Operations (Condo Scenario) - Winter + Summer 2009.urb
Project Name: Eagle Lodge Operations (Winter) - 2009
Project Location: Mountain Counties and Rural Counties
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Tons/Year)

AREA SOURCE EMISSION ESTIMATES (Tons per Year, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.04	0.50	0.37	0.00	0.00
Hearth	1.93	0.05	3.53	0.01	0.53
Landscaping	0.06	0.00	0.42	0.00	0.00
Consumer Prdcts	0.74	-	-	-	-
Architectural Coatings	0.58	-	-	-	-
TOTALS (tpy, unmitigated)	3.35	0.55	4.31	0.01	0.53

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Condo/townhouse general	3.07	5.41	39.35	0.03	5.04
Conference Room	0.26	0.33	2.42	0.00	0.30
Base Lodge Employee Trips	0.55	0.95	6.78	0.01	0.91
Day Spa	0.21	0.36	2.61	0.00	0.32
Ice Rink	0.25	0.43	3.12	0.00	0.39
High turnover (sit-down)	0.77	1.21	8.77	0.01	1.09
Convenience market (24 ho	4.20	7.19	52.24	0.04	6.46
TOTAL EMISSIONS (tons/yr)	9.31	15.88	115.29	0.08	14.51

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2009 Season: Annual

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Condo/townhouse general	5.19	20.53 trips/dwelling unit	83.00	1,704.00
Conference Room		0.80 trips/people	200.00	160.00
Base Lodge Employee Trips		1.83 trips/employees	122.00	223.26
Day Spa		20.87 trips/1000 sq. ft.	8.00	166.96
Ice Rink		39.93 trips/1000 sq. ft.	5.00	199.65
High turnover (sit-down)		2.81 trips/seats	200.00	562.00
Convenience market (24 ho		863.10 trips/1000 sq. ft.	4.00	3,452.40

Sum of Total Trips 6,468.27
Total Vehicle Miles Traveled 52,419.59

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	54.90	1.30	98.40	0.30
Light Truck < 3,750 lbs	15.10	2.60	95.40	2.00
Light Truck 3,751- 5,750	16.10	1.20	98.10	0.70
Med Truck 5,751- 8,500	7.30	1.40	95.90	2.70
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.30	0.00	66.70	33.30
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.90	0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.20	0.00	50.00	50.00
Motorcycle	1.60	75.00	25.00	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.40	7.10	85.70	7.20

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.8	7.3	7.5	9.5	7.4	7.4
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip Speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			
% of Trips - Commercial (by land use)						
Conference Room				2.0	1.0	97.0
Base Lodge Employee Trips				100.0	0.0	0.0
Day Spa				5.0	2.5	92.5
Ice Rink				5.0	2.5	92.5
High turnover (sit-down) rest.				5.0	2.5	92.5
Convenience market (24 hour)				2.0	1.0	97.0

Changes made to the default values for Land Use Trip Percentages

The Trip Rate and/or Acreage values for Condominium/townhouse general have changed from the defaults 6.9/5.19 to 20.53012/5.19
The Primary Trip % for City park changed from 70 to 100
The Diverted Trip % for City park changed from 25 to 0
The Pass-By Trip % for City park changed from 5 to 0
The Primary Trip % for Quality resturant changed from 50 to 100
The Diverted Trip % for Quality resturant changed from 40 to 0
The Pass-By Trip % for Quality resturant changed from 10 to 0

Changes made to the default values for Area

The landscape year changed from 2005 to 2009.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2009.
The operational winter selection item changed from 2 to 1.
The operational summer temperature changed from 60 to 70.

Eagle Lodge (Year 2009 Buildout)

CALINE4 Modeling Results and Estimated Local 1-Hour Carbon Monoxide Concentrations (ppm)

Projected Background 1-Hour CO Concentrations (ppm)[a]

Monitoring Station: Mono County

Year	1-Hr Concentration
2009	1.94

Intersection and Receptor Locations	Future Without Project		Future With Project		
	Traffic CO Contribution[b]	Estimated Local CO Concentration[c]	Traffic CO Contribution[b]	Estimated Local CO Concentration[c]	Exceedance of Significance Threshold[d]
Meridian Boulevard and East of Majestic Pines Road North 2009 WKND					
NE	0.8	2.7	1.3	3.2	NO
SE	1.1	3.0	1.6	3.5	NO
SW	1.0	2.9	1.5	3.4	NO
NW	0.9	2.8	1.4	3.3	NO
Meridian Boulevard and West of Majestic Pines Road North 2009 WKND					
NE	0.9	2.8	1.8	3.7	NO
SE	0.9	2.8	2.9	4.8	NO
SW	1.0	2.9	2.7	4.6	NO
NW	1.1	3.0	2.2	4.1	NO
Minaret Road and Meridian Boulevard 2009 WKND					
NE	1.3	3.2	1.7	3.6	NO
SE	1.6	3.5	1.9	3.8	NO
SW	1.8	3.7	2.1	4.0	NO
NW	1.5	3.4	1.7	3.6	NO
Old Mammoth Road and Meridian Boulevard 2009 WKND					
NE	2.3	4.2	2.3	4.2	NO
SE	2.2	4.1	2.4	4.3	NO
SW	2.5	4.4	2.8	4.7	NO
NW	2.4	4.3	2.5	4.4	NO

a Based on guidance provided by the AQMD Air Quality Analysis Guidance Handbook

b The 1-hour traffic contribution (ppm) is determined by inputing total traffic volumes into the CALINE4 model.

c The estimated local concentration is the traffic contribution + the background concentration.

d The California Ambient Air Quality Standard for 1-hour CO concentrations is 20 ppm.

Eagle Lodge (Year 2009 Buildout)

CALINE4 Modeling Results and Estimated Local 8-Hour Carbon Monoxide Concentrations (ppm)

Projected Background 8-Hour CO Concentrations (ppm) [a]	
Monitoring Station: Mono County	Average Persistence Factor = 0.70
Year: 2009 — 8-Hr Concentration: 1.36	

Intersection and Receptor Locations	Future Without Project: Traffic CO Contribution [b]	Future Without Project: Estimated Local CO Concentration [c]	Future With Project: Traffic CO Contribution [b]	Future With Project: Estimated Local CO Concentration [c]	Future With Project: Exceedance of Significance Threshold [d]
Meridian Boulevard and East of Majestic Pines Road North 2009 WKND					
NE	0.4	1.8	0.7	2.1	NO
SE	0.6	1.9	0.8	2.2	NO
SW	0.5	1.8	0.8	2.2	NO
NW	0.5	1.8	0.8	2.1	NO
Meridian Boulevard and West of Majestic Pines Road North 2009 WKND					
NE	0.4	1.8	0.9	2.3	NO
SE	0.5	1.8	1.1	2.5	NO
SW	0.5	1.8	1.2	2.5	NO
NW	0.6	1.9	1.2	2.5	NO
Minaret Road and Meridian Boulevard 2009 WKND					
NE	0.7	2.1	0.9	2.3	NO
SE	0.8	2.2	1.0	2.3	NO
SW	0.9	2.3	1.1	2.5	NO
NW	0.8	2.2	1.0	2.3	NO
Old Mammoth Road and Meridian Boulevard 2009 WKND					
NE	1.1	2.5	1.1	2.5	NO
SE	1.1	2.5	1.2	2.5	NO
SW	1.2	2.5	1.3	2.7	NO
NW	1.1	2.5	1.2	2.5	NO

a Based on guidance provided by the AQMD Air Quality Analysis Guidance Handbook.

b The persistence factor is calculated as recommended in Table B.15 in the Transportation Project-Level Carbon Monoxide Protocol (Institute of Transportation Studies, UC Davis, Revised 1997). This is a generalized persistence factor likely to provide a conservative estimate in most situations.

c The estimated local concentration is the traffic contribution + the background concentration.

d The California Ambient Air Quality Standard for 8-hour CO concentrations is 9 ppm.

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: MERIDIAN BOULEVARD AND EAST MAJESTIC PINES ROAD NORTH WKND NP
RUN: (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S Z0= 100. CM ALT= 0. (FT)
BRG= WORST CASE VD= .0 CM/S
CLAS= 7 (G) VS= .0 CM/S
MIXH= 1000. M AMB= .0 PPM
SIGTH= 5. DEGREES TEMP= 15.6 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)
A. NF	8	-1500	8	-500	AG	2	6.3	.0	35.0
B. NA	8	-500	8	0	AG	2	16.4	.0	33.0
C. ND	8	0	8	500	AG	162	8.7	.0	33.0
D. NE	8	500	8	1500	AG	162	6.3	.0	35.0
E. SF	-8	1500	-8	500	AG	142	6.3	.0	35.0
F. SA	-8	500	-8	0	AG	22	16.4	.0	33.0
G. SD	-8	0	-8	-500	AG	18	8.7	.0	33.0
H. SE	-8	-500	-8	-1500	AG	18	6.3	.0	35.0
I. WF	1500	15	500	15	AG	251	6.3	.0	50.0
J. WA	500	15	0	15	AG	242	9.3	.0	33.0
K. WD	0	15	-500	15	AG	157	6.7	.0	33.0
L. WE	-500	15	-1500	15	AG	157	6.3	.0	50.0
M. EF	-1500	-15	-500	-15	AG	310	6.3	.0	50.0
N. EA	-500	-15	0	-15	AG	255	9.3	.0	33.0
O. ED	0	-15	500	-15	AG	368	6.7	.0	33.0
P. EE	500	-15	1500	-15	AG	368	6.3	.0	50.0
Q. NL	0	-1900	0	-1800	AG	0	16.4	.0	33.0
R. SL	0	0	-8	500	AG	120	16.4	.0	33.0
S. WL	0	0	500	8	AG	9	9.3	.0	33.0
T. EL	0	0	-500	-8	AG	55	9.3	.0	33.0

III. RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. NE3	25	40	6.0
2. SE3	25	-40	6.0
3. SW3	-25	-40	6.0
4. NW3	-25	40	6.0
5. NE7	38	53	6.0
6. SE7	38	-53	6.0
7. SW7	-38	-53	6.0
8. NW7	-38	53	6.0

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	A	B	C	D	E	F	G	H
1. NE3	264.	.8	.0	.0	.0	.0	.0	.0	.0	.0
2. SE3	355.	1.1	.0	.0	.3	.0	.0	.0	.0	.0
3. SW3	4.	1.0	.0	.0	.2	.0	.0	.1	.0	.0
4. NW3	95.	.9	.0	.0	.0	.0	.0	.0	.0	.0
5. NE7	263.	.6	.0	.0	.0	.0	.0	.0	.0	.0
6. SE7	353.	.8	.0	.0	.2	.0	.0	.0	.0	.0
7. SW7	6.	.7	.0	.0	.1	.0	.0	.0	.0	.0
8. NW7	96.	.7	.0	.0	.0	.0	.0	.0	.0	.0

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	I	J	K	L	M	N	O	P	Q	R	S	T
1. NE3	.0	.0	.2	.0	.1	.1	.0	.0	.0	.1	.0	.0
2. SE3	.0	.0	.0	.0	.0	.0	.2	.0	.0	.4	.0	.0
3. SW3	.0	.0	.0	.0	.0	.1	.0	.0	.0	.4	.0	.0
4. NW3	.0	.4	.0	.0	.0	.0	.0	.2	.0	.1	.0	.0
5. NE7	.0	.0	.1	.0	.1	.1	.0	.0	.0	.1	.0	.0
6. SE7	.0	.0	.0	.0	.0	.0	.1	.0	.0	.3	.0	.0
7. SW7	.0	.0	.0	.0	.0	.1	.0	.0	.0	.3	.0	.0
8. NW7	.0	.2	.0	.0	.0	.0	.0	.1	.0	.1	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: MERIDIAN BOULEVARD AND EAST MAJESTIC PINES ROAD NORTH WKND WP
RUN: (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

```
        U=    .5 M/S            Z0= 100. CM            ALT=     0. (FT)
      BRG= WORST CASE           VD=   .0 CM/S
     CLAS=     7 (G)            VS=   .0 CM/S
     MIXH= 1000. M             AMB=   .0 PPM
    SIGTH=    5. DEGREES      TEMP= 15.6 DEGREE (C)
```

II. LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)
A. NF	8	-1500	8	-500	AG	2	6.3	.0	35.0
B. NA	8	-500	8	0	AG	2	16.9	.0	33.0
C. ND	8	0	8	500	AG	219	9.6	.0	33.0
D. NE	8	500	8	1500	AG	219	6.3	.0	35.0
E. SF	-8	1500	-8	500	AG	218	6.3	.0	35.0
F. SA	-8	500	-8	0	AG	55	16.9	.0	33.0
G. SD	-8	0	-8	-500	AG	18	9.6	.0	33.0
H. SE	-8	-500	-8	-1500	AG	18	6.3	.0	35.0
I. WF	1500	15	500	15	AG	411	6.3	.0	50.0
J. WA	500	15	0	15	AG	402	9.3	.0	33.0
K. WD	0	15	-500	15	AG	339	6.7	.0	33.0
L. WE	-500	15	-1500	15	AG	339	6.3	.0	50.0
M. EF	-1500	-15	-500	-15	AG	584	6.3	.0	50.0
N. EA	-500	-15	0	-15	AG	483	9.3	.0	33.0
O. ED	0	-15	500	-15	AG	639	6.7	.0	33.0
P. EE	500	-15	1500	-15	AG	639	6.3	.0	50.0
Q. NL	0	-1900	0	-1800	AG	0	16.9	.0	33.0
R. SL	0	0	-8	500	AG	163	16.9	.0	33.0
S. WL	0	0	500	8	AG	9	9.3	.0	33.0
T. EL	0	0	-500	-8	AG	101	9.3	.0	33.0

III. RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. NE3	25	40	6.0
2. SE3	25	-40	6.0
3. SW3	-25	-40	6.0
4. NW3	-25	40	6.0
5. NE7	38	53	6.0
6. SE7	38	-53	6.0
7. SW7	-38	-53	6.0
8. NW7	-38	53	6.0

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	A	B	C	D	E	F	G	H
1. NE3	264.	1.3	.0	.0	.1	.0	.0	.0	.0	.0
2. SE3	355.	1.6	.0	.0	.4	.0	.0	.2	.0	.0
3. SW3	4.	1.5	.0	.0	.2	.0	.0	.3	.0	.0
4. NW3	95.	1.4	.0	.0	.1	.0	.0	.0	.0	.0
5. NE7	263.	1.0	.0	.0	.1	.0	.0	.0	.0	.0
6. SE7	353.	1.2	.0	.0	.3	.0	.0	.1	.0	.0
7. SW7	6.	1.2	.0	.0	.2	.0	.0	.2	.0	.0
8. NW7	96.	1.1	.0	.0	.1	.0	.0	.0	.0	.0

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

CONC/LINK (PPM)

RECEPTOR	I	J	K	L	M	N	O	P	Q	R	S	T
1. NE3	.0	.0	.4	.0	.2	.2	.0	.0	.0	.2	.0	.0
2. SE3	.0	.2	.0	.0	.0	.0	.3	.0	.0	.5	.0	.0
3. SW3	.0	.0	.0	.0	.0	.3	.0	.0	.0	.5	.0	.0
4. NW3	.1	.6	.0	.0	.0	.0	.2	.2	.0	.2	.0	.0
5. NE7	.0	.0	.2	.0	.2	.2	.0	.0	.0	.1	.0	.0
6. SE7	.0	.1	.0	.0	.0	.0	.2	.0	.0	.3	.0	.0
7. SW7	.0	.0	.0	.0	.0	.2	.0	.0	.0	.3	.0	.0
8. NW7	.0	.4	.0	.0	.0	.0	.1	.2	.0	.1	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: OLD MAMMOTH ROAD AND MERIDIAN BOULEVARD WKND NP
RUN: (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S	Z0= 100. CM	ALT= 0. (FT)
BRG= WORST CASE	VD= .0 CM/S	
CLAS= 7 (G)	VS= .0 CM/S	
MIXH= 1000. M	AMB= .0 PPM	
SIGTH= 5. DEGREES	TEMP= 15.6 DEGREE (C)	

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)
A. NF	15	-1500	15	-500	AG	502	6.3	.0	35.0
B. NA	15	-500	15	0	AG	378	11.1	.0	33.0
C. ND	15	0	15	500	AG	594	7.4	.0	33.0
D. NE	15	500	15	1500	AG	594	6.3	.0	35.0
E. SF	-15	1500	-15	500	AG	640	6.3	.0	35.0
F. SA	-15	500	-15	0	AG	509	11.1	.0	33.0
G. SD	-15	0	-15	-500	AG	652	8.0	.0	33.0
H. SE	-15	-500	-15	-1500	AG	652	6.3	.0	35.0
I. WF	1500	23	500	23	AG	472	6.3	.0	50.0
J. WA	500	23	0	23	AG	350	12.1	.0	45.0
K. WD	0	23	-500	23	AG	450	7.2	.0	33.0
L. WE	-500	23	-1500	23	AG	450	6.3	.0	50.0
M. EF	-1500	-23	-500	-23	AG	481	6.3	.0	50.0
N. EA	-500	-23	0	-23	AG	340	12.1	.0	45.0
O. ED	0	-23	500	-23	AG	399	7.2	.0	33.0
P. EE	500	-23	1500	-23	AG	399	6.3	.0	50.0
Q. NL	0	0	15	-500	AG	124	11.1	.0	33.0
R. SL	0	0	-15	500	AG	131	11.1	.0	33.0
S. WL	0	0	500	15	AG	122	12.1	.0	33.0
T. EL	0	0	-500	-15	AG	141	12.1	.0	33.0

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. NE3	33	48	6.0
2. SE3	33	-48	6.0
3. SW3	-33	-48	6.0
4. NW3	-33	48	6.0
5. NE7	46	61	6.0
6. SE7	46	-61	6.0
7. SW7	-46	-61	6.0
8. NW7	-46	61	6.0

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. NE3	185.	2.3	.0	.8	.2	.0	.0	.0	.3	.2
2. SE3	355.	2.2	.0	.2	.8	.0	.2	.3	.0	.0
3. SW3	5.	2.5	.0	.0	.2	.2	.0	1.0	.3	.0
4. NW3	175.	2.4	.2	.3	.0	.0	.0	.3	.9	.0
5. NE7	186.	1.6	.0	.6	.0	.0	.0	.0	.2	.2
6. SE7	353.	1.6	.0	.0	.5	.0	.1	.3	.0	.0
7. SW7	6.	1.7	.0	.0	.2	.2	.0	.7	.0	.0
8. NW7	173.	1.6	.1	.2	.0	.0	.0	.0	.6	.0

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. NE3	.0	.3	.0	.0	.0	.0	.1	.0	.2	.0	.0	.0
2. SE3	.0	.2	.0	.0	.0	.0	.2	.0	.0	.2	.0	.0
3. SW3	.0	.0	.1	.0	.0	.3	.0	.0	.0	.2	.0	.0
4. NW3	.0	.0	.2	.0	.0	.2	.0	.0	.2	.0	.0	.0
5. NE7	.0	.2	.0	.0	.0	.0	.1	.0	.2	.0	.0	.0
6. SE7	.0	.2	.0	.0	.0	.0	.1	.0	.0	.1	.0	.0
7. SW7	.0	.0	.1	.0	.0	.2	.0	.0	.0	.2	.0	.0
8. NW7	.0	.0	.2	.0	.0	.2	.0	.0	.1	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: OLD MAMMOTH ROAD AND MERIDIAN BOULEVARD WKND WP
RUN: (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S	Z0= 100. CM	ALT= 0. (FT)
BRG= WORST CASE	VD= .0 CM/S	
CLAS= 7 (G)	VS= .0 CM/S	
MIXH= 1000. M	AMB= .0 PPM	
SIGTH= 5. DEGREES	TEMP= 15.6 DEGREE (C)	

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)
A. NF	15	-1500	15	-500	AG	507	6.3	.0	35.0
B. NA	15	-500	15	0	AG	378	11.1	.0	33.0
C. ND	15	0	15	500	AG	643	7.6	.0	33.0
D. NE	15	500	15	1500	AG	643	6.3	.0	35.0
E. SF	-15	1500	-15	500	AG	673	6.3	.0	35.0
F. SA	-15	500	-15	0	AG	542	11.6	.0	33.0
G. SD	-15	0	-15	-500	AG	663	8.2	.0	33.0
H. SE	-15	-500	-15	-1500	AG	663	6.3	.0	35.0
I. WF	1500	23	500	23	AG	492	6.3	.0	50.0
J. WA	500	23	0	23	AG	370	12.1	.0	45.0
K. WD	0	23	-500	23	AG	508	7.2	.0	33.0
L. WE	-500	23	-1500	23	AG	508	6.3	.0	50.0
M. EF	-1500	-23	-500	-23	AG	571	6.3	.0	50.0
N. EA	-500	-23	0	-23	AG	381	12.1	.0	45.0
O. ED	0	-23	500	-23	AG	429	7.2	.0	33.0
P. EE	500	-23	1500	-23	AG	429	6.3	.0	50.0
Q. NL	0	0	15	-500	AG	129	11.1	.0	33.0
R. SL	0	0	-15	500	AG	131	11.1	.0	33.0
S. WL	0	0	500	15	AG	122	12.1	.0	33.0
T. EL	0	0	-500	-15	AG	190	12.1	.0	33.0

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. NE3	33	48	6.0
2. SE3	33	-48	6.0
3. SW3	-33	-48	6.0
4. NW3	-33	48	6.0
5. NE7	46	61	6.0
6. SE7	46	-61	6.0
7. SW7	-46	-61	6.0
8. NW7	-46	61	6.0

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. NE3	185.	2.3	.0	.8	.3	.0	.0	.0	.3	.2
2. SE3	355.	2.4	.0	.2	.9	.0	.2	.4	.0	.0
3. SW3	5.	2.8	.0	.0	.3	.2	.0	1.1	.3	.0
4. NW3	175.	2.5	.2	.3	.0	.0	.0	.4	1.0	.0
5. NE7	186.	1.6	.0	.6	.0	.0	.0	.0	.2	.2
6. SE7	353.	1.7	.0	.0	.6	.0	.2	.3	.0	.0
7. SW7	6.	1.9	.0	.0	.2	.2	.0	.8	.0	.0
8. NW7	173.	1.7	.1	.2	.0	.0	.0	.0	.7	.0

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. NE3	.0	.3	.0	.0	.0	.0	.1	.0	.2	.0	.0	.0
2. SE3	.0	.2	.0	.0	.0	.0	.2	.0	.0	.2	.0	.0
3. SW3	.0	.0	.1	.0	.0	.3	.0	.0	.0	.2	.0	.1
4. NW3	.0	.0	.2	.0	.0	.2	.0	.0	.2	.0	.0	.1
5. NE7	.0	.2	.0	.0	.0	.0	.1	.0	.2	.0	.0	.0
6. SE7	.0	.2	.0	.0	.0	.0	.2	.0	.0	.1	.0	.0
7. SW7	.0	.0	.1	.0	.0	.2	.0	.0	.0	.2	.0	.0
8. NW7	.0	.0	.2	.0	.0	.2	.0	.0	.1	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: MINARET ROAD AND MERIDIAN BOULEVARD WKND NP
RUN: (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S	Z0= 100. CM	ALT= 0. (FT)
BRG= WORST CASE	VD= .0 CM/S	
CLAS= 7 (G)	VS= .0 CM/S	
MIXH= 1000. M	AMB= .0 PPM	
SIGTH= 5. DEGREES	TEMP= 15.6 DEGREE (C)	

II. LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)
	LINK COORDINATES (FT)								
A. NF	15	-1500	15	-500	AG	174	6.3	.0	35.0
B. NA	15	-500	15	0	AG	136	12.7	.0	33.0
C. ND	15	0	15	500	AG	344	7.6	.0	33.0
D. NE	15	500	15	1500	AG	344	6.3	.0	35.0
E. SF	-15	1500	-15	500	AG	416	6.3	.0	35.0
F. SA	-15	500	-15	0	AG	250	12.7	.0	33.0
G. SD	-15	0	-15	-500	AG	255	7.6	.0	33.0
H. SE	-15	-500	-15	-1500	AG	255	6.3	.0	35.0
I. WF	1500	23	500	23	AG	377	6.3	.0	50.0
J. WA	500	23	0	23	AG	354	10.3	.0	45.0
K. WD	0	23	-500	23	AG	316	6.8	.0	33.0
L. WE	-500	23	-1500	23	AG	316	6.3	.0	50.0
M. EF	-1500	-23	-500	-23	AG	498	6.3	.0	50.0
N. EA	-500	-23	0	-23	AG	405	10.3	.0	45.0
O. ED	0	-23	500	-23	AG	550	6.9	.0	33.0
P. EE	500	-23	1500	-23	AG	550	6.3	.0	50.0
Q. NL	0	0	15	-500	AG	38	12.7	.0	33.0
R. SL	0	0	-15	500	AG	166	12.7	.0	33.0
S. WL	0	0	500	15	AG	23	10.3	.0	33.0
T. EL	0	0	-500	-15	AG	93	10.3	.0	33.0

III. RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
	COORDINATES (FT)		
1. NE3	33	48	6.0
2. SE3	33	-48	6.0
3. SW3	-33	-48	6.0
4. NW3	-33	48	6.0
5. NE7	46	61	6.0
6. SE7	46	-61	6.0
7. SW7	-46	-61	6.0
8. NW7	-46	61	6.0

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	A	B	C	D	E	F	G	H
			CONC/LINK (PPM)							
1. NE3	262.	1.3	.0	.0	.2	.0	.0	.1	.0	.0
2. SE3	354.	1.6	.0	.1	.5	.0	.1	.2	.0	.0
3. SW3	4.	1.8	.0	.0	.1	.2	.1	.6	.0	.0
4. NW3	95.	1.5	.0	.0	.1	.0	.0	.2	.0	.0
5. NE7	260.	1.0	.0	.0	.1	.0	.0	.1	.0	.0
6. SE7	352.	1.2	.0	.0	.4	.0	.0	.2	.0	.0
7. SW7	6.	1.3	.0	.0	.1	.1	.0	.4	.0	.0
8. NW7	96.	1.2	.0	.0	.1	.0	.0	.2	.0	.0

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	I	J	K	L	M	N	O	P	Q	R	S	T
	CONC/LINK (PPM)											
1. NE3	.0	.0	.3	.0	.1	.2	.0	.0	.0	.1	.0	.0
2. SE3	.0	.1	.0	.0	.0	.0	.2	.0	.0	.3	.0	.0
3. SW3	.0	.0	.0	.0	.0	.3	.0	.0	.0	.3	.0	.0
4. NW3	.0	.6	.0	.0	.0	.0	.0	.2	.0	.1	.0	.0
5. NE7	.0	.0	.2	.0	.0	.2	.0	.0	.0	.1	.0	.0
6. SE7	.0	.1	.0	.0	.0	.0	.2	.0	.0	.2	.0	.0
7. SW7	.0	.0	.0	.0	.0	.2	.0	.0	.0	.2	.0	.0
8. NW7	.0	.4	.0	.0	.0	.0	.0	.2	.0	.1	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: MINARET ROAD AND MERIDIAN BOULEVARD WKND WP
RUN: (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

```
        U=    .5 M/S            Z0= 100. CM           ALT=     0. (FT)
      BRG= WORST CASE           VD=   .0 CM/S
     CLAS=     7 (G)            VS=   .0 CM/S
     MIXH= 1000. M             AMB=   .0 PPM
    SIGTH=    5. DEGREES      TEMP= 15.6 DEGREE (C)
```

II. LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)
A. NF	15	-1500	15	-500	AG	209	6.3	.0	35.0
B. NA	15	-500	15	0	AG	136	13.3	.0	33.0
C. ND	15	0	15	500	AG	400	8.2	.0	33.0
D. NE	15	500	15	1500	AG	400	6.3	.0	35.0
E. SF	-15	1500	-15	500	AG	450	6.3	.0	35.0
F. SA	-15	500	-15	0	AG	284	13.3	.0	33.0
G. SD	-15	0	-15	-500	AG	310	7.8	.0	33.0
H. SE	-15	-500	-15	-1500	AG	310	6.3	.0	35.0
I. WF	1500	23	500	23	AG	453	6.3	.0	50.0
J. WA	500	23	0	23	AG	430	9.9	.0	45.0
K. WD	0	23	-500	23	AG	461	6.8	.0	33.0
L. WE	-500	23	-1500	23	AG	461	6.3	.0	50.0
M. EF	-1500	-23	-500	-23	AG	727	6.3	.0	50.0
N. EA	-500	-23	0	-23	AG	578	9.9	.0	45.0
O. ED	0	-23	500	-23	AG	668	6.8	.0	33.0
P. EE	500	-23	1500	-23	AG	668	6.3	.0	50.0
Q. NL	0	0	15	-500	AG	73	13.3	.0	33.0
R. SL	0	0	-15	500	AG	166	13.3	.0	33.0
S. WL	0	0	500	15	AG	23	9.9	.0	33.0
T. EL	0	0	-500	-15	AG	149	9.9	.0	33.0

III. RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. NE3	33	48	6.0
2. SE3	33	-48	6.0
3. SW3	-33	-48	6.0
4. NW3	-33	48	6.0
5. NE7	46	61	6.0
6. SE7	46	-61	6.0
7. SW7	-46	-61	6.0
8. NW7	-46	61	6.0

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	A	B	C	D	E	F	G	H
1. NE3	262.	1.7	.0	.0	.2	.0	.0	.2	.0	.0
2. SE3	354.	1.9	.0	.1	.6	.0	.1	.3	.0	.0
3. SW3	5.	2.1	.0	.0	.2	.1	.0	.7	.1	.0
4. NW3	95.	1.7	.0	.0	.1	.0	.0	.3	.0	.0
5. NE7	260.	1.3	.0	.0	.2	.0	.0	.2	.0	.0
6. SE7	352.	1.4	.0	.0	.4	.0	.0	.3	.0	.0
7. SW7	6.	1.6	.0	.0	.2	.1	.0	.5	.0	.0
8. NW7	96.	1.4	.0	.0	.1	.0	.0	.2	.0	.0

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	I	J	K	L	M	N	O	P	Q	R	S	T
1. NE3	.0	.0	.5	.0	.2	.3	.0	.0	.0	.1	.0	.1
2. SE3	.0	.2	.0	.0	.0	.0	.3	.0	.0	.3	.0	.0
3. SW3	.0	.0	.1	.0	.0	.4	.0	.0	.0	.3	.0	.0
4. NW3	.1	.7	.0	.0	.0	.0	.0	.3	.0	.1	.0	.0
5. NE7	.0	.0	.3	.0	.1	.3	.0	.0	.0	.1	.0	.1
6. SE7	.0	.2	.0	.0	.0	.0	.2	.0	.0	.2	.0	.0
7. SW7	.0	.0	.1	.0	.0	.3	.0	.0	.0	.2	.0	.0
8. NW7	.1	.5	.0	.0	.0	.0	.0	.3	.0	.1	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: MERIDIAN BOULEVARD AND WEST MAJESTIC PINES ROAD NORTH WKND NP
RUN: (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S   Z0= 100. CM   ALT= 0. (FT)
BRG= WORST CASE   VD= .0 CM/S
CLAS= 7 (G)   VS= .0 CM/S
MIXH= 1000. M   AMB= .0 PPM
SIGTH= 5. DEGREES   TEMP= 15.6 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)
	LINK COORDINATES (FT)								
A. NF	8	-1500	8	-500	AG	62	6.3	.0	35.0
B. NA	8	-500	8	0	AG	59	10.3	.0	33.0
C. ND	8	0	8	500	AG	101	6.8	.0	33.0
D. NE	8	500	8	1500	AG	101	6.3	.0	35.0
E. SF	-8	1500	-8	500	AG	223	6.3	.0	35.0
F. SA	-8	500	-8	0	AG	25	10.3	.0	33.0
G. SD	-8	0	-8	-500	AG	74	6.8	.0	33.0
H. SE	-8	-500	-8	-1500	AG	74	6.3	.0	35.0
I. WF	1500	8	500	8	AG	156	6.3	.0	35.0
J. WA	500	8	0	8	AG	110	13.3	.0	33.0
K. WD	0	8	-500	8	AG	23	7.4	.0	33.0
L. WE	-500	8	-1500	8	AG	23	6.3	.0	35.0
M. EF	-1500	-8	-500	-8	AG	18	6.3	.0	35.0
N. EA	-500	-8	0	-8	AG	18	13.3	.0	33.0
O. ED	0	-8	500	-8	AG	261	7.6	.0	33.0
P. EE	500	-8	1500	-8	AG	261	6.3	.0	35.0
Q. NL	0	0	8	-500	AG	3	10.3	.0	33.0
R. SL	0	0	-8	500	AG	198	10.3	.0	33.0
S. WL	0	0	500	8	AG	46	13.3	.0	33.0
T. EL	-1900	0	-1800	0	AG	0	13.3	.0	33.0

POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
	COORDINATES (FT)		
1. NE3	25	25	6.0
2. SE3	25	-25	6.0
3. SW3	-25	-25	6.0
4. NW3	-25	25	6.0
5. NE7	38	38	6.0
6. SE7	38	-38	6.0
7. SW7	-38	-38	6.0
8. NW7	-38	38	6.0

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	A	B	C	D	E	F	G	H
			CONC/LINK (PPM)							
1. NE3	94.	.9	.0	.0	.0	.0	.0	.0	.0	.0
2. SE3	355.	.9	.0	.0	.2	.0	.0	.0	.0	.0
3. SW3	86.	1.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NW3	94.	1.1	.0	.0	.0	.0	.0	.0	.0	.0
5. NE7	96.	.6	.0	.0	.0	.0	.0	.0	.0	.0

RUN: (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	I	J	K	L	M	N	O	P	Q	R	S	T
	CONC/LINK (PPM)											
1. NE3	.0	.4	.0	.0	.0	.0	.2	.1	.0	.0	.1	.0
2. SE3	.0	.0	.0	.0	.0	.0	.1	.0	.0	.3	.0	.0
3. SW3	.0	.2	.0	.0	.0	.0	.4	.0	.0	.0	.1	.0
4. NW3	.0	.4	.0	.0	.0	.0	.2	.1	.0	.1	.1	.0
5. NE7	.0	.2	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
6. SE7	.0	.0	.0	.0	.0	.0	.1	.0	.0	.2	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: MERIDIAN BOULEVARD AND WEST MAJESTIC PINES ROAD NORTH WKND WP
RUN: (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S	Z0= 100. CM	ALT= 0. (FT)
BRG= WORST CASE	VD= .0 CM/S	
CLAS= 7 (G)	VS= .0 CM/S	
MIXH= 1000. M	AMB= .0 PPM	
SIGTH= 5. DEGREES	TEMP= 15.6 DEGREE (C)	

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)
A. NF	8	-1500	8	-500	AG	81	6.3	.0	35.0
B. NA	8	-500	8	0	AG	78	9.3	.0	33.0
C. ND	8	0	8	500	AG	106	6.7	.0	33.0
D. NE	8	500	8	1500	AG	106	6.3	.0	35.0
E. SF	-8	1500	-8	500	AG	564	6.3	.0	35.0
F. SA	-8	500	-8	0	AG	59	9.3	.0	33.0
G. SD	-8	0	-8	-500	AG	101	6.7	.0	33.0
H. SE	-8	-500	-8	-1500	AG	101	6.3	.0	35.0
I. WF	1500	8	500	8	AG	155	6.3	.0	35.0
J. WA	500	8	0	8	AG	116	15.5	.0	33.0
K. WD	0	8	-500	8	AG	22	8.4	.0	33.0
L. WE	-500	8	-1500	8	AG	22	6.3	.0	35.0
M. EF	-1500	-8	-500	-8	AG	18	6.3	.0	35.0
N. EA	-500	-8	0	-8	AG	18	15.5	.0	33.0
O. ED	0	-8	500	-8	AG	589	17.6	.0	33.0
P. EE	500	-8	1500	-8	AG	589	6.3	.0	35.0
Q. NL	0	0	8	-500	AG	3	9.3	.0	33.0
R. SL	0	0	-8	500	AG	505	9.9	.0	33.0
S. WL	0	0	500	8	AG	39	15.5	.0	33.0
T. EL	-1900	0	-1800	0	AG	0	15.5	.0	33.0

POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. NE3	25	25	6.0
2. SE3	25	-25	6.0
3. SW3	-25	-25	6.0
4. NW3	-25	25	6.0
5. NE7	38	38	6.0
6. SE7	38	-38	6.0
7. SW7	-38	-38	6.0
8. NW7	-38	38	6.0

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. NE3	96.	1.8	.0	.0	.0	.0	.0	.0	.0	.0
2. SE3	85.	2.9	.0	.0	.0	.0	.0	.0	.0	.0
3. SW3	86.	2.7	.0	.0	.0	.0	.0	.0	.0	.0
4. NW3	96.	2.2	.0	.0	.0	.0	.0	.0	.0	.0
5. NE7	99.	1.3	.0	.0	.0	.0	.0	.0	.0	.0

RUN: (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. NE3	.0	.5	.0	.0	.0	.0	1.1	.1	.0	.0	.1	.0
2. SE3	.0	.2	.0	.0	.0	.0	2.4	.1	.0	.0	.1	.0
3. SW3	.0	.2	.0	.0	.0	.0	2.1	.1	.0	.0	.1	.0
4. NW3	.0	.4	.0	.0	.0	.0	1.1	.1	.0	.3	.1	.0
5. NE7	.0	.3	.0	.0	.0	.0	.9	.0	.0	.0	.0	.0
6. SE7	.0	.2	.0	.0	.0	.0	1.2	.0	.0	.0	.0	.0

Title   : Mono County Avg 2009 Winter Default Title
Version   : Emfac2002 V2.2 Apr 23 2003
Run Date : 06/28/06 14:07:34
Scen Year: 2009 -- Model Years: 1965 to 2009
Season   : Winter
Area   : Mono County
****
Year:2009 -- Model Years 1965 to 2009 Inclusive -- Winter
Emfac2002 Emission Factors: V2.2 Apr 23 2003
Pollutant Name: Carbon Monoxide   Temperature: 27F Relative Humidity: 50%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
3	9.498	17.946	14.768	35.841	40.226	54.809	17.560
4	9.104	17.066	14.109	35.841	40.226	54.809	16.934
5	8.739	16.257	13.505	35.841	40.226	54.809	16.359
6	8.400	15.509	12.826	32.931	36.847	52.521	15.486
7	8.085	14.820	12.205	30.322	33.827	50.430	14.689
8	7.792	14.184	11.634	27.980	31.125	48.520	13.961
9	7.519	13.597	11.110	25.874	28.704	46.775	13.294
10	7.265	13.053	10.627	23.979	26.530	45.183	12.682
11	7.027	12.549	10.183	22.270	24.576	43.733	12.121
12	6.804	12.082	9.772	20.727	22.817	42.412	11.604
13	6.595	11.648	9.393	19.332	21.231	41.214	11.129
14	6.400	11.244	9.041	18.070	19.800	40.128	10.690
15	6.216	10.868	8.716	16.926	18.507	39.148	10.286
16	6.043	10.518	8.415	15.889	17.338	38.268	9.912
17	5.881	10.192	8.135	14.947	16.278	37.481	9.566
18	5.728	9.887	7.874	14.092	15.318	36.783	9.246
19	5.583	9.602	7.632	13.313	14.446	36.168	8.950
20	5.447	9.337	7.407	12.605	13.655	35.635	8.675
21	5.318	9.088	7.198	11.960	12.936	35.178	8.420
22	5.197	8.856	7.003	11.372	12.282	34.795	8.184
23	5.082	8.639	6.821	10.836	11.687	34.485	7.965
24	4.974	8.436	6.652	10.348	11.146	34.244	7.762
25	4.871	8.247	6.494	9.903	10.654	34.073	7.574
26	4.775	8.070	6.348	9.497	10.207	33.969	7.400
27	4.683	7.904	6.211	9.127	9.800	33.934	7.239
28	4.596	7.750	6.085	8.790	9.430	33.965	7.090
29	4.515	7.607	5.967	8.484	9.095	34.064	6.953
30	4.437	7.473	5.858	8.206	8.791	34.232	6.826
31	4.365	7.350	5.757	7.955	8.516	34.469	6.711
32	4.296	7.235	5.664	7.727	8.268	34.778	6.605
33	4.232	7.129	5.579	7.522	8.045	35.160	6.509
34	4.171	7.032	5.501	7.338	7.846	35.618	6.422
35	4.114	6.944	5.429	7.174	7.669	36.155	6.344
36	4.061	6.863	5.365	7.029	7.513	36.775	6.275
37	4.012	6.791	5.308	6.901	7.376	37.481	6.214
38	3.966	6.726	5.256	6.790	7.258	38.280	6.162
39	3.924	6.669	5.212	6.696	7.157	39.175	6.118
40	3.885	6.620	5.173	6.616	7.074	40.173	6.083

Eagle Lodge (Year 2024 Buildout)

CALINE4 Modeling Results and Estimated Local 1-Hour Carbon Monoxide Concentrations (ppm)

Projected Background 1-Hour CO Concentrations (ppm)[a]	
Monitoring Station: Central LA	
Year	1-Hr Concentration
2024	1.94

Intersection and Receptor Locations	Future Without Project		Future With Project		
	Traffic CO Contribution[b]	Estimated Local CO Concentration[c]	Traffic CO Contribution[b]	Estimated Local CO Concentration[c]	Exceedance of Significance Threshold[d]
Meridian Boulevard and East of Majestic Pines Road North 2024 WKND					
NE	0.3	2.2	0.4	2.3	NO
SE	0.4	2.3	0.6	2.5	NO
SW	0.3	2.2	0.5	2.4	NO
NW	0.3	2.2	0.4	2.3	NO
Meridian Boulevard and West of Majestic Pines Road North 2024 WKND					
NE	0.3	2.2	0.4	2.3	NO
SE	0.3	2.2	0.7	2.6	NO
SW	0.3	2.2	0.7	2.6	NO
NW	0.3	2.2	0.5	2.4	NO
Minaret Road and Meridian Boulevard 2024 WKND					
NE	0.5	2.4	0.6	2.5	NO
SE	0.5	2.4	0.7	2.6	NO
SW	0.6	2.5	0.7	2.6	NO
NW	0.6	2.5	0.7	2.6	NO
Old Mammoth Road and Meridian Boulevard 2024 WKND					
NE	0.7	2.6	0.6	2.5	NO
SE	0.6	2.5	0.5	2.4	NO
SW	0.7	2.6	0.6	2.5	NO
NW	0.7	2.6	0.8	2.7	NO

a Based on guidance provided by the AQMD Air Quality Analysis Guidance Handbook

b The 1-hour traffic contribution (ppm) is determined by inputing total traffic volumes into the CALINE4 model.

c The estimated local concentration is the traffic contribution + the background concentration.

d The California Ambient Air Quality Standard for 1-hour CO concentrations is 20 ppm.

Eagle Lodge (Year 2024 Buildout)

CALINE4 Modeling Results and Estimated Local 8-Hour Carbon Monoxide Concentrations (ppm)

Projected Background 8-Hour CO Concentrations (ppm) [a]	
Monitoring Station: Central LA	Average Persistence Factor = 0.70
Year: 2024 — 8-Hr Concentration: 1.36	

Intersection and Receptor Locations	Future Without Project		Future With Project		
	Traffic CO Contribution [b]	Estimated Local CO Concentration [c]	Traffic CO Contribution [b]	Estimated Local CO Concentration [c]	Exceedance of Significance Threshold [d]
Meridian Boulevard and East of Majestic Pines Road North 2024 WKND					
NE	0.1	1.5	0.2	1.6	NO
SE	0.2	1.6	0.3	1.6	NO
SW	0.2	1.6	0.3	1.6	NO
NW	0.2	1.6	0.3	1.6	NO
Meridian Boulevard and West of Majestic Pines Road North 2024 WKND					
NE	0.1	1.5	0.2	1.6	NO
SE	0.1	1.5	0.3	1.6	NO
SW	0.1	1.5	0.3	1.6	NO
NW	0.1	1.5	0.3	1.6	NO
Minaret Road and Meridian Boulevard 2024 WKND					
NE	0.3	1.6	0.3	1.6	NO
SE	0.3	1.6	0.4	1.7	NO
SW	0.3	1.6	0.4	1.7	NO
NW	0.3	1.6	0.4	1.7	NO
Old Mammoth Road and Meridian Boulevard 2024 WKND					
NE	0.4	1.7	0.4	1.7	NO
SE	0.3	1.6	0.3	1.6	NO
SW	0.4	1.7	0.3	1.6	NO
NW	0.4	1.7	0.4	1.7	NO

a Based on guidance provided by the AQMD Air Quality Analysis Guidance Handbook.

b The persistence factor is calculated as recommended in Table B.15 in the Transportation Project-Level Carbon Monoxide Protocol (Institute of Transportation Studies, UC Davis, Revised 1997). This is a generalized persistence factor likely to provide a conservative estimate in most situations.

c The estimated local concentration is the traffic contribution + the background concentration.

d The California Ambient Air Quality Standard for 8-hour CO concentrations is 9 ppm.

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: MERIDIAN BOULEVARD AND EAST MAJESTIC PINES ROAD WKND NP
RUN: (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S	Z0= 100. CM	ALT= 0. (FT)
BRG= WORST CASE	VD= .0 CM/S	
CLAS= 7 (G)	VS= .0 CM/S	
MIXH= 1000. M	AMB= .0 PPM	
SIGTH= 5. DEGREES	TEMP= 15.6 DEGREE (C)	

II. LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)
	LINK COORDINATES (FT)								
A. NF	8	-1500	8	-500	AG	0	1.6	.0	35.0
B. NA	8	-500	8	0	AG	0	3.0	.0	33.0
C. ND	8	0	8	500	AG	338	2.3	.0	33.0
D. NE	8	500	8	1500	AG	338	1.6	.0	35.0
E. SF	-8	1500	-8	500	AG	265	1.6	.0	35.0
F. SA	-8	500	-8	0	AG	65	3.0	.0	33.0
G. SD	-8	0	-8	-500	AG	0	2.0	.0	33.0
H. SE	-8	-500	-8	-1500	AG	0	1.6	.0	35.0
I. WF	1500	15	500	15	AG	374	1.6	.0	50.0
J. WA	500	15	0	15	AG	374	2.2	.0	33.0
K. WD	0	15	-500	15	AG	259	1.7	.0	33.0
L. WE	-500	15	-1500	15	AG	259	1.6	.0	50.0
M. EF	-1500	-15	-500	-15	AG	415	1.6	.0	50.0
N. EA	-500	-15	0	-15	AG	257	2.2	.0	33.0
O. ED	0	-15	500	-15	AG	457	1.7	.0	33.0
P. EE	500	-15	1500	-15	AG	457	1.6	.0	50.0
Q. NL	0	-1900	0	-1800	AG	0	3.0	.0	33.0
R. SL	0	0	-8	500	AG	200	3.0	.0	33.0
S. WL	0	0	500	8	AG	0	2.2	.0	33.0
T. EL	0	0	-500	-8	AG	158	2.2	.0	33.0

III. RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
	COORDINATES (FT)		
1. NE3	25	40	6.0
2. SE3	25	-40	6.0
3. SW3	-25	-40	6.0
4. NW3	-25	40	6.0
5. NE7	38	53	6.0
6. SE7	38	-53	6.0
7. SW7	-38	-53	6.0
8. NW7	-38	53	6.0

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	A	B	C	D	E	F	G	H
			CONC/LINK (PPM)							
1. NE3	355.	.3	.0	.0	.2	.0	.0	.0	.0	.0
2. SE3	356.	.4	.0	.0	.2	.0	.0	.0	.0	.0
3. SW3	4.	.3	.0	.0	.0	.0	.0	.0	.0	.0
4. NW3	95.	.3	.0	.0	.0	.0	.0	.0	.0	.0
5. NE7	263.	.2	.0	.0	.0	.0	.0	.0	.0	.0
6. SE7	354.	.3	.0	.0	.1	.0	.0	.0	.0	.0
7. SW7	6.	.3	.0	.0	.0	.0	.0	.0	.0	.0
8. NW7	96.	.3	.0	.0	.0	.0	.0	.0	.0	.0

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	I	J	K	L	M	N	O	P	Q	R	S	T
	CONC/LINK (PPM)											
1. NE3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. SE3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NW3	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. NE7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. SE7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. SW7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. NW7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: MERIDIAN BOULEVARD AND EAST MAJESTIC PINES ROAD NORTH WKND WP
RUN: (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S Z0= 100. CM ALT= 0. (FT)
BRG= WORST CASE VD= .0 CM/S
CLAS= 7 (G) VS= .0 CM/S
MIXH= 1000. M AMB= .0 PPM
SIGTH= 5. DEGREES TEMP= 15.6 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)
A. NF	8	-1500	8	-500	AG	0	1.6	.0	35.0
B. NA	8	-500	8	0	AG	0	3.1	.0	33.0
C. ND	8	0	8	500	AG	395	3.0	.0	33.0
D. NE	8	500	8	1500	AG	395	1.6	.0	35.0
E. SF	-8	1500	-8	500	AG	341	1.6	.0	35.0
F. SA	-8	500	-8	0	AG	98	3.1	.0	33.0
G. SD	-8	0	-8	-500	AG	0	2.0	.0	33.0
H. SE	-8	-500	-8	-1500	AG	0	1.6	.0	35.0
I. WF	1500	15	500	15	AG	534	1.6	.0	50.0
J. WA	500	15	0	15	AG	534	2.2	.0	33.0
K. WD	0	15	-500	15	AG	441	1.7	.0	33.0
L. WE	-500	15	-1500	15	AG	441	1.6	.0	50.0
M. EF	-1500	-15	-500	-15	AG	689	1.6	.0	50.0
N. EA	-500	-15	0	-15	AG	485	2.2	.0	33.0
O. ED	0	-15	500	-15	AG	728	1.7	.0	33.0
P. EE	500	-15	1500	-15	AG	728	1.6	.0	50.0
Q. NL	0	-1900	0	-1800	AG	0	3.1	.0	33.0
R. SL	0	0	-8	500	AG	243	3.1	.0	33.0
S. WL	0	0	500	8	AG	0	2.2	.0	33.0
T. EL	0	0	-500	-8	AG	204	2.2	.0	33.0

III. RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. NE3	25	40	6.0
2. SE3	25	-40	6.0
3. SW3	-25	-40	6.0
4. NW3	-25	40	6.0
5. NE7	38	53	6.0
6. SE7	38	-53	6.0
7. SW7	-38	-53	6.0
8. NW7	-38	53	6.0

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	A	B	C	D	E	F	G	H
1. NE3	264.	.4	.0	.0	.0	.0	.0	.0	.0	.0
2. SE3	356.	.6	.0	.0	.2	.0	.0	.0	.0	.0
3. SW3	5.	.5	.0	.0	.1	.0	.0	.0	.0	.0
4. NW3	95.	.4	.0	.0	.0	.0	.0	.0	.0	.0
5. NE7	263.	.3	.0	.0	.0	.0	.0	.0	.0	.0
6. SE7	353.	.4	.0	.0	.2	.0	.0	.0	.0	.0
7. SW7	6.	.4	.0	.0	.0	.0	.0	.0	.0	.0
8. NW7	96.	.4	.0	.0	.0	.0	.0	.0	.0	.0

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	I	J	K	L	M	N	O	P	Q	R	S	T
1. NE3	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. SE3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0
3. SW3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.1	.0	.0
4. NW3	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. NE7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. SE7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. SW7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. NW7	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: OLD MAMMOTH ROAD AND MERIDIAN BOULEVARD WKND NP
RUN: (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S Z0= 100. CM ALT= 0. (FT)
BRG= WORST CASE VD= .0 CM/S
CLAS= 7 (G) VS= .0 CM/S
MIXH= 1000. M AMB= .0 PPM
SIGTH= 5. DEGREES TEMP= 15.6 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)
A. NF	15	-1500	15	-500	AG	650	1.6	.0	35.0
B. NA	15	-500	15	0	AG	534	2.4	.0	33.0
C. ND	15	0	15	500	AG	637	1.8	.0	33.0
D. NE	15	500	15	1500	AG	637	1.6	.0	35.0
E. SF	-15	1500	-15	500	AG	903	1.6	.0	35.0
F. SA	-15	500	-15	0	AG	693	2.4	.0	33.0
G. SD	-15	0	-15	-500	AG	937	2.1	.0	33.0
H. SE	-15	-500	-15	-1500	AG	937	1.6	.0	35.0
I. WF	1500	23	500	23	AG	484	1.6	.0	50.0
J. WA	500	23	0	23	AG	327	2.7	.0	45.0
K. WD	0	23	-500	23	AG	427	1.8	.0	33.0
L. WE	-500	23	-1500	23	AG	427	1.6	.0	50.0
M. EF	-1500	-23	-500	-23	AG	591	1.6	.0	50.0
N. EA	-500	-23	0	-23	AG	478	2.7	.0	45.0
O. ED	0	-23	500	-23	AG	627	1.9	.0	33.0
P. EE	500	-23	1500	-23	AG	627	1.6	.0	50.0
Q. NL	0	0	15	-500	AG	116	2.4	.0	33.0
R. SL	0	0	-15	500	AG	210	2.4	.0	33.0
S. WL	0	0	500	15	AG	157	2.7	.0	33.0
T. EL	-1900	0	-1800	0	AG	113	2.7	.0	33.0

III. RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
1. NE3	33	48	6.0
2. SE3	33	-48	6.0
3. SW3	-33	-48	6.0
4. NW3	-33	48	6.0
5. NE7	46	61	6.0
6. SE7	46	-61	6.0
7. SW7	-46	-61	6.0
8. NW7	-46	61	6.0

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	A	B	C	D	E	F	G	H
1. NE3	185.	.7	.0	.2	.0	.0	.0	.0	.1	.0
2. SE3	355.	.6	.0	.0	.2	.0	.0	.0	.0	.0
3. SW3	5.	.7	.0	.0	.0	.0	.0	.3	.1	.0
4. NW3	175.	.7	.0	.0	.0	.0	.0	.0	.3	.0
5. NE7	186.	.5	.0	.2	.0	.0	.0	.0	.0	.0
6. SE7	353.	.4	.0	.0	.1	.0	.0	.0	.0	.0
7. SW7	6.	.5	.0	.0	.0	.0	.0	.2	.0	.0
8. NW7	174.	.5	.0	.0	.0	.0	.0	.0	.2	.0

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	I	J	K	L	M	N	O	P	Q	R	S	T
1. NE3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. SE3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4. NW3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. NE7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. SE7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. SW7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. NW7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: OLD MAMMOTH ROAD AND MERIDIAN BOULEVARD WKND WP
RUN: (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S	Z0= 100. CM	ALT= 0. (FT)
BRG= WORST CASE	VD= .0 CM/S	
CLAS= 7 (G)	VS= .0 CM/S	
MIXH= 1000. M	AMB= .0 PPM	
SIGTH= 5. DEGREES	TEMP= 15.6 DEGREE (C)	

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)
A. NF	15	-1500	15	-500	AG	727	1.6	.0	35.0
B. NA	15	-500	15	0	AG	525	2.3	.0	33.0
C. ND	15	0	15	500	AG	241	1.7	.0	33.0
D. NE	15	500	15	1500	AG	241	1.6	.0	35.0
E. SF	-15	1500	-15	500	AG	936	1.6	.0	35.0
F. SA	-15	500	-15	0	AG	726	2.3	.0	33.0
G. SD	-15	0	-15	-500	AG	1036	2.1	.0	33.0
H. SE	-15	-500	-15	-1500	AG	1036	1.6	.0	35.0
I. WF	1500	23	500	23	AG	407	1.6	.0	50.0
J. WA	500	23	0	23	AG	277	2.8	.0	45.0
K. WD	0	23	-500	23	AG	496	1.9	.0	33.0
L. WE	-500	23	-1500	23	AG	496	1.6	.0	50.0
M. EF	-1500	-23	-500	-23	AG	479	1.6	.0	50.0
N. EA	-500	-23	0	-23	AG	479	2.8	.0	45.0
O. ED	0	-23	500	-23	AG	776	2.0	.0	33.0
P. EE	500	-23	1500	-23	AG	776	1.6	.0	50.0
Q. NL	0	0	15	-500	AG	202	2.3	.0	33.0
R. SL	0	0	-15	500	AG	210	2.3	.0	33.0
S. WL	0	0	500	15	AG	130	2.8	.0	33.0
T. EL	-1900	0	-1800	0	AG	0	2.8	.0	33.0

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. NE3	33	48	6.0
2. SE3	33	-48	6.0
3. SW3	-33	-48	6.0
4. NW3	-33	48	6.0
5. NE7	46	61	6.0
6. SE7	46	-61	6.0
7. SW7	-46	-61	6.0
8. NW7	-46	61	6.0

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. NE3	185.	.6	.0	.2	.0	.0	.0	.0	.1	.0
2. SE3	353.	.5	.0	.0	.0	.0	.0	.1	.0	.0
3. SW3	83.	.6	.0	.0	.0	.0	.0	.0	.2	.0
4. NW3	175.	.8	.0	.0	.0	.0	.0	.0	.4	.0
5. NE7	186.	.5	.0	.1	.0	.0	.0	.0	.0	.0
6. SE7	276.	.4	.0	.0	.0	.0	.0	.0	.0	.0
7. SW7	82.	.4	.0	.0	.0	.0	.0	.0	.1	.0
8. NW7	174.	.5	.0	.0	.0	.0	.0	.0	.2	.0

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. NE3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. SE3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW3	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0
4. NW3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. NE7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. SE7	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0
7. SW7	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0
8. NW7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: MINARET ROAD AND MERIDIAN BOULEVARD WKND NP
RUN: (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S   Z0= 100. CM   ALT= 0. (FT)
BRG= WORST CASE   VD= .0 CM/S
CLAS= 7 (G)   VS= .0 CM/S
MIXH= 1000. M   AMB= .0 PPM
SIGTH= 5. DEGREES   TEMP= 15.6 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)
	LINK COORDINATES (FT)								
A. NF	15	-1500	15	-500	AG	413	1.6	.0	35.0
B. NA	15	-500	15	0	AG	241	2.6	.0	33.0
C. ND	15	0	15	500	AG	432	1.8	.0	33.0
D. NE	15	500	15	1500	AG	432	1.6	.0	35.0
E. SF	-15	1500	-15	500	AG	673	1.6	.0	35.0
F. SA	-15	500	-15	0	AG	398	2.6	.0	33.0
G. SD	-15	0	-15	-500	AG	552	2.1	.0	33.0
H. SE	-15	-500	-15	-1500	AG	552	1.6	.0	35.0
I. WF	1500	23	500	23	AG	518	1.6	.0	50.0
J. WA	500	23	0	23	AG	508	2.5	.0	45.0
K. WD	0	23	-500	23	AG	590	1.8	.0	33.0
L. WE	-500	23	-1500	23	AG	590	1.6	.0	50.0
M. EF	-1500	-23	-500	-23	AG	830	1.6	.0	50.0
N. EA	-500	-23	0	-23	AG	729	2.5	.0	45.0
O. ED	0	-23	500	-23	AG	860	1.8	.0	33.0
P. EE	500	-23	1500	-23	AG	860	1.6	.0	50.0
Q. NL	0	0	15	-500	AG	172	2.6	.0	33.0
R. SL	0	0	-15	500	AG	275	2.7	.0	33.0
S. WL	0	0	500	15	AG	10	2.5	.0	33.0
T. EL	0	0	-500	-15	AG	101	2.5	.0	33.0

III. RECEPTOR LOCATIONS

RECEPTOR	X	Y	Z
	COORDINATES (FT)		
1. NE3	33	48	6.0
2. SE3	33	-48	6.0
3. SW3	-33	-48	6.0
4. NW3	-33	48	6.0
5. NE7	46	61	6.0
6. SE7	46	-61	6.0
7. SW7	-46	-61	6.0
8. NW7	-46	61	6.0

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	A	B	C	D	E	F	G	H
			CONC/LINK (PPM)							
1. NE3	262.	.5	.0	.0	.0	.0	.0	.0	.0	.0
2. SE3	355.	.5	.0	.0	.1	.0	.0	.0	.0	.0
3. SW3	4.	.6	.0	.0	.0	.0	.0	.2	.0	.0
4. NW3	175.	.6	.0	.0	.0	.0	.0	.0	.2	.0
5. NE7	262.	.4	.0	.0	.0	.0	.0	.0	.0	.0
6. SE7	276.	.4	.0	.0	.0	.0	.0	.0	.0	.0
7. SW7	6.	.4	.0	.0	.0	.0	.0	.1	.0	.0
8. NW7	173.	.4	.0	.0	.0	.0	.0	.0	.1	.0

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	I	J	K	L	M	N	O	P	Q	R	S	T
	CONC/LINK (PPM)											
1. NE3	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. SE3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
3. SW3	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0
4. NW3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. NE7	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. SE7	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0
7. SW7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. NW7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: MINARET ROAD AND MERIDIAN BOULEVARD WKND WP
RUN: (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S	Z0= 100. CM	ALT= 0. (FT)
BRG= WORST CASE	VD= .0 CM/S	
CLAS= 7 (G)	VS= .0 CM/S	
MIXH= 1000. M	AMB= .0 PPM	
SIGTH= 5. DEGREES	TEMP= 15.6 DEGREE (C)	

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)
A. NF	15	-1500	15	-500	AG	508	1.6	.0	35.0
B. NA	15	-500	15	0	AG	289	2.7	.0	33.0
C. ND	15	0	15	500	AG	424	1.9	.0	33.0
D. NE	15	500	15	1500	AG	424	1.6	.0	35.0
E. SF	-15	1500	-15	500	AG	707	1.6	.0	35.0
F. SA	-15	500	-15	0	AG	432	2.7	.0	33.0
G. SD	-15	0	-15	-500	AG	607	2.2	.0	33.0
H. SE	-15	-500	-15	-1500	AG	607	1.6	.0	35.0
I. WF	1500	23	500	23	AG	594	1.6	.0	50.0
J. WA	500	23	0	23	AG	584	2.4	.0	45.0
K. WD	0	23	-500	23	AG	747	1.8	.0	33.0
L. WE	-500	23	-1500	23	AG	747	1.6	.0	50.0
M. EF	-1500	-23	-500	-23	AG	1059	1.6	.0	50.0
N. EA	-500	-23	0	-23	AG	902	2.5	.0	45.0
O. ED	0	-23	500	-23	AG	1090	1.8	.0	33.0
P. EE	500	-23	1500	-23	AG	1090	1.6	.0	50.0
Q. NL	0	0	15	-500	AG	219	2.7	.0	33.0
R. SL	0	0	-15	500	AG	275	2.8	.0	33.0
S. WL	0	0	500	15	AG	10	2.4	.0	33.0
T. EL	0	0	-500	-15	AG	157	2.4	.0	33.0

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. NE3	33	48	6.0
2. SE3	33	-48	6.0
3. SW3	-33	-48	6.0
4. NW3	-33	48	6.0
5. NE7	46	61	6.0
6. SE7	46	-61	6.0
7. SW7	-46	-61	6.0
8. NW7	-46	61	6.0

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. NE3	262.	.6	.0	.0	.0	.0	.0	.0	.0	.0
2. SE3	275.	.7	.0	.0	.0	.0	.0	.0	.0	.0
3. SW3	5.	.7	.0	.0	.0	.0	.0	.2	.0	.0
4. NW3	175.	.7	.0	.0	.0	.0	.0	.0	.2	.0
5. NE7	262.	.4	.0	.0	.0	.0	.0	.0	.0	.0
6. SE7	277.	.5	.0	.0	.0	.0	.0	.0	.0	.0
7. SW7	6.	.5	.0	.0	.0	.0	.0	.1	.0	.0
8. NW7	173.	.5	.0	.0	.0	.0	.0	.0	.2	.0

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. NE3	.0	.0	.2	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. SE3	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0	.0
3. SW3	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0
4. NW3	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. NE7	.0	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. SE7	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0	.0
7. SW7	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0	.0
8. NW7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: MERIDIAN BOULEVARD AND WEST MAJESTIC PINES ROAD NORTH WKND NP
RUN: (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S	Z0= 100. CM	ALT= 0. (FT)
BRG= WORST CASE	VD= .0 CM/S	
CLAS= 7 (G)	VS= .0 CM/S	
MIXH= 1000. M	AMB= .0 PPM	
SIGTH= 5. DEGREES	TEMP= 15.6 DEGREE (C)	

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)
A. NF	8	-1500	8	-500	AG	128	1.6	.0	35.0
B. NA	8	-500	8	0	AG	125	2.5	.0	33.0
C. ND	8	0	8	500	AG	102	1.8	.0	33.0
D. NE	8	500	8	1500	AG	102	1.6	.0	35.0
E. SF	-8	1500	-8	500	AG	223	1.6	.0	35.0
F. SA	-8	500	-8	0	AG	25	2.5	.0	33.0
G. SD	-8	0	-8	-500	AG	117	1.8	.0	33.0
H. SE	-8	-500	-8	-1500	AG	117	1.6	.0	35.0
I. WF	1500	8	500	8	AG	251	1.6	.0	35.0
J. WA	500	8	0	8	AG	170	2.5	.0	33.0
K. WD	0	8	-500	8	AG	83	1.8	.0	33.0
L. WE	-500	8	-1500	8	AG	83	1.6	.0	35.0
M. EF	-1500	-8	-500	-8	AG	85	1.6	.0	35.0
N. EA	-500	-8	0	-8	AG	85	2.5	.0	33.0
O. ED	0	-8	500	-8	AG	385	1.8	.0	33.0
P. EE	500	-8	1500	-8	AG	385	1.6	.0	35.0
Q. NL	0	0	8	-500	AG	3	2.5	.0	33.0
R. SL	0	0	-8	500	AG	198	2.5	.0	33.0
S. WL	0	0	500	8	AG	81	2.5	.0	33.0
T. EL	0	0	-500	-8	AG	0	2.5	.0	33.0

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. NE3	25	25	6.0
2. SE3	25	-25	6.0
3. SW3	-25	-25	6.0
4. NW3	-25	25	6.0
5. NE7	38	38	6.0
6. SE7	38	-38	6.0
7. SW7	-38	-38	6.0
8. NW7	-38	38	6.0

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. NE3	94.	.3	.0	.0	.0	.0	.0	.0	.0	.0
2. SE3	86.	.3	.0	.0	.0	.0	.0	.0	.0	.0
3. SW3	86.	.3	.0	.0	.0	.0	.0	.0	.0	.0
4. NW3	94.	.3	.0	.0	.0	.0	.0	.0	.0	.0
5. NE7	96.	.2	.0	.0	.0	.0	.0	.0	.0	.0
6. SE7	354.	.2	.0	.0	.0	.0	.0	.0	.0	.0
7. SW7	84.	.2	.0	.0	.0	.0	.0	.0	.0	.0
8. NW7	95.	.2	.0	.0	.0	.0	.0	.0	.0	.0

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. NE3	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
2. SE3	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0
3. SW3	.0	.0	.0	.0	.0	.0	.1	.0	.0	.0	.0	.0
4. NW3	.0	.1	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5. NE7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6. SE7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7. SW7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8. NW7	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0

CALINE4: CALIFORNIA LINE SOURCE DISPERSION MODEL
JUNE 1989 VERSION
PAGE 1

JOB: MERIDIAN BOULEVARD AND WEST MAJESTIC PINES ROAD NORTH WKND WP
RUN: (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

I. SITE VARIABLES

U= .5 M/S Z0= 100. CM ALT= 0. (FT)
BRG= WORST CASE VD= .0 CM/S
CLAS= 7 (G) VS= .0 CM/S
MIXH= 1000. M AMB= .0 PPM
SIGTH= 5. DEGREES TEMP= 15.6 DEGREE (C)

II. LINK VARIABLES

LINK DESCRIPTION	LINK COORDINATES (FT) X1	Y1	X2	Y2	TYPE	VPH	EF (G/MI)	H (FT)	W (FT)
A. NF	8	-1500	8	-500	AG	147	1.6	.0	35.0
B. NA	8	-500	8	0	AG	144	2.2	.0	33.0
C. ND	8	0	8	500	AG	107	1.7	.0	33.0
D. NE	8	500	8	1500	AG	107	1.6	.0	35.0
E. SF	-8	1500	-8	500	AG	564	1.6	.0	35.0
F. SA	-8	500	-8	0	AG	59	2.2	.0	33.0
G. SD	-8	0	-8	-500	AG	144	1.7	.0	33.0
H. SE	-8	-500	-8	-1500	AG	144	1.6	.0	35.0
I. WF	1500	8	500	8	AG	250	1.6	.0	35.0
J. WA	500	8	0	8	AG	176	2.8	.0	33.0
K. WD	0	8	-500	8	AG	82	1.9	.0	33.0
L. WE	-500	8	-1500	8	AG	82	1.6	.0	35.0
M. EF	-1500	-8	-500	-8	AG	85	1.6	.0	35.0
N. EA	-500	-8	0	-8	AG	85	2.8	.0	33.0
O. ED	0	-8	500	-8	AG	713	3.2	.0	33.0
P. EE	500	-8	1500	-8	AG	713	1.6	.0	35.0
Q. NL	0	0	8	-500	AG	3	2.2	.0	33.0
R. SL	0	0	-8	500	AG	505	2.3	.0	33.0
S. WL	0	0	500	8	AG	74	2.8	.0	33.0
T. EL	0	0	-500	-8	AG	0	2.8	.0	33.0

POLLUTANT: Carbon Monoxide

III. RECEPTOR LOCATIONS

RECEPTOR	COORDINATES (FT) X	Y	Z
1. NE3	25	25	6.0
2. SE3	25	-25	6.0
3. SW3	-25	-25	6.0
4. NW3	-25	25	6.0
5. NE7	38	38	6.0
6. SE7	38	-38	6.0
7. SW7	-38	-38	6.0
8. NW7	-38	38	6.0

IV. MODEL RESULTS (WORST CASE WIND ANGLE)

RECEPTOR	BRG (DEG)	PRED CONC (PPM)	CONC/LINK (PPM) A	B	C	D	E	F	G	H
1. NE3	95.	.4	.0	.0	.0	.0	.0	.0	.0	.0
2. SE3	85.	.7	.0	.0	.0	.0	.0	.0	.0	.0
3. SW3	86.	.7	.0	.0	.0	.0	.0	.0	.0	.0
4. NW3	95.	.5	.0	.0	.0	.0	.0	.0	.0	.0
5. NE7	98.	.3	.0	.0	.0	.0	.0	.0	.0	.0

RUN: (WORST CASE ANGLE)
POLLUTANT: Carbon Monoxide

IV. MODEL RESULTS (WORST CASE WIND ANGLE) (CONT.)

RECEPTOR	CONC/LINK (PPM) I	J	K	L	M	N	O	P	Q	R	S	T
1. NE3	.0	.1	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0
2. SE3	.0	.0	.0	.0	.0	.0	.5	.0	.0	.0	.0	.0
3. SW3	.0	.0	.0	.0	.0	.0	.4	.0	.0	.0	.0	.0
4. NW3	.0	.1	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0
5. NE7	.0	.0	.0	.0	.0	.0	.2	.0	.0	.0	.0	.0
6. SE7	.0	.0	.0	.0	.0	.0	.3	.0	.0	.0	.0	.0

Title   : Mono County Avg 2024 Winter Default Title
Version : Emfac2002 V2.2 Apr 23 2003
Run Date : 06/28/06 14:07:34
Scen Year: 2024 -- Model Years: 1979 to 2024
Season   : Winter
Area   : Mono County

****

Year:2024 -- Model Years 1979 to 2024 Inclusive -- Winter
Emfac2002 Emission Factors: V2.2 Apr 23 2003
Pollutant Name: Carbon Monoxide   Temperature: 27F Relative Humidity: 50%

Speed MPH	LDA	LDT	MDT	HDT	UBUS	MCY	ALL
3	1.407	2.616	3.234	5.238	5.436	32.288	3.273
4	1.378	2.550	3.154	5.238	5.436	32.288	3.221
5	1.349	2.487	3.077	5.238	5.436	32.288	3.170
6	1.321	2.426	2.986	4.830	4.939	31.075	3.056
7	1.295	2.368	2.899	4.462	4.498	29.961	2.949
8	1.269	2.312	2.818	4.130	4.107	28.937	2.850
9	1.243	2.258	2.741	3.830	3.758	27.996	2.758
10	1.219	2.207	2.668	3.560	3.448	27.132	2.673
11	1.195	2.157	2.599	3.315	3.170	26.339	2.592
12	1.172	2.109	2.534	3.093	2.922	25.611	2.517
13	1.150	2.064	2.472	2.891	2.700	24.945	2.447
14	1.128	2.020	2.412	2.708	2.500	24.336	2.381
15	1.107	1.977	2.356	2.542	2.321	23.780	2.320
16	1.087	1.936	2.302	2.391	2.160	23.274	2.261
17	1.067	1.897	2.250	2.253	2.015	22.816	2.207
18	1.047	1.859	2.201	2.127	1.884	22.403	2.156
19	1.028	1.822	2.154	2.012	1.765	22.033	2.107
20	1.010	1.786	2.109	1.907	1.658	21.703	2.062
21	0.992	1.752	2.066	1.811	1.562	21.412	2.019
22	0.975	1.719	2.024	1.724	1.474	21.160	1.979
23	0.958	1.687	1.985	1.644	1.395	20.943	1.941
24	0.941	1.656	1.946	1.570	1.323	20.763	1.905
25	0.925	1.626	1.910	1.503	1.258	20.618	1.871
26	0.910	1.597	1.874	1.442	1.198	20.507	1.840
27	0.895	1.569	1.840	1.386	1.145	20.430	1.810
28	0.880	1.542	1.808	1.334	1.096	20.388	1.782
29	0.865	1.516	1.776	1.287	1.052	20.380	1.756
30	0.851	1.490	1.746	1.244	1.012	20.407	1.732
31	0.838	1.466	1.717	1.205	0.976	20.469	1.710
32	0.824	1.442	1.689	1.170	0.943	20.567	1.689
33	0.811	1.419	1.662	1.138	0.914	20.702	1.670
34	0.799	1.397	1.636	1.109	0.888	20.875	1.652
35	0.786	1.375	1.611	1.082	0.864	21.088	1.636
36	0.774	1.354	1.586	1.059	0.843	21.342	1.622
37	0.763	1.334	1.563	1.038	0.825	21.640	1.610
38	0.751	1.315	1.541	1.019	0.809	21.983	1.599
39	0.740	1.296	1.520	1.003	0.795	22.375	1.589
40	0.729	1.278	1.499	0.989	0.783	22.818	1.582

Operational PM10 Localized Analysis (Year 2006)

Vehicle Emissions

Vehicle Miles Travelled	PM10 Emission Factor (g/vmt)[1]	PM10 Emissions (kg/day)
78,537	21.6	1696

[1]Assumes 40% control from street sweeping

Residential Wood Stove Emissions

Wood Burning Appliance Type	Number	PM10 Emission Factor (g/day/stove)	PM10 Emissions (kg/day)
Fireplace-Visitor	448	266	60
Fireplace-Resident	51	308	8
Conventional Stove/Insert	239	285	34
Certified I Stove/Insert	177	171	15
Certified II Stove/Insert	6728	142.5	479

Totals

Total Emissions (kg)		2285
PM10 Budget Limit (kg)		3042
Inventory/Budgeted (percent)		75.1

Mandatory curtailment (50 percent control) included per SB656.

CALCULATED IMPACTS AT BUILDOUT (ug/m^3)

Wood-Burning Dominated Design Day	
Fireplaces	7.1
Stoves/Inserts	55.6
Road Dust	3.5
Tailpipe	5.9
Background	5.0
Total[2]	**77.2**

Road Dust-Dominated Design Day	
Fireplaces	4.1
Stoves/Inserts	32.0
Road Dust	66.0
Tailpipe	0.0
Background	5.0
Total[2]	**107.2**

[2]The Federal 24 hour PM_{10} standard is 150 ug/m^3.

Operational PM10 Localized Analysis (Year 2009 - Without Projec

Vehicle Emissions

Vehicle Miles Travelled	PM10 Emission Factor (g/vmt)[1]	PM10 Emissions (kg/day)
80,204	21.6	1732

[1]Assumes 40% control from street sweeping

Residential Wood Stove Emissions

Wood Burning Appliance Type	Number	PM10 Emission Factor (g/day/stove)	PM10 Emissions (kg/day)
Fireplace-Visitor	382	266	51
Fireplace-Resident	44	308	7
Conventional Stove/Insert	204	285	29
Certified I Stove/Insert	177	171	15
Certified II Stove/Insert	6910	142.5	492

Totals

Total Emissions (kg)		2320
PM10 Budget Limit (kg)		3042
Inventory/Budgeted (percent)		76.3

Mandatory curtailment (50 percent control) included per SB656.

CALCULATED IMPACTS AT BUILDOUT (ug/m^3)

Wood-Burning Dominated Design Day	
Fireplaces	6.1
Stoves/Inserts	56.4
Road Dust	3.6
Tailpipe	6.1
Background	5.0
Total[2]	**77.2**

Road Dust-Dominated Design Day	
Fireplaces	3.5
Stoves/Inserts	32.5
Road Dust	67.4
Tailpipe	0.0
Background	5.0
Total[2]	**108.5**

[2]The Federal 24 hour PM_{10} standard is 150 ug/m^3.

Operational PM10 Localized Analysis (Year 2009 - With Project)

Vehicle Emissions

Vehicle Miles Travelled	PM10 Emission Factor (g/vmt)[1]	PM10 Emissions (kg/day)
88,239	21.6	1906

[1]Assumes 40% control from street sweeping

Residential Wood Stove Emissions

Wood Burning Appliance Type	Number	PM10 Emission Factor (g/day/stove)	PM10 Emissions (kg/day)
Fireplace-Visitor	382	266	51
Fireplace-Resident	44	308	7
Conventional Stove/Insert	204	285	29
Certified I Stove/Insert	177	171	15
Certified II Stove/Insert	6910	142.5	492

Totals

Total Emissions (kg)		2493
PM10 Budget Limit (kg)		3042
Inventory/Budgeted (percent)		82.0

Mandatory curtailment (50 percent control) included per SB656.

CALCULATED IMPACTS AT BUILDOUT (ug/m^3)

Wood-Burning Dominated Design Day	
Fireplaces	6.1
Stoves/Inserts	56.4
Road Dust	4.0
Tailpipe	6.7
Background	5.0
Total[2]	**78.2**

Road Dust-Dominated Design Day	
Fireplaces	3.5
Stoves/Inserts	32.5
Road Dust	74.2
Tailpipe	0.0
Background	5.0
Total[2]	**115.2**

[2]The Federal 24 hour PM_{10} standard is 150 ug/m^3.

Appendix C-3

- Alternative Operation Emissions Inventory
  - Alternative 1 (Development in Accordance to Existing Regulations)
    - Regional Emission Summary Sheet
    - Stationary Source Emissions
    - URBEMIS2002 Output Files
  - Alternative 2 (Reduced Intensity)
    - Regional Emission Summary Sheet
    - Stationary Source Emissions
    - URBEMIS2002 Output Files

Eagle Lodge Alternative 1

Regional Emission Calculations (lbs/day)

	CO	NOx	PM10	ROC	SOx
Existing					
Mobile	25	3	2	2	0.1
Area	0.1	0.1	0	0.1	0
Stationary	0.1	0.0	0.4	0.0	0.0
Total Existing	**25.2**	**3.1**	**2.4**	**2.1**	**0.1**
Project					
Mobile	23.43	3.24	2.85	1.8	0.02
Area	0.1	0.04	0	0.08	0
Stationary	0	0	1	0	0
Total Project	**24**	**3**	**4**	**2**	**0**
Net Project					
Net Mobile	-1.6	0.2	0.9	-0.2	-0.1
Net Area	0.0	-0.1	0.0	0.0	0.0
Net Stationary	0.2	0.0	1.0	0.0	0.1
Total Net	-1.4	0.2	1.9	-0.2	0.0
SCAQMD Significance Threshold	550	55	150	55	150
Difference	**(551)**	**(55)**	**(148)**	**(55)**	**(150)**
Significant?	**No**	**No**	**No**	**No**	**No**

Electricity Usage

Land Use	1,000 Sqft	Electricity Usage Rate [a] (kWh\sq.ft\yr)	Total Electricity Usage (KWh\year)	Total Electricity Usage (MWh\Day)	CO 0.2	ROC 0.01	NOx 1.15	PM10 0.04	SOx 0.12
					Emission Factors (lbs/MWh) [b]				
Existing					Emissions from Electricity Consumption (lbs/day)				
Retail	0.6	13.55	8,130	0.022	0.004	0.000	0.026	0.001	0.003
Hotel/Motel	12.0	9.95	119,400	0.327	0.065	0.003	0.376	0.013	0.039
Total Existing			**127,530**	**0.349**	**0.07**	**0.00**	**0.40**	**0.01**	**0.04**
Project									
Office	35.0	12.95	453,250	1.242	0.248	0.012	1.428	0.050	0.149
Total Project			**453,250**	**1.242**	**0.25**	**0.01**	**1.43**	**0.05**	**0.15**
Net Emissions From Electricity Usage					**0.18**	**0.01**	**1.03**	**0.04**	**0.11**

Summary of Stationary Emissions

	CO	ROC	NOx	PM10	SOx
Total Existing Emissions (lbs/day)	0.07	0.00	0.40	0.01	0.04
Total Project Emissions (lbs/day)	0.25	0.01	1.43	0.05	0.15
Total Net Emissions (lbs/day)	**0.18**	**0.01**	**1.03**	**0.04**	**0.11**

[a] Electricity Usage Rates from Table A9-11-A, CEQA Air Quality Handbook, SCAQMD, 1993.

[b] Emission Factors from Table A9-11-B, CEQA Air Quality Handbook, SCAQMD, 1993.

09/06/2006 4:19 PM

URBEMIS 2002 For Windows 8.7.0

File Name: V:\AQNOISE DIVISION\Active Projects\Eagle Lodge\Alternatives\Alternative 1\Alternative 1.urb
Project Name: Alternative 1
Project Location: South Coast Air Basin (Los Angeles area)
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Tons/Year)

AREA SOURCE EMISSION ESTIMATES (Tons per Year, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.00	0.04	0.04	0.00	0.00
Hearth	0.00	0.00	0.00	0.00	0.00
Landscaping	0.01	0.00	0.06	0.00	0.00
Consumer Prdcts	0.00	-	-	-	-
Architectural Coatings	0.06	-	-	-	-
TOTALS (tpy, unmitigated)	0.08	0.04	0.10	0.00	0.00

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
General office building	1.80	3.24	23.43	0.02	2.85
TOTAL EMISSIONS (tons/yr)	1.80	3.24	23.43	0.02	2.85

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2009 Season: Annual

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
General office building		40.94 trips/1000 sq. ft.	35.00	1,432.90

Sum of Total Trips 1,432.90
Total Vehicle Miles Traveled 10,288.22

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	54.90	1.30	98.40	0.30
Light Truck < 3,750 lbs	15.10	2.60	95.40	2.00
Light Truck 3,751- 5,750	16.10	1.20	98.10	0.70
Med Truck 5,751- 8,500	7.30	1.40	95.90	2.70
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.30	0.00	66.70	33.30
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.90	0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.20	0.00	50.00	50.00
Motorcycle	1.60	75.00	25.00	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.40	7.10	85.70	7.20

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Rural Trip Length (miles)	11.5	4.9	6.0	10.3	5.5	5.5
Trip Speeds (mph)	35.0	40.0	40.0	40.0	40.0	40.0
% of Trips - Residential	20.0	37.0	43.0			
% of Trips - Commercial (by land use)						
General office building				35.0	17.5	47.5

Changes made to the default values for Land Use Trip Percentages

Changes made to the default values for Area

The landscape year changed from 2005 to 2009.

Changes made to the default values for Operations

The operational emission year changed from 2005 to 2009.
The operational winter temperature changed from 50 to 40.
The operational winter selection item changed from 3 to 1.
The operational summer temperature changed from 90 to 70.
The operational summer selection item changed from 8 to 4.

Eagle Lodge Alternative 2

Regional Emission Calculations (lbs/day)

	CO	NOx	PM10	ROC	SOx
Existing					
Mobile	25	3	2	2	0.1
Area	0.1	0.1	0	0.1	0
Stationary	0.1	0.0	0.4	0.0	0.0
Total Existing	**25.2**	**3.1**	**2.4**	**2.1**	**0.1**
Project					
Mobile	40.58	5.61	5.14	3.33	0.03
Area	2.99	0.55	0.34	2.4	0.01
Stationary	1	0	3	0	0
Total Project	**44**	**6**	**9**	**6**	**0**
Net Project					
Net Mobile	15.6	2.6	3.1	1.3	-0.1
Net Area	2.9	0.5	0.3	2.3	0.0
Net Stationary	0.5	0.0	2.7	0.1	0.3
Total Net	18.9	3.1	6.2	3.7	0.2
SCAQMD Significance Threshold	550	55	150	55	150
Difference	**(531)**	**(52)**	**(144)**	**(51)**	**(150)**
Significant?	**No**	**No**	**No**	**No**	**No**

Electricity Usage

Land Use	1,000 Sqft	Electricity Usage Rate [a] (kWh\sq.ft\yr)	Total Electricity Usage (KWh\year)	Total Electricity Usage (MWh\Day)	CO	ROC	NOx	PM10	SOx
				Emission Factors (lbs/MWh) [b]	0.2	0.01	1.15	0.04	0.12
Existing					Emissions from Electricity Consumption (lbs/day)				
Retail	0.6	13.55	8,130	0.022	0.004	0.000	0.026	0.001	0.003
Hotel/Motel	12.0	9.95	119,400	0.327	0.065	0.003	0.376	0.013	0.039
Total Existing			**127,530**	**0.349**	**0.07**	**0.00**	**0.40**	**0.01**	**0.04**
Project									
Office	52.0	12.95	673,400	1.845	0.369	0.018	2.122	0.074	0.221
Residential (DU)	54.0	5,627	303,831	0.832	0.166	0.008	0.957	0.033	0.100
Total Project			**977,231**	**2.677**	**0.54**	**0.03**	**3.08**	**0.11**	**0.32**
Net Emissions From Electricity Usage					**0.47**	**0.02**	**2.68**	**0.09**	**0.28**

Summary of Stationary Emissions

	CO	ROC	NOx	PM10	SOx
Total Existing Emissions (lbs/day)	0.07	0.00	0.40	0.01	0.04
Total Project Emissions (lbs/day)	0.54	0.03	3.08	0.11	0.32
Total Net Emissions (lbs/day)	**0.47**	**0.02**	**2.68**	**0.09**	**0.28**

[a] Electricity Usage Rates from Table A9-11-A, CEQA Air Quality Handbook, SCAQMD, 1993.

[b] Emission Factors from Table A9-11-B, CEQA Air Quality Handbook, SCAQMD, 1993.

09/06/2006 4:19 PM

URBEMIS 2002 For Windows 8.7.0

File Name: V:\AQNOISE DIVISION\Active Projects\Eagle Lodge\Alternatives\Alternative 2\Alternative2.urb
Project Name: Eagle Lodge Operations (Winter) - 2009
Project Location: Mountain Counties and Rural Counties
On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
(Tons/Year)

AREA SOURCE EMISSION ESTIMATES (Tons per Year, Unmitigated)

Source	ROG	NOx	CO	SO2	PM10
Natural Gas	0.04	0.51	0.40	0.00	0.00
Hearth	1.26	0.03	2.29	0.01	0.34
Landscaping	0.04	0.00	0.30	0.00	0.00
Consumer Prdcts	0.48	-	-	-	-
Architectural Coatings	0.58	-	-	-	-
TOTALS (tpy, unmitigated)	2.40	0.55	2.99	0.01	0.34

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
Condo/townhouse general	0.68	1.18	8.60	0.01	1.10
Base Lodge Employee Trips	0.60	1.04	7.42	0.01	0.99
High turnover (sit-down)	0.77	1.21	8.77	0.01	1.09
General Commercial	1.25	2.12	15.41	0.01	1.91
Convenience market (24 ho	0.03	0.05	0.39	0.00	0.05
TOTAL EMISSIONS (tons/yr)	3.33	5.61	40.58	0.03	5.14

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2009 Season: Annual

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
Condo/townhouse general	3.38	6.90 trips/dwelling unit	54.00	372.60
Base Lodge Employee Trips		2.00 trips/employees	122.00	244.00
High turnover (sit-down)		2.81 trips/seats	200.00	562.00
General Commercial		21.21 trips/1000 sq. ft.	48.00	1,018.08
Convenience market (24 ho		21.21 trips/1000 sq. ft.	1.20	25.45

Sum of Total Trips 2,222.13
Total Vehicle Miles Traveled 18,560.87

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	54.90	1.30	98.40	0.30
Light Truck < 3,750 lbs	15.10	2.60	95.40	2.00
Light Truck 3,751- 5,750	16.10	1.20	98.10	0.70
Med Truck 5,751- 8,500	7.30	1.40	95.90	2.70
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.30	0.00	66.70	33.30
Med-Heavy 14,001-33,000	1.00	0.00	20.00	80.00
Heavy-Heavy 33,001-60,000	0.90	0.00	11.10	88.90
Line Haul > 60,000 lbs	0.00	0.00	0.00	100.00
Urban Bus	0.20	0.00	50.00	50.00
Motorcycle	1.60	75.00	25.00	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.40	7.10	85.70	7.20

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	10.8	7.3	7.5	9.5	7.4	7.4
Rural Trip Length (miles)	16.8	7.1	7.9	14.7	6.6	6.6
Trip Speeds (mph)	35.0	35.0	35.0	35.0	35.0	35.0
% of Trips - Residential	32.9	18.0	49.1			

% of Trips - Commercial (by land use)

	Commute	Non-Work	Customer
Base Lodge Employee Trips	100.0	0.0	0.0
High turnover (sit-down) rest.	5.0	2.5	92.5
General Commercial	2.0	1.0	97.0
Convenience market (24 hour)	2.0	1.0	97.0

Appendix D

Noise Technical Worksheets

Eagle Lodge
Draft Environmental Impact Report

Noise Assessment Files

Provided by PCR Services Corporation

July 2006

D-1	Noise Monitoring Data Sheets
D-2	Roadway Noise Analysis Sheets (TENS Methodology)

Appendix D-1

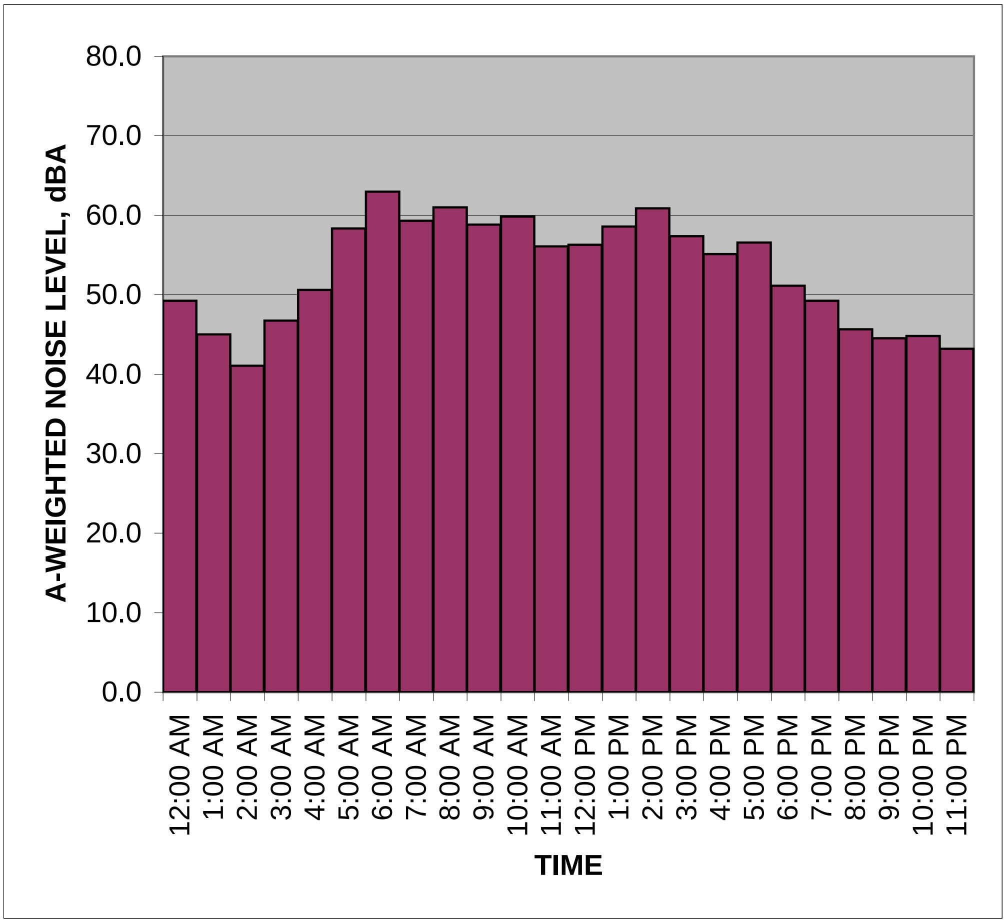
- Noise Monitoring Data Sheets

Community Noise Equivalent Level, CNEL.

Project: Eagle Lodge
Location: North
Sources: Traffic Volumes and Operations

Date: January 18, 2006

TIME	*HNL, dB(A)*
12:00 AM	49.2
1:00 AM	45.0
2:00 AM	41.1
3:00 AM	46.8
4:00 AM	50.6
5:00 AM	58.4
6:00 AM	63.0
7:00 AM	59.3
8:00 AM	61.0
9:00 AM	58.8
10:00 AM	59.8
11:00 AM	56.1
12:00 PM	56.3
1:00 PM	58.6
2:00 PM	60.9
3:00 PM	57.4
4:00 PM	55.1
5:00 PM	56.6
6:00 PM	51.1
7:00 PM	49.3
8:00 PM	45.7
9:00 PM	44.5
10:00 PM	44.8
11:00 PM	43.2
CNEL, dB(A):	**62.1**



NOTES:

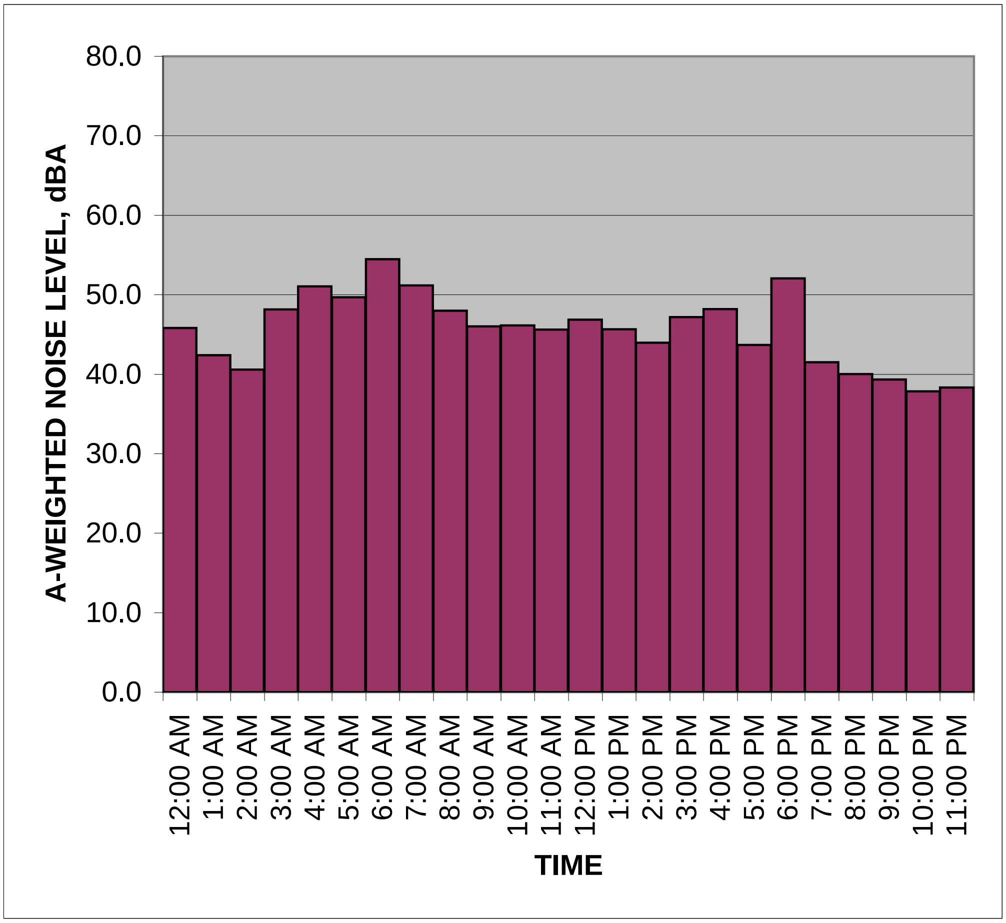
fieldcnel.xls

Community Noise Equivalent Level, CNEL.

Project: Eagle Lodge
Location: North
Sources: Traffic Volumes and Operations

Date: January 19, 2006

TIME	*HNL, dB(A)*
12:00 AM	45.8
1:00 AM	42.4
2:00 AM	40.6
3:00 AM	48.2
4:00 AM	51.1
5:00 AM	49.7
6:00 AM	54.5
7:00 AM	51.2
8:00 AM	48.0
9:00 AM	46.0
10:00 AM	46.1
11:00 AM	45.6
12:00 PM	46.9
1:00 PM	45.7
2:00 PM	44.0
3:00 PM	47.2
4:00 PM	48.2
5:00 PM	43.7
6:00 PM	52.1
7:00 PM	41.5
8:00 PM	40.0
9:00 PM	39.3
10:00 PM	37.8
11:00 PM	38.3
CNEL, dB(A):	**54.8**



NOTES:

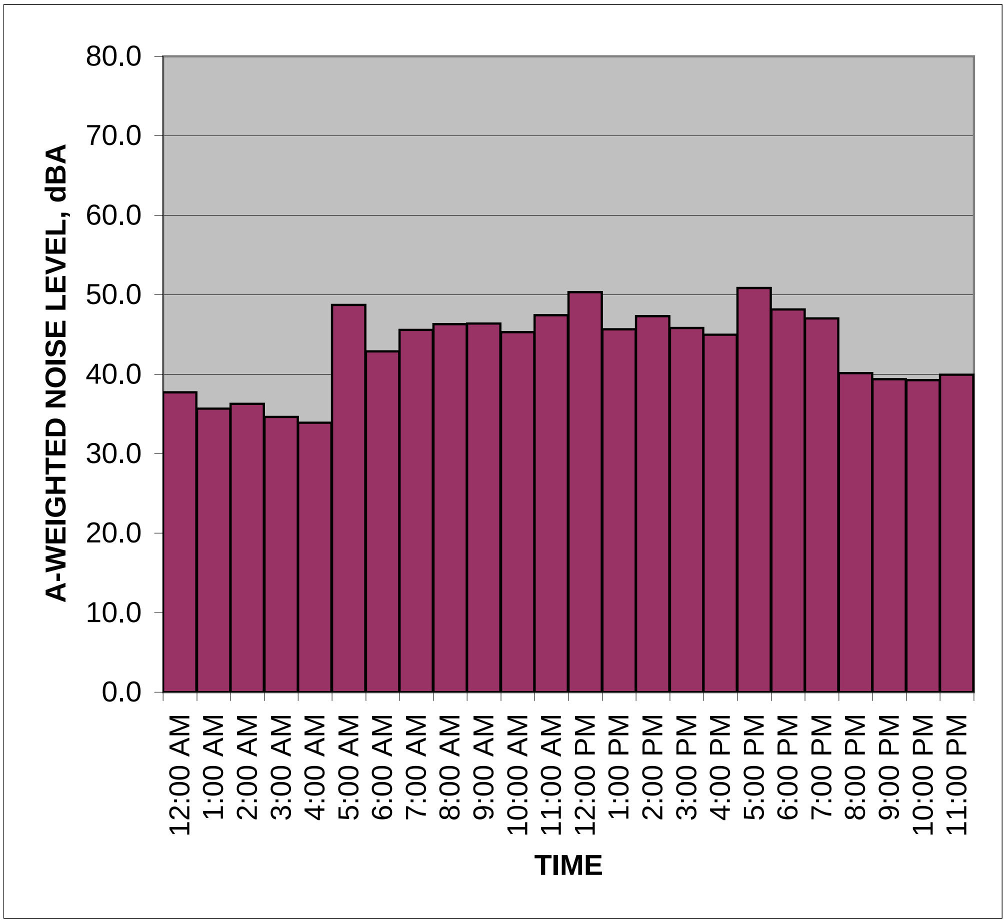
fieldcnel.xls

Community Noise Equivalent Level, CNEL.

Project: Eagle Lodge
Location: North
Sources: Traffic Volumes and Operations

Date: January 20, 2006

TIME	*HNL, dB(A)*
12:00 AM	37.7
1:00 AM	35.7
2:00 AM	36.3
3:00 AM	34.6
4:00 AM	33.9
5:00 AM	48.7
6:00 AM	42.9
7:00 AM	45.6
8:00 AM	46.3
9:00 AM	46.4
10:00 AM	45.3
11:00 AM	47.4
12:00 PM	50.3
1:00 PM	45.7
2:00 PM	47.3
3:00 PM	45.8
4:00 PM	45.0
5:00 PM	50.9
6:00 PM	48.2
7:00 PM	47.0
8:00 PM	40.1
9:00 PM	39.4
10:00 PM	39.3
11:00 PM	39.9
CNEL, dB(A):	**49.6**



NOTES:

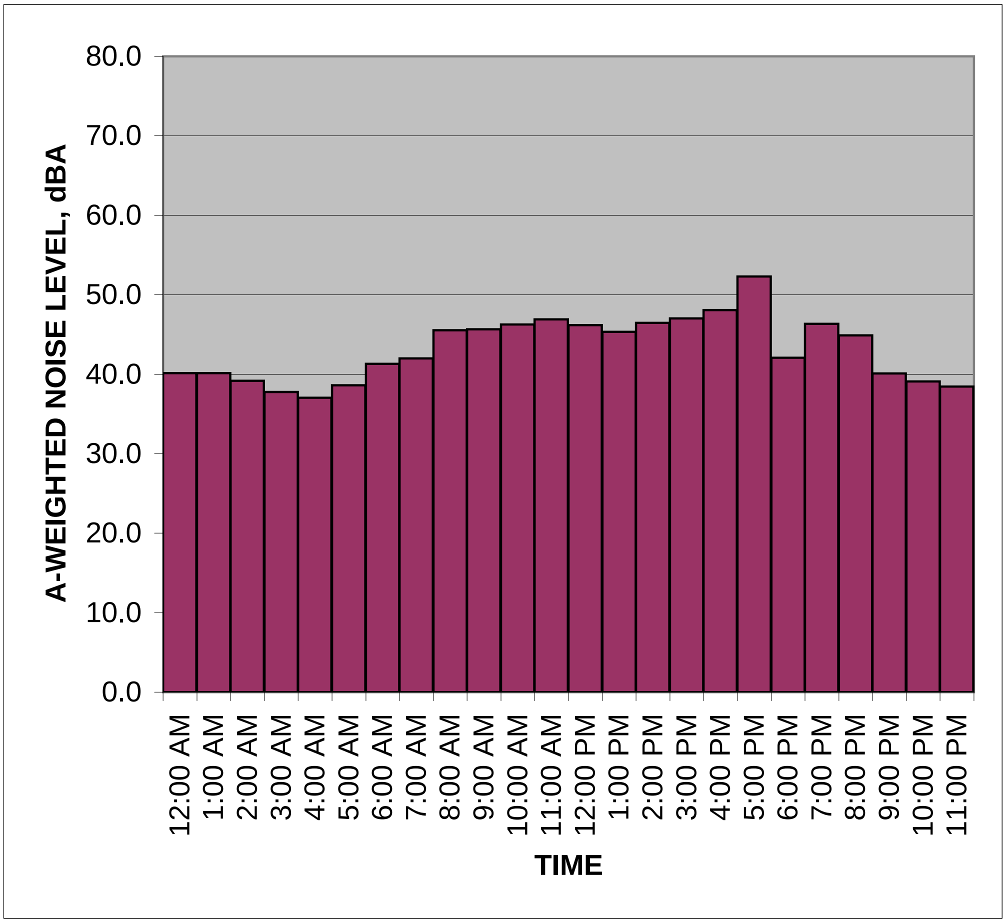
fieldcnel.xls

Community Noise Equivalent Level, CNEL.

Project: Eagle Lodge
Location: North
Sources: Traffic Volumes and Operations

Date: January 21, 2006

TIME	*HNL, dB(A)*
12:00 AM	40.2
1:00 AM	40.2
2:00 AM	39.2
3:00 AM	37.8
4:00 AM	37.1
5:00 AM	38.6
6:00 AM	41.3
7:00 AM	42.0
8:00 AM	45.5
9:00 AM	45.7
10:00 AM	46.3
11:00 AM	46.9
12:00 PM	46.2
1:00 PM	45.3
2:00 PM	46.5
3:00 PM	47.0
4:00 PM	48.1
5:00 PM	52.3
6:00 PM	42.1
7:00 PM	46.3
8:00 PM	44.9
9:00 PM	40.1
10:00 PM	39.1
11:00 PM	38.4
CNEL, dB(A):	**48.3**



NOTES:

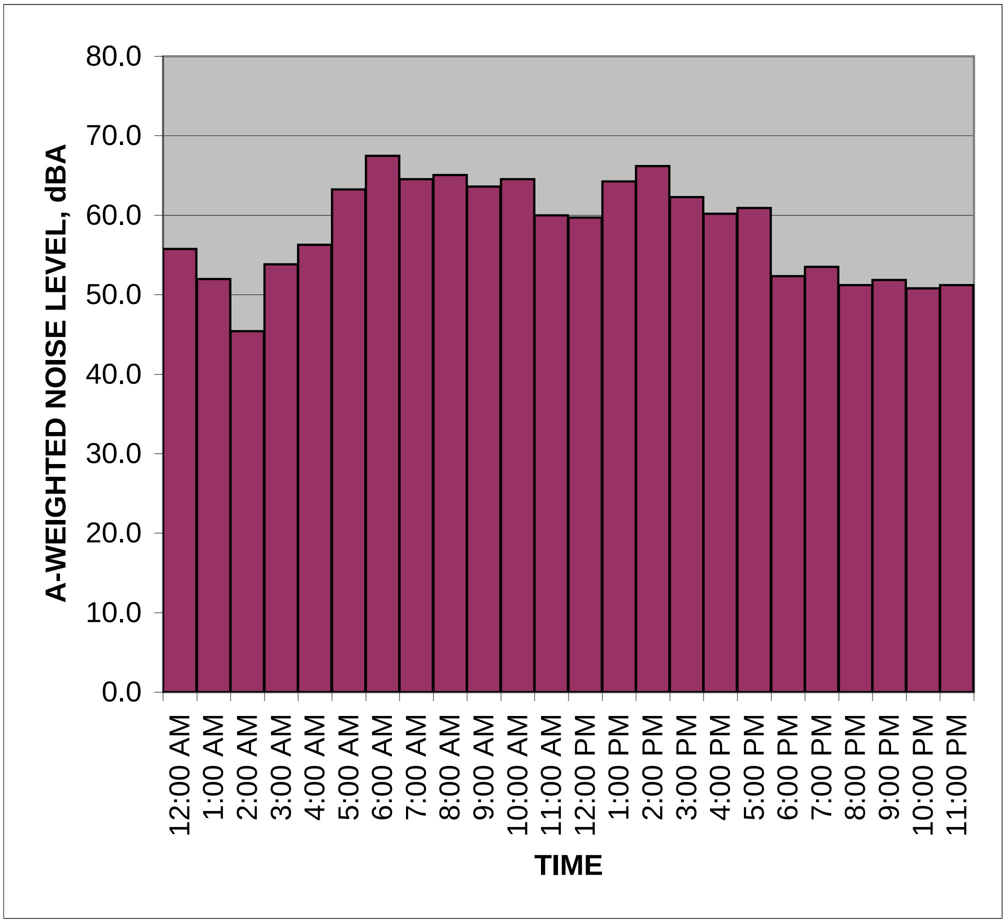
fieldcnel.xls

Community Noise Equivalent Level, CNEL.

Project: Eagle Lodge
Location: North East
Sources: Traffic Volumes and Operations

Date: January 18, 2006

TIME	HNL, dB(A)
12:00 AM	55.8
1:00 AM	52.0
2:00 AM	45.4
3:00 AM	53.8
4:00 AM	56.3
5:00 AM	63.3
6:00 AM	67.5
7:00 AM	64.5
8:00 AM	65.1
9:00 AM	63.6
10:00 AM	64.6
11:00 AM	60.0
12:00 PM	59.7
1:00 PM	64.3
2:00 PM	66.2
3:00 PM	62.3
4:00 PM	60.2
5:00 PM	60.9
6:00 PM	52.4
7:00 PM	53.5
8:00 PM	51.2
9:00 PM	51.9
10:00 PM	50.8
11:00 PM	51.2
CNEL, dB(A):	**66.9**



NOTES:

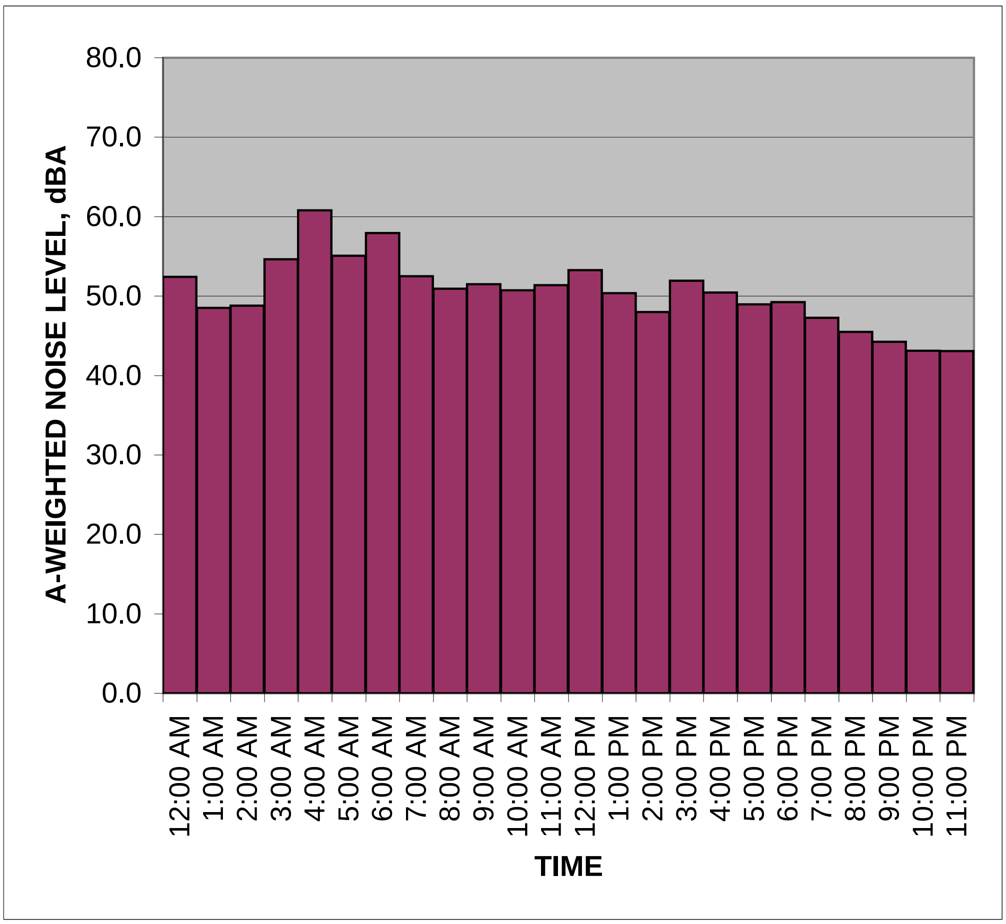
fieldcnel.xls

Community Noise Equivalent Level, CNEL.

Project: Eagle Lodge
Location: North East
Sources: Traffic Volumes and Operations

Date: January 19, 2006

TIME	HNL, dB(A)
12:00 AM	52.4
1:00 AM	48.5
2:00 AM	48.8
3:00 AM	54.7
4:00 AM	60.8
5:00 AM	55.1
6:00 AM	58.0
7:00 AM	52.5
8:00 AM	50.9
9:00 AM	51.5
10:00 AM	50.7
11:00 AM	51.4
12:00 PM	53.3
1:00 PM	50.4
2:00 PM	48.0
3:00 PM	51.9
4:00 PM	50.5
5:00 PM	49.0
6:00 PM	49.3
7:00 PM	47.3
8:00 PM	45.5
9:00 PM	44.2
10:00 PM	43.1
11:00 PM	43.1
CNEL, dB(A):	**60.9**



NOTES:

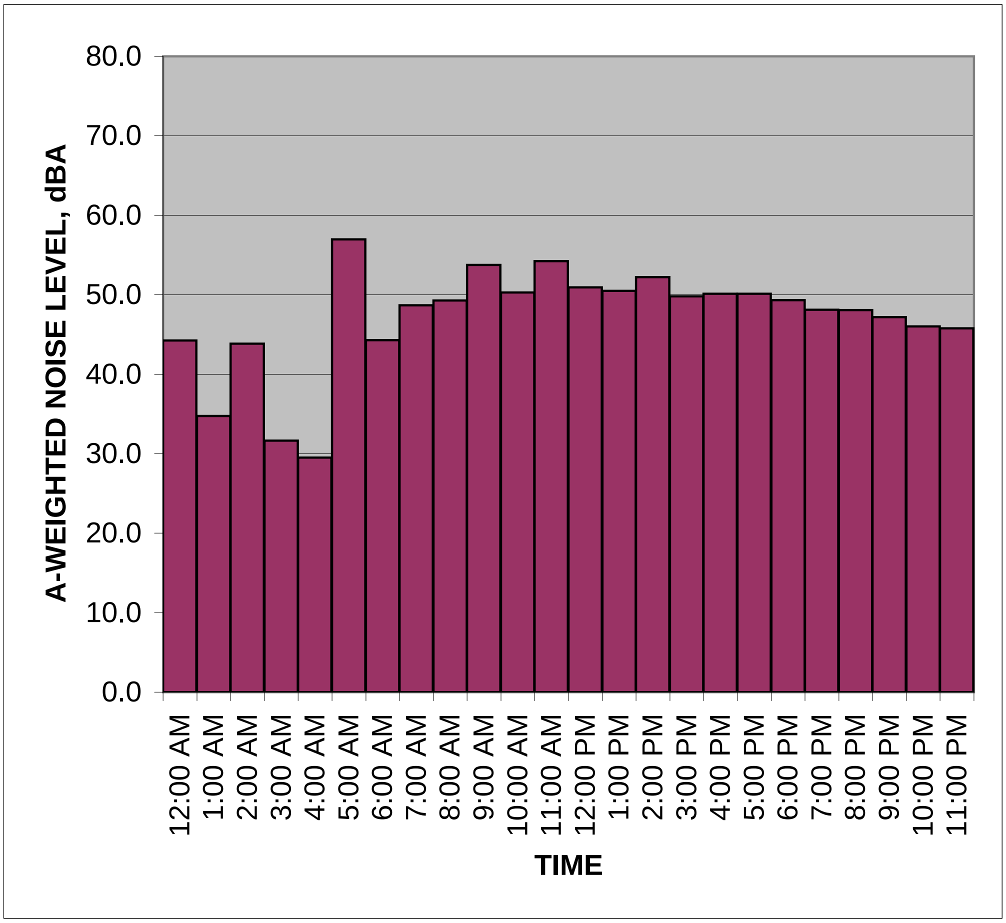
fieldcnel.xls

Community Noise Equivalent Level, CNEL.

Project: Eagle Lodge
Location: North East
Sources: Traffic Volumes and Operations

Date: January 20, 2006

TIME	*HNL, dB(A)*
12:00 AM	44.2
1:00 AM	34.7
2:00 AM	43.9
3:00 AM	31.7
4:00 AM	29.5
5:00 AM	57.0
6:00 AM	44.3
7:00 AM	48.7
8:00 AM	49.3
9:00 AM	53.7
10:00 AM	50.3
11:00 AM	54.3
12:00 PM	50.9
1:00 PM	50.5
2:00 PM	52.2
3:00 PM	49.8
4:00 PM	50.1
5:00 PM	50.1
6:00 PM	49.3
7:00 PM	48.1
8:00 PM	48.1
9:00 PM	47.2
10:00 PM	46.0
11:00 PM	45.8
CNEL, dB(A):	**55.6**



NOTES:

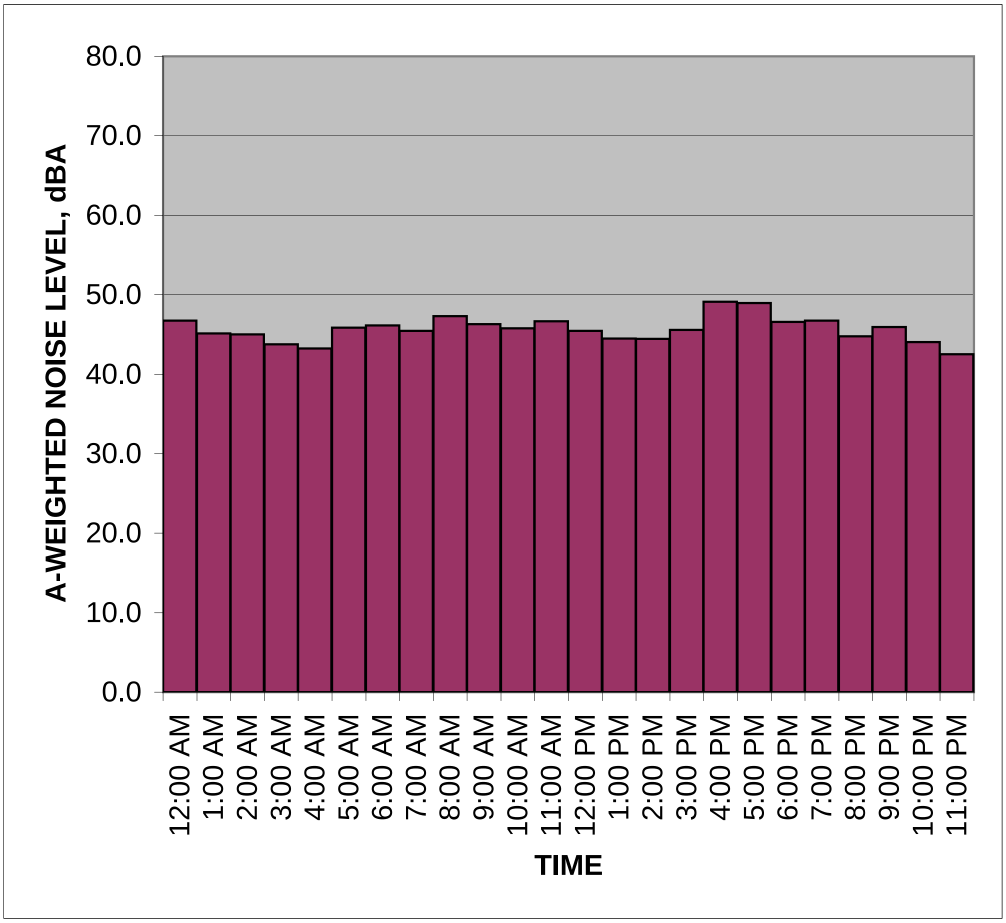
fieldcnel.xls

Community Noise Equivalent Level, CNEL.

Project: Eagle Lodge
Location: North East
Sources: Traffic Volumes and Operations

Date: January 21, 2006

TIME	*HNL, dB(A)*
12:00 AM	46.7
1:00 AM	45.1
2:00 AM	45.0
3:00 AM	43.8
4:00 AM	43.2
5:00 AM	45.9
6:00 AM	46.2
7:00 AM	45.5
8:00 AM	47.3
9:00 AM	46.3
10:00 AM	45.8
11:00 AM	46.7
12:00 PM	45.5
1:00 PM	44.5
2:00 PM	44.4
3:00 PM	45.6
4:00 PM	49.1
5:00 PM	48.9
6:00 PM	46.6
7:00 PM	46.7
8:00 PM	44.8
9:00 PM	45.9
10:00 PM	44.0
11:00 PM	42.5
CNEL, dB(A):	**51.9**



NOTES:

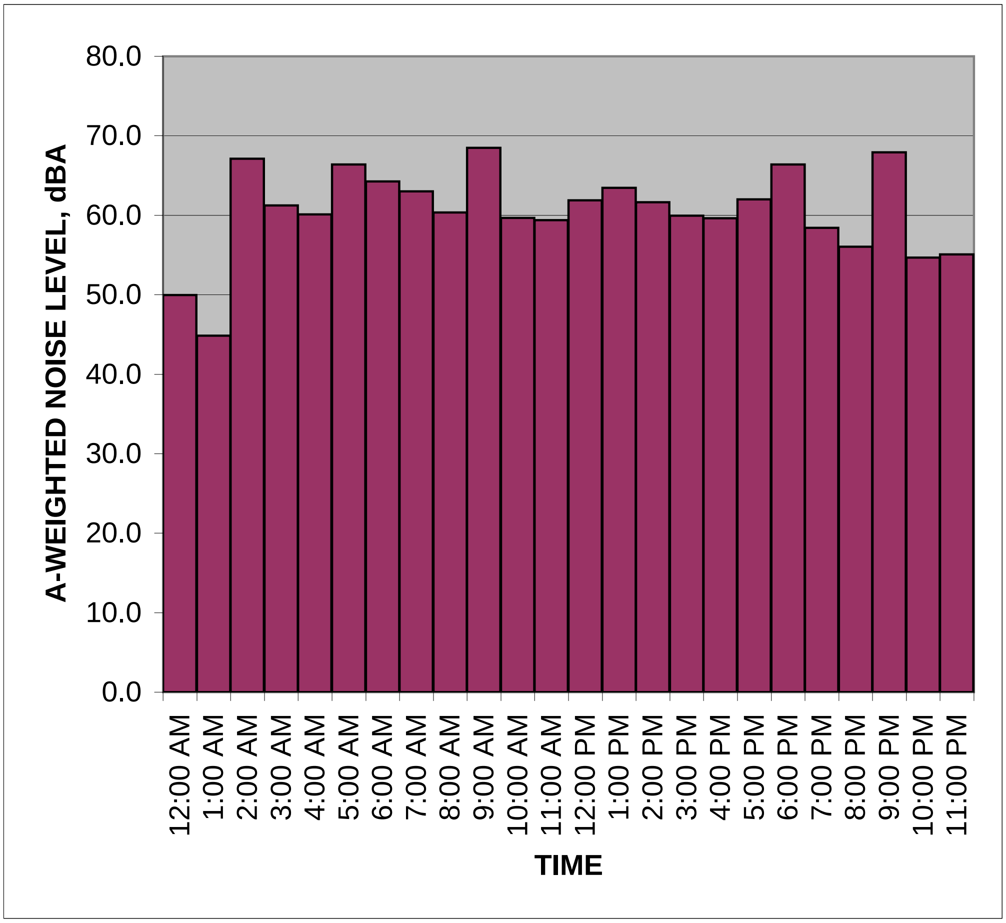
fieldcnel.xls

Community Noise Equivalent Level, CNEL.

Project: Eagle Lodge
Location: South
Sources: Traffic Volumes and Operations

Date: January 18, 2006

TIME	HNL, dB(A)
12:00 AM	50.0
1:00 AM	44.9
2:00 AM	67.1
3:00 AM	61.3
4:00 AM	60.1
5:00 AM	66.4
6:00 AM	64.3
7:00 AM	63.0
8:00 AM	60.4
9:00 AM	68.5
10:00 AM	59.7
11:00 AM	59.4
12:00 PM	61.9
1:00 PM	63.5
2:00 PM	61.7
3:00 PM	59.9
4:00 PM	59.6
5:00 PM	62.0
6:00 PM	66.4
7:00 PM	58.4
8:00 PM	56.1
9:00 PM	67.9
10:00 PM	54.7
11:00 PM	55.1
CNEL, dB(A):	**69.2**



NOTES:

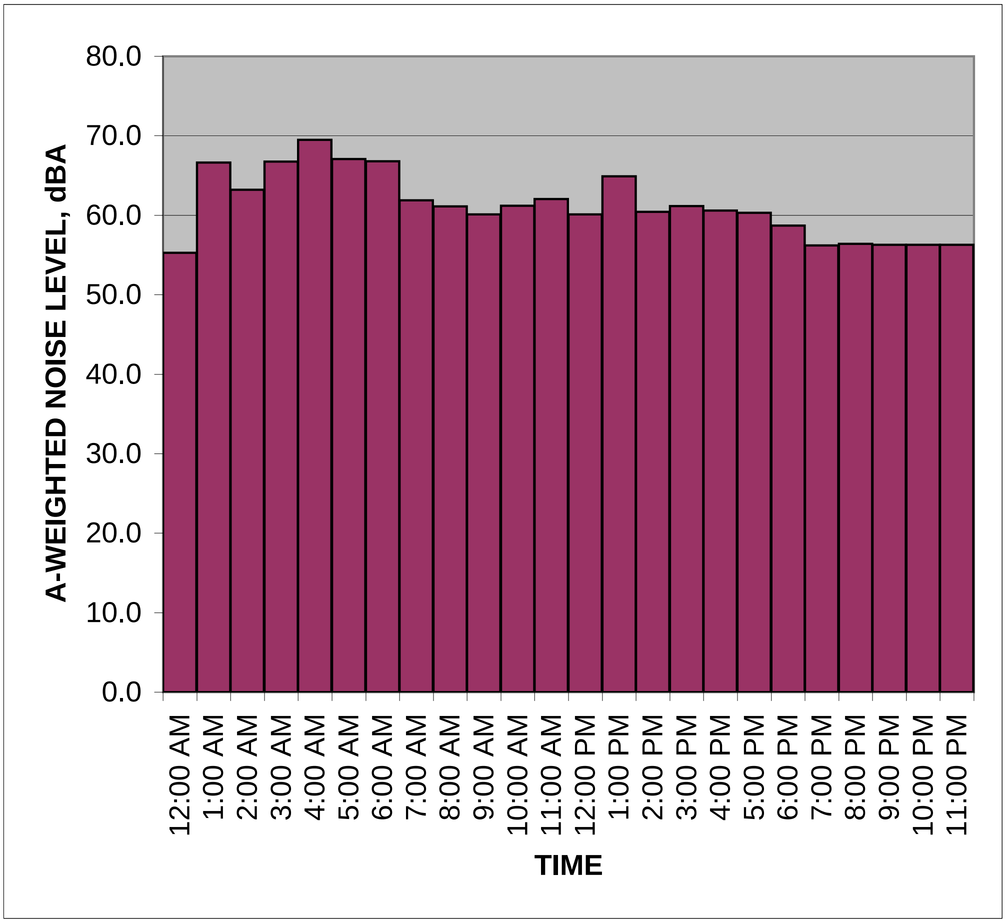
fieldcnel.xls

Community Noise Equivalent Level, CNEL.

Project: Eagle Lodge
Location: South
Sources: Traffic Volumes and Operations

Date: January 19, 2006

TIME	*HNL, dB(A)*
12:00 AM	55.3
1:00 AM	66.6
2:00 AM	63.2
3:00 AM	66.7
4:00 AM	69.5
5:00 AM	67.1
6:00 AM	66.8
7:00 AM	61.9
8:00 AM	61.1
9:00 AM	60.1
10:00 AM	61.2
11:00 AM	62.0
12:00 PM	60.1
1:00 PM	64.9
2:00 PM	60.4
3:00 PM	61.2
4:00 PM	60.6
5:00 PM	60.3
6:00 PM	58.7
7:00 PM	56.2
8:00 PM	56.4
9:00 PM	56.3
10:00 PM	56.3
11:00 PM	56.3
CNEL, dB(A):	**71.4**



NOTES:

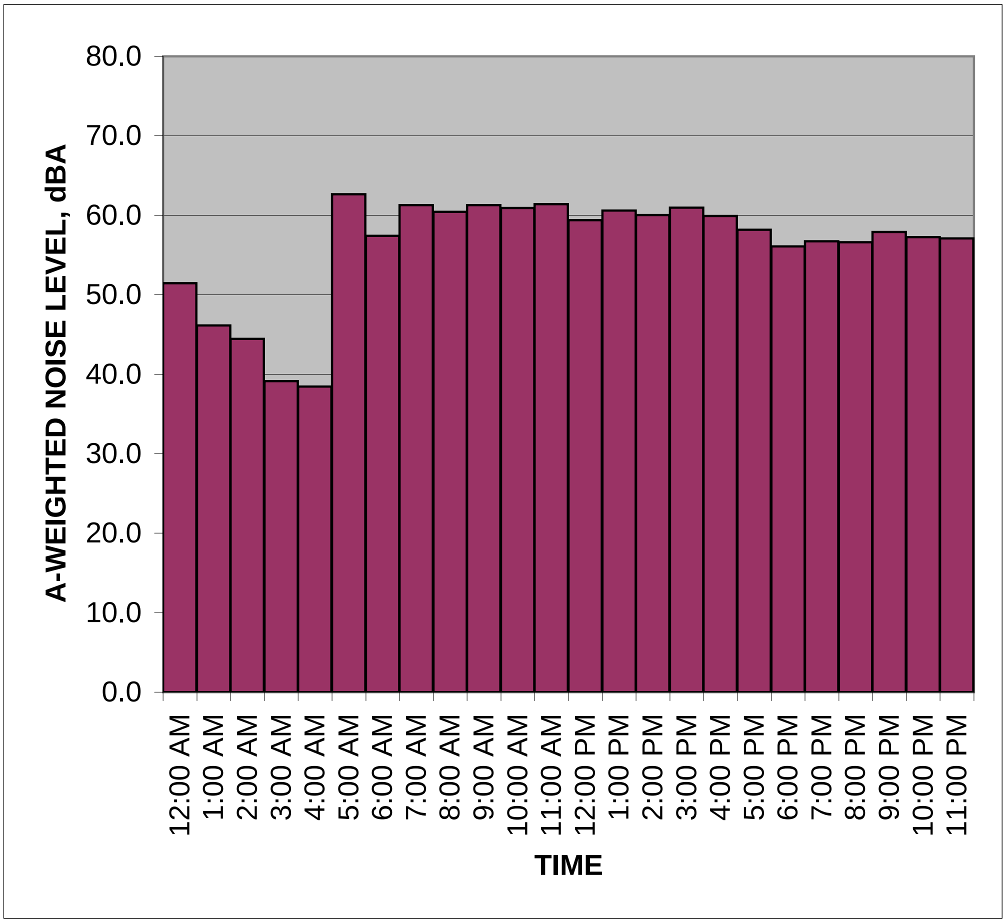
fieldcnel.xls

Community Noise Equivalent Level, CNEL.

Project: Eagle Lodge
Location: South
Sources: Traffic Volumes and Operations

Date: January 20, 2006

TIME	*HNL, dB(A)*
12:00 AM	51.5
1:00 AM	46.2
2:00 AM	44.4
3:00 AM	39.1
4:00 AM	38.4
5:00 AM	62.7
6:00 AM	57.4
7:00 AM	61.3
8:00 AM	60.4
9:00 AM	61.3
10:00 AM	60.9
11:00 AM	61.4
12:00 PM	59.4
1:00 PM	60.6
2:00 PM	60.1
3:00 PM	60.9
4:00 PM	59.9
5:00 PM	58.2
6:00 PM	56.1
7:00 PM	56.7
8:00 PM	56.6
9:00 PM	57.9
10:00 PM	57.3
11:00 PM	57.1
CNEL, dB(A):	**63.5**



NOTES:

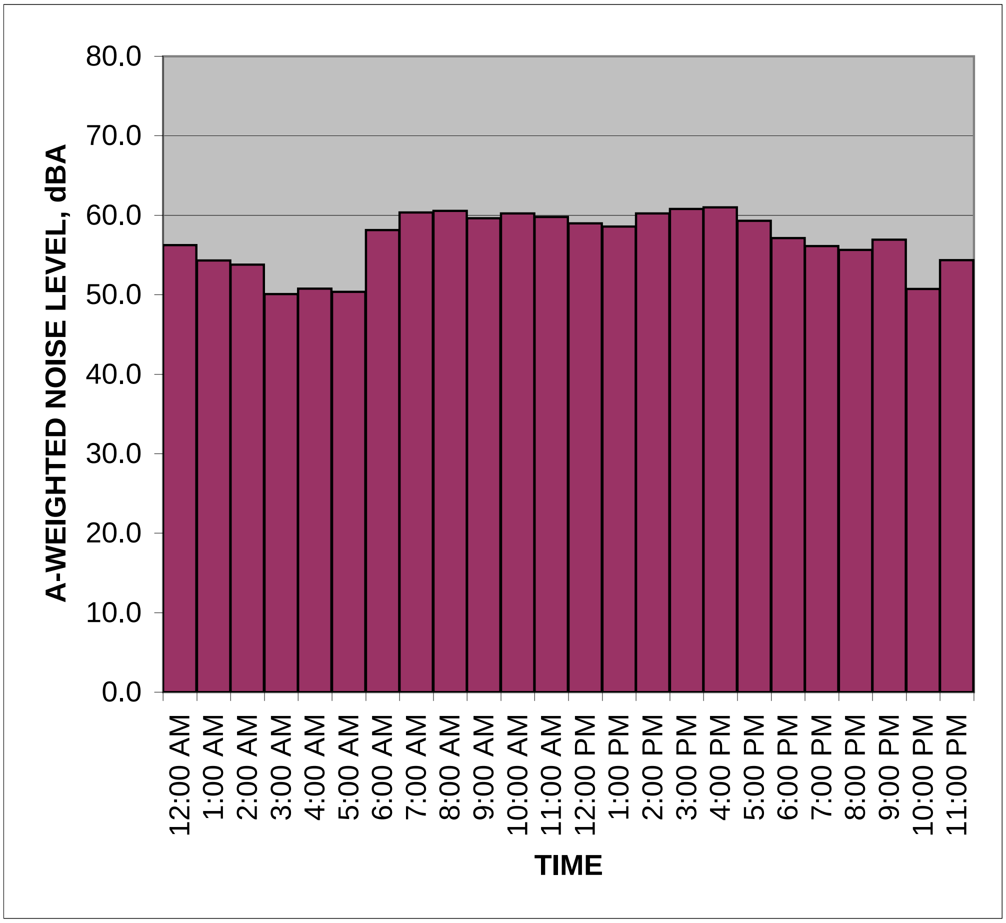
fieldcnel.xls

Community Noise Equivalent Level, CNEL.

Project: Eagle Lodge
Location: South
Sources: Traffic Volumes and Operations

Date: January 21, 2006

TIME	HNL, dB(A)
12:00 AM	56.3
1:00 AM	54.3
2:00 AM	53.8
3:00 AM	50.1
4:00 AM	50.8
5:00 AM	50.4
6:00 AM	58.1
7:00 AM	60.4
8:00 AM	60.6
9:00 AM	59.6
10:00 AM	60.2
11:00 AM	59.8
12:00 PM	59.0
1:00 PM	58.6
2:00 PM	60.2
3:00 PM	60.8
4:00 PM	61.0
5:00 PM	59.3
6:00 PM	57.1
7:00 PM	56.1
8:00 PM	55.7
9:00 PM	56.9
10:00 PM	50.7
11:00 PM	54.4
CNEL, dB(A):	**62.1**



NOTES:

fieldcnel.xls

Appendix D-2

- Roadway Noise Analysis (TENS Methodology)

Mammoth Lakes - Eagle Lodge
TENS Analysis (Year 2009)

Existing									
	Traffic Volumes			Leq			CNEL		
Roadway/Segment	AM	PM	ADT	ROW	50 Feet	100 Feet	ROW	50 Feet	100 Feet
Main Street East of Old Mammoth Road			3610	60.3	56.3	54.3	61.6	57.6	55.5
Main Street West of Old Mammoth Road			9490	64.5	60.5	58.5	65.8	61.8	59.7
Main Street East of Minaret Road			10710	65.1	61.1	59.0	66.3	62.3	60.2
Lake Mary Road West of Minaret Road			7160	63.3	59.3	57.3	64.5	60.5	58.5
Lake Mary Road West of Kelly Road			850	55.2	50.5	48.3	56.4	51.7	49.5
Future No Project									
	Traffic Volumes			Leq			CNEL		
Roadway/Segment	AM	PM	ADT	ROW	50 Feet	100 Feet	ROW	50 Feet	100 Feet
Main Street East of Old Mammoth Road			3680	60.4	56.4	54.4	61.6	57.6	55.6
Main Street West of Old Mammoth Road			9720	64.6	60.6	58.6	65.9	61.9	59.8
Main Street East of Minaret Road			11510	65.4	61.4	59.3	66.6	62.6	60.6
Lake Mary Road West of Minaret Road			9260	64.4	60.4	58.4	65.6	61.7	59.6
Lake Mary Road West of Kelly Road			2620	60.1	55.4	53.2	61.3	56.6	54.4
Future With Project									
	Traffic Volumes			Leq			CNEL		
Roadway/Segment	AM	PM	ADT	ROW	50 Feet	100 Feet	ROW	50 Feet	100 Feet
Main Street East of Old Mammoth Road			3740	60.5	56.5	54.5	61.7	57.7	55.7
Main Street West of Old Mammoth Road			9720	64.6	60.6	58.6	65.9	61.9	59.8
Main Street East of Minaret Road			11710	65.5	61.5	59.4	66.7	62.7	60.6
Lake Mary Road West of Minaret Road			9330	64.5	60.5	58.4	65.7	61.7	59.6
Lake Mary Road West of Kelly Road			2660	60.2	55.4	53.2	61.4	56.7	54.4

	CNEL			
Summary	50 ft. from ROW		At ROW	
Roadway/Segment	Project Increment	Cumulative Increment	Project Increment	Cumulative Increment
Main Street East of Old Mammoth Road	0.1	0.1	0.1	0.1
Main Street West of Old Mammoth Road	0.0	0.1	0.0	0.1
Main Street East of Minaret Road	0.1	0.4	0.1	0.4
Lake Mary Road West of Minaret Road	0.0	1.2	0.1	1.2
Lake Mary Road West of Kelly Road	0.1	5.0	0.1	5.0

Mammoth Lakes - Eagle Lodge
TENS Analysis (Year 2009)

Existing									
	Traffic Volumes			Leq			CNEL		
Roadway/Segment	AM	PM	ADT	ROW	50 Feet	100 Feet	ROW	50 Feet	100 Feet
Old Mammoth Road South of Main Street			7320	64.6	59.8	57.6	65.8	61.1	58.8
Old Mammoth Road North of Meridian Boulevard			5590	63.4	58.7	56.5	64.6	59.9	57.7
Old Mammoth Road South of Meridian Boulevard			5760	63.5	58.8	56.6	64.7	60.0	57.8
Meridian Boulevard, East of Old Mammoth Road			4140	60.9	56.9	54.9	62.2	58.2	56.1
Meridian Boulevard, West of Old Mammoth Road			4230	61.0	57.0	55.0	62.2	58.3	56.2
Future No Project									
	Traffic Volumes			Leq			CNEL		
Roadway/Segment	AM	PM	ADT	ROW	50 Feet	100 Feet	ROW	50 Feet	100 Feet
Old Mammoth Road South of Main Street			7510	64.7	60.0	57.7	65.9	61.2	59.0
Old Mammoth Road North of Meridian Boulevard			6400	64.0	59.3	57.0	65.2	60.5	58.3
Old Mammoth Road South of Meridian Boulevard			6520	64.1	59.3	57.1	65.3	60.6	58.3
Meridian Boulevard, East of Old Mammoth Road			4720	61.5	57.5	55.5	62.7	58.7	56.7
Meridian Boulevard, West of Old Mammoth Road			4810	61.6	57.6	55.5	62.8	58.8	56.8
Future With Project									
	Traffic Volumes			Leq			CNEL		
Roadway/Segment	AM	PM	ADT	ROW	50 Feet	100 Feet	ROW	50 Feet	100 Feet
Old Mammoth Road South of Main Street			7570	64.7	60.0	57.8	65.9	61.2	59.0
Old Mammoth Road North of Meridian Boulevard			6730	64.2	59.5	57.3	65.4	60.7	58.5
Old Mammoth Road South of Meridian Boulevard			6630	64.1	59.4	57.2	65.3	60.6	58.4
Meridian Boulevard, East of Old Mammoth Road			4920	61.7	57.7	55.6	62.9	58.9	56.9
Meridian Boulevard, West of Old Mammoth Road			5710	62.3	58.3	56.3	63.5	59.6	57.5

	CNEL			
Summary	50 ft. from ROW		At ROW	
Roadway/Segment	Project Increment	Cumulative Increment	Project Increment	Cumulative Increment
Old Mammoth Road South of Main Street	0.0	0.1	0.0	0.1
Old Mammoth Road North of Meridian Boulevard	0.2	0.8	0.2	0.8
Old Mammoth Road South of Meridian Boulevard	0.0	0.6	0.0	0.6
Meridian Boulevard, East of Old Mammoth Road	0.2	0.7	0.2	0.7
Meridian Boulevard, West of Old Mammoth Road	0.8	1.3	0.7	1.3

Mammoth Lakes - Eagle Lodge
TENS Analysis (Year 2009)

Existing									
	Traffic Volumes			Leq			CNEL		
Roadway/Segment	AM	PM	ADT	ROW	50 Feet	100 Feet	ROW	50 Feet	100 Feet
Meridian Boulevard, East of Minaret Boulevard			5170	61.9	57.9	55.9	63.1	59.1	57.1
Meridian Boulevard, West of Minaret Road			4600	61.4	57.4	55.4	62.6	58.6	56.6
Meridian Boulevard, East of Majestic Pines Road North			3330	60.0	56.0	54.0	61.2	57.2	55.2
Meridian Boulevard, West of Majestic Pines Road North			2780	59.2	55.2	53.2	60.4	56.4	54.4
Minaret Road, Main Street for Forest Trail			8770	65.3	60.6	58.4	66.6	61.8	59.6
Future No Project									
	Traffic Volumes			Leq			CNEL		
Roadway/Segment	AM	PM	ADT	ROW	50 Feet	100 Feet	ROW	50 Feet	100 Feet
Meridian Boulevard, East of Minaret Boulevard			5500	62.2	58.2	56.1	63.4	59.4	57.3
Meridian Boulevard, West of Minaret Road			4980	61.7	57.7	55.7	63.0	59.0	56.9
Meridian Boulevard, East of Majestic Pines Road North			3680	60.4	56.4	54.4	61.6	57.6	55.6
Meridian Boulevard, West of Majestic Pines Road North			3100	59.7	55.7	53.6	60.9	56.9	54.9
Minaret Road, Main Street for Forest Trail			9230	65.6	60.8	58.6	66.8	62.1	59.9
Future With Project									
	Traffic Volumes			Leq			CNEL		
Roadway/Segment	AM	PM	ADT	ROW	50 Feet	100 Feet	ROW	50 Feet	100 Feet
Meridian Boulevard, East of Minaret Boulevard			6680	63.0	59.0	57.0	64.2	60.2	58.2
Meridian Boulevard, West of Minaret Road			7270	63.4	59.4	57.3	64.6	60.6	58.6
Meridian Boulevard, East of Majestic Pines Road North			6390	62.8	58.8	56.8	64.0	60.0	58.0
Meridian Boulevard, West of Majestic Pines Road North			5840	62.4	58.4	56.4	63.6	59.7	57.6
Minaret Road, Main Street for Forest Trail			9310	65.6	60.9	58.7	66.8	62.1	59.9

CNEL

Summary	50 ft. from ROW		At ROW	
Roadway/Segment	Project Increment	Cumulative Increment	Project Increment	Cumulative Increment
Meridian Boulevard, East of Minaret Boulevard	0.8	1.1	0.8	1.1
Meridian Boulevard, West of Minaret Road	1.6	2.0	1.6	2.0
Meridian Boulevard, East of Majestic Pines Road North	2.4	2.8	2.4	2.8
Meridian Boulevard, West of Majestic Pines Road North	2.8	3.3	2.7	3.2
Minaret Road, Main Street for Forest Trail	0.0	0.3	0.0	0.2

Mammoth Lakes - Eagle Lodge
TENS Analysis (Year 2009)

Existing									
	Traffic Volumes			Leq			CNEL		
Roadway/Segment	AM	PM	ADT	ROW	50 Feet	100 Feet	ROW	50 Feet	100 Feet
Minaret Road, South of Main			4290	62.2	57.5	55.3	63.5	58.7	56.5
Majestic Pines Drive, North of Meridian Boulevard			980	55.8	51.1	48.9	57.0	52.3	50.1
Majestic Pines Drive, South of Meridian Boulevard			710	54.4	49.7	47.5	55.6	50.9	48.7
Kelly Road, South of Lake Mary Road			550	53.3	48.6	46.4	54.5	49.8	47.6
0			0	-	-	-	-	-	-
Future No Project									
	Traffic Volumes			Leq			CNEL		
Roadway/Segment	AM	PM	ADT	ROW	50 Feet	100 Feet	ROW	50 Feet	100 Feet
Minaret Road, South of Main			5950	63.7	58.9	56.7	64.9	60.2	57.9
Majestic Pines Drive, North of Meridian Boulevard			1620	58.0	53.3	51.1	59.2	54.5	52.3
Majestic Pines Drive, South of Meridian Boulevard			740	54.6	49.9	47.7	55.8	51.1	48.9
Kelly Road, South of Lake Mary Road			1730	58.3	53.6	51.4	59.5	54.8	52.6
0			0	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!
Future With Project									
	Traffic Volumes			Leq			CNEL		
Roadway/Segment	AM	PM	ADT	ROW	50 Feet	100 Feet	ROW	50 Feet	100 Feet
Minaret Road, South of Main			6220	63.9	59.1	56.9	65.1	60.3	58.1
Majestic Pines Drive, North of Meridian Boulevard			2190	59.3	54.6	52.4	60.5	55.8	53.6
Majestic Pines Drive, South of Meridian Boulevard			1010	56.0	51.2	49.0	57.2	52.5	50.2
Kelly Road, South of Lake Mary Road			1760	58.4	53.7	51.4	59.6	54.9	52.7
0			0	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!	#NUM!

	CNEL			
Summary	50 ft. from ROW		At ROW	
Roadway/Segment	Project Increment	Cumulative Increment	Project Increment	Cumulative Increment
Minaret Road, South of Main	0.1	1.6	0.2	1.6
Majestic Pines Drive, North of Meridian Boulevard	1.3	3.5	1.3	3.5
Majestic Pines Drive, South of Meridian Boulevard	1.4	1.6	1.4	1.6
Kelly Road, South of Lake Mary Road	0.1	5.1	0.1	5.1
0	#NUM!	-	#NUM!	-

Mammoth Lakes - Eagle Lodge
TENS Analysis (Year 2024)

Existing									
	Traffic Volumes			Leq			CNEL		
Roadway/Segment	AM	PM	ADT	ROW	50 Feet	100 Feet	ROW	50 Feet	100 Feet
Main Street East of Old Mammoth Road			3610	60.3	56.3	54.3	61.6	57.6	55.5
Main Street West of Old Mammoth Road			9490	64.5	60.5	58.5	65.8	61.8	59.7
Main Street East of Minaret Road			10710	65.1	61.1	59.0	66.3	62.3	60.2
Lake Mary Road West of Minaret Road			7160	63.3	59.3	57.3	64.5	60.5	58.5
Lake Mary Road West of Kelly Road			850	55.2	50.5	48.3	56.4	51.7	49.5
Future No Project									
	Traffic Volumes			Leq			CNEL		
Roadway/Segment	AM	PM	ADT	ROW	50 Feet	100 Feet	ROW	50 Feet	100 Feet
Main Street East of Old Mammoth Road			11780	65.5	61.5	59.4	66.7	62.7	60.7
Main Street West of Old Mammoth Road			23860	68.5	64.5	62.5	69.8	65.8	63.7
Main Street East of Minaret Road			26900	69.1	65.1	63.0	70.3	66.3	64.2
Lake Mary Road West of Minaret Road			22600	68.3	64.3	62.3	69.5	65.5	63.5
Lake Mary Road West of Kelly Road			7420	64.6	59.9	57.7	65.8	61.1	58.9
Future With Project									
	Traffic Volumes			Leq			CNEL		
Roadway/Segment	AM	PM	ADT	ROW	50 Feet	100 Feet	ROW	50 Feet	100 Feet
Main Street East of Old Mammoth Road			11960	65.5	61.5	59.5	66.8	62.8	60.7
Main Street West of Old Mammoth Road			23860	68.5	64.5	62.5	69.8	65.8	63.7
Main Street East of Minaret Road			27300	69.1	65.1	63.1	70.3	66.3	64.3
Lake Mary Road West of Minaret Road			22740	68.3	64.3	62.3	69.6	65.6	63.5
Lake Mary Road West of Kelly Road			7580	64.7	60.0	57.8	65.9	61.2	59.0

	CNEL			
Summary	50 ft. from ROW		At ROW	
Roadway/Segment	Project Increment	Cumulative Increment	Project Increment	Cumulative Increment
Main Street East of Old Mammoth Road	0.1	5.2	0.1	5.2
Main Street West of Old Mammoth Road	0.0	4.0	0.0	4.0
Main Street East of Minaret Road	0.0	4.0	0.0	4.0
Lake Mary Road West of Minaret Road	0.1	5.1	0.1	5.1
Lake Mary Road West of Kelly Road	0.1	9.5	0.1	9.5

Mammoth Lakes - Eagle Lodge
TENS Analysis (Year 2024)

Existing									
	Traffic Volumes			Leq			CNEL		
Roadway/Segment	AM	PM	ADT	ROW	50 Feet	100 Feet	ROW	50 Feet	100 Feet
Old Mammoth Road South of Main Street			7320	64.6	59.8	57.6	65.8	61.1	58.8
Old Mammoth Road North of Meridian Boulevard			5590	63.4	58.7	56.5	64.6	59.9	57.7
Old Mammoth Road South of Meridian Boulevard			5760	63.5	58.8	56.6	64.7	60.0	57.8
Meridian Boulevard, East of Old Mammoth Road			4140	60.9	56.9	54.9	62.2	58.2	56.1
Meridian Boulevard, West of Old Mammoth Road			4230	61.0	57.0	55.0	62.2	58.3	56.2
Future No Project									
	Traffic Volumes			Leq			CNEL		
Roadway/Segment	AM	PM	ADT	ROW	50 Feet	100 Feet	ROW	50 Feet	100 Feet
Old Mammoth Road South of Main Street			15760	67.9	63.2	61.0	69.1	64.4	62.2
Old Mammoth Road North of Meridian Boulevard			18060	68.5	63.8	61.6	69.7	65.0	62.8
Old Mammoth Road South of Meridian Boulevard			18740	68.6	63.9	61.7	69.9	65.1	62.9
Meridian Boulevard, East of Old Mammoth Road			12540	65.8	61.8	59.7	67.0	63.0	60.9
Meridian Boulevard, West of Old Mammoth Road			11820	65.5	61.5	59.5	66.7	62.7	60.7
Future With Project									
	Traffic Volumes			Leq			CNEL		
Roadway/Segment	AM	PM	ADT	ROW	50 Feet	100 Feet	ROW	50 Feet	100 Feet
Old Mammoth Road South of Main Street			15880	67.9	63.2	61.0	69.1	64.4	62.2
Old Mammoth Road North of Meridian Boulevard			18720	68.6	63.9	61.7	69.9	65.1	62.9
Old Mammoth Road South of Meridian Boulevard			18960	68.7	64.0	61.8	69.9	65.2	63.0
Meridian Boulevard, East of Old Mammoth Road			13140	66.0	62.0	59.9	67.2	63.2	61.1
Meridian Boulevard, West of Old Mammoth Road			13620	66.1	62.1	60.1	67.3	63.3	61.3

	CNEL			
Summary	50 ft. from ROW		At ROW	
Roadway/Segment	Project Increment	Cumulative Increment	Project Increment	Cumulative Increment
Old Mammoth Road South of Main Street	0.0	3.3	0.0	3.3
Old Mammoth Road North of Meridian Boulevard	0.1	5.2	0.2	5.3
Old Mammoth Road South of Meridian Boulevard	0.1	5.2	0.0	5.2
Meridian Boulevard, East of Old Mammoth Road	0.2	5.0	0.2	5.0
Meridian Boulevard, West of Old Mammoth Road	0.6	5.0	0.6	5.1

Mammoth Lakes - Eagle Lodge
TENS Analysis (Year 2024)

Existing									
	Traffic Volumes			Leq			CNEL		
Roadway/Segment	AM	PM	ADT	ROW	50 Feet	100 Feet	ROW	50 Feet	100 Feet
Meridian Boulevard, East of Minaret Boulevard			5170	61.9	57.9	55.9	63.1	59.1	57.1
Meridian Boulevard, West of Minaret Road			4600	61.4	57.4	55.4	62.6	58.6	56.6
Meridian Boulevard, East of Majestic Pines Road North			3330	60.0	56.0	54.0	61.2	57.2	55.2
Meridian Boulevard, West of Majestic Pines Road North			2780	59.2	55.2	53.2	60.4	56.4	54.4
Minaret Road, Main Street for Forest Trail			8770	65.3	60.6	58.4	66.6	61.8	59.6
Future No Project									
	Traffic Volumes			Leq			CNEL		
Roadway/Segment	AM	PM	ADT	ROW	50 Feet	100 Feet	ROW	50 Feet	100 Feet
Meridian Boulevard, East of Minaret Boulevard			17200	67.1	63.1	61.1	68.3	64.3	62.3
Meridian Boulevard, West of Minaret Road			16600	67.0	63.0	60.9	68.2	64.2	62.1
Meridian Boulevard, East of Majestic Pines Road North			9140	64.4	60.4	58.3	65.6	61.6	59.6
Meridian Boulevard, West of Majestic Pines Road North			8300	64.0	60.0	57.9	65.2	61.2	59.1
Minaret Road, Main Street for Forest Trail			21400	69.2	64.5	62.3	70.4	65.7	63.5
Future With Project									
	Traffic Volumes			Leq			CNEL		
Roadway/Segment	AM	PM	ADT	ROW	50 Feet	100 Feet	ROW	50 Feet	100 Feet
Meridian Boulevard, East of Minaret Boulevard			19560	67.7	63.7	61.6	68.9	64.9	62.9
Meridian Boulevard, West of Minaret Road			21180	68.0	64.0	62.0	69.2	65.2	63.2
Meridian Boulevard, East of Majestic Pines Road North			14560	66.4	62.4	60.4	67.6	63.6	61.6
Meridian Boulevard, West of Majestic Pines Road North			13780	66.2	62.2	60.1	67.4	63.4	61.3
Minaret Road, Main Street for Forest Trail			21560	69.3	64.5	62.3	70.5	65.7	63.5

	CNEL			
Summary	50 ft. from ROW		At ROW	
Roadway/Segment	Project Increment	Cumulative Increment	Project Increment	Cumulative Increment
Meridian Boulevard, East of Minaret Boulevard	0.6	5.8	0.6	5.8
Meridian Boulevard, West of Minaret Road	1.0	6.6	1.0	6.6
Meridian Boulevard, East of Majestic Pines Road North	2.0	6.4	2.0	6.4
Meridian Boulevard, West of Majestic Pines Road North	2.2	7.0	2.2	7.0
Minaret Road, Main Street for Forest Trail	0.0	3.9	0.1	3.9

Mammoth Lakes - Eagle Lodge
TENS Analysis (Year 2024)

Existing									
	Traffic Volumes			Leq			CNEL		
Roadway/Segment	AM	PM	ADT	ROW	50 Feet	100 Feet	ROW	50 Feet	100 Feet
Minaret Road, South of Main			4290	62.2	57.5	55.3	63.5	58.7	56.5
Majestic Pines Drive, North of Meridian Boulevard			980	55.8	51.1	48.9	57.0	52.3	50.1
Majestic Pines Drive, South of Meridian Boulevard			710	54.4	49.7	47.5	55.6	50.9	48.7
Kelly Road, South of Lake Mary Road			550	53.3	48.6	46.4	54.5	49.8	47.6
Future No Project									
	Traffic Volumes			Leq			CNEL		
Roadway/Segment	AM	PM	ADT	ROW	50 Feet	100 Feet	ROW	50 Feet	100 Feet
Minaret Road, South of Main			17660	68.4	63.7	61.5	69.6	64.9	62.7
Majestic Pines Drive, North of Meridian Boulevard			6760	64.2	59.5	57.3	65.4	60.7	58.5
Majestic Pines Drive, South of Meridian Boulevard			2560	60.0	55.3	53.1	61.2	56.5	54.3
Kelly Road, South of Lake Mary Road			5160	63.0	58.3	56.1	64.3	59.5	57.3
Future With Project									
	Traffic Volumes			Leq			CNEL		
Roadway/Segment	AM	PM	ADT	ROW	50 Feet	100 Feet	ROW	50 Feet	100 Feet
Minaret Road, South of Main			18200	68.5	63.8	61.6	69.7	65.0	62.8
Majestic Pines Drive, North of Meridian Boulevard			7900	64.9	60.2	58.0	66.1	61.4	59.2
Majestic Pines Drive, South of Meridian Boulevard			2940	60.6	55.9	53.7	61.8	57.1	54.9
Kelly Road, South of Lake Mary Road			5220	63.1	58.4	56.2	64.3	59.6	57.4

	CNEL			
Summary	50 ft. from ROW		At ROW	
Roadway/Segment	Project Increment	Cumulative Increment	Project Increment	Cumulative Increment
Minaret Road, South of Main	0.1	6.3	0.1	6.2
Majestic Pines Drive, North of Meridian Boulevard	0.7	9.1	0.7	9.1
Majestic Pines Drive, South of Meridian Boulevard	0.6	6.2	0.6	6.2
Kelly Road, South of Lake Mary Road	0.1	9.8	0.0	9.8

Appendix E

Floral and Faunal Compendia

ANGIOSPERMS (DICOTYLEDONS)

SCIENTIFIC NAME	COMMON NAME
Asteraceae	**Sunflower Family**
Achillea millefolium	California yarrow
Ambrosia acanthicarpa	annual bur-sage
* *Anthemis cotula*	mayweed
Artemisia douglasiana	mugwort
Artemisia ludoviciana	silver wormwood
Artemisia tridentata	basin sagebrush
Aster integrifolius	aster
* *Chamomilla suaveolens*	pineapple weed
Chrysothamnus nauseosus	rubber rabbitbrush
* *Conyza canadensis*	horseweed
Erigeron sp.	fleabane daisy
Filago californica	California fluffweed
Gnaphalium purpureum	cudweed
Brassicaceae	**Mustard Family**
Lepidium virginicum var. *virginicum*	peppergrass
* *Sisymbrium altissimum*	tumble mustard
Caprifoliaceae	**Honeysuckle Family**
Symphoricarpos rotundifolius	snowberry
Chenopodiaceae	**Goosefoot Family**
* *Salsola tragus*	Russian thistle
Ericaceae	**Heath Family**
Arctostaphylos sp.	manzanita
Fabaceae	**Legume Family**
Lupinus latifolius	broad-leaved lupine
Lupinus praetensis var. *praetensis*	lupine
* *Medicago polymorpha*	California bur clover
* *Melilotus alba*	white sweetclover
* *Melilotus indica*	sourclover
Trifolium longipes	clover
Trifolium cyathiferum	clover

* *Non-Native Species*

ANGIOSPERMS (DICOTYLEDONS)

SCIENTIFIC NAME	COMMON NAME
Onagraceae	**Evening Primrose Family**
Epilobium ciliatum	California cottonweed
Rosaceae	**Rose Family**
Potentilla gracilis	cinquefoil
Salicaceae	**Willow Family**
Populus tremuloides	quaking aspen
Salix exigua	sandbar willow
Salix lasiolepis	arroyo willow
Scrophulariaceae	**Figwort Family**
Castilleja miniata	Indian paintbrush
Mimulus guttatus	common monkey-flower
* *Verbascum thapsus*	woolly mullein

* *Non-Native Species*

ANGIOSPERMS (MONOCOTYLEDONS)

SCIENTIFIC NAME	COMMON NAME
Cyperaceae	**Sedge Family**
Carex sp.	sedge
Eleocharis macrostachya	pale spike-rush
Juncaceae	**Rush Family**
Juncus mexicanus	Mexican rush
Liliaceae	**Lily Family**
Bloomeria sp.	common goldenstar
Poaceae	**Grass Family**
* *Agrostis stolonifera*	redtop
Elymus glaucus	blue wildrye
Melica bulbosa	coast range melic
Poa praetensis	Malpais bluegrass
* *Polypogon monspeliensis*	annual beard grass
Typhaceae	**Cattail Family**
Typha angustifolia	narrow-leaved cattail

* ***Non-Native Species***

GYMNOSPERMS

SCIENTIFIC NAME	COMMON NAME
Pinaceae	**Pine Family**
Pinus jefferyi	Jeffery pine
Pinus sp.	lodgepole pine

* *Non-Native Species*

APPENDIX E – FAUNAL COMPENDIUM

BIRDS

SCIENTIFIC NAME	COMMON NAME
Corvidae	**Jays and Crows**
Cyanocitta stelleri	Steller's jay
Corvus brachyrhynchos	American crow
Sturnidae	**Starlings**
* *Sturnus vulgaris*	European starling
Icteridae	**Blackbirds**
Euphagus cyanocephalus	Brewer's blackbird

* *Non-Native Species*

Appendix F

Cultural Resources Technical Report

PHASE I CULTURAL AND PALEONTOLOGICAL RESOURCES ASSESSMENT FOR THE PROPOSED EAGLE LODGE BASE AREA DEVELOPMENT, TOWN OF MAMMOTH LAKES, MONO COUNTY, CALIFORNIA

Report Prepared For:

Town of Mammoth Lakes
Community Development Department
437 Old Mammoth Road, Suite R
Mammoth Lakes, CA 93546

Mark Wardlaw, Director

Report Prepared By:

PCR Services Corporation
One Venture, Suite 150
Irvine, CA 92618
Phone: (949) 753-7001

Amy M. Holmes, RPA, Principal Investigator
J.D. Stewart, Ph.D., Principal Paleontologist

Old Mammoth, CA 1994 7.5' USGS Quadrangle
5.85 Acres

Keywords: CA-MNO-1529, cultural resources survey, Phase I, Mono County, Town of Mammoth Lakes

TABLE OF CONTENTS

TABLE OF CONTENTS (CONTINUED)

Page

LIST OF FIGURES

Page

LIST OF TABLES

MANAGEMENT SUMMARY

The Mammoth Mountain Ski Area (MMSA) plans to develop a permanent base lodge facility at 3256 Meridian Boulevard (APN#'s 32-040-12 and 32-040-08) in the Town of Mammoth Lakes, CA (i.e., the "project"). The 5.85-acre project site is located within the Town's Urban Growth Boundary (3.46 acres) and the Inyo National Forest (2.39 acres). Since the project site is located on both municipal and federal lands, a joint California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) environmental document is being prepared.

The purpose of this study is to identify cultural and paleontological resources that could be impacted by the implementation of the proposed project; analyze the nature of those impacts associated with those resources identified; and propose appropriate mitigation measures for potential impacts, if any. The results of this study will be incorporated into the project's Draft Environmental Impact Report (DEIR) and Environmental Assessment (EA) documents.

In September and October of 2005, **PCR Services Corporation (PCR)** conducted a Phase I Cultural and Paleontological Resources assessment of the Eagle Lodge Base Area project site. This assessment included a records search through the California Historic Resources Information System Eastern Information Center (CHRIS-EIC) in Riverside; a paleontological records search through the University of California Museum of Paleontology (UCMP) online database; a Sacred Lands Search through the California Native American Heritage Commission (NAHC) in Sacramento; and a pedestrian survey of the project site by a qualified archaeologist.

No cultural resources were identified on the surface of the project site during the pedestrian survey. There is no record of paleontological resources within the project site, and no indication of any geologic units within the project site old enough to contain paleontological resources. Geological information and comparative data from nearby archaeological sites indicate, however, that there is potential for buried archaeological or Native American resources within the fill and glacial deposits that underlie the project site. Recommended mitigation measures include monitoring of excavations of alluvial deposits and the upper three feet of glacial deposits in the project and provisions for the discovery of archaeological and Native American resources.

1.0 INTRODUCTION AND SETTING

The Mammoth Mountain Ski Area (MMSA) plans to develop a permanent base lodge facility at 3256 Meridian Boulevard (APN #'s 32-040-12 and 32-040-08) in the Town of Mammoth Lakes, CA (Figure 1 on page 3). The 5.85-acre project site is located within the Town's Urban Growth Boundary (3.46 acres) and the Inyo National Forest (2.39 acres) (Figure 2 on page 3). Since the project site is located on both municipal and federal land, PCR Services Corporation (PCR) was contracted by the Town of Mammoth Lakes (Town) to prepare a joint California Environmental Quality Act (CEQA)/National Environmental Preservation Act (NEPA) environmental document.

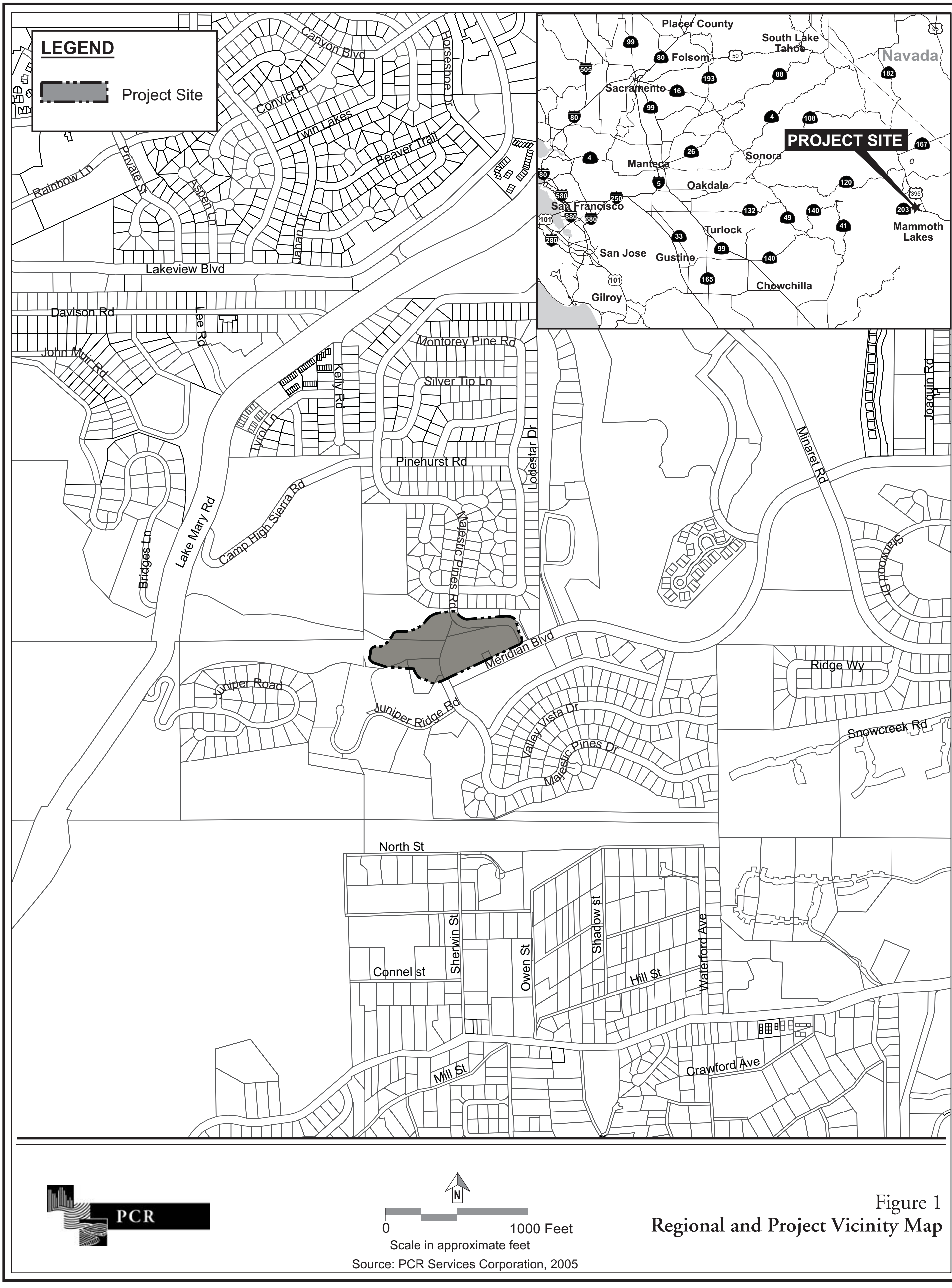
The site is located at the base of the Eagle Express chairlift (Chair 15), which is located on lands administered by the Inyo National Forest. Existing uses on the project site include a surface parking lot for skiers utilizing Eagle Express and the temporary Little Eagle Base Lodge. The surface parking lot, which is bounded by Meridian Boulevard and Majestic Pines Road, can accommodate approximately 225 vehicles, inclusive of day-skier and temporary/drop-off parking.

The project would create a mixed use of day skier amenities and general commercial services. This would include visitor lodging, a subterranean parking structure, and a mix of ski-related uses including food service, ticketing, and a ski rental/pro shop (Figure 3 on page 3).

The purpose of this study is to identify potential cultural and paleontological resources that could be affected by implementation of the proposed project; analyze the nature of those affects any identified resources; and propose appropriate mitigation measures.

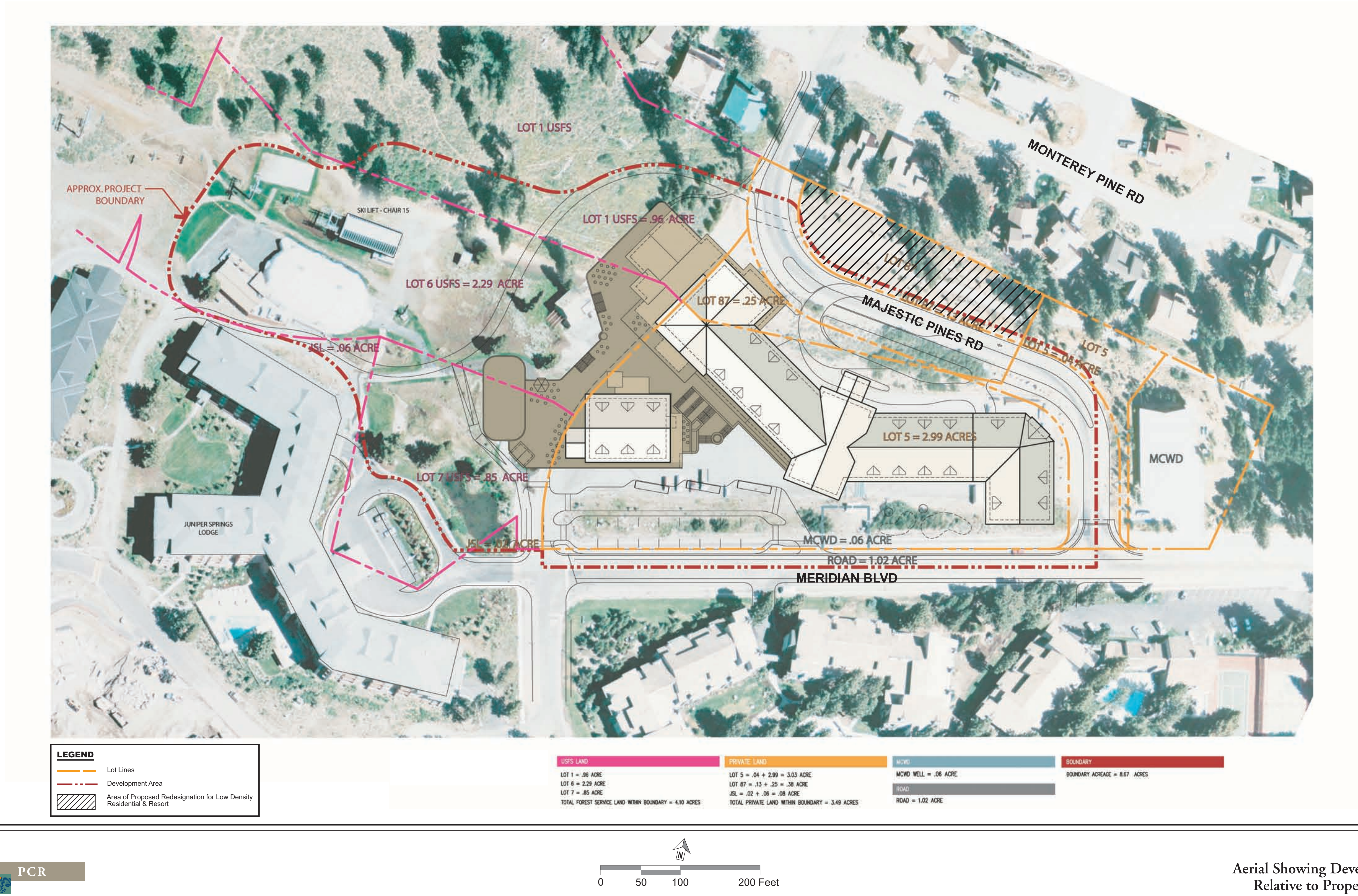
2.0 REGULATORY FRAMEWORK

Numerous laws and regulations require federal, state, and local agencies to consider the effects of a proposed project on cultural resources. These laws and regulations stipulate a process for compliance, define the responsibilities of the various agencies proposing the action, and prescribe the relationship among other involved agencies (e.g. State Historic Preservation Office and the Advisory Council on Historic Preservation). The primary federal and state laws governing and affecting preservation of historic resources of national, state, regional, and/or local significance include the National Historic Preservation Act (NHPA) of 1966, as amended; CEQA; and the California Register of Historical Resources (California Register), Public Resources Code (PRC) 5024. At the local government level, relevant regulations include the



PCR

Figure 1
Regional and Project Vicinity Map



Source: Gensler, 2006.

PCR

Figure 2
Aerial Showing Development Relative to Property Lines

Source: Gensler, 2005

PCR

Figure 3
Site Plan

Town of Mammoth Lakes General Plan (adopted 1987) and proposed General Plan Update (2005). A description of these laws and regulations is provided below.

2.1 Federal Level

2.1.1 National Register of Historic Places

First authorized by the Historic Sites Act of 1935, the National Register of Historic Places (National Register) was established by the NHPA of 1966, as "an authoritative guide to be used by federal, State, and local governments, private groups and citizens to identify the Nation's historic resources and to indicate what properties should be considered for protection from destruction or impairment."[1] The National Register recognizes properties that are significant at the national, State and local levels.

To be eligible for listing in the National Register, a resource must be significant in American history, architecture, archaeology, engineering, or culture. Districts, sites, buildings, structures, and objects of potential significance must meet one or more of the following four established criteria:[2]

1. Are associated with events that have made a significant contribution to the broad patterns of our history;
2. Are associated with the lives of persons significant in our past;
3. Embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
4. Have yielded, or may be likely to yield, information important in prehistory or history.

---

[1] *Code of Federal Regulations (CFR), 36 Section 60.2.*

[2] *U.S. Department of the Interior, National Park Service, National Register Bulletin: How to Apply the National Register Criteria for Evaluation (Washington, DC: National Park Service, 1995).*

Unless the property possesses exceptional significance, it must be at least fifty years old to be eligible for National Register listing.[3]

In addition to meeting the criteria of significance, a property must have integrity. Integrity is understood as "the ability of a property to convey its significance."[4] The National Register recognizes seven qualities that, in various combinations, define integrity. To retain historic integrity a property must possess several, and usually most, of these seven aspects. Thus, the retention of the specific aspects of integrity is paramount for a property to convey its significance.[5] The seven factors that define integrity are location, design, setting, materials, workmanship, feeling, and association.

2.1.2 Paleontological Resources

Federal protection for significant paleontological resources would apply to the project if any construction or other related project impacts occurred on federally owned or managed lands. Federal legislative protection for paleontological resources stems from the Antiquities Act of 1906 (PL 59-209; 16 United States Code 431 *et. seq.*; 34 Stat. 225), which calls for protection of historic landmarks, historic and prehistoric structures, and other objects of historic or scientific interest on federal lands. Because the proposed project is partially on federal land, this federal statute is applicable.

2.2 State Level

2.2.1 California Register of Historical Resources

The State implements the NHPA through its statewide comprehensive cultural resources surveys and preservation programs. The California Office of Historic Preservation (OHP), as an office of the California Department of Parks and Recreation, implements the policies of the NHPA on a statewide level. The OHP also maintains the California Historic Resources Inventory. The State Historic Preservation Officer (SHPO) is an appointed official who implements historic preservation programs within the State's jurisdictions.

---

3 *Exceptional Significance as defined by National Register Criteria Consideration G: Properties That Have Achieved Significance Within the Past Fifty Years. National Register Bulletin: How to Apply the National Register Criteria for Evaluation (Washington, DC: National Park Service, 1995).*

4 *National Register Bulletin 15, p. 44.*

5 *Ibid.*

Created by Assembly Bill 2881 which was signed into law on September 27, 1992, the California Register is "an authoritative listing and guide to be used by state and local agencies, private groups, and citizens in identifying the existing historical resources of the state and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change."[6] The criteria for eligibility for the California Register are based upon National Register criteria.[7] Certain resources are determined by the statute to be automatically included in the California Register, including California properties formally determined eligible for, or listed in, the National Register.[8]

To be eligible for the California Register, a prehistoric or historic property must be significant at the local, state, and/or federal level under one or more of the following criteria:

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- Is associated with the lives of persons important in our past;
- 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
- Has yielded, or may be likely to yield, information important in prehistory or history.

A resource eligible for the California Register must meet one of the criteria of significance described above and retain enough of its historic character or appearance (integrity) to be recognizable as a historical resource and to convey the reason for its significance. It is possible that a historic resource may not retain sufficient integrity to meet the criteria for listing in the National Register, but it may still be eligible for listing in the California Register.

Additionally, the California Register consists of resources that are listed automatically and those that must be nominated through an application and public hearing process. The California Register automatically includes the following:

- California properties listed on the National Register of Historic Places and those formally Determined Eligible for the National Register of Historic Places.

[6] *California Public Resources Code Section 5024.1(a).*

[7] *California Public Resources Code § 5024.1(b).*

[8] *California Public Resources Code § 5024.1(d).*

- California Registered Historical Landmarks from No. 770 onward.
- Those California Points of Historical Interest that have been evaluated by the OHP and have been recommended to the State Historical Commission for inclusion on the California Register.

Other resources that may be nominated to the California Register include:

- Historical resources with a significance rating of Category 3 through 5.[9]
- Individual historical resources.
- Historical resources contributing to historic districts.
- Historical resources designated or listed as local landmarks, or designated under any local ordinance, such as an historic preservation overlay zone.

2.2.2 California Environmental Quality Act

The CEQA is the principal statute governing environmental review of projects occurring in the State. CEQA requires lead agencies to determine if a proposed project would have a significant effect on archaeological resources (PRC Sections 21000 *et seq.*). As defined in Section 21083.2 of the PRC a "unique" archaeological resource is 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 any of the following criteria:

- Contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information.
- Has a special and particular quality such as being the oldest of its type or the best available example of its type.
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

In addition, CEQA Section 15064.5 broadens the approach to CEQA by using the term "historical resource" instead of "unique archaeological resource." The CEQA Guidelines

[9] *Those properties identified as eligible for listing in the National Register of Historic Places, the California Register of Historical Resources, and/or a local jurisdiction register.*

recognize that certain historical resources may also have significance. The Guidelines recognize that a historical resource includes: (1) a resource in the California Register of Historical Resources; (2) a resource included in a local register of historical resources, as defined in PRC §5020.1 (k) or identified as significant in a historical resource survey meeting the requirements of PRC §5024.1 (g); and (3) any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California by the lead agency, provided the lead agency's determination is supported by substantial evidence in light of the whole record.

If a lead agency determines that an archaeological site is a historical resource, the provisions of §21084.1 of the PRC and §15064.5 of the Guidelines apply. If an archaeological site does not meet the criteria for a historical resource contained in the Guidelines, then the site is to be treated in accordance with the provisions of PRC §21083, which is a unique archaeological resource. The Guidelines note that if an archaeological resource is neither a unique archaeological nor a historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment. (Guidelines §15064.5(c)(4)).

2.2.3 Paleontological Resources

Paleontological resources are also afforded protection by environmental legislation under CEQA. Appendix G (part V) of the CEQA Guidelines provides guidance relative to significant impacts on paleontological resources, stating that "a project will normally result in a significant impact on the environment if it will ...disrupt or adversely affect a paleontological resource or site or unique geologic feature, except as part of a scientific study." Section 5097.5 of the PRC specifies that any unauthorized removal of paleontological remains is a misdemeanor. Further, the California Penal Code Section 622.5 sets the penalties for damage or removal of paleontological resources.

2.3 Local Level

Cultural resources within the jurisdiction of the Town of Mammoth Lakes are subject to documentation and subsequent planning and preservation consideration.

Town of Mammoth Lakes Adopted General Plan (1987)

The objectives of the cultural resource provisions of the Town's adopted General Plan (1987) are to conserve the historical and scientific qualities of the resources, which include historical and archaeological resources, and to promote heritage tourism. Specific goals for management of cultural resources include the following directives:

1. To attempt to locate and record all known archaeologic and historic resources of Mammoth Lakes and the adjacent areas.

2. To preserve, interpret and, where feasible, make accessible to the public archaeologic and historic resources of Mammoth Lakes and adjacent areas.

3. To preserve archaeologic and historic sites for present and future scientific research and educational programs.

Policies in support of these goals include the following:

1. Comprehensive studies and inventories of the Mammoth Lakes area archaeologic and historic sites should be supported by the Town in coordination with the Southern Mono County Historic Society to identify undiscovered sites.

2. An archaeologic 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.

3. The Town shall strive to ensure that historic and archaeologic sites are available to residents and visitors by: 1) establishing funding for historic and archaeologic preservation through state and federal grants, private trusts, and donations, 2) actively promoting the Town's cultural resources in cooperation with the Mammoth Lakes, Resort Association and Historic Society, and 3) encouraging the provision of publications about and tours of the sites.

4. Primary (1) archaeologic and historic sites should be protected through: 1) the adoption of an ordinance designed to protect primary sites and where necessary, provide for the purchase of significant sites, and 2) the obtaining of state and/or national register status where appropriate.

The Town of Mammoth Lakes Draft General Plan (Update 2005, pending approval)

L.U.3.a. The Town shall develop and maintain a cultural resources database that includes data regarding historic and archaeological resources within the Planning Area as that information is developed through project reviews or other archaeological/historical surveys. The database shall be used to ensure the protection and preservation of historic and archaeological resources within the Planning Area.

3.0 NATURAL SETTING

Geographically, Mono County is within the interface of the eastern Sierra Nevada Mountains and the Basin and Range geomorphic provinces. This area is characterized by foothills, steep ridges and slopes coming off of the Sierra Nevada Mountains to the west. The project site is situated at the base of the Sierra Nevada range and the southwestern edge of the Long Valley Caldera. Resurgent domes of the Long Valley Caldera are located to the north and east of the project site.

Regional Sierra Nevadan geology is tied to the formation of the Sierra Nevada. This is best described by Hill (1975) and Pakiser et al. (1964). Volcanic activity, such as underground magma chambers, not only shapes the topography of the region, but it also provides resources such as hot springs and obsidian that were undoubtedly utilized by prehistoric peoples. Hall (1983) describes the dynamic volcanic activity that has shaped the landscape in the vicinity of the project site. The mountains surrounding the project site are mapped primarily as plutonic Mesozoic granite and granodiorite of the Sierra Nevada batholith. Lesser amounts of volcanic Tertiary rock flows are also present (Jennings 1977). Pleistocene glacial deposits overlie the basement and volcanic rocks in the project site and throughout the Town (Sierra Geotechnical Services, Inc. 2005). Results of the geotechnical study for the project indicate that the project site is underlain by Undocumented fill, Quaternary younger alluvium, and Quaternary Tioga Till (i.e., glacial till) (Sierra Geotechnical Services, Inc. 2005). These geologic deposits most likely predate the human occupation of the region. Soils in the project site are generally gravelly sandy loams. Soils in this area of Mono County have been mapped, but a soil survey has not been published.

4.0 CULTURAL SETTING

4.1 Prehistoric Context

Roger G. Elston (1986) provides an overview of the prehistory of the western Great Basin including the eastern slope of the Sierra Nevada. Robert Bettinger (1977) presents the prehistoric cultural chronology and associated adaptations for the Inyo-Mono region. These chronologies are presented in Table 1 on page 13.

4.1.1 Pre-Archaic (12,000-7,500 Years Before Present [YBP])

The first people in California may have been among the first people in North America. Recent research at the Monte Verde site in Chile has demonstrated human presence in the Americas by approximately 12,500 years ago, and challenged the established model of initial

Table 1

Chronology of the High Sierra and Eastern Slopes

Adaptive Strategy (Regional Phases)	Age (YBP) (Regional Phases)	Climate (Grayson 1993; Antevs 1948; Mehringer 1986)	Diagnostic Artifacts/Features
Pre-Archaic (Mohave Complex)	12,000 - 7,500 (pre- 5,500)	Conditions were cool and moist relative to the modern climate. Characterized by extensive marshlands and shallow lakes, and woodlands at lower elevations Mono and Owens Lakes contained water.	Stemmed, concave base and fluted lanceolate projectile points such as Lake Mojave, Silver Lake, and Great Basin Transverse.
Early Archaic (Little Lake Phase)	7,500 – 4,000 (7,500 – 3,150)	Conditions were relatively hot and dry.	Little Lake and Pinto projectile points and possibly Humboldt series projectile points, and concave base projectile points.
Middle Archaic (Newberry Phase)	4,000 – 1,500 (3,150 – 1,350)	Conditions become cooler and moister than the previous period.	Elko series projectile points, first evidence of regional exchange in obsidian and marine shell beads, as well as ground stone implements. The major changes seem to be settlement and subsistence patterns, stylistic elaborations, and an increase in population density.
Late Archaic (Haiwee Phase) (Marana Phase)	1,500 – 400 (1,350 – 650) (650 – contact)	A warming and drying trend begins sometime around 2,000 YBP and reaches its peak about 1,500 YBP.	Atlatl and dart replaced by the bow and arrow. Eastgate, Rose Spring, Cottonwood, and Desert series projectile points introduced. Plant processing equipment becomes more elaborate and abundant. Trans-Sierran obsidian trade. Brownware ceramics introduced after 900 YBP. Piñon exploitation and wild crop irrigation.

Source: Bettinger 1977; Elston 1986:135

overland migration from Siberia through western Canada into the Great Plains at the end of the last Ice Age. Initial migration down the western coast of North America, including coastal California, now appears to be a more likely scenario (Surovell 2003). One of the earliest radiocarbon dates from North America come from the Arlington Springs Woman site on Santa Rosa Island, in southern California. The human remains from this site have been dated to approximately 13,000 YBP (Dr. John Johnson, personal communication, May 12, 2005).

The rate of movement from the coast to inland California locations such as the Eagle Lodge project area is not known (see Rockman 2003), but may have been relatively rapid. Many early California sites, characterized as Late Paleoindian/Early Archaic period, are located near pluvial desert valley lakes formed by glacial meltwaters that are now evaporated or much reduced in size (Moratto 1984). Lakeshore occupation sites often include artifacts such as large projectile points (e.g., Lake Mohave), flaked stone debitage, and fire-affected rock concentrations.

Lifeways during the Paleoindian Period were characterized by highly mobile hunting and gathering. Prey included megafauna such as mammoth and technology included a distinctive flaked stone toolkit that has been identified across much of North America and into Central America. The megafauna went extinct during a warming trend that began approximately 10,000 years ago, and both the extinction and climatic change (which included warmer temperatures in desert valleys and reduced precipitation in mountain areas) were factors in widespread cultural change. Lifeways continued to be organized around hunting and gathering, but the resource base expanded and used a wider range of plant and game resources. Technological traditions also became more localized. This constellation of characteristics has been given the name "Archaic" and it was the most enduring of cultural adaptations to the North American environment.

4.1.2 Early Archaic (7,000-4,000 YBP)

The Early Archaic in the Mammoth Lakes region is known as the Little Lake Phase, dating from ca. 7,500 to 3,150 YBP. Between 7,500 and 5,500 YBP the period is not as well defined for the rest of the Western Great Basin. The climate in the middle Holocene was generally hot and dry. During this time, people used base camps adjacent to rivers, and used temporary task-based camps at higher altitudes on a seasonal basis. These lithic scatters higher than 6,000 feet above mean sea level are thought to be hunting camps. Diagnostic tools of the Early Archaic include Pinto and Little Lake series projectile points. The Early Archaic economy was still organized around hunting of large game.

4.1.3 Middle Archaic (4,000-1,500 YBP)

Bettinger and Taylor (1974) refer to the Middle Archaic as the Newberry Phase (3,150-1,350 YBP) in the southern section of the Eastern Sierra Front. The Middle Archaic is characterized by a transition from the Early Archaic emphasis based on hunting to a more diversified subsistence base that included the exploitation of plant and small animal resources. Grinding stones appear in the archaeological record for the first time in the region. This is consistent with the archaeological remains recovered from Mammoth Creek Cave and Hot Creek Shelters. Large bifaces were fashioned to export raw material. Elko and Humboldt series dart points were common. Site types include quarries, multipurpose camps located in upland valleys, and seed camps located near springs and creeks. Base camps contained features such as pithouses, storage areas, and burials. Seasonal camps were often reoccupied year after year. Kobari and others (1980) suggest that high altitude resources were also exploited as hunting camps were located at high elevations, such as the Casa Diablo and Long Valley Caldera.

4.1.4 Late Archaic (1,500-400 YBP)

The Late Archaic in the region is subdivided into the Haiwee Phase (1,350 to 650 YBP) and the Marana Phase (650 YBP to EuroAmerican contact). During this time, a wide range of resources and ecozones were exploited. There was an increased emphasis on plant resources, and small game hunting replaced large game hunting. There were many technological changes during the Late Archaic. For example, the bow and arrow replaced the atlatl and darts. Diagnostic artifacts include Rose Spring, Eastgate, and Desert Side-Notched projectile points and brownware ceramics (after 900 YBP). Rosegate projectile points are characteristic of the Haiwee Phase, while small Desert Side-Notched and Cottonwood arrow points, and brownware ceramics define the Marana. Steatite disk beads are also common. Obsidian trade was thought to be east-west from Mono Lake and Long Valley Caldera over the Sierra Nevada. As the climate again oscillated to a warmer and drier regime, the area also experienced significant human population increase. With the shift to dryer conditions came a shift to piñon exploitation. Higher elevations continued to be exploited at this time (Bettinger 1977). After 750 YBP, wild crop irrigation and lowland base camps were common. It was during the Late Archaic that flat slab schist milling stones, milling slicks, and bedrock mortars apparently first appeared. The Marana Phase sites are thought to represent Owens Valley Paiute pre-contact sites, as the Owens Valley Paiute were the occupants of the region at the time of contact.

4.2 Ethnographic Context

The following ethnographic summary of the Owens Valley Paiute is derived in part from the Cultural Resources section of *Revised Draft Program Environmental Impact Report for the Town of Mammoth Lakes General Plan Update* (Town of Mammoth Lakes 2005). In addition, Sven Liljeblad and Catherine S. Fowler (1986) provide a comprehensive synthesis of the Owens Valley Paiute.

Traditionally, groups of Owens Valley Paiute have occupied an area from the Town to approximately 60 miles to the east and 100 miles to the south. A ten to 15 mile-wide band of land immediately north-northeast of the Town was jointly used by Owens Valley Paiute and Northern Paiute groups from Mono Lake. This territory includes all of Owens Valley, Round Valley, Long Valley, Fish Lake Valley, and Deep Springs Valley. While both Paiute groups speak Western Numic languages, the Northern Paiute speak Northern Paiute and the Owens Valley Paiute speak Owens Valley Paiute (Nancy Peterson Walter 2005). Other neighboring groups, on the west side of the Sierra Nevada (the Monache) and south of the Town on both flanks of the mountains (Monache and Owens Valley Paiute) speak other dialects of Mono and share many cultural bonds.

The Owens Valley Paiute occupied the Owens Valley on a year-round basis with many semi-sedentary settlements located on major rivers and streams along the west side of the valley. Closer to the Town, in both Long Valley and in the Mammoth Basin, the pre-contact and historic use of the area by the Owens Valley Native American groups has been vaguely documented. However, according to Wally Woolfenden, the ethnographic notes of F.S. Hules and F.J. Essene from the 1930s, and oral interviews of local people from the 1970s clearly document the year-round occupation of Long Valley by the Long Valley Paiute (a subgroup of the Owens Valley Paiute), during the 1800s and 1900s. Jeff Burton cites the work of Emma Lou Davis, Matthew Hall (1983), E.W. Gifford, and Helen Doyle in suggesting that Long Valley included an indigenous population of Northern Paiute in historic times, and provided resources and refuge on an occasional basis to Northern Paiute from Mono Lake, to Monache and Miwok from the west side of the Sierra, and to surrounding Mono-speaking groups of Paiute from Benton, Round Valley, and Owens Valley.

In contrast to the Owens Valley Paiute, the Long Valley Paiute are said to have been highly mobile in historic times, constantly moving in search of food resources and often utilizing resources beyond Long Valley. This movement included frequent trips over the Sierra crest, through Mammoth Pass, in order to collect acorns and to fish and hunt in the San Joaquin River drainage, and area within North Fork Mono Territory. Such trips sometimes occurred in winter, at which time moccasins and snowshoes were worn for snow travel.

In the vicinity of Mammoth Lakes, Mammoth Mountain is reported by Julian Steward as being a scared place as it stands on the border between the Monache (western Mono) and the Owens Valley Paiute (eastern Mono), and is considered to be the place of origin in all Mono-speakers' traditional myths. The actual locations of human origin there are marked by particular geographic features. Elsewhere in Mammoth Basin, ethnographic use by Long Valley Paiute and others is assumed to be seasonal rather than year round.

Owens Valley Paiute groups traded extensively with their neighbors in order to acquire additional foods as well as ornaments, money, and other commodities. Items traded included salt, piñon pine nuts, seeds, obsidian, sinew-backed bows, rabbit skin blankets, deerskins, moccasins, mountain sheepskin, fox skin leggings, balls of tobacco, baskets, basketry water bottles waterproofed with pitch, wooden hot rock lifters, and red and white pigments, in exchange for shell money (e.g., disc beads, tubular clam beads, and more recently, glass beads), acorns and acorn meal, finely-constructed Yokuts baskets, cane for arrows, manzanita berries, squaw berries, and elderberries from the Monache. The Mono Paiute traded salt, piñon pine nuts, piagi (i.e., Pandora moth larvae), brine fly larvae, rabbit skin blankets, baskets, pumice stones, and red and white pigments to the Sierra Miwok, in exchange for shell money, acorns, baskets, arrows, a fungus used in paints, manzanita berries, elderberries, and squaw berries.

In Owens Valley, the population was sedentary, with year-round occupation in permanent villages and short-term visits to temporary camps for resource procurement. Leadership was hereditary, and headmen were responsible for organizing communal work projects and festivals that may have served to redistribute resource surpluses as well as to fulfill other social functions. As for the other groups using Long Valley, the Monache and the Southern Sierra Miwok groups were probably similar in their social organization to the Owens Valley Paiute, with at least some hereditary rulers and semi-permanent villages. Some researchers have postulated that any indigenous Long Valley groups that may have existed would have followed a pattern closer to that of the Mono Lake Paiute (and other Great Basin groups) than that of Owens Valley Paiute, due to similarities in environmental constraints. However, Long Valley residents may have been closely tied to the Owens Valley Paiute through kinship and trade.

Long Valley offered a variety of food resources during snow-free months. In the spring, Tui chub, speckled dace, and Owens sucker may have been dished from creeks, while roots, wild onions and greens along creeks and meadows might have replenished dwindling winter stores. Small game, deer, and antelope could have been hunted nearby. In the summer, grass seeds may have been collected from meadows and drier upland areas. Fall subsistence activities of both the Mono Lake and Owens Valley Paiute revolved around the collection of piñon. Piagi are another food resource available every two years in the Jeffery pine forests. Piagi were collected as they descended the Jeffery pine trees during mid to late summer. Nancy Peterson Walter, a local ethnologist, has extensive knowledge of the Owens Valley Paiute's exploitation of piagi (Fowler and Walter 1985). Also, there are several recorded archaeological sites in the region that are associated with piagi exploitation (Weaver and Basgall 1986).

Much of the trade and travel likely occurred during the summer months, when the high Sierra passes were free of deep snow. Inter- and intra-regional trade may have had extensive ramifications for subsistence and settlement systems of the Owens Valley and Long Valley areas. It is proposed that an elaborate exchange system might account for the relatively complex sociopolitical organization of the Owens Valley Paiute.

5.0 METHODS

5.1 Records Search

5.1.1 Cultural Resources

On September 20, 2005, personnel from the CHRIS-EIC conducted a cultural resources records search for the project. This records search included an examination of previous survey coverage and reports, historic maps, and known cultural resources within a half-mile radius of the project site. In addition, the California Points of Historical Interest, the California Historical Landmarks, the California Register, the National Register, and the California State Historic Resources Inventory were reviewed. PCR also contacted the United States Forest Service (USFS) at the Inyo National Forest regarding any cultural resource studies or recorded cultural resources within the project site.

5.1.2 Native American Consultation

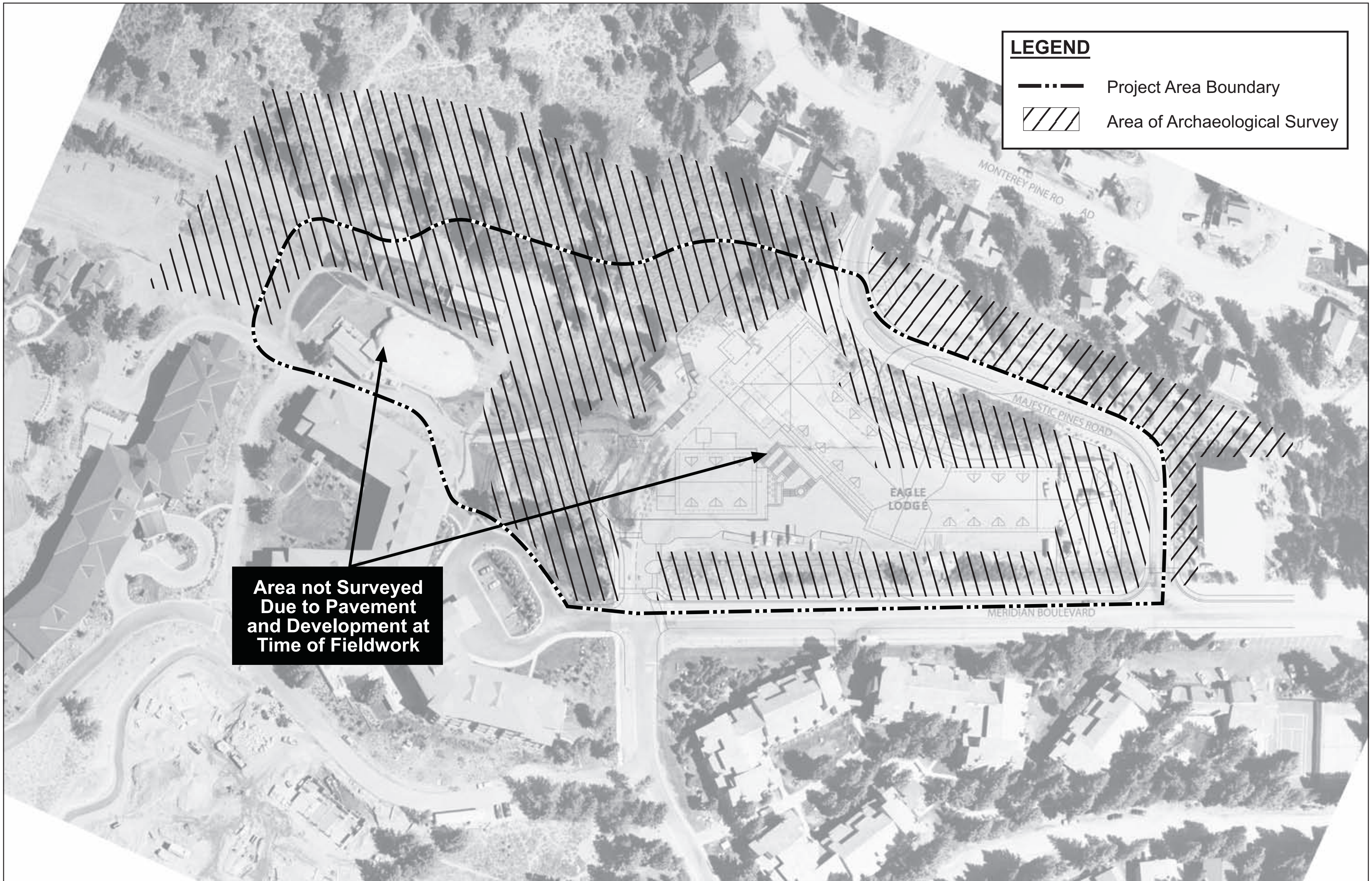
On September 15, 2005, PCR commissioned a Sacred Lands Search for the project site through the Native American Heritage Commission (NAHC) in Sacramento. The NAHC provided a list of individuals and organizations that might have knowledge of sacred lands in the area in February 2006. PCR sent letters via certified mail describing the proposed project and requesting input about Native American resources in the project vicinity to the persons on the list on February 16, 2006. A copy of PCR's consultation letter is provided in Appendix A.

5.1.3 Paleontological Resources

This records search consisted of an examination of geologic maps and paleontological locality records. The UCMP online database was accessed to determine if known vertebrate fossil localities are present inside or in the vicinity of the project site.

5.2 Fieldwork

Fieldwork for the cultural resources investigation consisted of intensive pedestrian surface survey of the project area. The survey was conducted by PCR on September 23, 2005. Résumes of key personnel are provided in Appendix B. At the time of survey, the project boundary had only been approximately defined by the Town of Mammoth Lakes and the USFS. The PCR archaeologist surveyed within the approximate project site boundary and beyond the current western project site boundary in the vicinity of the Chair 15 ski lift. The area surveyed in relation to the current project boundary is shown in Figure 4 on page 20.



PCR

Scale not provided

Source: Gensler, 2006

Figure 4
Area Surveyed in Relation to the Project Boundary

The exposed ground surface was inspected for prehistoric and historical-period artifacts and features. Due to the developed nature of much of the project area, less than half of the surface of the project area could be visually inspected. All unpaved portions of the project area were walked over in a pattern of transects spaced not more than 15 meters apart. These included the unpaved sections of Lot 1, Lots 5-7, and Lot 87, the landscaped medians that surround the parking lot, and the unpaved area between the parking lot and the Chair 15 ski lift. The landscaped medians contain large granite boulders; these boulders were examined for cultural features such as milling slicks and cupules. Photographs of the project site were taken and disturbances to the ground surface were noted.

6.0 RESULTS

6.1 Records Search

6.1.1 Cultural Resources

PCR reviewed cultural resources records from both the CHRIS-EIC and the Inyo National Forest. According to CHRIS-EIC records search, the project site has not been previously surveyed. However, according to Inyo National Forest records, a section of the project site on National Forest Lands was surveyed in 1981 during the Camp High Sierra Land Exchange. This survey identified one prehistoric archaeological site, CA-MNO-1529, located on the Chair 15 slope approximately 200 m (650 feet) northwest of the project site boundary. The site includes bedrock milling features and an obsidian lithic scatter (Taylor 1981). The site was excavated in 1982 by a University of California, Davis archaeological field school class (Basgall 1984).

Excavations at CA-MNO-1529 identified three artifact-bearing strata overlying cemented glacial deposits. These strata included a thin (3-5 centimeters) upper humus/loam layer, derived from decomposition of organic duff and roots, a thicker (30-60 centimeter) sandy loam layer, and an unsorted loose glacial till-gravel layer that measured 30-50 centimeters or thicker (bottom not reached in some excavations). The sandy loam layer had the highest artifact content and largest artifact size. It was described as a colluvial layer of "medium brown, unbedded deposit of sand to silt-size particles intermixed with volcanic ash/pumice gravels and obsidian blast" (Basgall 1984:10). Similar artifact-bearing strata have been identified at nearby sites CA-MNO-529, located approximately 1500 feet (450 meters) east of the project area, and sites CA-MNO-714 and CA-MNO-561, located in the Long Valley-Mammoth Mountain region. Artifact density and size was lower in the loose glacial till-gravel layer than in the sandy layer and both decreased with depth. These characteristics suggest that some of the artifacts in this layer may be "drift and have been introduced into the layer from the sandy layer through natural processes such as movement of ground water and freeze-thaw action. No artifacts were identified in the cemented glacial deposits. Obsidian artifact hydration dates suggest that occupation of the site may have extended from the Little Lake Phase of the Early Archaic (7,000 to 3,150 years ago) to the to the Haiwee Phase of the Late Archaic (1,350 to 650 years ago), with intensification of occupation during the Haiwee Phase (Basgall 1984). Despite this level of work, the site has not been formally evaluated with respect to the National Register and California Register. An EA prepared for the current project in 1997 (USDA-FS 1997) stated that the current project area was completely surveyed in conjunction with the Camp High Sierra Land Exchange, and that all potentially significant cultural resources were mitigated.

Results of the geotechnical study for the proposed action conducted in December 2005 indicated that deposits comparable to the artifact–bearing sandy loam colluvial and unconsolidated glacial till deposit layers identified at site CA-MNO-1529 are present at depth in the project area. Coring determined that the upper four feet of sediment below the modern ground surface of the project area consists of undocumented fill (i.e., introduced sediments). This fill overlies a combination of alluvium, which is similar to the description of the sandy loam layer provided by Basgall (1984:10-16), and glacial till deposits. The alluvial layer is approximately 6 feet deep in the project area. Variable glacial deposits underlie the alluvial layer to the base of the test boring holes.

6.1.2 Native American Resources

The Sacred Land Search did not identify any Native American cultural resources in the vicinity of the project site. The NAHC provided a list of Native American individuals and organizations that may have knowledge of Native American cultural resources in the area. PCR sent a consultation letter to all the parties on the NAHC's consultation list in February 2006 requesting information and input about sensitive areas that may be affected by the proposed development. To date, PCR has not received any responses to the letters.

6.1.3 Paleontological Resources

The paleontological records search through the UCMP online database determined that there are no known vertebrate fossil localities within the project site or even within a one-mile radius of the project site. The closest vertebrate fossil locality in that database is located more than 30 miles to the north.

6.2 Survey

6.2.1 Cultural Resources

No cultural resources were observed on the ground surface of the project site. Undisturbed ground is scarce as the majority of the project site consists of a paved parking lot and landscape features (Figure 5 on page 23). The PCR archaeologist examined all unpaved sections of the project site. These areas included the landscaped medians that surround the parking lot, and the unpaved area between the parking lot and the Chair 15 ski lift (see Figure 2). The landscaped medians contain large granite boulders; these boulders were examined for cultural features such as milling slicks and cupules. No cultural features were observed on these boulders. Ground surface visibility in the unpaved areas was good (i.e., 50-75 percent visible).

As noted above, the Town and USFS had delineated only an approximate project site boundary at the time of survey. The PCR archaeologist surveyed within the approximate project site boundary and beyond the western project site boundary in the vicinity of the Chair 15 ski lift. A scatter of obsidian flakes was observed west of the approximate project site boundary ca. 25 meters upslope from the Chair 15 ski lift. This flake scatter is likely part of archaeological site CA-MNO-1529 that has eroded down slope. This scatter was later determined to lie outside of the updated project boundary, and so was not recorded further.

6.2.2 Paleontological Resources

Initial consultation of collection records and geologic maps indicated that the Town area had no history of fossil resources, largely because the terrain was glaciated and is dominated by igneous and metamorphic rocks. The PCR archaeologist verified those impressions and to photographically documented the site conditions. This confirmed that the local geology is granite, metavolcanics, and glacial debris. Apart from glacial deposits, there are no sediments old enough to produce fossils inside or within the vicinity of the project site.

7.0 ENVIRONMENTAL IMPACT ASSESSMENT

7.1 Significance Criteria

In accordance with Section 21083.2 of CEQA and Section 15064.5(b)(1) of the CEQA Guidelines, project impacts to archaeological resources are considered significant if:

- Project activities could cause the loss, destruction, or other damage to a prehistoric or historic archaeological site that has been identified as unique. Any action, such as

_.

_.

Figure 5
Site Photographs

Source: PCR Services Corporation, 2006.

clearing, scraping, soil removal, mechanical excavation, or digging that would destroy, alter, damage, or degrade a site's integrity (i.e., intactness), stratigraphy, or association has the potential to be a significant impact.

- Project activities result in physical demolition, destruction, relocation, or alteration of a historic resource or its immediate surroundings such that its significance would be materially impaired. A resource is "materially impaired" if those physical characteristics that convey its historical significance are demolished or materially altered.

- Project activities result in the direct of indirect destruction of a unique paleontological resource or site.

7.2 Potential Archaeological Resources and Project Impacts

Archaeological and historical resources are considered to be significant if they possess integrity and may contribute information important in prehistory or history at the federal, State, and/or local levels. Paleontological resources are considered to be significant if they provide new data on fossil animals, distribution, evolution, or other scientifically important information.

Potential impacts to paleontological and archaeological resources are generally associated with site clearing, grading, and excavation activities proposed by the development project. Therefore, based on the prior research conducted of the project site, the potential of the proposed project to impact undiscovered cultural or paleontological resources is discussed in the following paragraphs.

7.2.1 Archaeological and Historic Resources

Less than Significant Impact with Mitigation Incorporated. As indicated above, no archaeological resources have been identified on the surface of the project site. The project site surface has been extensively disturbed by the construction of the parking lot, medians, and the landscape features.

Results of this study indicate that there is potential for buried cultural resources in the project area. As described above, the geotechnical study for the project determined that the stratigraphy of the project area consist of an upper four feet of undocumented fill over a combination of alluvium and glacial till deposits. It is unlikely that there are archaeological deposits within the glacial fill, as these likely predate the human occupation of the Mammoth Lakes area. However, several factors suggest that there may be intact archaeological deposits in the alluvium or at the contact of the glacial deposits and the alluvium. Foremost, the alluvial deposit described by the geotechnical study is similar to the artifact-bearing alluvial unit excavated at nearby site CA-MNO-1529, described in Basgall (1984), and other sites in the region, as described above. Other contributing factors include the relative proximity of the project area to prehistoric routes through the Sierras, particularly in relation to the obsidian source at Casa Diablo approximately 22 miles to the east-southeast (Bettinger, Basgall, and Delacorte 1983), the number of sites in a one-mile radius of the project area indicated by the cultural resources records search, and the location of the project area at the base of a hill which can be conducive to the burial and preservation of archaeological materials. Therefore, there is potential for subsurface cultural deposits in the project area. As discussed further below, monitoring is recommended for all ground-disturbing construction activities affecting the alluvial deposits and upper three feet of the glacial deposits related to the project in order reduce the effect of the proposed action on previously undiscovered cultural resources in the project area. Under these recommendations, pursuant to CEQA Guidelines Section 15064.5(c)(4)), project impacts on archaeological and historic resources are considered less than significant with mitigation incorporated.

7.2.2 Paleontological Resources

No Impact. There are no known paleontological resources or unique geological features within the project site. Preliminary results of a paleontological records search through the UCMP online database indicated that there are no recorded fossil localities within the project area or within a one mile radius of the project site. The closest vertebrate fossil locality is located more than 30 miles north of the project site. Initial consultation of collection records and geologic maps indicate that the Mammoth Lakes area has no history of fossil resources largely because the terrain is dominated by igneous and metamorphic rocks. As there is no record of paleontological resources in the area and no features indicative of paleontological resources, the proposed project would not result in an impact to paleontological resources and no further analysis is required.

7.2.3 Native American Resources

Less than Significant Impact with Mitigation Incorporated. No areas containing human remains have been documented at the CHRIS-EIC in the project area or within a one-mile radius of the project area. If human remains are encountered unexpectedly during construction excavation and grading activities, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the NAHC. The NAHC will then identify the person(s) thought to be the Most Likely Descendent of the deceased Native American, who will then help determine what course of action should be taken in dealing with the remains.

Responses to date to the NAHC Sacred Lands Search indicate that there are no sensitive Native American cultural resources in the project area.

8.0 RECOMMENDED MITIGATION

The following mitigation measures are recommended to ensure that potential impacts to buried archaeological and Native American resources that may remain in the alluvial deposits or at the contact between the alluvial deposits and underlying glacial deposits are reduced to a less than significant level. The project would not likely cause a substantial adverse change in significance to any paleontological resources or unique geologic features, and so no mitigation measures are proposed for these resources

CULT-1 A qualified archaeological monitor shall be present during the ground-disturbing construction activities affecting the alluvial deposits and upper three feet of the glacial deposits in the project area. Due to the potential for subsurface cultural deposits, a culturally affiliated Native American monitor with experience in cultural resources also shall monitor these ground-disturbing activities. Currently, there is no legal requirement in California to include a Native American monitor in a monitoring program. The NAHC recommends, however, that if a client or lead agency prefers not to include a Native American monitor, the client or lead agency notify or otherwise clear this decision with all of the Native American groups identified by the NAHC as having affiliation with the project area. As the Eagle Lodge project is subject to SB 18 consultation, it would be appropriate to either include a Native American monitor, or otherwise determine and follow the preferences of the Native American community with respect to monitoring. No monitor is required for construction-related activities in the lower glacial deposits.

If cultural resources are identified, the archaeologist shall be allowed to temporarily divert or redirect grading or excavation activities in the vicinity in order to make an evaluation of the find and determine appropriate treatment. Treatment will include the Town's goals of preservation where practicable and public interpretation of historic and archaeological resources. The archaeologist shall prepare a final report about the monitoring to be filed with the Project Applicant, Mono County, and the CHRIS-EIC, as required by the State Historic Preservation Officer (SHPO). The report shall include documentation and interpretation of resources recovered, if any. Interpretation will include evaluation of eligibility of the resources with respect to the National Register and California Register. The report shall also include all specialists' reports as appendices. The lead agency shall designate repositories in the event that significant resources are recovered

CULT-2 If human remains are encountered unexpectedly during construction excavation and grading activities, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to PRC Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the NAHC. The NAHC will then identify the person(s) thought to be the Most Likely Descendent of the deceased Native American, who will then help determine what course of action should be taken in dealing with the remains.

9.0 REFERENCES CITED

Antevs, E.
1948 Climatic Changes and Pre-White Man. In The Great Basin with Emphasis on Glacial and Postglacial Times. *University of Utah Bulletin* 38(20), Biological Series 10(7):168-191.

Basgall, M.E.
1984 *The Archaeology of MNO-1529: A Secondary Reduction Site in Mammoth Lakes, Mono County, California*. Report on file at Eastern Information Center, University of California Riverside.

Bettinger, R. L.
1977 Aboriginal Human Ecology in Owens Valley, Eastern California: Prehistoric Change in the Great Basin. *American Antiquity* 43:3-17.

Bettinger, R. L., Mark E. Basgall, and Michael G. Delacorte,
1983 An Archaeological Reconnaissance of Mammoth Mountain, Mono and Madera Counties, California. Far Western Anthropological Research Group, Inc., Davis.

Bettinger, R. L., and R. E. Taylor
1974 Suggested Revisions in Archaeological Sequences of the Great Basin and Interior Southern California. *Nevada Archaeological Survey Research Paper* 5:1-26.

Elston, R.G.
1986 Prehistory of the Western Area. *Great Basin*, edited by W. L. d'Azevedo, pp. 31-50. *Handbook of North American Indians*, vol. 11, W. G. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.

Fowler, C.S. and N.P. Walter
1985 Harvesting Pandora Moth Larvae with the Owens Valley Paiute. *Journal of California and Great Basin Anthropology* 7(2) 155-165.

Grayson, D.K.
1993 *The Desert's Past: A Natural History of the Great Basin.* Washington: Smithsonian Institution.

Hall, M. C.
1983 *Late Holocene Hunter-Gatherers and Volcanism in the Long Valley-Mono Basin Region*: Prehistoric Culture Change in the Eastern Sierra Nevada. Unpublished Ph.D. dissertation, Department of Anthropology, University of California, Riverside.

Hill, M.
1975 *Geology of the Sierra Nevada.* University of California Press, Berkeley.

Jennings, C.W.
1977 Geologic Map of California, 1:750,000 scale. California Department of Conservation, Division of Mines and Geology, Sacramento, CA.

Liljeblad, S. and C.S. Fowler
1986 Owens Valley Paiute. In *Great Basin*, edited by W. L. d'Azevedo, pp. 412–434. *Handbook of North American Indians*, vol. 11, W. G. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.

Mehringer, P. J., Jr.
1986 Prehistoric Environments. In *Great Basin*, edited by W. L. d'Azevedo, pp. 31-50. *Handbook of North American Indians*, vol. 11, W. G. Sturtevant, general editor. Smithsonian Institution, Washington, D.C.

Moratto, Michael J.
1984 *California Archaeology.* San Diego: Academic Press.

Pakiser, L. C., M. F. Kane, and W. H. Jackson
1964 Structural Geology and Volcanism of the Owens Valley Region, California A Geophysical Study. *United States Geological Survey Professional Paper* 438.

Rockman, Marcy
2003 Knowledge and Learning in the Archaeology of Colonization. In *Colonization of Unfamiliar Landscapes: The Archaeology of Adaptation*, edited by Marcy Rockman and James Steele, pp. 3-24. Routledge Press, London, 2003

Sierra Geotechnical Services, Inc.
2005 *Preliminary Geotechnical Investigation for MMSA Eagle Base Lodge Development, Mammoth Lakes, CA.* Report submitted to the Town of Mammoth Lakes, December, 2005.

Surovell, Todd,
2003 Simulating Coastal Migration in New World Colonization. *Current Anthropology* 484:580-591.

Taylor, William.
1981 Site record for CA-MNO-1529. Document on file at the California Historical Resources Information System Eastern Information Center, Department of Anthropology, University of California, Riverside.

Town of Mammoth Lakes
2005 *Draft Program Environmental Impact Report for the General Plan Update.* SCH#2003042155. On file at the Town of Mammoth Lakes Community Development Department, 437 Old Mammoth Rd, Suite R, Mammoth Lakes, CA, 93546, October 2005.

United States Department of Agriculture Forest Service, Inyo National Forest.
1997 Mammoth Mountain Ski Area Base VII Expansion Project Environmental Assessment.

Walter, Nancy Peterson
2005 Comment made on previously circulated EIR for the Town of Mammoth Lakes General Plan Update. On file at the Town of Mammoth Lakes Community Development Department, Mammoth Lakes, CA.

Weaver, R.A. and M. Basgall
1986 Aboriginal Exploitation of Pandora Moth Larvae in East-Central California. *Journal of California and Great Basin Anthropology* 8(2) 161-179.

APPENDIX A: NATIVE AMERICAN CONSULTATION

STATE OF CALIFORNIA Arnold Schwarzenegger, Governor

NATIVE AMERICAN HERITAGE COMMISSION
915 CAPITOL MALL, ROOM 364
SACRAMENTO, CA 95814
(916) 653-4082
Fax (916) 657-5390

April 4, 2006

Marcy Rockman
PCR Services Corporation
233 Wilshire Blvd., Suite 130
Santa Monica, CA 90401

VIA FAX: 310-451-5279

Re: Tribal Consultation Request. Town of Mammoth Lakes-Eagle Lodge Master Plan Amendment. Inyo County

Dear Ms. Rockman:

Government Code §65352.3 requires local governments to consult with California Native American tribes identified by the Native American Heritage Commission (NAHC) for the purpose of protecting, and/or mitigating impacts to cultural places. Attached is a consultation list of tribes with traditional lands or cultural places located within the requested plan amendment boundaries.

As a part of consultation, the NAHC recommends that local governments conduct record searches through the NAHC and California Historic Resources Information System (CHRIS) to determine if any cultural places are located within the area(s) affected by the proposed action. NAHC Sacred Lands File requests must be made in writing. All requests must include county, USGS quad map name, township, range and section. Local governments should be aware, however, that records maintained by the NAHC and CHRIS are not exhaustive, and a negative response to these searches does not preclude the existence of a cultural place. A tribe may be the only source of information regarding the existence of a cultural place.

If you receive notification of change of addresses and phone numbers from Tribes, please notify me. With your assistance we are able to assure that our consultation list contains current information.

If you have any questions, please contact me at (916) 653-4040.

Sincerely,

Rob Wood
Environmental Specialist III

Attachment

California Tribal Consultation List
Town of Mammoth Lakes
March 30, 2006

Big Pine Band of Owens Valley Jessica Bacoch, Chairperson P. O. Box 700 Big Pine , CA 93513 bigpinetribaladmin@earthlink. (760) 938-2003	Owens Valley Paiute -
Bishop Reservation Gerald Howard, Chairperson 50 Tu Su Lane Bishop , CA 93515 mervin@telis.org (760) 873-3584	Paiute - Shoshone
Fort Independence Community of Paiute Carl Dahlberg Chairperson P.O. Box 67 Independence , CA 93526 stephanie@fortindependence. (760) 878-2126	Paiute
Lone Pine Paiute-Shoshone Reservation Rachel Joseph, Chairperson P.O. Box 747 Lone Pine , CA 93545 rajoseph@lppsr.org (760) 876-1034	Paiute Shoshone
Walker River Reservation Genia Williams, Chairperson P.O. Box 220 Schurz , NV 89427 chair@wrpt.net 775-773-2306	Northern Paiute

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is applicable only for consultation with Native American tribes under Government Code Section 65352.3.

APPENDIX B: RESUMES

Mitchell Marken, Ph.D., ASSOCIATE PRINCIPAL, DIRECTOR OF CULTURAL RESOURCES MANAGEMENT

Professional History

- Ph.D., Archaeology, University of St. Andrews, Scotland, 1991
- Dpl., Archaeology and Ethnology, Maritime Studies, University of St. Andrews, Scotland, 1985
- Cultural Resources Manager/Senior Environmental Scientist, Tetra Tech, Inc., San Francisco, California, 1998 - 2004
- Adjunct Professor, University of San Francisco

Expertise

Mitchell Marken has over 18 years of archaeological and management experience in the environmental field. His experience includes project management, field supervision, environmental monitoring, cultural resource planning, report and proposal writing, quality assurance of regulatory reports, project evaluation, underwater survey, site mitigation, excavation, artifact analysis, mapping, research design, team training, coordination with state and federal agencies, permit acquisition and public speaking. Since 1990, he has managed large-scale Cultural Resource and Environmental projects for public utility companies, mining companies and private developers throughout Western U.S.

Dr. Marken has completed environmental compliance training with the Federal Energy Regulatory Commission (FERC), and Section 106 compliance training from the Advisory Council on Historic Preservation. He has worked internationally and for state governments concerning the preservation and exploration of underwater sites including shipwrecks. He has published a University Press of Florida book entitled "Pottery from Spanish Shipwrecks: 1500 - 1800," and is featured in a U.S. public school textbook entitled "Lessons in Character" published by the Young People's Press for middle school students.

Experience

Archaeology/Paleontology: Dr. Marken has worked with State Historic Preservation Office and information centers throughout the Western U.S. for record searches and surveys on projects ranging from cellular towers to extensive multi-state linear corridors. Other projects include site inventories and test excavation for the U.S. Army Corps of Engineers (ACOE), and the U.S. National Guard in Northern and Southern California and San Francisco County Department of Public Works, and construction monitoring for the U.S. Coast Guard at various radio tower sites in California.

In addition to fieldwork, Dr. Marken coordinated and worked with regulatory agencies in impact analysis and mitigation planning, on the development of Programmatic Agreements and Memorandums of Understanding including the U.S. Navy for Treasure Island, the U.S. Army in Hawaii and the Department of Defense at Lawrence Livermore National Laboratory. He has also been active in facilitating Native American consultation and worked with California Tribes on educating local agencies with regards to burials, and with Santa Cruz County regarding mitigation of sea wall armoring on paleontological resources.

In addition to his California experience, Dr. Marken was also the principal author of Minnesota's Submerged Cultural Resources Plan. The plan is used as a guideline for the preservation of underwater sites in the Great Lakes and inland water bodies.

CEQA/NEPA Compliance: Dr. Marken has worked on various projects for National Environmental Policy Act (NEPA), National Historic Preservation Act and California Environmental Quality Act (CEQA) compliance throughout the United States for the U.S. Coast Guard, the U.S. Army, the U.S. Navy, and the ACOE. He has also performed third party review for California State Lands for fiber optic cable construction both on land and for submerged projects. In addition, he wrote and compiled the necessary background information and impact analysis on all Coast Guard owned ships and stations for the Deepwater Project Environmental Impact Statement for the U.S. Coast Guard.

Dr. Marken's NEPA experience also includes the preparation of sensitive and controversial documents relating to a large-scale Army transformation project on the islands of Hawaii for the U.S. Army including an additional training base on Oahu, and military housing conversion projects in Hawaii and California.

Workshops/Education:
Section 106 Compliance Training (GSA Interagency Training Center); FERC Environmental Compliance Training

Professional Affiliations

SAA Society for American Archaeology

Joe D. Stewart, Ph.D., PRINCIPAL PALEONTOLOGIST

Professional History

- Ph.D., Systematics & Ecology, University of Kansas, Lawrence, Kansas, 1984
- Assistant Curator of Vertebrate Paleontology, Natural History Museum of Los Angeles County, Los Angeles, California, 1985-2003
- Owner/Partner/Paleontological Consultant, Stewart Paleontological Consulting, Pasadena, California, 1997-2005

Expertise

J. D. Stewart has 30 years of experience in the field of paleontology. He has authored or co-authored 33 peer-reviewed articles for scientific journals and books. Within these, he has authored or co-authored descriptions of three new genera and three new species.

He has served as expert witness for the U.S. Department of Justice. He is a recognized authority on fossil fishes of Cretaceous rocks of North America and Cenozoic rocks of the western coast of North America.

Experience

Dr. Stewart has extensive experience finding and excavating fossils for county, state, and provincial institutions. Numerous environmental firms have employed him for identification of paleontological and archaeological specimens. His field work includes projects in cooperation with the U.S. Bureau of Land Management, U.S. Army Corps of Engineers, U.S. Navy, U. S. Department of Energy, and California State Parks. The Bureau of Land Management's national website features one of his excavations from 2003. He has monitored construction activity in numerous counties and municipalities. In addition to fieldwork, he has experience in the supervision of preparators, curatorial assistants, and excavators. He also has extensive experience preparing fossils, and has processed and recovered thousands of vertebrate microfossils. Dr. Stewart has authored and co-authored many paleontological assessment documents and California Environmental Quality Act-mandated monitoring and mitigation reports. He was the in-house curator for several major exhibits at the Natural History Museum of Los Angeles County, and helped develop two exhibits that toured the nation.

Presentations

Dr. Stewart has presented the results of his research at over 35 scientific conferences in the U.S., China, Germany, Switzerland, Mexico, and Canada.

Professional Affiliations

Member, Society of Vertebrate Paleontology

Research Associate, Natural History Museum of Los Angeles County

Amy M. Holmes, RPA, SENIOR ARCHAEOLOGIST

Professional History

- Registered Professional Archaeologist since 2000
- M.A., Anthropology, Washington State University, Pullman, Washington, 1998
- B.A., Anthropology, Texas A&M University, College Station, Texas, 1995
- Principal Investigator, Earth Tech, Inc., Colton, California, 2003 – 2004
- Geoarchaeologist, Pacific Legacy, Inc., Cameron Park, California, 2002 – 2003
- Field Director, SWCA Environmental Consultants, Reno, Nevada, 2001 - 2002
- Staff Geoarchaeologist, Prewitt and Associates, Inc., Austin, Texas, 1999 – 2001
- Staff Geoarchaeologist, LaRamie Soils Service, Laramie, Wyoming, 1998 – 1999
- Archaeological Technician, various companies, 1994-1999

Expertise

Amy Holmes is a RPA-certified archaeologist/geoarchaeologist with 12 years of experience in Cultural Resources Management. Ms. Holmes meets the U.S. Secretary of Interior's standards for an Archaeologist. She is a geoarchaeological specialist with knowledge of the principles of stratigraphy, soil morphology, and process geomorphology and their relation to archaeological sites. Ms. Holmes also has expertise in Great Basin archaeology and the prehistory of the western United States. She has extensive experience leading field crews for survey, archaeological testing, and data recovery projects. Ms. Holmes has experience working with both federal and state cultural resources regulations.

Experience

Archaeology: Ms. Holmes has worked on projects for federal, state, municipal, and private clients including the U.S. Army Corps of Engineers and Caltrans. She is familiar with the cultural resources requirements of the National Environmental Policy Act (NEPA), the National Historic Preservation Act (NHPA), and the Section 106 process. Ms. Holmes works regularly with the cultural resources requirements of the California Environmental Quality Act (CEQA). She is skilled in the preparation of cultural resources sections for CEQA documents such as Initial Studies and Environmental Impact Reports.

Ms. Holmes has worked as an archaeologist and geoarchaeologist in Texas, Wyoming, Montana, North Dakota, Colorado, Utah, Arizona, Nevada and California. She currently holds a Cultural Resource Use Permit for the Nevada Bureau of Land Management (BLM) and an Antiquities Permit for the state of Nevada. She is also permitted to perform cultural resources work on BLM land in California.

At PCR, Ms. Holmes functions as Principal Investigator and deputy Project Manager on cultural resources projects throughout California and Nevada. Her responsibilities include Native American consultation, technical oversight, budget tracking, preparing proposals and cost estimates, and writing technical reports. Ms. Holmes supervises junior staff throughout all aspects of fieldwork, lab analyses, and report writing.

Workshops/Education:
"CEQA and Cultural Resources, UCLA Extension, March 2006"

CPR and First Aid, renewed February 2005

Project Manager Training, Earth Tech, Inc., March 2004

Working with California Office of Historic Preservation, SCA workshop, April 2004

Health and Safety Training:
Defensive Driving Refresher course, Earth Tech, July 2004

HAZWOPER 40-hour Hazardous waste workers' and 24-hour First Responder-Operations Level, ETAC, August 2004

Technical writing workshop for CRM professionals, SRI Institute, 2000

Professional Affiliations

Society for American Archaeology

APPENDIX C: CONFIDENTIAL APPENDIX—RECORDS SEARCH RESULTS

EASTERN INFORMATION CENTER
CALIFORNIA HISTORICAL RESOURCES INFORMATION SYSTEM
Department of Anthropology, University of California, Riverside, CA 92521-0418
(951) 827-5745 - Fax (951) 827-5409 - eickw@ucr.edu
Inyo, Mono, and Riverside Counties

September 20, 2005
RS #3516

Amy Holmes
PCR
One Venture, Suite 150
Irvine, CA 92618

Re: Cultural Resource Records Search for the Eagle Lodge Base Facility

Dear Ms. Holmes:

We received your request on September 16, 2005 for a cultural resource records search for the Eagle Lodge Base Facility located in Section 3 & 34, T.3S, R.27E, MDBM, in the Town of Mammoth Lakes in Mono County. We have reviewed our site records, maps, and manuscripts against the location map you provided.

Our records indicate that 22 cultural resource studies have been conducted within a one-mile radius of your project area. None of these studies involved the project area. One additional study provides an overview of cultural resources in the general project vicinity. These reports are listed on the attachment entitled "Archeological Reports" and are available upon request at 15¢/page plus $30/hour. The KEYWORD section of each citation lists the geographic area, quad name, listing of trinomials (when identified), report number in our manuscript files (MN#), and the number of pages per report.

No cultural resource properties are recorded within the boundaries of the project area. Our records indicate that 29 properties have been recorded within a one-mile radius of the project area. Copies of the records are included for your reference.

The above information is reflected on the enclosed map. Areas that have been surveyed are highlighted in yellow. Numbers marked in blue ink refer to the report number in our manuscript files (MN #). Cultural resource properties are marked in red; numbers in black refer to Trinomial designations, those in green to Primary Number designations. National Register properties are indicated in light blue.

Additional sources of information consulted are identified below. Note that not all sites or properties are listed on the Office of Historic Preservation (OHP) Archaeological Determinations of Eligibility or Directory of Properties in the Historic Property Data File. Only those sites or properties that have been reviewed by the OHP are listed.

> National Register of Historic Places (07/29/05): no listed properties are located within the boundaries of the project area.
>
> Office of Historic Preservation, Archaeological Determinations of Eligibility (03/07/05): no listed sites are located within the boundaries of the project area.
>
> Office of Historic Preservation, Directory of Properties in the Historic Property Data File (03/07/05): no listed properties are located within the boundaries of the project area.
>
> A copy of the relevant portion of the 1953 USGS Mt. Morrison 15' topographic map is included for your reference.

As the Information Center for Mono County, it is necessary that we receive a copy of all cultural resource reports and site information pertaining to this county in order to maintain our map and manuscript files. Confidential information provided with this records search regarding the location of cultural resources outside the boundaries of your project area should not be included in reports addressing the project area.

Sincerely,

Farah Firtha

Farah Firtha
Information Officer

Enclosures

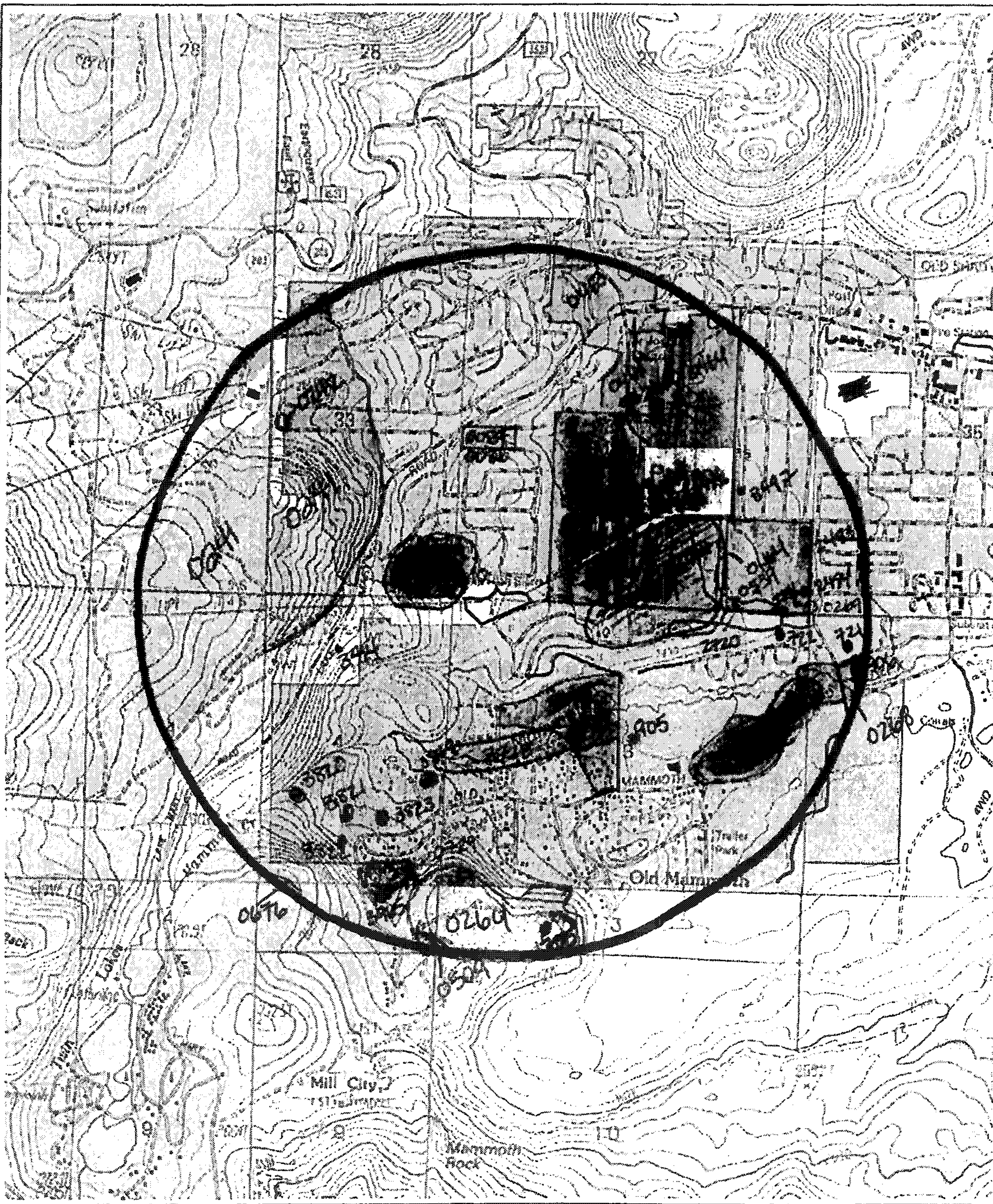


Figure 2
Mammoth Lakes - Eagle Lodge
Vicinity Map

2000 0 2000 Feet

Source: USGS Topographic Series (Bloody Mt., Crystal Crag, Mammoth Mt., Old Mammoth, CA);
PCR Services Corporation, 2005.

Document No.: 1080001 Other Document Type
BALDWIN, CLIFFORD PARK

1931 ARCHAEOLOGICAL EXPLORATION AND SURVEY IN SOUTHERN INYO COUNTY, CALIFORNIA [NOT A COMPLETE REPORT]. IN ARCHAEOLOGICAL RESOURCES IN THE SALINE-EUREKA VALLEY AREA, BY CAROLE ROBARCHEK (1972 & 1973). PHOTOS ON FILE BLM/DPS.

Last Update: 11/05/2004 Cataloged by: WOR-CA-04 on 09/19/1988
Keywords: 17 PP (7), 566 ACRES SURVEYED (4), CA-INY-0415 (8), CA-INY-0414 (8), CA-INY-0405 (8), CA-INY-0404 (8), CA-INY-0417 (8), CA-INY-0402 (8), CA-INY-0432 (8), CA-INY-0410 (8), CA-INY-0407 (8), CA-INY-0408 (8), CA-INY-0409 (8), CA-INY-0411 (8), CA-INY-0412 (8), CA-INY-0416 (8), CA-INY-0413 (8), LITTLE LAKE/COSO REGION (4), COSO PEAK 7.5' QUAD (4), DRY MTN. 15' QUAD (4), IN-0001 (MF #0001) (6), NEW YORK BUTTE 15' QUAD (4), NO ACREAGE SURVEYED (4), RECONNAISSANCE STUDY (1), UNKNOWN MAPS (MAPS NOT IN MS.) (4)

Document No.: 1081093 Unpublished Report
WITTERS, RANDY

1977 *ARCHAEOLOGICAL RECONNAISSANCE REPORT - EXCHANGE - CORPORATION YARD/ WOODSTOCK FOR MONACHE MEADOWS.* INYO NATIONAL FOREST. SUBMITTED TO U.S. FOREST SERVICE. UNPUBLISHED REPORT ON FILE AT UCR, EASTERN INFORMATION CENTER, RIVERSIDE, CA 92521

Last Update: 12/13/2004 Cataloged by: WOR-CA-04 on 11/28/1988
Keywords: 15 PP (7), 5 ACRES SURVEYED (4), LONG VALLEY CALDERA (4), OLD MAMMOTH 7.5' QUAD (4), MN-0086 (MF #1080) (6), NO RESOURCES (8), ARR #05-04-0059 (6)

Document No.: 1081240 Unpublished Report
TAYLOR, WILLIAM

1980 *ARCHAEOLOGICAL RECONNAISSANCE REPORT - WOODSTOCK PARCEL/TANNER EXCHANGE.* INYO NATIONAL FOREST. SUBMITTED TO U.S. FOREST SERVICE. UNPUBLISHED REPORT ON FILE AT UCR, EASTERN INFORMATION CENTER, RIVERSIDE, CA 92521.

Last Update: 12/13/2004 Cataloged by: WOR-CA-04 on 12/08/1988
Keywords: 5 PP (7), 5 ACRES SURVEYED (4), MN-0087 (MF #1080) (6), LONG VALLEY CALDERA (4), OLD MAMMOTH 7.5' QUAD (4), NO RESOURCES (8), ARR #05-04-0207 (6)

Document No.: 1081623 Unpublished Report
BASGALL, MARK E.

1982 *THE ARCHAEOLOGY OF CAMP HIGH SIERRA (CA-MNO-1529); A PRELIMINARY REPORT.* U.C. DAVIS ANTHROPOLOGY, & FAR WESTERN ANTHROPOLOGICAL, INC. SUBMITTED TO U.S. FOREST SERVICE, INYO NATIONAL FOREST. UNPUBLISHED REPORT ON FILE AT UCR, EASTERN INFORMATION CENTER, RIVERSIDE, CA 92521.

Last Update: 12/14/2004 Cataloged by: WOR-CA-04 on 12/20/1988

Keywords: 39 PP (7), CA-MNO-1529 (8), DATA RECOVERY ONLY (1), MN-0210 (MF #1446) (6), OLD MAMMOTH 7.5' QUAD (4), NO ACREAGE SURVEYED (4)

==

Document No.: 1081624 Unpublished Report
TAYLOR, WILLIAM

1981 *ARCHAEOLOGICAL RECONNAISSANCE REPORT - CAMP HIGH SIERRA LAND EXCHANGE.* INYO NATIONAL FOREST--MAMMOTH RANGER DISTRICT. SUBMITTED TO U.S. FOREST SERVICE. UNPUBLISHED REPORT ON FILE AT UCR, EASTERN INFORMATION CENTER, RIVERSIDE, CA 92521.

Last Update: 12/14/2004 Cataloged by: WOR-CA-04 on 12/20/1988
Keywords: 14 PP (7), 35 ACRES SURVEYED (4), CA-MNO-1529 (8), MN-0211 (MF #1446) (6), OLD MAMMOTH 7.5' QUAD (4), LONG VALLEY CALDERA (4), ARR #05-04-0230 (6)

Document No.: 1081813 Unpublished Report
BETTINGER, ROBERT L., MARK E. BASGAL, AND M.G. DELACORTE

1983 *AN ARCHAEOLOGICAL RECONNAISSANCE OF MAMMOTH MOUNTAIN, MONO AND MADERA COUNTIES, CALIFORNIA.* FAR WESTERN ANTHROPOLOGICAL RESEARCH GROUP. SUBMITTED TO PRIVATE. UNPUBLISHED REPORT ON FILE AT UCR, EASTERN INFORMATION CENTER, RIVERSIDE, CA 92501

Last Update: 12/15/2004 Cataloged by: WOR-CA-04 on 03/28/1989
Keywords: MN-0241 (MF #1623) (6), 44 PP (7), 2000 ACRES SURVEYED (4), OLD MAMMOTH 7.5' QUAD (4), MAMMOTH MTN 7.5' QUAD (4), LONG BALLEY CALDERA (4), CA-MNO-1924 (8), CA-MNO-1925 (8), ARR #05-04-0310 (6)

Document No.: 1081972 Unpublished Report
BURTON, JEFF

1982 *ARCHAEOLOGICAL SURVEY REPORT - MAMMOTH BLUFF, MAMMOTH LAKES, MONO COUNTY, CALIFORNIA.* JEFF BURTON, CONSULTING ARCHAEOLOGIST. SUBMITTED TO PRIVATE. UNPUBLISHED REPORT ON FILE AT UCR, EASTERN INFORMATION CENTER, RIVERSIDE, CA 92501

Last Update: 12/15/2004 Cataloged by: WOR-CA-04 on 03/06/1989
Keywords: 21 PP (7), 75 ACRES SURVEYED (4), CA-MNO-1705 (8), CA-MNO-1706 (8), MN-0264 (MF #1774) (6), OLD MAMMOTH 7.5' QUAD (4), LONG VALLEY CALDERA (4), BLOODY MTN. 7.5' QUAD (4), ARR #05-04-0280 (6)

Document No.: 1081973 Unpublished Report
BURTON, JEFF

1982 *ARCHAEOLOGICAL SURVEY REPORT - MAMMOTH MEADOW, MAMMOTH LAKES, MONO COUNTY, CALIF.* JEFF BURTON, CONSULTING ARCHAEOLOGIST. SUBMITTED TO PRIVATE. UNPUBLISHED REPORT ON FILE AT UCR, EASTERN INFORMATION CENTER, RIVERSIDE, CA 92501

Last Update: 12/15/2004 Cataloged by: WOR-CA-04 on 03/06/1989

Keywords: 40 ACRES SURVEYED (4), 34 PP (7), CA-MNO-0905 (8), CA-MNO-0904 (8),
MN-0266 (MF #1775) (6), OLD MAMMOTH 7.5' QUAD (4), LONG VALLEY CALDERA (4)

==

Document No.: 1081975 Unpublished Report
BURTON, JEFF

1982 *ARCHAEOLOGICAL SURVEY REPORT - PINEBROOKE CONDOMINIUM PROJECT, MAMMOTH LAKES, MONO COUNTY, CALIFORNIA.* AUTHOR(S). SUBMITTED TO PRIVATE. UNPUBLISHED REPORT ON FILE AT UCR, EASTERN INFORMATION CENTER, RIVERSIDE, CA 92501

Last Update: 12/15/2004 Cataloged by: WOR-CA-04 on 03/06/1989
Keywords: 1.49 ACRES SURVEYED (4), 12 PP (7), MN-0269 (MF #1777) (6), OLD MAMMOTH 7.5' QUAD (4), LONG VALLEY CALDERA (4), NO RESOURCES (8)

Document No.: 1083367 Unpublished Report
BURTON, JEFFREY F.

1990 *AN ARCHAEOLOGICAL SURVEY OF THE NORTH VILLAGE PROJECT AREA MAMMOTH LAKES, CALIFORNIA.* TRANS-SIERRAN ARCHAEOLOGICAL RESEARCH (#19). SUBMITTED TO PRIVATE. UNPUBLISHED REPORT ON FILE AT UCR, EASTERN INFORMATION CENTER, RIVERSIDE, CA 92501

Last Update: 12/20/2004 Cataloged by: WOR-CA-04 on 09/12/1990
Keywords: MN-0463 (MF #2962) (6), 34 PP (7), 90 ACRES SURVEYED (4), LONG VALLEY CALDERA (4), BLOODY MTN. 7.5' QUAD (4), CRYSTAL CRAG 7.5' QUAD (4), MAMMOTH MTN. 7.5' QUAD (4), OLD MAMMOTH 7.5' QUAD (4), CA-MNO-2480 (8), CA-MNO-2481 (8)

Document No.: 1083368 Unpublished Report
BURTON, JEFFREY F.

1990 *AN ARCHAEOLOGICAL SURVEY OF THE LODESTAR PROPERTY MAMMOTH LAKES, CALIFORNIA.* TRANS-SIERRAN ARCHAEOLOGICAL RESEARCH (#20). SUBMITTED TO PRIVATE. UNPUBLISHED REPORT ON FILE AT UCR, EASTERN INFORMATION CENTER, RIVERSIDE, CA 92501

Last Update: 12/20/2004 Cataloged by: WOR-CA-04 on 09/12/1990
Keywords: MN-0464 (MF #2963) (6), 40 PP (7), 200 ACRES SURVEYED (4), BLOODY MTN 7.5' QUAD (4), CRYSTAL CRAG 7.5' QUAD (4), MAMMOTH MTN 7.5' QUAD (4), OLD MAMMOTH 7.5' QUAD (4), LONG VALLEY CALDERA (4), CA-MNO-2482 (8), CA-MNO-2483 (8), CA-MNO-2484 (8), CA-MNO-2485 (8), CA-MNO-2486 (8), CA-MNO-2487 (8)

Document No.: 1083369 Unpublished Report
BURTON, JEFFREY F.

1989 *AN ARCHAEOLOGICAL SURVEY OF THE MINARET ROAD EXTENSION MAMMOTH LAKES, CALIFORNIA.* TRANS-SIERRAN ARCHAEOLOGICAL RESEARCH (#17). SUBMITTED TO PRIVATE. UNPUBLISHED REPORT ON FILE AT UCR, EASTERN INFORMATION CENTER, RIVERSIDE, CA 92501

Last Update: 12/20/2004 Cataloged by: WOR-CA-04 on 09/12/1990

Keywords: MN-0465 (MF #2963) (6), 25 PP (7), 10 ACRES SURVEYED (4), OLD MAMMOTH 7.5' QUAD (4), LONG VALLEY CALDERA (4), CA-MNO-2482 (8)

==

Document No.: 1083646 Unpublished Report
BURTON, JEFFERY AND MARY FARRELL

1990 *ARCHAEOLOGICAL TEST EXCAVATIONS AT THE SNOW CREEK SITE (CA-MNO-3) MAMMOTH LAKES, CALIFORNIA*. TRANS-SIERRAN ARCHAEOLOGICAL RESEARCH (#23). SUBMITTED TO PRIVATE. UNPUBLISHED REPORT ON FILE AT UCR, EASTERN INFORMATION CENTER, RIVERSIDE, CA 92501

Last Update: 12/20/2004 Cataloged by: WOR-CA-04 on 01/30/1991
Keywords: MN-0503 (MF #3323) (6), 172 PP (7), NO ACREAGE SURVEYED (4), LONG VALLEY CALDERA (4), OLD MAMMOTH 7.5' QUAD (4), CA-MNO-0003 (8)

Document No.: 1083781 Unpublished Report
FAUST, NICHOLAS

1990 *ARCHAEOLOGICAL RECONNAISSANCE REPORT: MILL CITY LOGE COURSE*. INYO NATIONAL FOREST - MAMMOTH DISTRICT. SUBMITTED TO U.S. FOREST SERVICE. UNPUBLISHED REPORT ON FILE AT UCR, EASTERN INFORMATION CENTER, RIVERSIDE, CA 92501.

Last Update: 12/20/2004 Cataloged by: WRO-CA-04 on 06/07/1991
Keywords: MN-0509 (MF #3431) (6), 4 PP (7), 10 ACRES SURVEYED (4), LONG VALLEY CALDERA (4), BLOODY MTN. 7.5' QUAD (4), NO RESOURCES (8), ARR #05-04-0496 (6)

Document No.: 1083787 Unpublished Report
FAUST, NICHOLAS A.

1990 *ARCHAEOLOGICAL RECONNAISSANCE REPORT: CONTEL- MAMMOTH SKI AND RACQUET CLUB REALIGNMENT*. INYO NATIONAL FOREST - MAMMOTH DISTRICT. SUBMITTED TO U.S. FOREST SERVICE. UNPUBLISHED REPORT ON FILE AT UCR, EASTERN INFORMATION CENTER, RIVERSIDE, CA 92501

Last Update: 12/15/2004 Cataloged by: WRO-CA-04 on 06/07/1991
Keywords: MN-0242 (MF #1623) (6), 4 PP (7), 1 ACRE SURVEYED (4), OLD MAMMOTH 7.5' QUAD (4), LONG VALLEY CALDERA (4), NO RESOURCES (8), ARR #05-04-0498 (6)

Document No.: 1084008 Unpublished Report
KAUTZ, ROBERT R.

1991 *ARCHAEOLOGICAL TESTING PROCEDURES AT SIX SITES IN MAMMOTH LAKES, CA; THE LODESTAR PROJECT*. MARIAH ASSOCIATES (MAMMOTH LAKES, CA). SUBMITTED TO PRIVATE. UNPUBLISHED REPORT ON FILE AT UCR, EASTERN INFORMATION CENTER, RIVERSIDE, CA 92501

Last Update: 12/20/2004 Cataloged by: WRO-CA-04 on 01/25/1992
Keywords: MN-0467 (MF #2963) (6), 40 PP (7), NO ACRE SURVEYED--TESTING (4), OLD MAMMOTH 7.5' QUAD (4), LONG VALLEY CALDERA (4), 26-2482 (CA-MNO-2482) (8),

26-2483 (CA-MNO-2483) (8), 26-2484 (CA-MNO-2484) (8), 26-2485 (CA-MNO-2485) (8), 26-2486 (CA-MNO-2486) (8), 26-2487 (CA-MNO-2487) (8), 26-3575 (8), MAI PROJECT #638 (6)

==

Document No.: 1084017 Unpublished Report
HARDESTY, DONALD L., STEVEN F. MEHLS, AND PRISCILLA E. MECHAM WITH MARY RUSCO

1991 *A CLASS III CULTURAL RESOURCES INVENTORY OF THE 493 ACRE BODIE STUDY AREA, MONO COUNTY, CALIFORNIA; I HISTORIC, II HISTORIC APPENDIX, III PREHISTORIC, IIIA PREHISTORIC SITE RECORDS, IV - XXII - HISTORIC SITE RECORDS.* WESTERN CULTURAL RESOURCE MANAGEMENT. SUBMITTED TO PRIVATE (GALAXY MINING, DBA BODIE CONSOLIDATED). UNPUBLISHED REPORT ON FILE AT UCR, EASTERN INFORMATION CENTER, RIVERSIDE, CA 9250

Last Update: 12/20/2004 Cataloged by: WRO-CA-04 on 01/25/1992
Keywords: MN-0539 (MF #3616) (6), 896 PP (3 VOLUMES OF REPORTS) (7), 4996 PP (ALL SITE RECORDS PRE & HISTORIC) (7), BODIE 7.5' QUAD (4), KIRKWOOD SPRING 7.5' QUAD (4), MONO BASIN (4), BRIDGEPORT AREA (4), CA-MNO-2658/H (8), 493 ACRES SURVEYED (4), HISTORIC MINING (0)

Document No.: 1084158 Dissertation/Thesis
HANEY, JEFFERSON W.

1992 *WRITTEN IN BEDROCK: PREHISTORIC ACORN USE IN THE EASTERN SIERRA NEVADA.* M.A. THESIS. SONOMA STATE UNIVERSITY, CA; (CULTURAL RESOURCES MANAGEMENT).

Last Update: 11/15/2004 Cataloged by: WRO-CA-04 on 05/07/1992
Keywords: MN-0566 & IN-0276 (MF #3745) (6), 229 PP (7), NO ACREAGE SURVEYED (4)

Document No.: 1084177 Unpublished Report
BURTON, JEFFERY F.

1992 *ARCHAEOLOGICAL TESTING AT THE EAGLE'S NEST SITE (CA-MNO-907), MAMMOTH LAKES, CALIFORNIA.* TRANS-SIERRAN ARCHAEOLOGICAL. SUBMITTED TO TOWN OF MAMMOTH LAKES. UNPUBLISHED REPORT ON FILE AT UCR, EASTERN INFORMATION CENTER, RIVERSIDE, CA 92501

Last Update: 12/15/2004 Cataloged by: WRO-CA-04 on 07/03/1992
Keywords: MN-0268 (MF #1776) (6), 54 PP (7), NO ACREAGE SURVEYED (4), OLD MAMMOTH 7.5' QUAD (4), LONG VALLEY CALDERA (4), CA-MNO-0907 (8), CA-MNO-0905 (8)

Document No.: 1084251 Unpublished Report
BURTON, JEFFEREY F.

1992 *FURTHER INVESTIGATIONS AT THE SNOWCREEK ARCHAEOLOGICAL SITE, MAMMOTH LAKES, CALIFORNIA.* TRANS-SIERRAN ARCHAEOLOGICAL RESEARCH, INC. SUBMITTED TO TOWN OF MAMMOTH LAKES. UNPUBLISHED REPORT ON FILE AT UCR, EASTERN INFORMATION CENTER, RIVERSIDE, CA 92501

Last Update: 12/20/2004 Cataloged by: WRO-CA-04 on 10/02/1992
Keywords: MN-0504 (MF #3323) (6), 97 PP (7), NO ACREAGE SURVEYED (4), OLD MAMMOTH

7.5' QUAD. (4), LONG VALLEY CALDERA (4), CA-MNO-0003 (8)

==

Document No.: 1084511 Unpublished Report
VALDEZ, SHARYNN-MARIE AND NELSON SIEFKIN

1993 *ARCHAEOLOGICAL INVENTORY OF THE SOUTHERN CALIFORNIA EDISON OVERHEAD TO UNDERGROUND CONVERSION PROJECT, IN THE CITY OF MAMMOTH LAKES, MONO COUNTY, CALIFORNIA*. CULTURAL RESOURCES FACILITY, CSU BAKERSFIELD. SUBMITTED TO PRIVATE. UNPUBLISHED REPORT ON FILE AT UCR, EASTERN INFORMATION CENTER, RIVERSIDE, CA 9250

Last Update: 12/20/2004 Cataloged by: WRO-CA-04 on 05/24/1994
Keywords: MN-0629 (MF #4033) (6), 9 PP. (7), 21 ACRES SURVEYED (4), OLD MAMMOTH 7.5' QUAD (4), LONG VALLEY CALDERA (4), CA-MNO-3 (8), CA-MNO-561 (8), CA-MNO-906 (8), CA-MNO-907 (8)

Document No.: 1084879 Unpublished Report
FAUST, NICHOLAS

1995 *HERITAGE RESOURCES REPORT: MAMMOTH CONNECTOR TRAIL, MONO COUNTY, CALIFORNIA*. INYO NATIONAL FOREST. SUBMITTED TO INYO NATIONAL FOREST. UNPUBLISHED REPORT ON FILE AT EASTERN INFORMATION CENTER, U.C. RIVERSIDE, CA 92521

Last Update: 12/20/2004 Cataloged by: WRO-CA-04 on 03/25/1996
Keywords: MN-0676 (MF #4301) (6), 5 PP (7), 3 ACRES SURVEYED (4), BLOODY MTN. 7.5' QUAD (4), CRYSTAL CRAG 7.5' QUAD (4), MAMMOTH MTN. 7.5' QUAD (4), OLD MAMMOTH 7.5' QUAD (4), LONG VALLEY CALDERA (4), YES RESOURCES - PENDING TRINOMIAL (8), P-26-3008 (8)

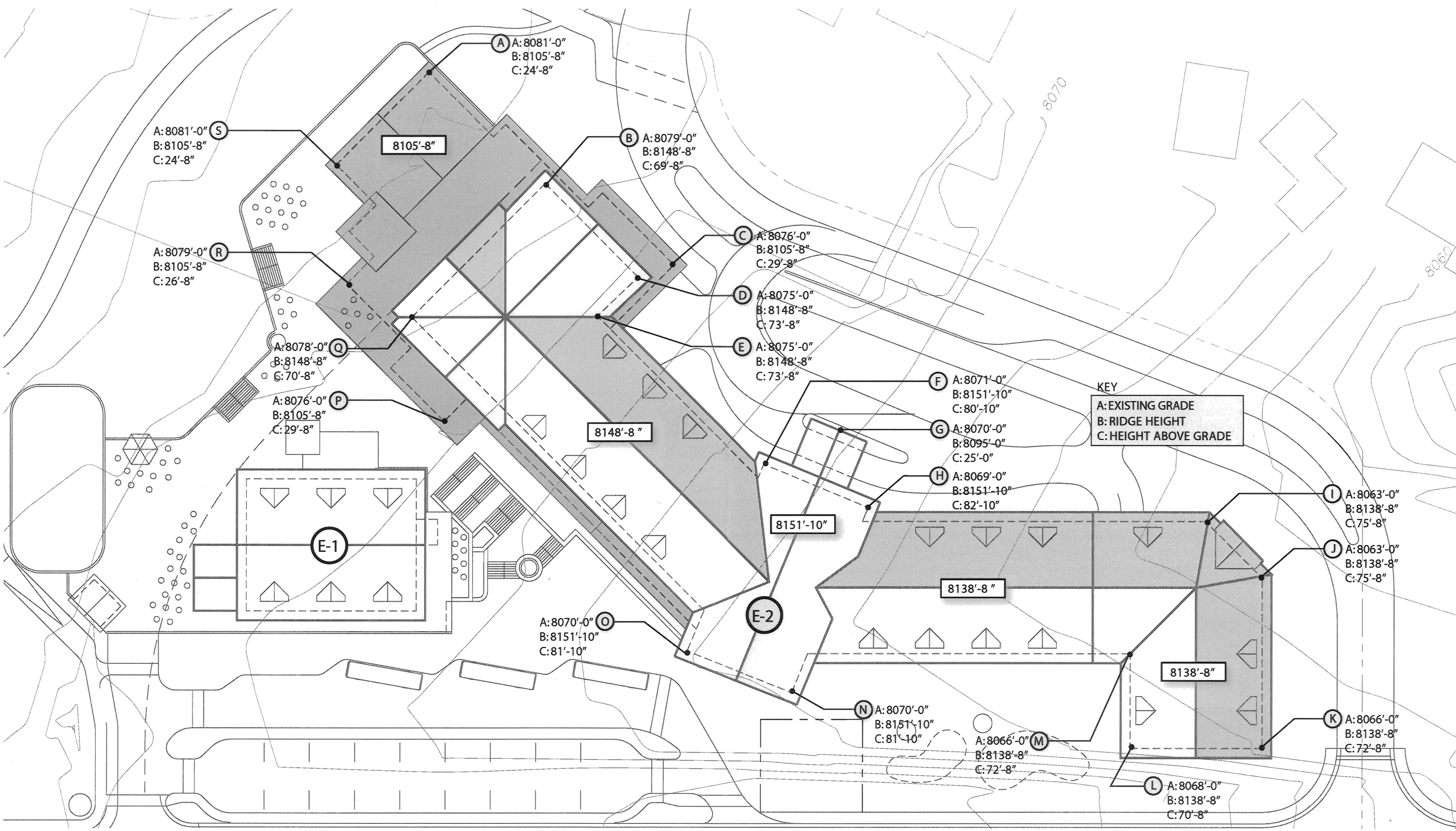
Document No.: 1085278 Unpublished Report
FAUST, NICHOLAS

1997 *HRR: MILL CITY ROAD PAVING, HRR. NO. 05-04-499-02*. FOREST SEVICE. SUBMITTED TO INYO NATIONAL FOREST. CONTRACT NO. HRR. NO. 05-04-4992. UNPUBLISHED REPORT ON FILE AT EASTERN INFORMATION CENTER, U.C. RIVERSIDE, CA 92521.

Last Update: 12/20/2004 Cataloged by: WRO-CA-04 on 04/07/1999
Keywords: MN-0729 (MF #4567) (6), 4 PP (7), 3 ACRES SURVEYED (4), CRYSTAL CRAG 7.5' QUAD, BLOODY MTN. 7.5' QUAD, OLD MAMMOTH 7.5' QUAD (4), LONG VALLEY CALDERA (4), NO RESOURCES (8), HRR NO. 05-04-4992 (6)

Appendix G

Detailed Height and Shade/Shadow Analysis For Proposed Action



EAGLE LODGE BASE AREA

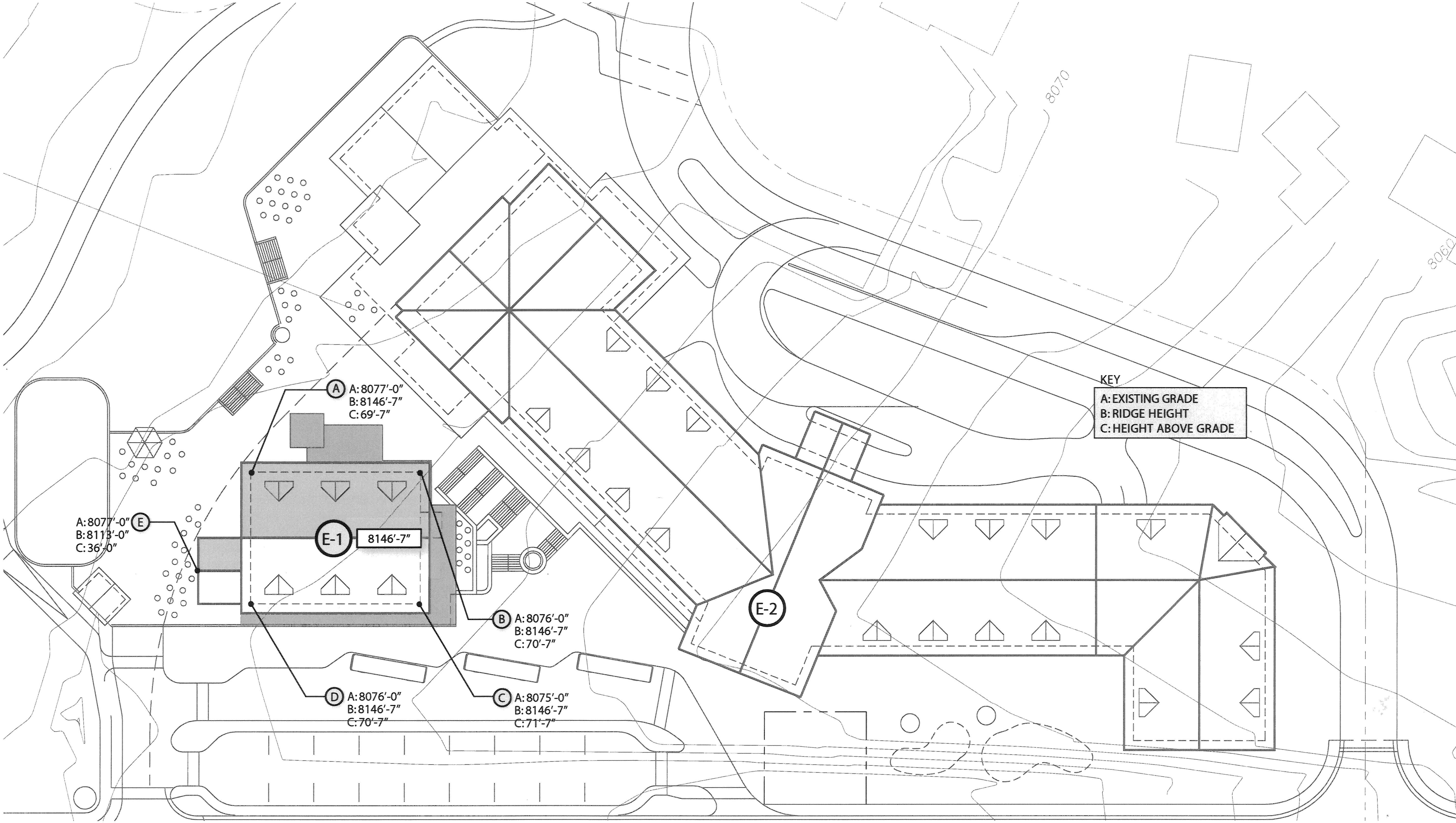
Mammoth Lakes, CA

Preliminary Height Analysis

PROPOSED ACTION
ROOF RIDGE HEIGHT ABOVE GRADE

August 1, 2006

Gensler



EAGLE LODGE BASE AREA

Mammoth Lakes, CA

Preliminary Height Analysis

PROPOSED ACTION
ROOF RIDGE HEIGHT ABOVE GRADE

August 1, 2006

Gensler

E.1 HEIGHT ABOVE EXISTING GRADE AT BUILDING CORNERS

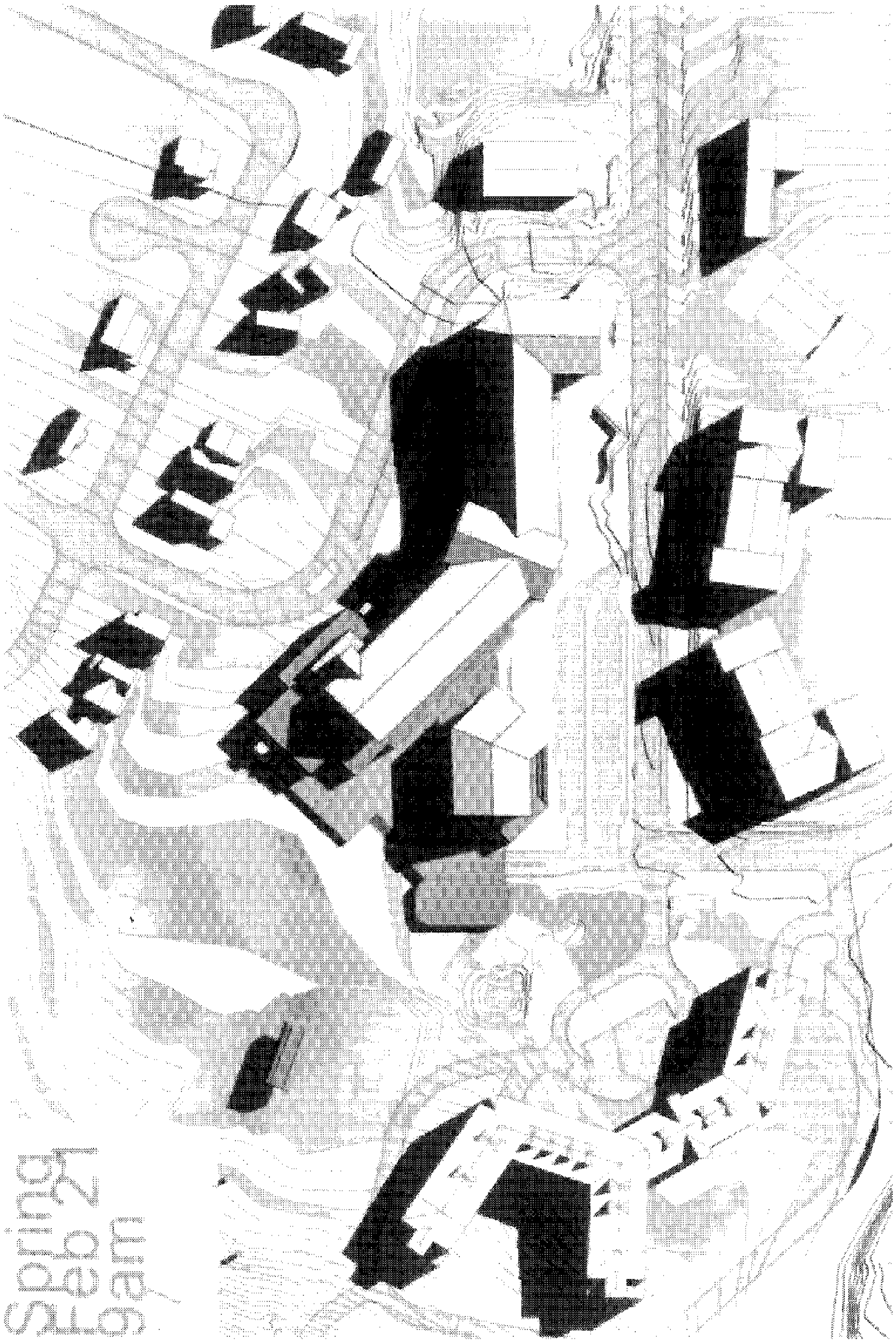
A.	69'-7"
B.	70'-7"
C.	71'-7"
D.	70'-7"
E.	36'-0"

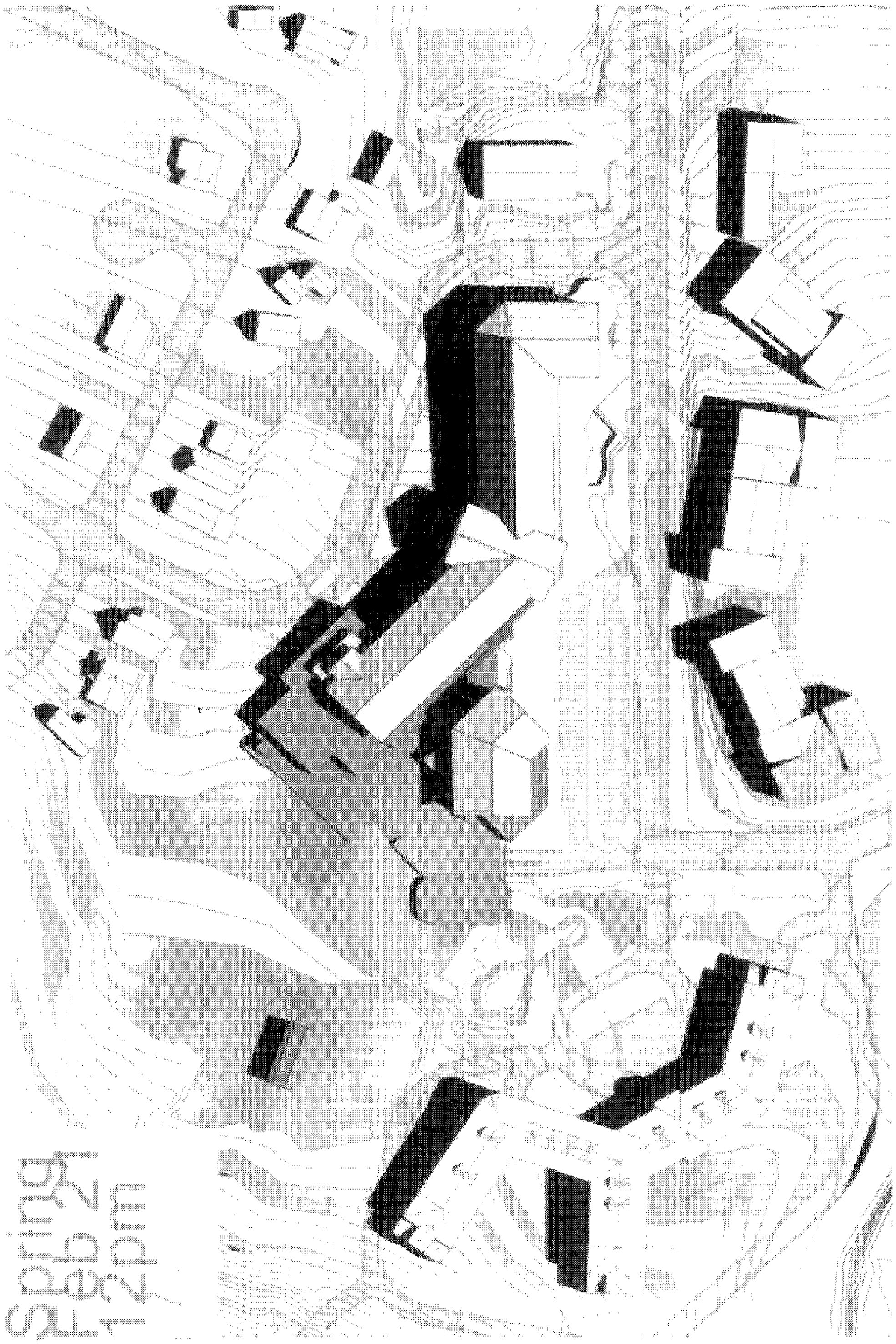
318'-4" / 5 = 63'-8"
AVE. HT. = 63'-8"

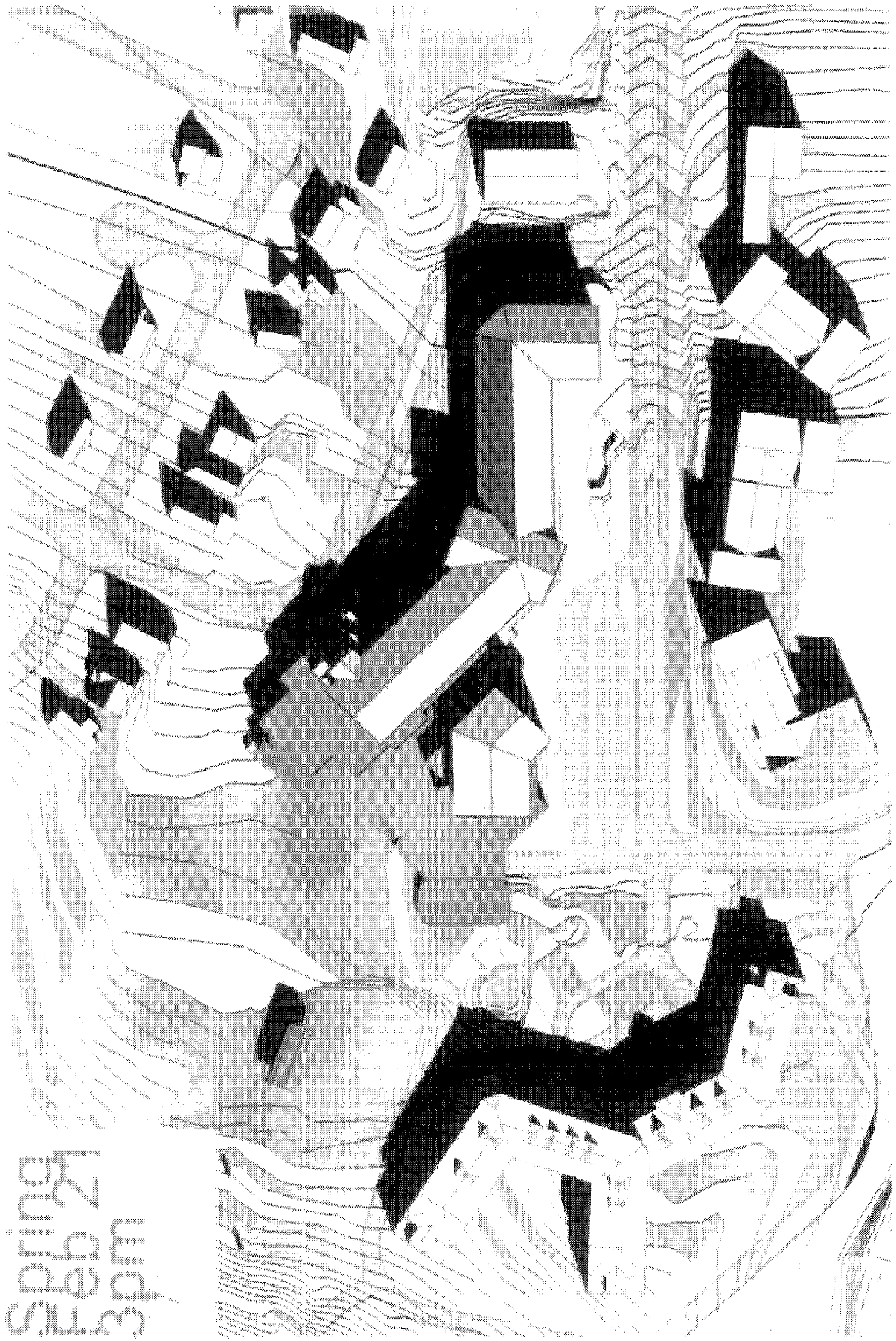
E.2 HEIGHT ABOVE EXISTING GRADE AT BUILDING CORNERS

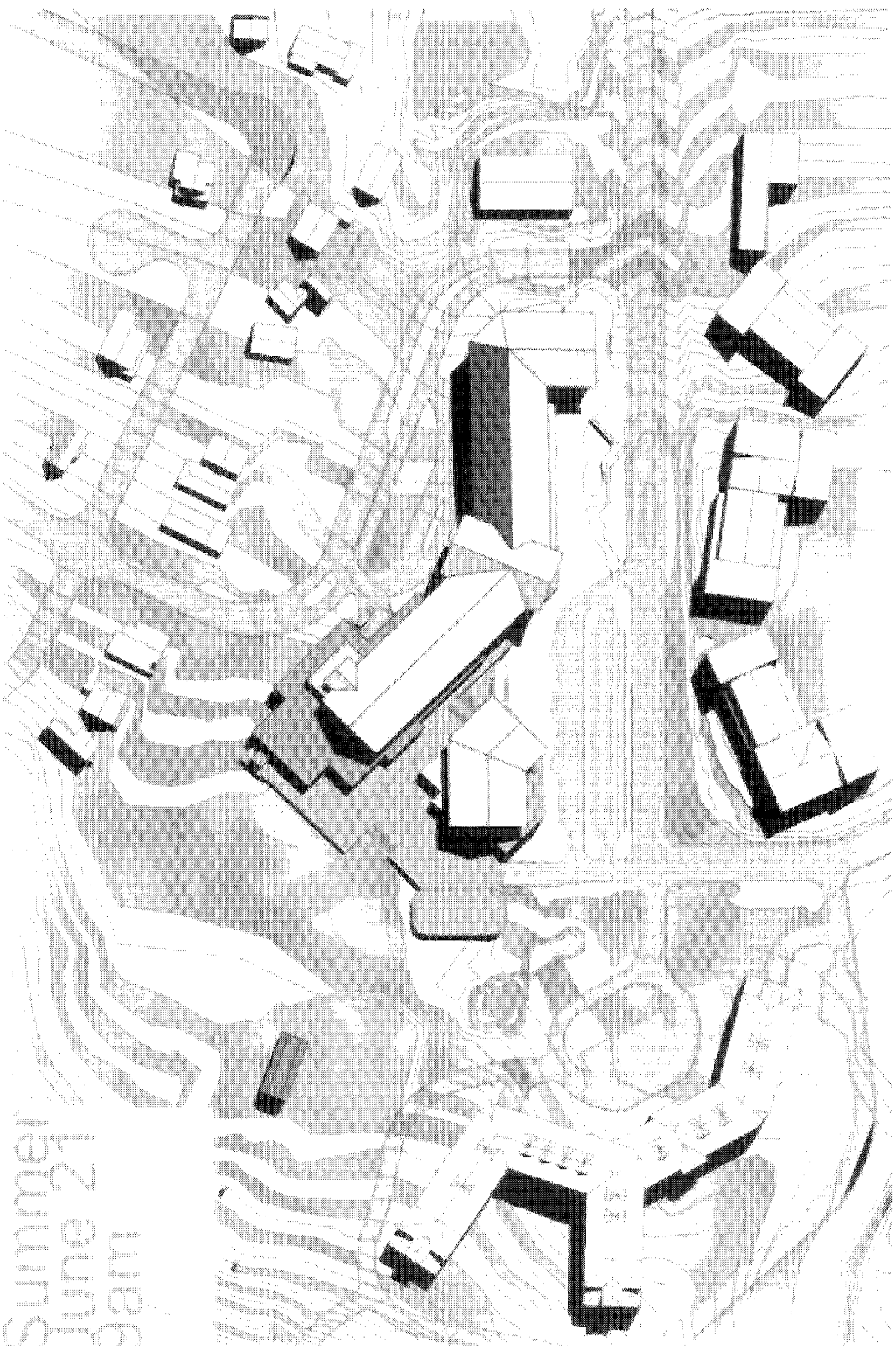
A.	24'-8"
B.	69'-8"
C.	29'-8"
D.	73'-8"
E.	73'-8"
F.	80'-10"
G.	25'-0"
H.	82'-10"
I.	75'-8"
J.	75'-8"
K.	72'-8"
L.	70'-8"
M.	72'-8"
N.	81'-10"
O.	81'-10"
P.	29'-8"
Q.	70'-8"
R.	26'-8"
S.	24'-8"

1142'-8" / 19 = 60'-2"
AVE. HT. = 60'-2"

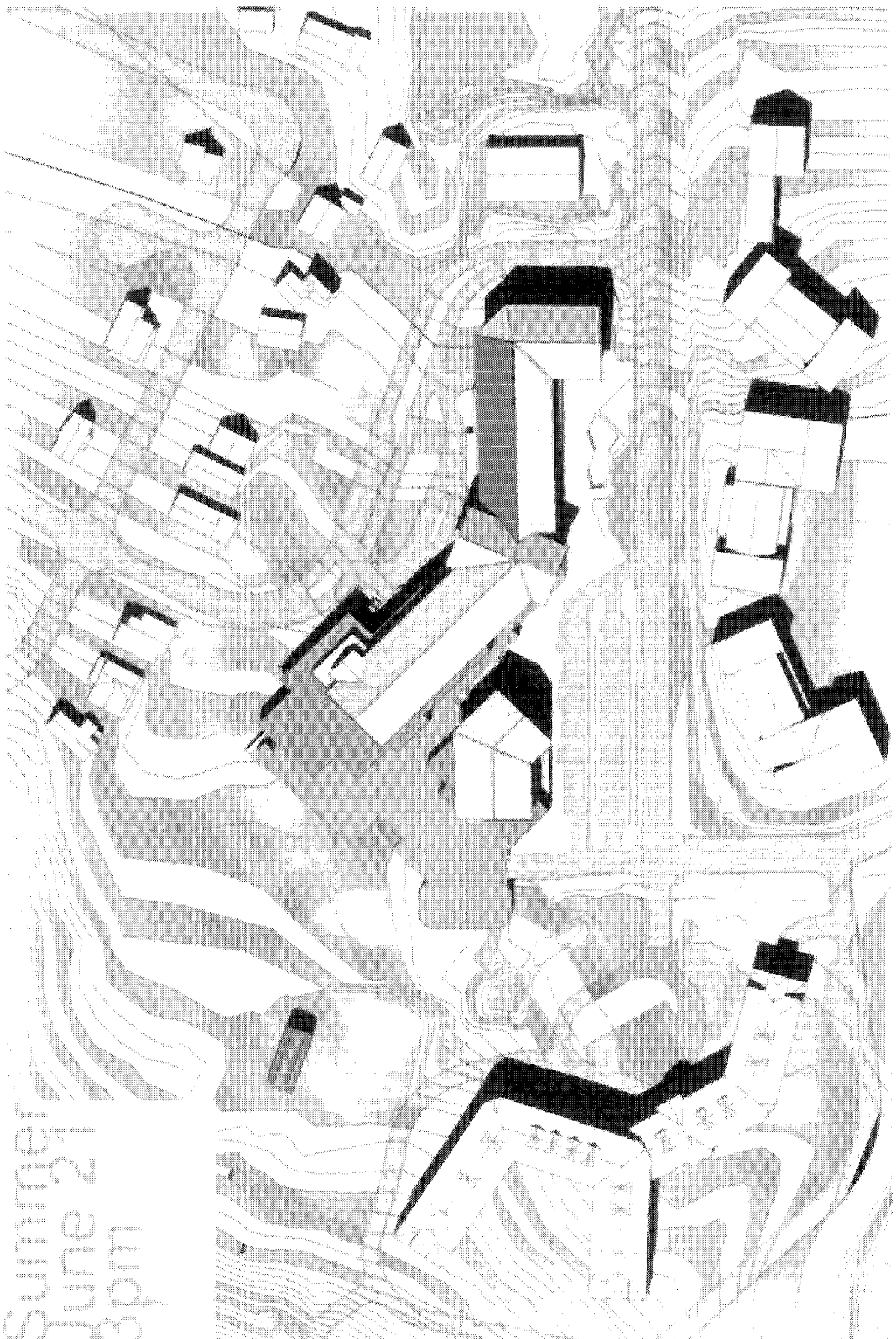

Spring
Feb 21
9am


Spring
Feb 21
12pm

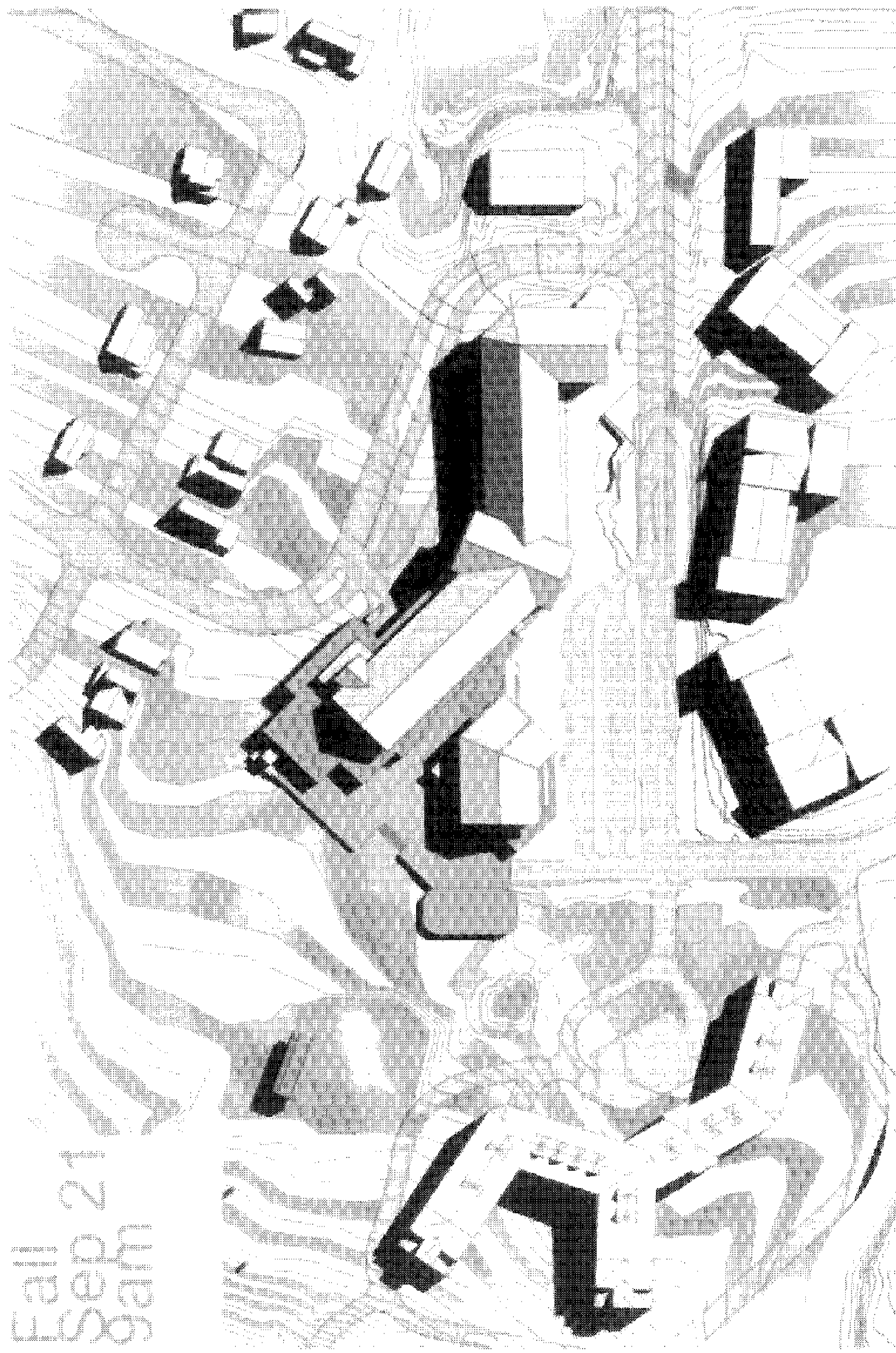

Spring
Feb 21
3pm

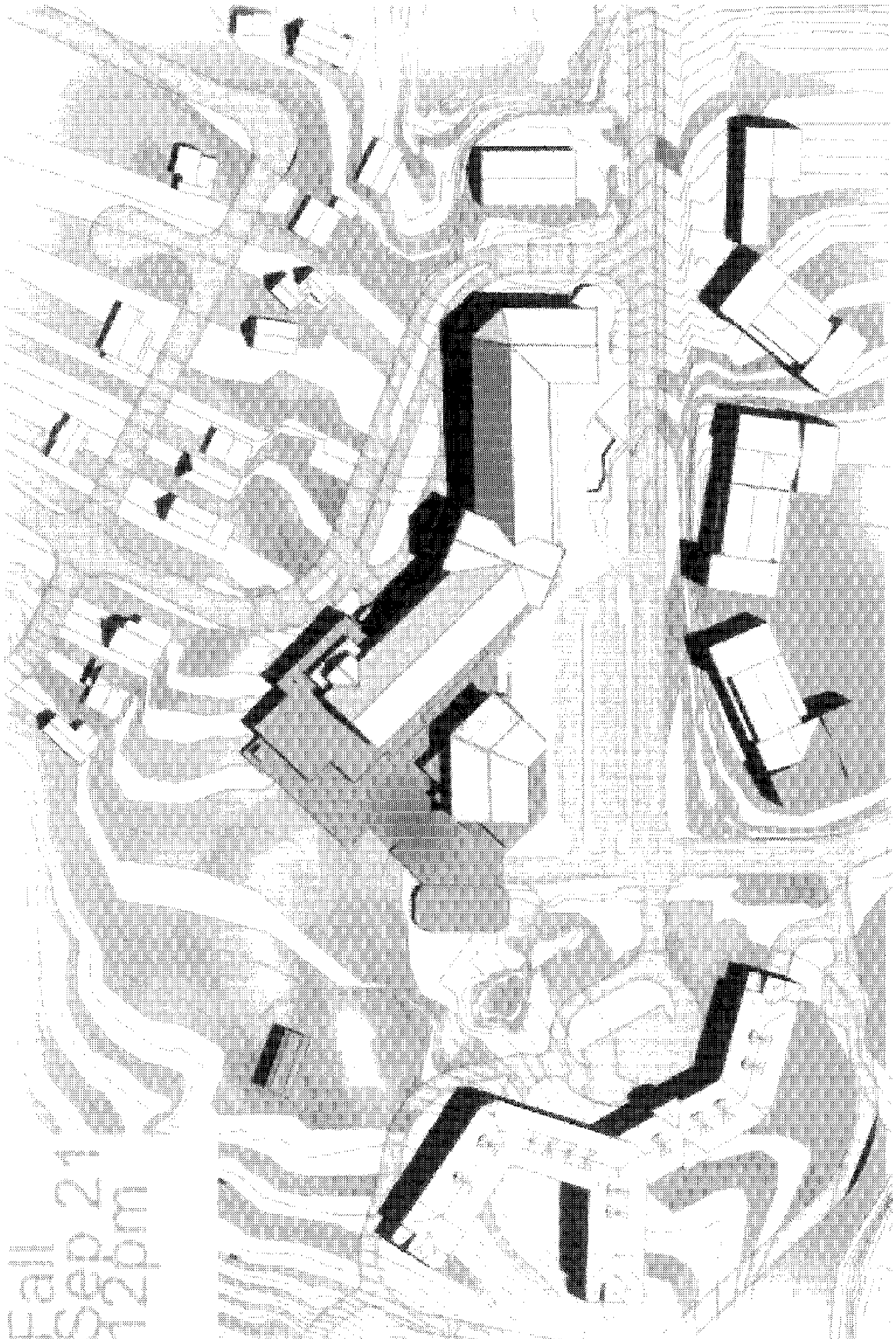

Summer
June 21
9am

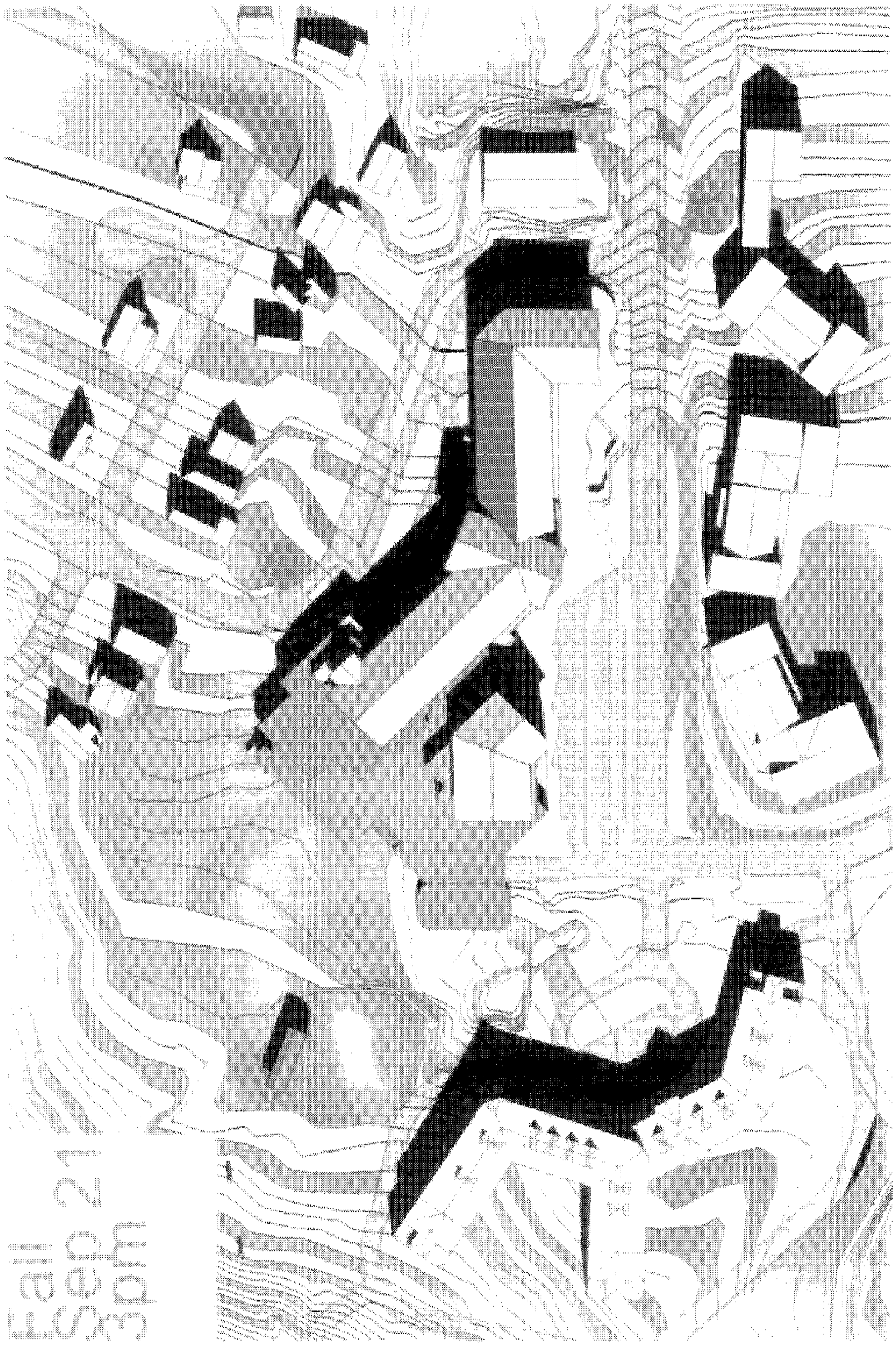

Summer
June 21
12pm

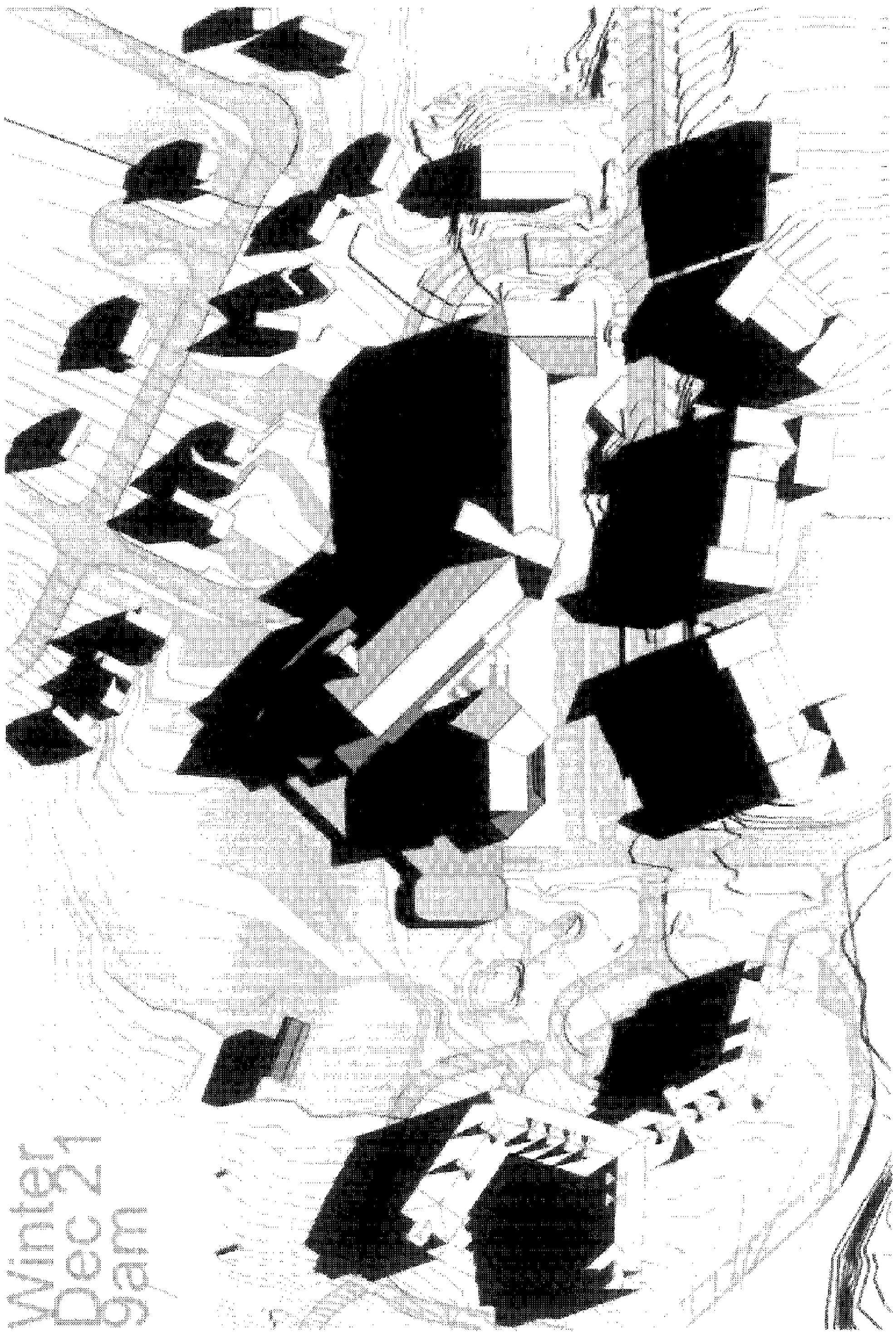


Summer
June 21
3pm

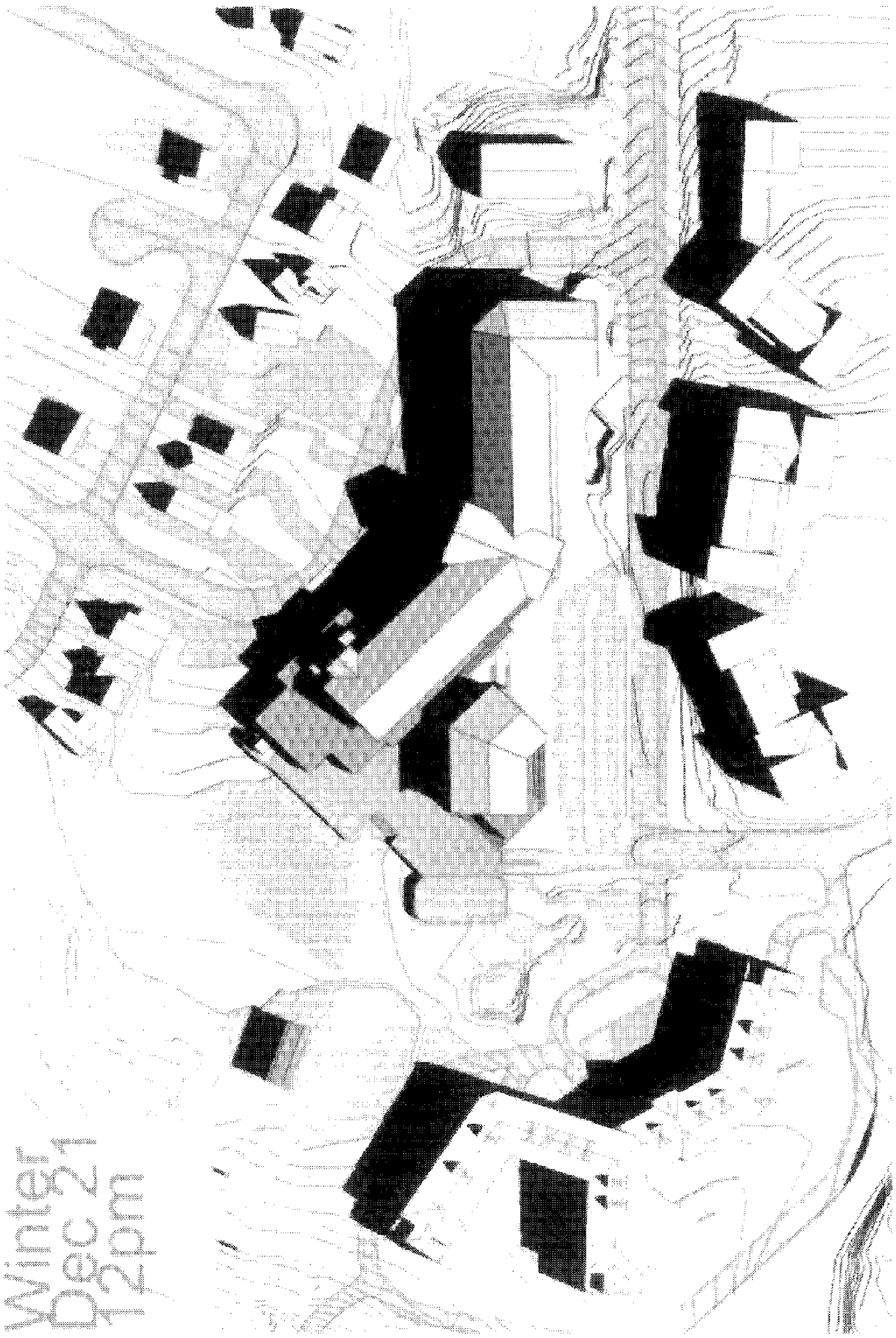

Fall
Sep 21
9am


Fall
Sep 21
12pm

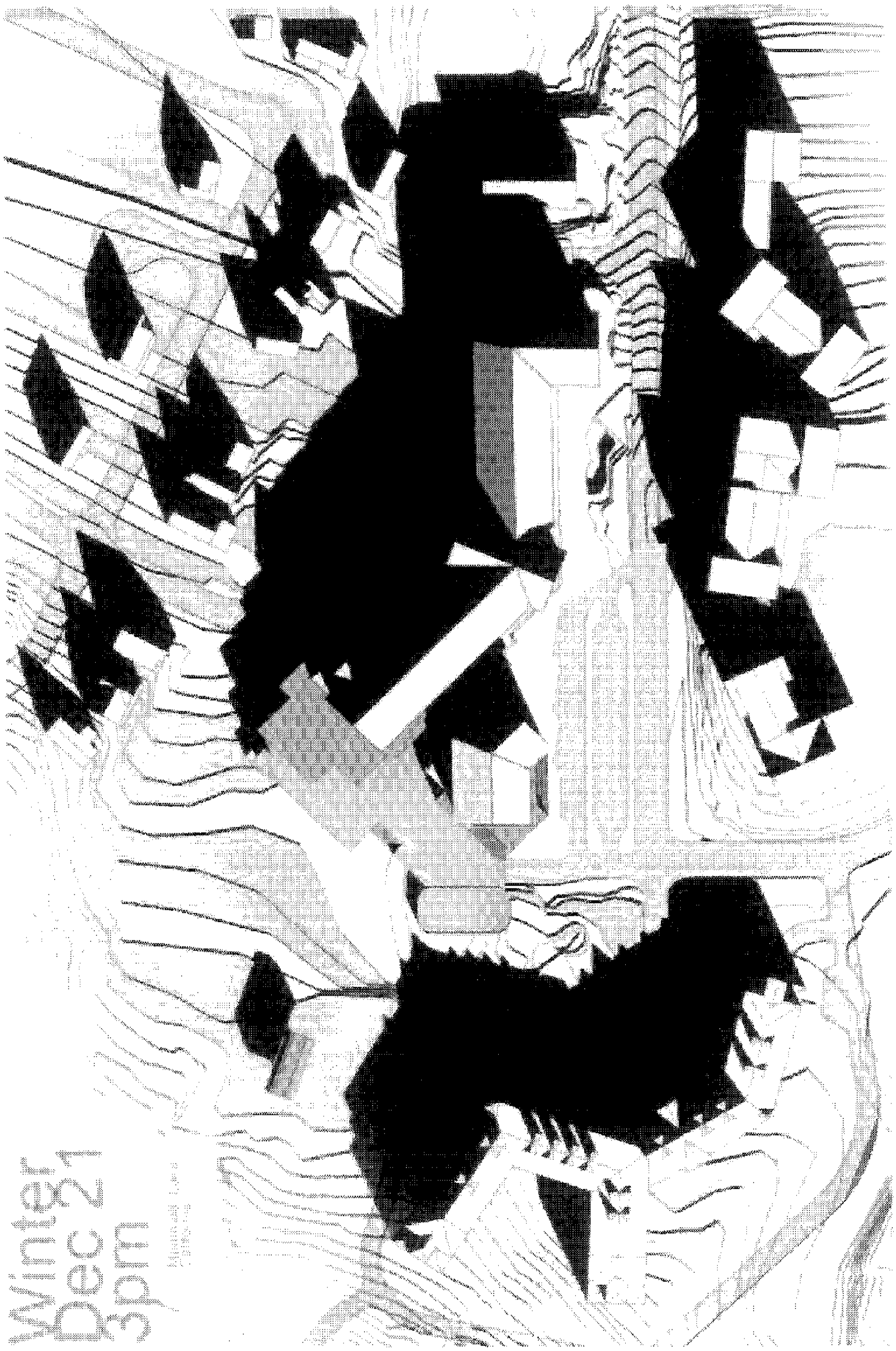

Fall
Sep 21
3pm



Winter
Dec 21
9am



Winter
Dec 21
12pm


Winter
Dec 21
3pm

Appendix H

Preliminary Hydrogeologic Investigation

Preliminary Drainage Study

Storm Water Pollution Prevention Plan

SIERRA GEOTECHNICAL SERVICES INC.

March 31, 2006

Project No. 3.30644.1

Mammoth Mountain Ski Area
PO Box 24
Mammoth Lakes, Ca, 93546

Attention: Mr. Tom Hodges

Subject: **PRELIMINARY HYDROGEOLOGIC INVESTIGATION**
MMSA Eagle Base Lodge
Mammoth Lakes, California

Reference: **PRELIMINARY GEOTECHNICAL INVESTIGATION**
MMSA Eagle Base Lodge
Sierra Geotechnical Services Project No. 3.30644; December 1, 2005
Mammoth Lakes, California

Dear Mr. Hodges:

In accordance with your authorization of our proposal and the MMSA Agreement for Professional Services dated February 20th, 2006, we herein submit the results of our preliminary hydrogeologic investigation for the proposed project. The purpose of this study was to assess the on-site hydrologic characteristics and provide conclusions regarding the impacts of construction dewatering (if any) to the surrounding vegetation areas.

We appreciate the opportunity to be of service to you. Should you have any questions regarding this report, please do not hesitate to contact us.

Respectfully,

SIERRA GEOTECHNICAL SERVICES, INC.

PROFESSIONAL GEOLOGIST
JOSEPH AARON ADLER
NO 2198
CERTIFIED ENGINEERING GEOLOGIST
3-31-07
STATE OF CALIFORNIA

Joseph A. Adler
Principal Geologist
CEG 2198

PROFESSIONAL GEOLOGIST
H. DEAN DOUGHERTY, III
No. 6497
Exp. 8/31/06
STATE OF CALIFORNIA

H. Dean Dougherty, III,
PG 6497

PRELIMINARY HYDROGEOLOGIC INVESTIGATION

FOR

MMSA EAGLE BASE LODGE DEVELOPMENT

MAMMOTH LAKES, CALIFORNIA

MARCH 31, 2006
PROJECT NO. 3.30644.1

Prepared By:

SIERRA GEOTECHNICAL SERVICES, INC.
P.O. Box 5024
Mammoth Lakes, California 93546
(760) 934-3992

www.sierrageotechnicalinc.com

TABLE OF CONTENTS

LIST OF ATTACHMENTS

1. PURPOSE AND SCOPE

This report presents the results of a preliminary hydrogeologic investigation for the proposed commercial/residential project to be located west to northwest of the intersection of Meridian Boulevard and Majestic Pines Road, adjacent to the Juniper Ridge Development in Mammoth Lakes, Mono County, California (Figures 1, 2 and 3). The purpose of this investigation was to investigate the site's existing hydrogeologic conditions in order to provide professional opinions and recommendations concerning the following:

- Assessment of existing hydrologic setting and groundwater budget.
- Potential impacts of dewatering during construction and operation to surrounding vegetation.
- Monitoring and Mitigation measures to reduce dewatering impacts.

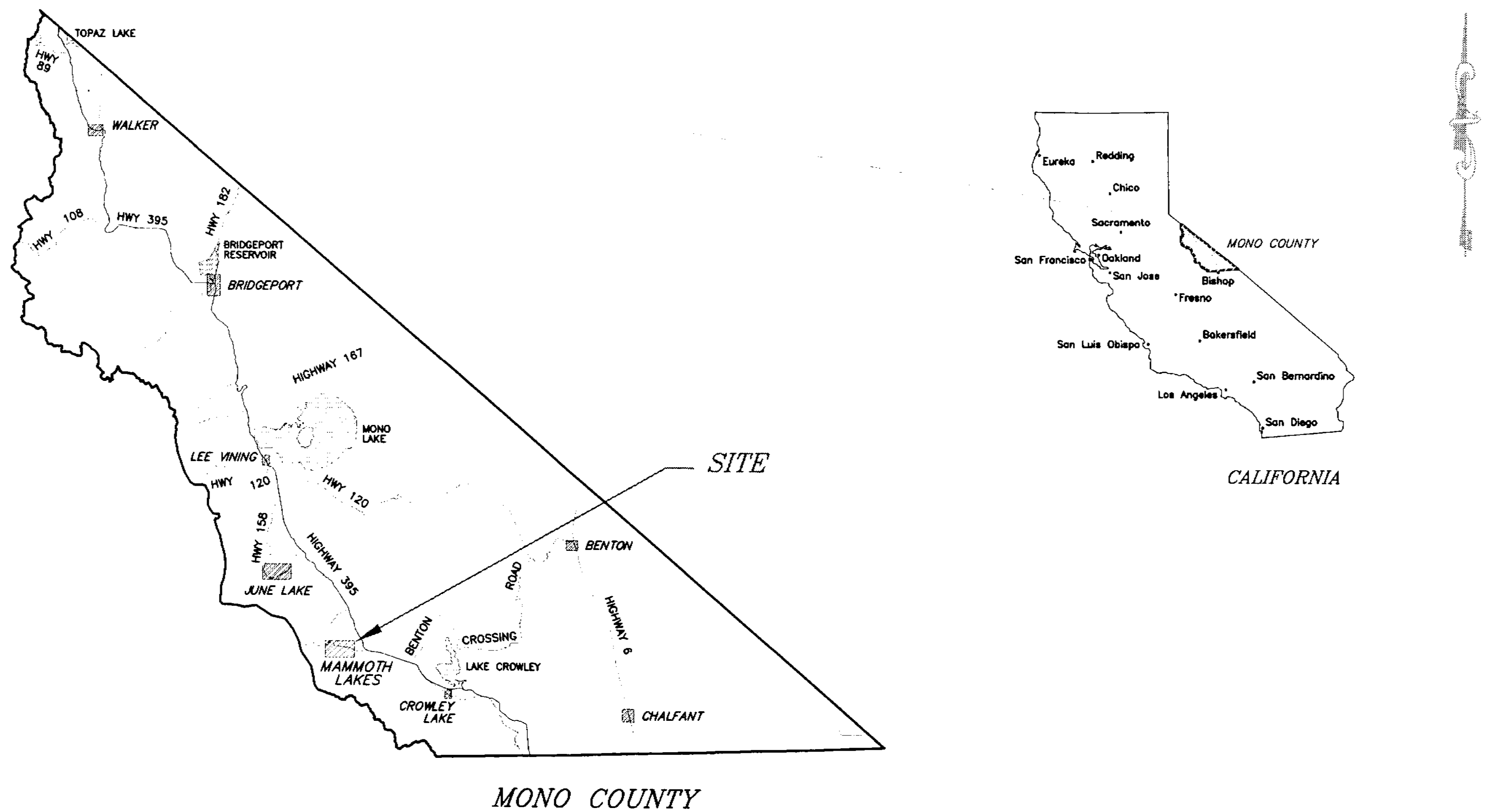
The scope of this investigation included a review of available geologic, hydrologic and hydrogeologic literature as well as field work which included water level monitoring and pump testing of on-site existing piezometers.

2. SITE DESCRIPTION

The semi-rectangular to "shoe" shaped site is located west to northwest of the intersection of Meridian Boulevard and Majestic Pines Road, adjacent to the Juniper Ridge Development in Mammoth Lakes, Mono County, California (37.6362° N, 118.9890° W). The majority of the site is occupied by a privately owned asphalt paved parking area with associated utilities. However, portions of the site to the northwest and west include undeveloped and lightly improved property owned by the United States Forest Service (USFS).

In general, the subject site slopes gradually toward the east/northeast. Ground surface elevations range from approximately 8081' MSL in the northwest corner of the site to approximately 8064' MSL in the northeast. Details of the topography are shown on Figure 4. Drainage is controlled by the topography such that site runoff flows east at approximately 5.3 percent.

Vegetation surrounding the parking area consists of a light growth of shrubs with few trees. Whereas vegetation within the USFS property consists of a light to moderate growth of grasses, shrubs and trees. This site is **not** located on a wetland. It is also not on a water of the state as identified by a blue line on the USGS Quad maps.



SITE REGIONAL MAP PROPOSED EAGLE LODGE DEVELOPMENT	
NTS	3/2006
3.30644.1_FIG1.DWG	HDD
3.30644.1	FIGURE 1

3. PROPOSED DEVELOPMENT

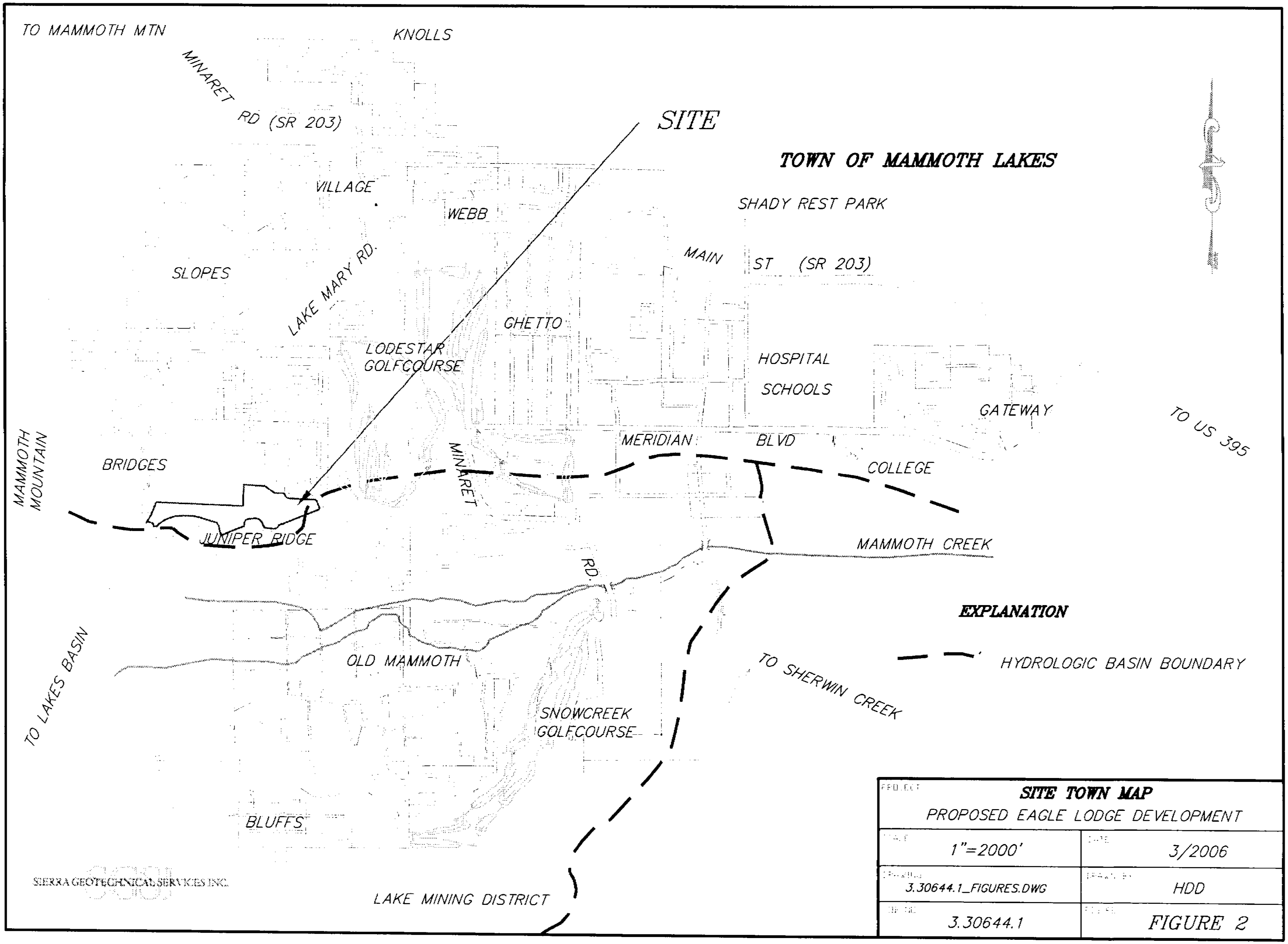
Based upon a review of the Request for Proposal distributed by the Mammoth Mountain Ski Area as well as the Eagle Lodge Base Area Development preliminary design prepared by Gensler Architecture, it is our understanding that the proposed project will likely include the construction of a 40,000 sqft. day lodge, 135,000 sqft. of mixed use residential and commercial facilities, structured parking, an ice rink, paved access drives and vehicular drop off areas, as well as associated utilities and other appurtenances. At least 1 to 2½ levels of underground parking are anticipated.

Foundations systems, although not yet designed, will likely consist of concrete perimeter footings with a concrete slab-on-grade, supporting either reinforced concrete block or reinforced concrete walls below grade, with either a concrete or conventional framing superstructure. Grading will likely include a maximum excavation to approximately 30-feet below ground level for the garage area. As previously noted, this project is in the design process and detailed plans for construction are currently not available. SGSI should review grading and foundation plans prior to construction in order to assure that they will be in conformance with our recommendations.

4. GEOLOGIC AND HYDROLOGIC CONDITIONS

The project site is located within the Sierra Nevada province, a generally north to northwesterly trending, asymmetric, and tilted fault-block, bordered on the east by the Sierra Nevada frontal-fault system. Predominant basement rock types of the Sierra Nevada include Cretaceous granitics with associated Paleozoic roof pendants along the west margin of Mono Basin, and to a lesser degree, Paleozoic meta-sedimentary formations mantled by Pleistocene glacial tills.

More specifically, the project site is located at the southwestern edge of the Long Valley caldera near the eastern flank of the Sierra Nevada. The caldera (collapsed volcano) is an east-west elongate, oval depression formed approximately 760,000 years ago with continued volcanic activity to the present (Bailey, 1989). The pre-volcanic basement rock in the Mammoth Lakes area is predominantly Mesozoic granitic rocks of the Sierra Nevada batholith. The batholith is a series of intrusions that displaced overlying ancient sedimentary sea floor rocks (roof pendants) during the Jurassic and Cretaceous Periods. Piedmont glaciation occurred throughout the Pleistocene leaving a mantle of glacial till covering the basement and volcanic rocks throughout the area now occupied by the Town of Mammoth Lakes.



SITE TOWN MAP	
PROPOSED EAGLE LODGE DEVELOPMENT	
1"=2000'	3/2006
3.30644.1_FIGURES.DWG	HDD
3.30644.1	FIGURE 2

Review of the exploratory geothermal well data and preliminary interpretations published by Diment and Urban (1990) indicates that glacial till with minor interbeds of basalt extend down to approximately 350-feet below the ground surface in close proximity to the subject site. Based on a lithologic log of Mammoth Lakes Geothermal Reservoir Assessment Project (MLGRAP) Well #2, volcanic basalt and rhyolite material were found in the remainder of the well to an approximate depth of 1,610-feet. The approximate location of MLGRAP Well #2 is 37.6456° north, 118.9733° west, and elevation 7861-feet mean sea level (Figure 5).

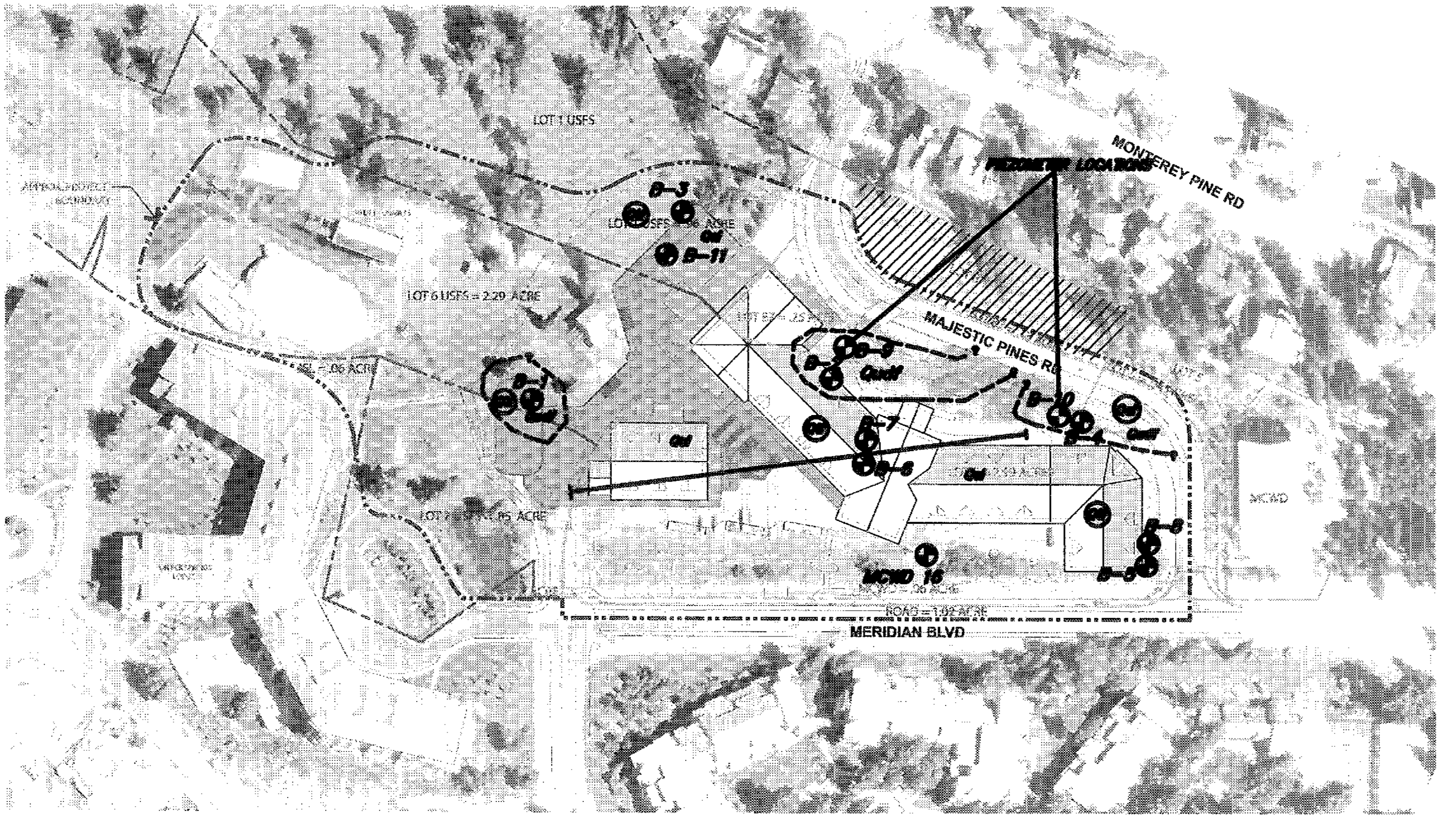
Based upon a review of the above referenced report the site is not located within any "Earthquake Fault Zones" or Alquist-Priolo Hazard Zones. The closest active fault to the site is the Hartley Springs fault (M_W~6.6) located approximately 0.2 mi (0.4 km) west/northwest of the subject site (SGSI, 2005).

4.1 Regional Hydrologic Setting

The subject site is regionally located within the surface waters of Mammoth Basin, which is composed of six smaller drainage basins, or watersheds, that are ultimately tributaries to both the Owens River and Crowley Lake (CDWR, 1973). More specifically the site is located in the Upper Mammoth Creek watershed (MCWD, 2005a). According to the California's State Water Quality Resources Control Board, Mammoth Basin is part of Section 603.10 of Long Subunit No. 10 of Owens Hydrologic Unit No. 3, located upstream of Crowley Lake (Lahontan, 1994). Crowley Lake is listed as a water body having impaired water quality according to the List of Water Quality Limited Segments, as outlined in Section 303(d) of the federal Clean Water Act (P.L. 92-500, as amended).

4.2 Local Groundwater

Groundwater underlying the site generally trends in the direction of the topographic gradient, which in this case is east/northeast. According to *USGS Water Resources Investigations Report 85-4183* (Farrar et al., 1985), depth to groundwater beneath the site was approximated at 250 feet below the ground surface (bgs). However, according to Mammoth Community Water District (MCWD) water well records, the depth to the permanent static groundwater aquifer is approximately 450 feet bgs (MCWD, 2005a) as recorded from MCWD Well No. 16, which is located within an easement adjacent the southern property line (Figure 3).



LEGEND

Qudf	UNDOCUMENTED FILL
Qal	ALLUVIUM (CIRCLED WHERE BURIED)
Qti	GLACIAL TILL (CIRCLED WHERE BURIED)
	GEOLOGIC CONTACT QUERIED WHERE UNCERTAIN
B-11	APPROXIMATE LOCATION OF EXPLORATORY BORING
S-1	APPROXIMATE LOCATION OF SEISMIC TRAVERSE BY KLEINFELDER (1986)
MCWD 16	APPROXIMATE LOCATION OF MCWD WATER WELL NO. 16

Sierra Geotechnical Services

PROJECT: **SUBSURFACE GEOTECHNICAL MAP** MMSA EAGLE BASE LODGE	
SCALE: N.T.S	DATE: 7/2006
DRAWING: FIG3.DWG	DRAWN BY: BM
JOB NO: 3.30644.1	FIGURE: FIGURE 3

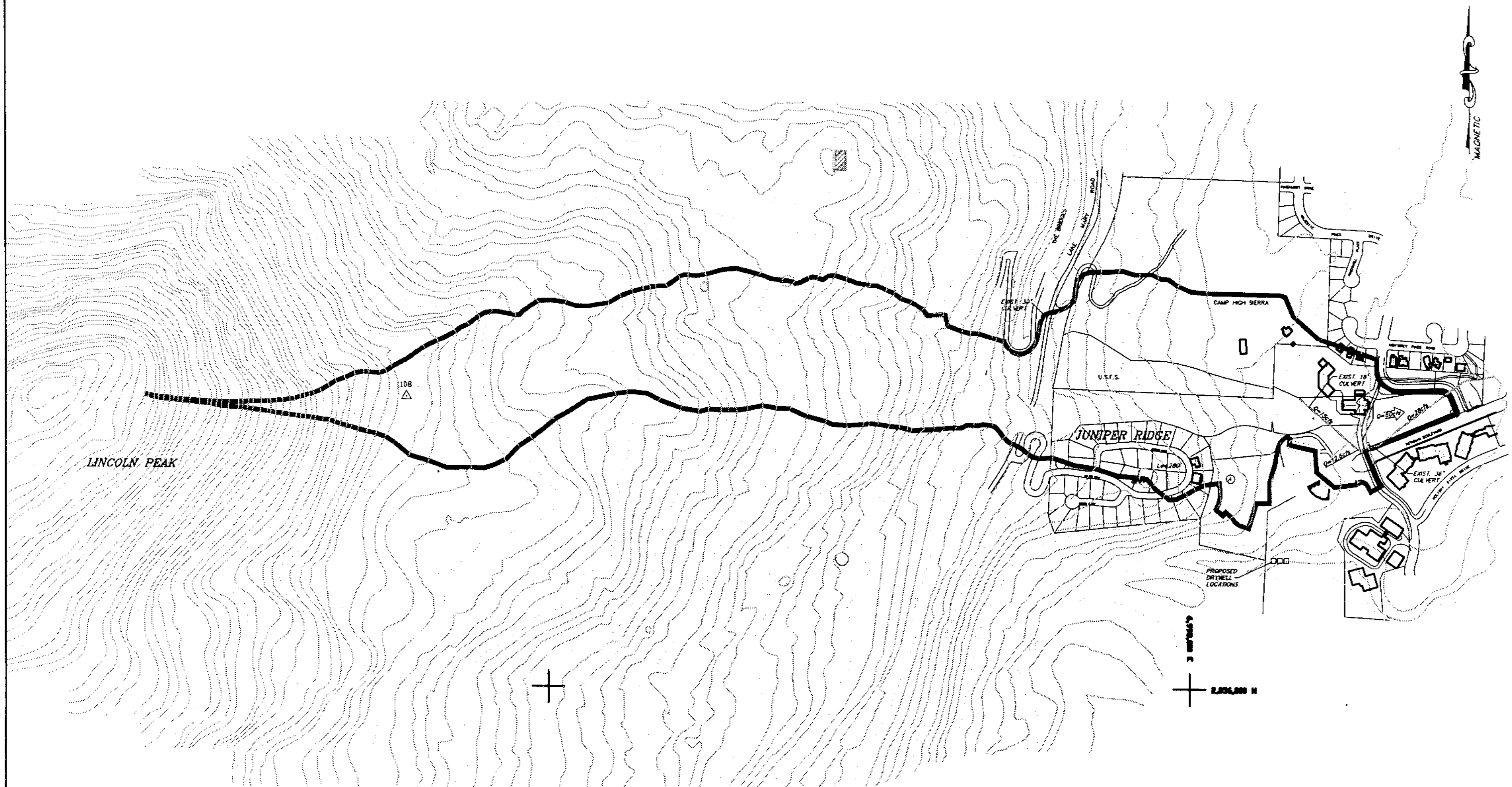
During the exploratory drilling conducted for the above referenced investigation light to heavy perched groundwater seepage was encountered in borings B-1, B-3, B-6 through B-7, and B-9 through B-11 at depths varying from approximately 4½-feet to 21-feet below grade (Appendix A). Zones of seepage varied based upon the subsurface lithology. In general, seepage occurred above and/or below the well cemented zones where the grain size as well as the amount gravels and cobbles increased.

Two thirty-foot deep piezometers with two-inch diameter casings were installed within Borings B-9 and B-10. Depth to perched groundwater observed in the wells was approximately 2 to 4 feet bgs. The locations of each well are shown on Figure 3.

4.3 Preliminary Groundwater Budget

An estimate of the preliminary groundwater budget for the site is based primarily on the relatively small hydrographic basin, or catchment area, that surrounds the site (Figure 4). The area of this basin measures approximately 128.8 acres. Based on estimated precipitation and evapotranspiration data provided by CDWR (1973), approximately 210 acre-feet per year of precipitation is available to recharge the basin surrounding the site, but approximately 357 acre-feet per year of water is removed by the MCWD. Removal is from two of their horizontal wells that are located beneath Lake Mary Road, directly upslope and to the west of the site, and from MCWD Well No.16.

Between 1995 and 2000 Well 16 has been reported to have static levels ranging from 414 to 484 feet bgs, pumping levels between 471 and 492 feet bgs, pumping discharge rates of 350 to 500 gallons per minute (gpm), and a projected annual pumping rate of approximately 0 acre-feet during normal conditions and 135 acre-feet during drought conditions (MCWD, 2005b). Water within the well and therefore the surrounding area is likely replenished from deep recharge emanating from the fractured Lincoln Peak volcanics underlying the glacial material as opposed to percolation from shallow run-off (MCWD 2005a).



LEGEND

EXISTING GROUND CONTOUR

DRAINAGE BASIN AREA BOUNDARY

Q=10cfs ESTIMATED FLOW FROM TRIBUTARY AREA OR WITHIN STORMDRAIN FROM A 100-YEAR, WINTER STORM cfs = CUBIC FEET PER SECOND

G:\SGSDocs\Brochure\SGSLogo.jpg

SITE HYDROGRAPHIC BASIN MAP PROPOSED EAGLE LODGE DEVELOPMENT	
1"=600'	3/2006
3.30644.1_FIG4.DWG	HDD
3.30644.1	FIGURE 4

5. FIELD TESTING

SGSI performed a pump test with an Envirotech ES-200 Purger with a power booster on March 24, 2006 within Boring B-9 at the site. This test yielded a sustained pumping rate of 1.62 gallons per minute (gpm) for a duration of 35 minutes. Drawdown in the well was estimated at 3 feet, and the well water recharged to its static level at 4.05 feet bgs within 4.5 minutes of measured recovery time. Based on these data, the groundwater underflow through the proposed Eagle Lodge building footprint was estimated using the following formula: Q = kia.

Where: Q = flow rate (gpd) through the excavation footprint
k = hydraulic conductivity
i = hydraulic gradient (vertical/horizontal)
a = area of the building excavation footprint
Δs = change in drawdown per one log cycle of time
b = saturated thickness of the aquifer penetrated by the well

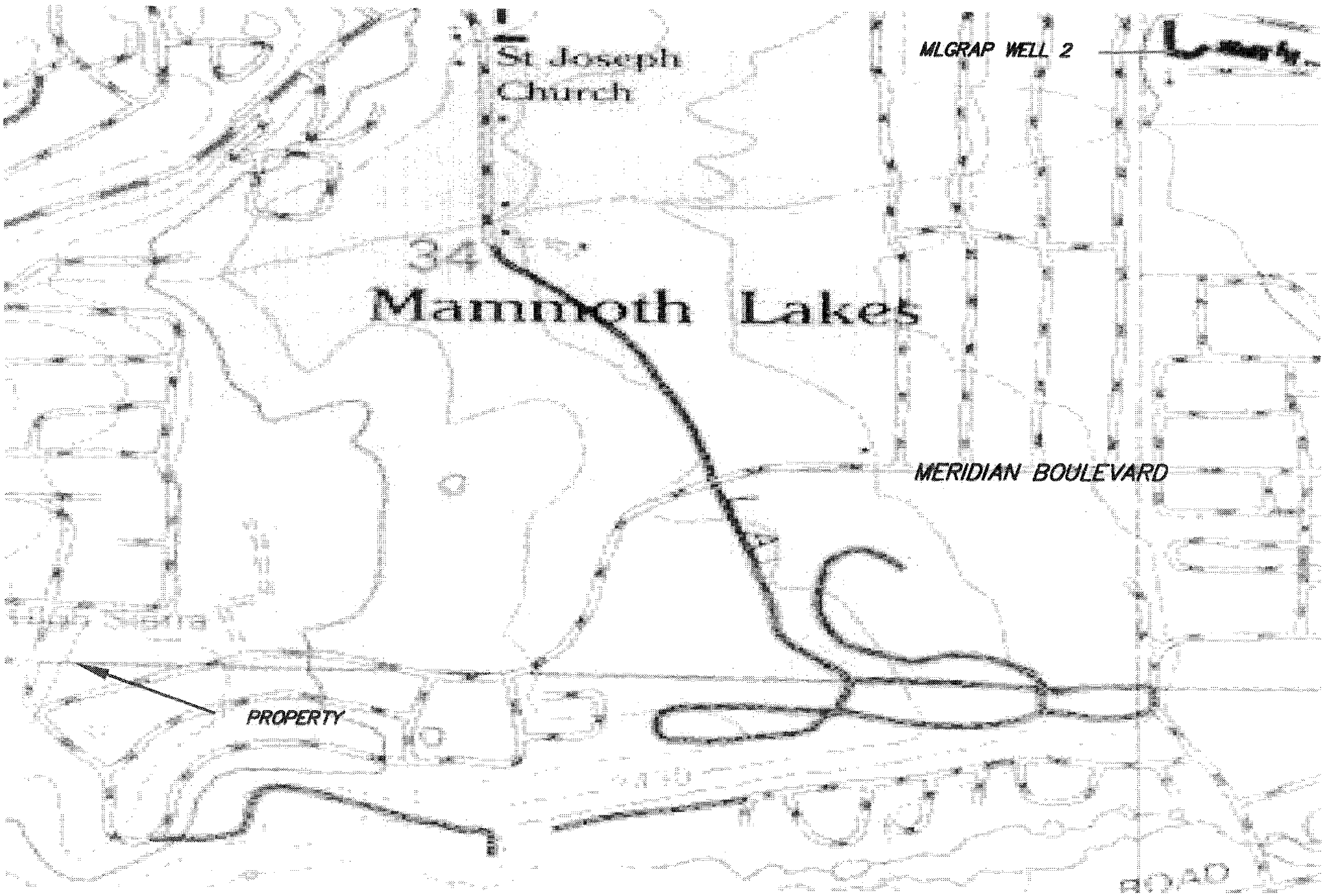
Substituting the measurements obtained in the field:

T = transmissivity (gpd/ft^2) $T = 264 \cdot Q / \Delta s = 143$ gpd/ft = 19 ft^2/day
k = T/b = 0.63 ft/day
i = 0.33
a = 100,154 ft^2

Q = 1,312 ft^3/day = 9,815 gpd

The recorded underflow is comparative to results obtained by SGSI in the fall of 1997 from a monitoring well (B-4, 1997) adjacent the Juniper Springs Lodge development. The results of this pump test indicated a sustained pumping flow of 1.2 gallons per minute (gpm), which yielded a hydraulic conductivity of 0.5 to 0.7 feet per day. This well along with the 3 others placed prior to development of Juniper Springs were unfortunately destroyed during construction of the lodge. The approximate location of well B-4 is shown on Figure 6.

It can be anticipated that approximately 9,815 gpd of water will move into the excavation every day, subject to seasonal variation and to local precipitation events. Please note that these readings were collected prior to the beginning of the spring/summer snowmelt run-off season. Groundwater flows are anticipated to be considerably higher during the run-off period. Additional testing should be performed on a monthly basis during the run-off period in order to acquire maximum flow rate data.



SOURCE: US GEOLOGICAL SURVEY
OLD MAMMOTH, CALIFORNIA 7.5 QUADRANGLE MAP, 1994

SUBJECT SITE LOCATED AT:
LATITUDE 37.6362° NORTH, LONGITUDE -118.9890° WEST

Sierra Geotechnical Services

PROJECT: GEOTHERMAL WELL LOCATION MMSA EAGLE BASE LODGE	
SCALE: 1"=2400'	DATE: 3/2006
DRAWING: FIGURE 5.DWG	DRAWN BY: jaa
JOB NO.: 3.30644.1	FIGURE: FIGURE 5

5.1 Drawdown

During the pump test, water levels were continuously recorded in boring B-10, located "down stream" and to the east (Figure 3), to ascertain whether removal of water from B-9 would have an affect on water levels in B-10. Prior to the test water levels in B-10 were recorded at approximately 2 feet bgs. During the testing period the change in water levels in B-10 were negligible (Appendix B).

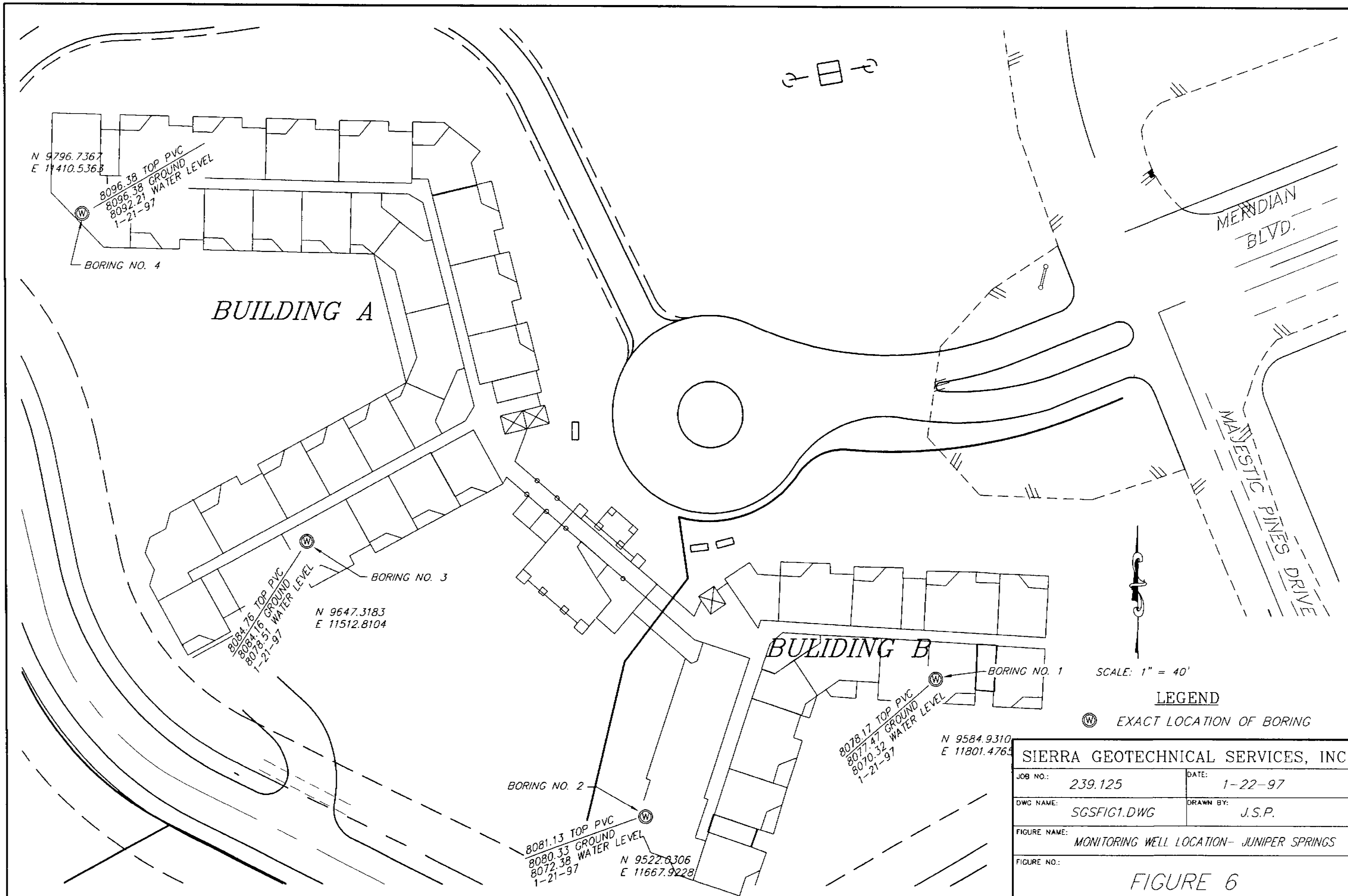
6. DEVELOPMENT IMPACT

The field data acquired for this study was limited to the use of the existing 2 inch diameter piezometers and their relative distance to each other for acquiring measurements. As previously noted additional monitoring wells surrounding the site had been destroyed. Although no drawdown impact was observed during the field testing, the use of just two piezometers to assess drawdown may not accurately reflect dewatering conditions during construction.

However, based upon the calculated flow rates dewatering during construction should not adversely impact the up-gradient wetland vegetation located outside the project boundary to the northwest of the ski area. Although flow rates will vary depending upon seasonal conditions shallow groundwater flow through the site area should be continuous and not static. Because flow rates are relatively large, and the water condition is not static the bypass/removal of water from the proposed down-gradient construction area should not adversely affect any up-gradient vegetation.

6.1 Monitoring and Mitigation

The water levels within the existing wells should be monitored on a monthly basis (especially during the snow melt run-off periods) to further assess seasonal flow rates. In addition, prior to construction, we recommend that at least 2 monitoring wells be installed adjacent or up gradient of the proposed construction area to aid in the recording of groundwater depths and flow rates. In the event that groundwater drawdown from construction is observed, appropriate mitigation measures shall be designed to protect proximal vegetated areas and employed in conformance with Regional Water Quality Control Board criteria.



SIERRA GEOTECHNICAL SERVICES, INC.	
JOB NO.: 239.125	DATE: 1-22-97
DWG NAME: SGSFIG1.DWG	DRAWN BY: J.S.P.
FIGURE NAME: MONITORING WELL LOCATION- JUNIPER SPRINGS	
FIGURE NO.: FIGURE 6	

We further recommend that the dewatering and prevention of moisture intrusion recommendations contained within the above referenced geotechnical investigation report be adhered to during site development.

Please note that all water removed from the site should be re-introduced back into the down stream drainage system (provided it is free of contaminants and silt) so that down-gradient vegetation and recharge are not negatively affected.

7. LIMITATIONS

This report has been prepared for the sole use and benefit of our client. The conclusions of this report pertain only to the site investigated. The intent of the report is to advise our client of the geologic and geotechnical recommendations relative to the future development of the proposed project. It should be understood that the consulting provided and the contents of this report are not perfect. Any errors or omissions noted by any party reviewing this report, and/or any other geotechnical aspects of the project, should be reported to this office in a timely fashion. The client is the only party intended by this office to directly receive this advice. Unauthorized use of or reliance on this report constitutes an agreement to defend and indemnify Sierra Geotechnical Services Incorporated from and against any liability, which may arise as a result of such use or reliance, regardless of any fault, negligence, or strict liability of Sierra Geotechnical Services Incorporated.

Conclusions and recommendations presented herein are based upon the evaluation of technical information gathered, experience, and professional judgment. Other consultants could arrive at different conclusions and recommendations. Final decisions on matters presented are the responsibility of the client and/or the governing agencies. No warranties in any respect are made as to the performance of the project.

The findings of this report are valid as of the present date. However, changes in the conditions of a property can occur with the passage of time, whether they are due to natural processes or the works of man on this or adjacent properties. In addition, changes in applicable or appropriate standards may occur, whether they result from legislation or the broadening of knowledge. Accordingly, the findings within this report may be invalidated wholly or partially by changes outside our control. Therefore, this report is subject to review and should not be relied upon after a period of three years.

8. REFERENCES

Bailey, R.A., 1989, Geologic map of the Long Valley caldera, Mono-Inyo craters volcanic chain, and vicinity, eastern California, U.S. Geological Survey Miscellaneous Investigation Series Map I-1933.

Brown and Caldwell, and Triad Engineering, 1984, Mammoth Lakes storm drainage master plan: Prepared for Mono County Public Works Department, July.

CDWR, 1973, Mammoth Basin water resources environmental study: California Department of Water Resources and Mammoth County Water District, p. 41, 44, 69, 70.

CRWQCB, 1994, Water quality control plan fro the Lahontan Region, north and south basins: California Regional Water Quality Control Board, Lahontan Region, Plate 1, 1:500,000 scale.

Davis, J.F., 1982, State of California special studies zones official map, NW ¼ Mt. Morrison quadrangle: California Geological Survey, 1:24,000 scale.

Davis, J.F., 1985, State of California earthquake fault zones official map, NE ¼ Devils Postpile quadrangle: California Geological Survey, 1:24,000 scale.

Diment, W.H., and T.C. Urban, 1990, Temperatures and natural gamma-ray logs obtained in boreholes MLGRAP #1 and #2, Mammoth Lakes, California: data and preliminary interpretations: U.S. Geological Survey Open-File Report 90-460, 132 p.

Farrar, C.D., J.M. Neil, and J.F. Howle, 1999, Magmatic carbon dioxide emissions at Mammoth Mountain, California: U.S. Geological Survey Water-Resources Investigations Report 98-4217, 17 p.

Farrar, C.D., M.L. Sorey, S.A. Rojstaczer, C.J. Janik, R.H. Mariner, T.L. Winnett, and M.D. Clark, 1985, Hydrologic and geochemical monitoring in Long Valley caldera, Mono County, California, 1982-1984: U.S. Geological Survey Water Resources Investigations Report 85-4183, 137 p.

FEMA, 1992, Flood insurance rate map, Town of Mammoth Lakes, California, Mono County: Federal Emergency Management Agency, National Flood Insurance Program, Community-Panel Number 060724 0002 & 0005 B, Panels 2 and 5 of 5, Revised September 30, 1:6,000 scale and 1:12,000, respectively.

Hill, D.P., D. Dzurisin, W.L. Ellsworth, E.T. Endo, D.L. Galloway, T.M. Gerlach, M.J.S. Johnston, J. Langbein, K.A. McGee, C.D. Miller, D. Oppenheimer, and M.L. Sorey, 2002, Response plan for volcano hazards in the Long Valley caldera and Mono Craters region, California: U.S. Geological Survey Bulletin 2185, 58 p.

Kleinfelder, J.H. & Associates, 1983, Geotechnical investigation and hydrogeology study at the proposed Juniper Ridge Development, Mammoth Lakes, California: Revised March 8, File R-1421-119, p.

MCWD, 2005a, Groundwater management plan for the Mammoth Basin watershed: Mammoth Community Water District, July, 45 p.

MCWD, 2005b, Urban water management plan, final draft: Mammoth Community Water District, December 22, 43 p.

Miller, C.D., 1989, Potential hazards from future volcanic eruptions in California: U.S. Geological Survey Bulletin 1847, 17 p.

Rinehart, C.D., D.C. Ross, and L.C. Pakiser, 1964, Geology and mineral deposits of the Mount Morrison quadrangle, Sierra Nevada, California: U.S. Geological Survey Professional Paper 385, 106 p.

SGSI, 1997, Results of pump testing related to estimation of flow from proposed subdrains, Eagle Springs Lodge Project: Prepared for Intrawest Mammoth Corporation, July 30, 3 p.

APPENDIX A

EXPLORATORY BORING LOGS

A subsurface field investigation was performed on October 6th, and November 8th and 9th 2005, which included the excavation of eleven 8-inch diameter hollow stem and air rotary continuous flight borings in the proposed development areas. Logs of the exploratory borings are presented herein. The approximate locations of the exploratory borings are shown on Subsurface Geotechnical Map (Figure 3).

Six borings were excavated by a CME-55 truck mounted drill rig on October 6th 2005 (B-1 through B-6). Rock refusal was encountered at relatively shallow depths prior to the anticipated foundation depth. Following this drilling a Schramm T660H Rotodrill air rotary drill rig was brought in on November 8th and 9^{th,} 2005 to complete an additional 5 borings to the anticipated foundation depths (B-7 through B-11).

SIERRA GEOTECHNICAL SERVICES INC.

BORING LOG

Project Name: MMSA Eagle Base Lodge
Boring No: B-1
Drill Rig Type: CME 55 8-inch Hollow Auger Stem Auger
Driller: Andressen Exploration Drilling
Boring Loc: Northwest end of parking lot

Date: 10/6/05
Project No: 3.30644
Elevation: 8079' MSL
Logged By: PS

Depth (ft.)	Sample Type	Graphic Log	Blow Count	U.S.C.S	DESCRIPTION	Laboratory Tests
0				SP	**Undocumented Fill** Brown, moist, loose to medium dense, fine to coarse grained SAND.	
5	SPT		82/3"	SP-SM	**Glacial Deposits** Grayish brown, moist to wet, very dense, fine to coarse SAND, abundant gravels and boulders. Rock refusal. Drill rate - 2 inches per 30 min.	
8	SPT		57/1"			
					Total depth = 8' 1". Groundwater encountered at approximately 4-½ feet. Backfilled 10/6/05.	

[illegible]

BORING LOG

Project Name: MMSA Eagle Base Lodge
Boring No: B-2
Drill Rig Type: CME 55 8-inch Hollow Auger Stem Auger
Driller: Andressen Exploration Drilling
Boring Loc: North end of parking lot within dirt area

Date: 10/6/05
Project No: 3.30644
Elevation: 8074' MSL
Logged By: PS

Depth (ft.)	Sample Type	Graphic Log	Blow Count	U.S.C.S	DESCRIPTION	Laboratory Tests
0				SP	**Undocumented Fill** Grayish brown, loose, fine to coarse grained SAND, few cobble clasts, boulders and asphalt debris. Rock refusal at 3-feet. Drill rate - 0 inches per 20 min.	
					Total depth = 3-feet. No groundwater encountered. *Backfilled 10/6/05*	

SIERRA GEOTECHNICAL SERVICES INC.

BORING LOG

Project Name: MMSA Eagle Base Lodge
Boring No: B-3
Drill Rig Type: CME 55 8-inch Hollow Auger Stem Auger
Driller: Andressen Exploration Drilling
Boring Loc: Northwest area of site within USFS property

Date: 10/6/05
Project No: 3.30644
Elevation: 8080' MSL
Logged By: PS

Depth (ft.)	Sample Type	Graphic Log	Blow Count	U.S.C.S	DESCRIPTION	Laboratory Tests
0				SP	**Alluvium** Dark gray to black, moist to wet, silty, loose to medium dense, very fine to medium grained SAND. Few gravels and cobbles.	
5	SPT		9 50/4"		Abundant boulders. Rock refusal at 6-feet.	
					Total depth = 6-feet. Groundwater encountered at approximately 5-feet. Backfilled 10/6/05	

SIERRA GEOTECHNICAL SERVICES INC.

BORING LOG

Project Name: MMSA Eagle Base Lodge
Boring No: B-4
Drill Rig Type: CME 55 8-inch Hollow Auger Stem Auger
Driller: Andressen Exploration Drilling
Boring Loc: Northeast corner of site north of pavement

Date: 10/6/05
Project No: 3.30644
Elevation: 8065' MSL
Logged By: PS

Depth (ft.)	Sample Type	Graphic Log	Blow Count	U.S.C.S	DESCRIPTION	Laboratory Tests
0				SP	**Undocumented Fill** Grayish brown, loose, fine to coarse grained SAND, few cobble clasts, boulders and asphalt debris. Rock refusal at 3-feet. Drill rate - 0 inches per 30 min.	
					Total depth = 3-feet. No groundwater encountered. *Backfilled 10/6/05*	

[illegible]

BORING LOG

Project Name: **MMSA Eagle Base Lodge**
Boring No: B-5
Drill Rig Type: CME 55 8-inch Hollow Auger Stem Auger
Driller: Andressen Exploration Drilling
Boring Loc: Southeast corner of site south of pavement

Date: 10/6/05
Project No: 3.30644
Elevation: 8066' MSL
Logged By: PS

Depth (ft.)	Sample Type	Graphic Log	Blow Count	U.S.C.S	DESCRIPTION	Laboratory Tests
0	SPT		50/1"	SP-SM	**Asphalt Concrete 3"+ 3" Base** **Alluvium** Brown, moist, medium dense, silty, fine to coarse SAND, few cobble clasts, few boulders. Slow drilling at approximately 3-feet. Rock refusal at 4' 1"	
					Total depth = 4' 1". No groundwater encountered. *Backfilled 10/6/05*	

BORING LOG

SIERRA GEOTECHNICAL SERVICES INC.

Project Name: MMSA Eagle Base Lodge
Boring No: B-6
Drill Rig Type: CME 55 8-inch Hollow Auger Stem Auger
Driller: Andressen Exploration Drilling
Boring Loc: East central area of site in pavement

Date: 10/6/05
Project No: 3.30644
Elevation: 8070' MSL
Logged By: PS

Depth (ft.)	Sample Type	Graphic Log	Blow Count	U.S.C.S	DESCRIPTION	Laboratory Tests
0					**Asphalt Concrete 3"+ 3" Base**	
					Alluvium	
				SP	Grayish brown to brown, moist to wet, medium dense, fine to coarse grained SAND, few cobble clasts, few boulders.	
5	SPT		42			
			50/5"		Slow drilling at 5'. Rock refusal at 6-feet.	
					Total depth = 6-feet. Groundwater encountered at 4½-feet. Backfilled 10/6/05	

BORING LOG

Project Name: MMSA Eagle Base Lodge
Boring No: B-7
Drill Rig Type: Schramm T660H
Driller: Test America Drilling Corp.
Boring Loc: South central area of site in pavement

Date: 11/8/05
Project No: 3.30644
Elevation: 8070' MSL
Logged By: PS

Depth (ft.)	Sample Type	Graphic Log	Blow Count	U.S.C.S	DESCRIPTION	Laboratory Tests
0					**Alluvium**	
				SM	Grayish brown, moist to wet, medium dense, silty, fine to coarse	
	CAL		38		SAND, with few cobble clasts and large boulders	NR
					minor debris. Minor seepage at approximately 4½-feet.	
5					**Glacial Deposits**	
				SP	Reddish brown to olive brown, moist, medium dense to	
	SPT		32		very dense, fine to coarse SAND, with cobble clasts and	
			50/5"		few small boulders. Moderately indurated.	
10					Moderate groundwater seepage at approximately	
					10-feet.	
	BULK					Sieve
15	CAL		50/4"			NR
					Well indurated at approximately 16-feet. Slow drilling.	
					Drill rate 1½-feet in 20 minutes.	
20						
					Moderately indurated at approximately 21-feet.	
					Heavy groundwater seepage.	
	SPT		30	SP-SM	Very dense, silty, fine to coarse SAND	
			50/4"		with abundant gravels, few cobble clasts and boulders.	
25						
	CAL		50/1"			NR
30	SPT		50/3"			
					Total depth = 30-feet. Grounwater encountered at approximately 4½, 10, and 21-feet. Good air circulation from 12 to 27-feet. Lost air at 27-feet. Total drill time 3 hours 10 min. Backfilled 11 8 05.	

SIERRA GEOTECHNICAL SERVICES INC.

BORING LOG

Project Name: MMSA Eagle Base Lodge
Boring No: B-8
Drill Rig Type: Schramm T660H
Driller: Test America Drilling Corp.
Boring Loc: Southeast end of parking lot

Date: 11/8/05
Project No: 3.30644
Elevation: 8066' MSL
Logged By: PS

Depth (ft.)	Sample Type	Graphic Log	Blow Count	U.S.C.S	DESCRIPTION	Laboratory Tests
0					**Alluvium**	
				SP	Brown, moist, medium dense, fine to coarse SAND with abundant gravels. Large boulder at 3-feet.	
5	SPT		36			
			50			
	BULK					Corrosivity, Sieve R-value
					Glacial Deposits	
				SP-SM	Grayish-brown to gray, moist, very dense, silty, very fine to coarse SAND with cobble clasts and few boulders.	
10	SPT		50/4"			
15	SPT		50/5"			
					Total depth = 15'5". Groundwater not encountered. Total drill time - 40 min. Backfilled 11 9 05.	

[illegible]

BORING LOG

Project Name: MMSA Eagle Base Lodge
Boring No: B-9
Drill Rig Type: Schramm T660H
Driller: Test America Drilling Corp.
Boring Loc: North end of parking lot within dirt area

Date: 11/8/05
Project No: 3.30644
Elevation: 8076' MSL
Logged By: PS

Depth (ft.)	Sample Type	Graphic Log	Blow Count	U.S.C.S	DESCRIPTION	Laboratory Tests
0				SP	**Undocumented Fill** Grayish-brown, moist, medium dense, fine to coarse SAND, with cobble clasts and boulders. Minor debris. Boulder at 3 to 4½-feet	
5	SPT		9 50/6"	SP-SM	**Glacial Deposits** Light grayish-brown to brown, moist, very dense, silty, very fine to coarse SAND with cobble clasts and boulders. Approximate 8 to 10-inch well inurdated bed at 7-feet.	
10	SPT		50/4"			
15	BULK			SM	Gray, moist, very dense, silty, fine to coarse SAND, with cobbles, and boulders. Groundwater seepage at approximately 17-feet. Well indurated from approximately 17 to 23-feet.	Direct Shear Max. Density, Sieve
	BULK					Sieve
20						
25	SPT		50/5"	SP	Dense to very dense, fine to coarse SAND.	
	BULK					Direct Shear Max. Density Corrosivity Sieve
30				SM	Gray, moist, very dense, silty, very fine to coarse SAND. Well indurated.	
					Total depth = 30-feet. Groundwater seepage encountered at 17-feet. *Piezometer installed to 30-feet. Total drill time 2 hours. Backfilled 11 9 05.*	

BORING LOG

Project Name: MMSA Eagle Base Lodge
Boring No: B-10
Drill Rig Type: Schramm T660H
Driller: Test America Drilling Corp.
Boring Loc: Northeast end of site north of pavement, south of Majestic Pines

Date: 11/9/05
Project No: 3.30644
Elevation: 8065' MSL
Logged By: PS

Depth (ft.)	Sample Type	Graphic Log	Blow Count	U.S.C.S	DESCRIPTION	Laboratory Tests
0				SP-SM	**Undocumented Fill** Brown, moist, medium dense, silty, fine to coarse SAND, with cobble clasts, and boulders. Minor debris.	
5	SPT		26 50/6"	SP-SM	**Alluvium** Medium brown to light grayish brown, moist, medium dense. to dense, silty, fine to coarse SAND with cobble clasts and boulders. Boulder 3 to 6-feet.	
	CAL		50/3"			
10	BULK			SP-SM	**Glacial Deposits** Grayish-brown to brown, moist to wet, very dense, silty, very fine to coarse SAND with cobble clasts and boulders. Heavy groundwater seepage at approxmately 8-feet.	NR
15	SPT		50/5"			
					Total depth 15'5" Heavy groundwater seepage encountered at approximately 8-feet. Piezometer installed to 30-feet. Drill time 1hr 30 min. Backfilled 11-10-05.	

[illegible]

BORING LOG

Project Name: MMSA Eagle Base Lodge
Boring No: B-11
Drill Rig Type: Schramm T660H
Driller: Test America Drilling Corp.
Boring Loc: Northwest end of parking lot within dirt, south of USFS property

Date: 11/9/05
Project No: 3.30644
Elevation: 8080' MSL
Logged By: PS

Depth (ft.)	Sample Type	Graphic Log	Blow Count	U.S.C.S	DESCRIPTION	Laboratory Tests
0				SM	**Alluvium** Dark grayish-brown, moist to wet, medium dense to dense, silty, fine to coarse SAND, with cobble clasts and boulders. Large boulder at approximately 3 to 5-feet.	
5	SPT		23 50/5"		Groundwater seepage at approximately 5-feet.	
10	SPT		50/6"	SM	**Glacial Deposits** Grayish-brown, moist, very dense, silty, very fine to coarse SAND with abundant gravels, and few cobble clasts. Well indurated bed to approximately 12-inches. Few boulders.	
15	BULK					Sieve
20					Well indurated from approximately 19 to 22-feet.	
25	SPT		50/4"	SP-SM	Gray, moist, very dense, silty, fine to coarse SAND with cobble clasts.	
30	BULK				Well indurated from approximately 27 to 30-feet.	Direct Shear Max. Density
					Total depth 30-feet. Groundwater seepage encountered at approximately 5-feet. Drill time 2hrs 10 min. Backfilled 11 10 05	

APPENDIX B

PUMP TEST RESULTS

SIERRA GEOTECHNICAL SERVICES INC.
P.O. BOX 5024, MAMMOTH LAKES, CA 93546
(760) 934-3992; (760) 934-8832 Fax

PUMP TEST WORKSHEET

Site Name: Eagle Base Lodge   Date: 3/24/06   Page: 1 of 1
Job No. 3.30644.14   Well No. B-9   Observer DD/BM

Time	Depth to Water	Pump Rate	Notes	Time	Depth to Water	Pump Rate	Notes
12:05	4.05’	-					
12:25	4.05’	-	Static				
12:40	NA	-					
12:50	NA	-					
12:58	NA	1.62					Pump Removed
0.00	6.2	Recovery (R)					
0.5 min	6.0	R					
1.5 min	5.5	R					
2 min	5.1	R					
2.5 min	4.95	R					
3 min	4.85	R					
3.5 min	4.7	R					
4 min	4.4	R					
4.5 min	4.05	R					

SIERRA GEOTECHNICAL SERVICES INC.

Site Name: Eagle Base Lodge

Job No. 3.30644.1

Location Code	Date	Time	Depth to Water	Previous Depth to Water	Measured By	Description of Measuring Point
B-10	3/24/06	12:25	2.1’	-	BM	Top of Pipe
B-10	3/24/06	12:30	2.11’	-	BM	Top of Pipe
B-10	3/24/06	12:35	2.1’	-	BM	Top of Pipe
B-10	3/24/06	12:40	2.1’	-	BM	Top of Pipe
B-10	3/24/06	12:45	2.11’	-	BM	Top of Pipe
B-10	3/24/06	12:50	2.1’	-	BM	Top of Pipe
B-10	3/24/06	12:55	2.1’	-	BM	Top of Pipe
B-10	3/24/06	12:58	2.1’	-	BM	Top of Pipe

SIERRA GEOTECHNICAL SERVICES INC. SGSI

TRANSMITTAL

To: MMSA
PO BOX 24
MAMMOTH LAKES, CA 93546

Date: March 31, 2006 Job No. 3.30644.1
Attention: Mr. Tom Hodges
Subject: Eagle Base Lodge

We are sending you: ☒ Attached ☐ Under Separate Cover
via: ☐ Mail ☐ Express Mail ☐ Federal Express ☐ Overnight ☒ Courier ☐ Pick Up

☐ Facsimile (total pages including this sheet -) Fax No.

the following items:	Description
2	Bound **Wet** Stamped Copies – Preliminary Hydro. Investigation
1	Unbound Xerox copy – Preliminary Hydro. Investigation

☐ For your review and comment ☒ For your files ☐ For approval ☐ For your signature

☐ For information and coordination ☐ For processing ☒ As requested For ______

Remarks:

Copies to:

By: Joe Adler

Preliminary Drainage Study

FOR

EAGLE LODGE

Owner Mailing Address:	Construction Project Address:
Mammoth Mountain Ski Area Post Office Box 24 Mammoth Lakes, CA 93546 Phone: (760) 934-2571 Attn: Tom Hodges x3243	Eagle Lodge Meridian Boulevard & Majestic Pines Mammoth Lakes, Ca 93546

Date of Amended Report: August 2006

Job No. 1737.2

Engineer:
triad/holmes associates

Post Office Box 1570
Mammoth Lakes, Ca 93546
Phone: (760) 934-7588
Fax: (760) 934-5619
triad@THAinc.com
David Laverty, LS, Principal
Tom Platz, RCE, Principal

REGISTERED PROFESSIONAL ENGINEER
PAUL EDWARD ROTEN
NO. C 56891
EXP. 6/30/07
CIVIL
STATE OF CALIFORNIA

Paul E. Roten, P.E. C56891

August 11, 2006
Date

Eagle Lodge

Table of Contents

APPENDIX

[1]Mammoth Lakes Storm Drainage Master Plan, Prepared for Mono County Public Works Department, July 1984, Brown and Caldwell and Triad Engineering, Plate 8 and portion of Table 6-1

[2]Design Manual, Mammoth Lakes Storm Drainage and Erosion Control, Prepared for Mono County Public Works Department, July 1984, Brown and Caldwell and Triad Engineering, excerpts as referenced

[3]Water Quality Control Plan for the Lahontan Region, North and South Basins, prepared by the State of California, Regional Water Quality Control Board, Lahontan Region, Chapter 4.8

Preliminary Drainage Study – Eagle Lodge

1 - Project Description

The Eagle Lodge project is located at the west end of Meridian Boulevard. Refer to Vicinity Maps in Appendix A.

The project site encompasses approximately 8.68 acres. This includes the area of the existing temporary Eagle Lodge Base Facility (tent), the existing parking area, parts of Meridian Boulevard, and Majestic Pines Road, the Bike Path route, as well as areas where utilities may be installed. Since this project is in its conceptual phase, the area identified may be revised during the design process, but should stay within the acreage we have considered.

Presently this site is almost completely disturbed. It includes Majestic Pines Road, Meridian Boulevard, a 2 acre parking lot, the temporary Eagle Lodge Base Facility, lift towers and other miscellaneous facilities. Areas that do not include improvements are generally disturbed. The project site drainage sheets from west to east along slopes of 1% to 10%. Site elevations range between 8,100 feet and 8060 feet above mean sea level.

The proposed project consists of the removal of the temporary Eagle Lodge Base Facility and parking lot, reconstruction of portions of Majestic Pines Road and Meridian Boulevard, construction of new Base Lodge Facilities and paved surfaces in an area that includes the existing parking lot, plus utility work, and grading in the surrounding area. The new Base Lodge Facility will include an underground parking structure, commercial property, condominium project, associated transportation, parking and utilities. Large earthmoving equipment will be used in this construction.

A sketch of the proposed development is shown on Exhibit 5 in Appendix A.

2 - Watershed and Hydrologic Conditions

The project is located completely within the Town of Mammoth lakes Tributary Subarea III-5 as identified in the Mammoth Lakes Storm Drainage Master Plan[1]. Offsite storm water enters the site in sheet flow and in a natural swale from the west. The area tributary used in the calculations for this report has been determined using the Mammoth Lakes Storm Drainage Master Plan[1] and new topographic information from the Town aerial photo maps prepared in the year 2000. Also a portion of this subarea bypasses the site and is therefore not tributary. Final tributary areas will be determined during final design as inlets are placed in their final locations.

Runoff from this site is tributary to the Town of Mammoth Lakes Separate Storm Sewer System (TMLSSS). This system is made up of underground and surface storm drainage facilities. On and Offsite flow from this site is conveyed in an existing 36 inch CMP that outlets at the southwest corner of the Sierra Star (also known as Loadstar) Golf Course. From the Golf Course runoff crosses Meridian Boulevard twice, enters a storm drain in Jaoquin to Dorrance, where it outflows into a natural channel in the Shady Rest Parcel. A large inlet is located adjacent to Center Street that collects the runoff from this location. The runoff is conveyed to Main Street then into natural and manmade channels that outlet into Murphy Gulch. Runoff through Murphy Gulch goes through two desiltation basins, prior to entering a pipe that crosses under Highway 203 and entering Mammoth Creek.

At the south west side of this property is an existing retention / infiltration pond that is for the existing Juniper Springs facilities. This facility will not be used for this project.

A soils investigation by Sierra Geotechnical Services, Inc. in December, 2005 encountered light to heavy groundwater seepage on the site at depths varying from approximately 4½-feet to 21-feet below grade. Based on this study the project area consists of a relatively thin layer of alluvium topsoil underlain by alluvium/glacial moraine deposits. The glacial till with minor interbeds of basalt extend down to approximately 350-feet below the ground surface. (SGSI, 2005)

A Preliminary Hydrogeologic Investigation by Sierra Geotechnical (SGSI, 2006) discusses groundwater, and dewatering requirements for this site.

3 - Objective

In this drainage study we will:

- preliminarily estimate hydrologic runoff quantities
- preliminarily size drainage facilities
- preliminarily size retention / infiltration facilities
- estimate increase in runoff due to site improvements

4 - Assumptions

Offsite runoff quantity results after this site are included in the Town of Mammoth Lakes Storm Drainage Master Plan[1], as shown on Plate 8 and as noted in Table 6-1, attached.

The hydrology calculations for this drainage report are based on the Design Manual[2] and included in Appendix B. Hydraulic Calculations are generally based on Manning's, Darcy-Weisbech, and Bernoulli's equations. LANDesk programs were used for the some of the Hydraulic Calculations, with remaining Hydraulic equations and Hydrologic Calculations written to Excel Spreadsheet programs. Hydraulic Calculations are included in Appendix C.

Retention / Infiltration pipe systems and drywells will be designed to contain 1 hour of a 20 year intensity storm, which is assumed to be 1 inch (0.83 feet) * Area (square feet) * C (infiltration coefficient) as required by the Water Quality Control Plan for the Lahontan Region[3].

References are included in Appendix E.

5 - Offsite Drainage Facilities

The entire tributary area that contains this site has a flow of 180 cfs according to the Town of Mammoth Lakes Master Plan[1] in a storm of 100 year intensity (including areas that are not directly tributary to this site). This study identifies the area that is directly tributary to this site (see Exhibit 3 in Appendix A). The area shown is based on what is directly tributary to the site and does not include the site itself or runoff that bypasses the site. Based on calculations in conformance with the Storm Drainage Design Manual[2] runoff in the offsite tributary area will be 103.8 cfs in a storm of 100 year intensity. The final area will be determined once final inlet locations have been determined.

Presently there is a 36" storm drain from the southwest corner diagonal across the site to the northeast corner of the site. This storm drain will be removed. There are two existing 36" storm drain pipes across Majestic Pines. These will remain. Offsite runoff will be collected in a new inlet installed upstream of this project and conveyed to a new storm drainage facility that will be connected to the existing 2-36" storm drains that cross under Majestic Pines and continue to the Golf Course. The route of this new storm drain has been preliminarily determined to be from the northwest side of the project, to the intersection of Meridian and the west intersection with Majestic Pines, along Meridian Boulevard, north at the east intersection with Majestic Pines, and connected to the existing 2-36" storm drain pipes. These facilities will be sized for a storm of 100 year intensity. It is estimated that this runoff can be contained in one 36" smooth flow storm drain pipe at 2.1% or one 42" smooth flow storm drain pipe at 1%.

6 - Onsite Drainage Facilities

Onsite storm drainage facilities will be designed based on the final site concept. The total quantity of runoff developed by the site in a storm of 100 year intensity is 9.9 cfs. A cmp pipe of 18" diameter can convey this entire amount. Therefore the maximum size of onsite storm drains will not need to exceed 18". The underground parking garage will have elevations that will be lower than all surrounding grades or storm drainage, so will need to have a sump pump system that "lifts" stormwater to the surface. Since this is a parking garage it is recommended that this water be conveyed through a device that removes oil and silt, prior to reintroduction into the storm water system.

Based on Predeveloped conditions as shown in Exhibit 4 of Appendix A under a storm of 100 year intensity, the site would contribute 8.4 cfs to this tributary area. Based on Proposed conditions as shown on Exhibit 5 of Appendix A under a storm of 100 year intensity, the site will contribute 9.9 cfs to this tributary area. This is an increase of 1.5 cfs. The total runoff tributary to and including this site equals the offsite runoff of 103.8 cfs plus the existing onsite runoff of 8.4 cfs or 112.2 cfs. The percentage increase in runoff rate for this area is therefore 1.5/112.2 or less than 2 percent. This increase will be offset by the required infiltration / retention facilities until these facilities have reached full capacity. The actual quantity of runoff will be reduced by the infiltration / retention facility capacity.

7 - Infiltration / Retention Facilities

The site has a total improved acreage of 8.68 acres. C values were taken from the Hydrologic calculations for storms of 100 year intensity. The table in Appendix D shows the summary of the Infiltration facility calculations.

There are several options that will be determined during the design phase for infiltration and retention. These options are preliminarily explored and shown in Appendix D.

8 - Erosion Protection

Grading shall be limited as much as possible. Graded areas shall be protected against erosion once they are brought to final grade. No graded areas are to be left unstabilized between April 15th and October 15th. A Notice of Intent will be required to connect this project with the NPDES for small construction projects in the State of California, as well as a SWPPP in conformance with the Lahontan Regional Water Quality Control Board[3] requirements.

Though this site is presently disturbed, all final surfaces should be stabilized to eliminate the potential for erosion.

9 - Conclusions

A preliminary analysis of storm water flows and quantities has been made as per Town of Mammoth Lakes Master Plan and Design Manual and Regional Water Quality Control Board Requirements.

The land upstream from the project site is relatively steep, so there is no impact to sites above this based on surface runoff or snowfall to sites. The runoff rate to downstream areas may increase during a storm of 100 year intensity by an amount of 1-2 percent. In storms of lower intensity, runoff rate may be reduced due to the new retention / infiltration facilities. Runoff Quantities to downstream area will be reduced by quantity of runoff held in the retention / infiltration facilities. Runoff will continue to be conveyed in the location identified in the Town of Mammoth Lakes Storm Drainage Master Plan[1].

Drainage facilities shall be selected to adequately collect and convey historic runoff across the site and outflow in as close to historic conditions as practicable. The final location and details of drainage facilities will be determined during the design process in preparation of the improvement plans. The criteria followed during the design process should address issues such as safety, erosion protection and water quality, as well as conforming to the requirements of the Clean Water Act, the State and regional Lahontan Water Quality Control Board.

Retention / Infiltration systems will be designed to collect the first flush as required by the Town of Mammoth Lakes and the Lahontan Regional Water Quality Control Board. Since the existing site did not have infiltration / retention facilities, and since there was a significant amount of existing impervious surfaces, this aspect of the project will be a significant improvement to the existing conditions.

A Notice of Intent must be filed to be part of the State of California NPDES CAS000002 for small construction projects as part of the Federal Clean Water Act. A Storm Water Pollution Prevention Plan must be prepared to conform to this NPDES. Runoff quality will be managed during construction with the SWPPP. After construction runoff quality will be managed with landscaping and sediment traps prior to the infiltration facilities.

A system that ensures the storm drainage facilities for on and offsite flows and infiltration / retention basins should be put in place. Particular items requiring maintenance include but are not limited to cleaning of grates, removal of foreign materials from storm drainage pipes, maintenance as necessary to inlet facilities and retention basins, and repairs as necessary to damaged facilities. Source control has been stated by the Lahontan regional water quality control board as the best way to limit sediment transport in stormwater. Therefore, the landscape is a part of the sediment elimination system and must be maintained.

This site is not located on a wetland or a stream. It is also not on a water of the state as identified by a blue line on the USGS Quad maps. The site is downstream from an identified wetland area. Based on the Preliminary Hydrogeologic Investigation study by Sierra Geotechnical Services, this site will not negatively affect the upstream wetland (SGSI 2006).

[1]Mammoth Lakes Storm Drainage Master Plan, Prepared for Mono County Public Works Department, July 1984, Brown and Caldwell and Triad Engineering.

[2]Design Manual, Mammoth Lakes Storm Drainage and Erosion Control, Prepared for Mono County Public Works Department, July 1984, Brown and Caldwell and Triad Engineering, see Appendix E for excerpts.

[3]Water Quality Control Plan for the Lahontan Region, North and South Basins, prepared by the State of California, Regional Water Quality Control Board, Lahontan Region, see Appendix E for excerpts.

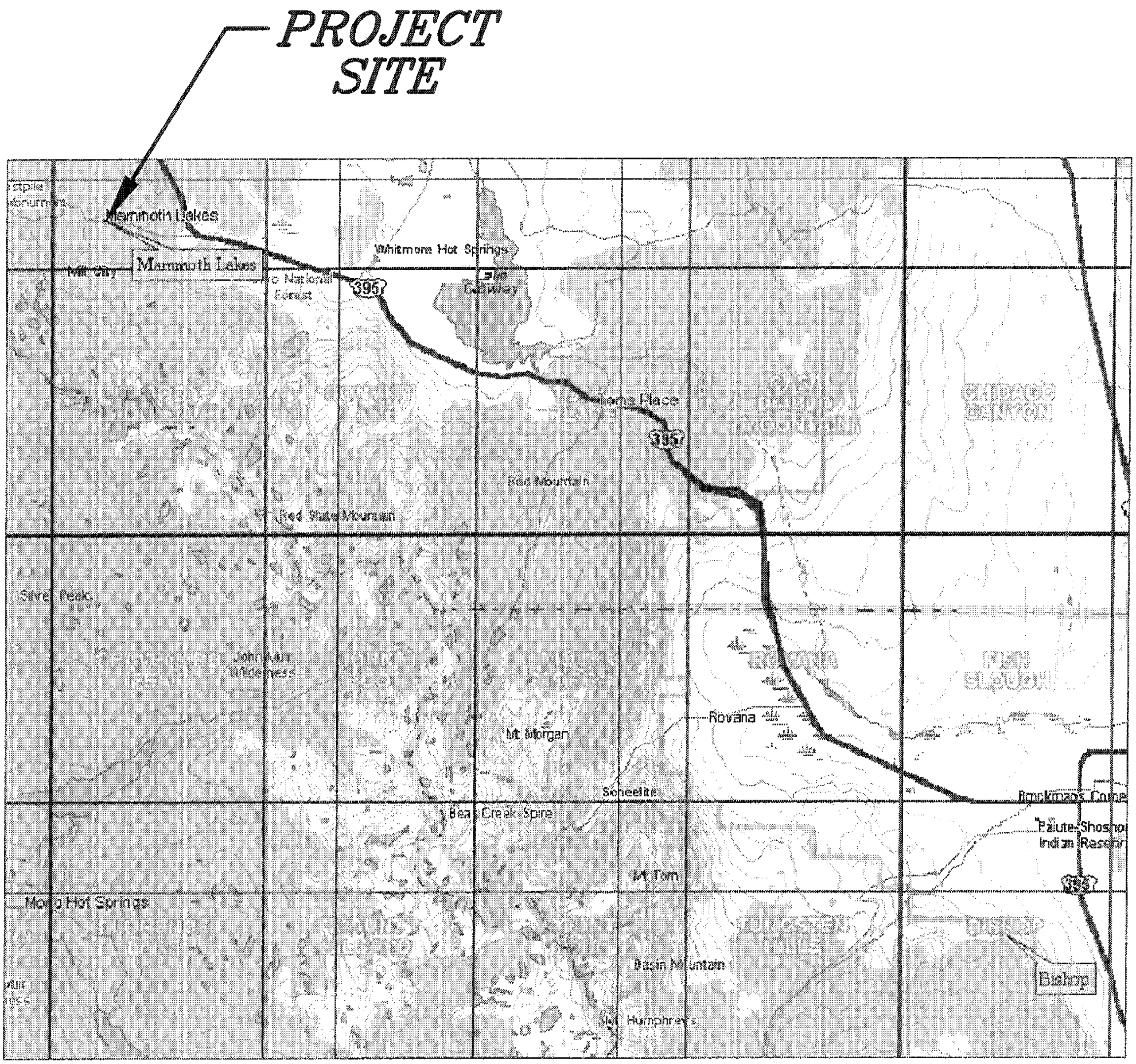
Preliminary Drainage Study

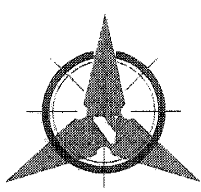
FOR

Eagle Lodge

APPENDIX A

FIGURES



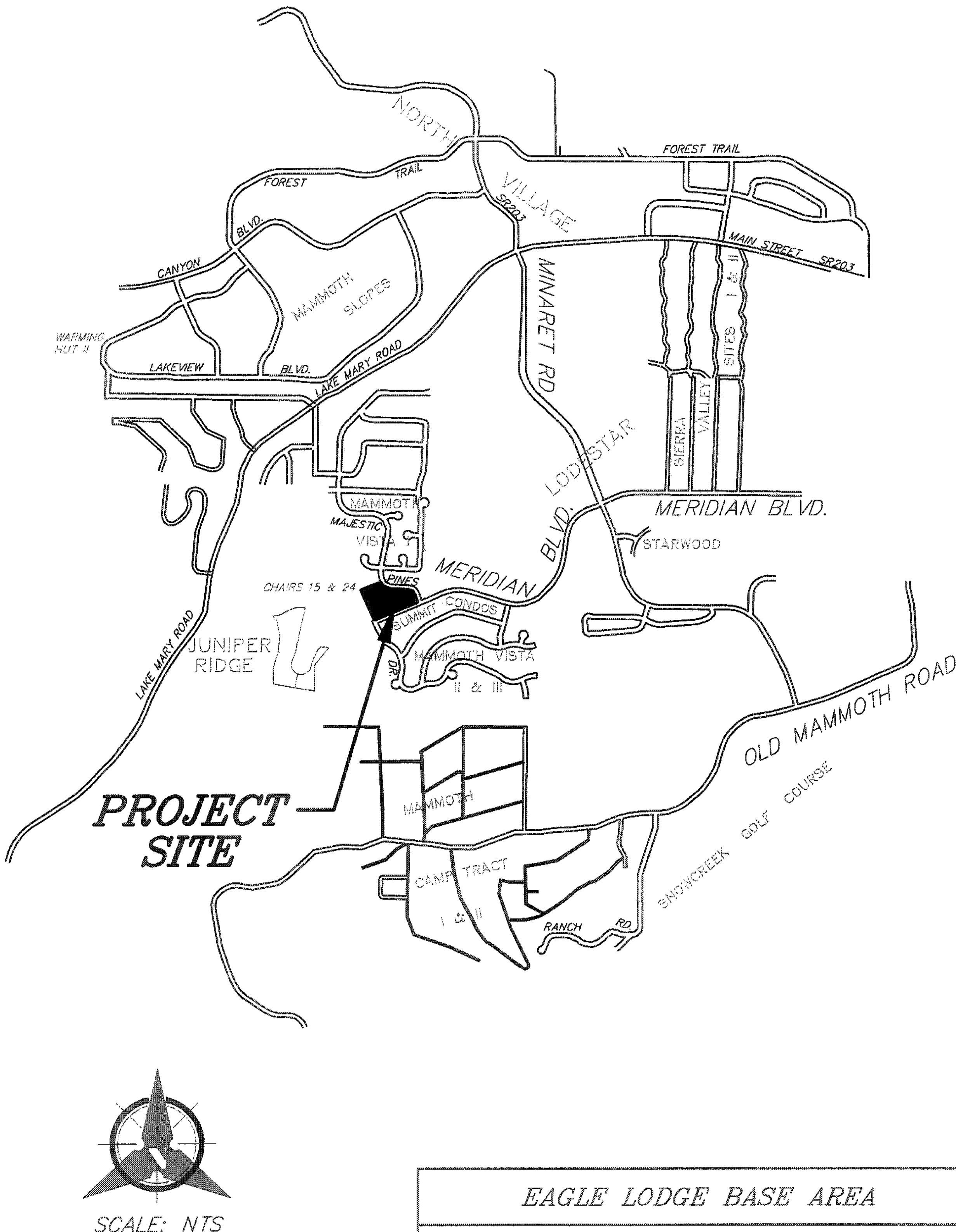


SCALE: NTS

EAGLE LODGE BASE AREA

EXHIBIT 1 – REGIONAL MAP

JOB NO. 1737.2 DWG SMF	triad/holmes associates	08–10–06

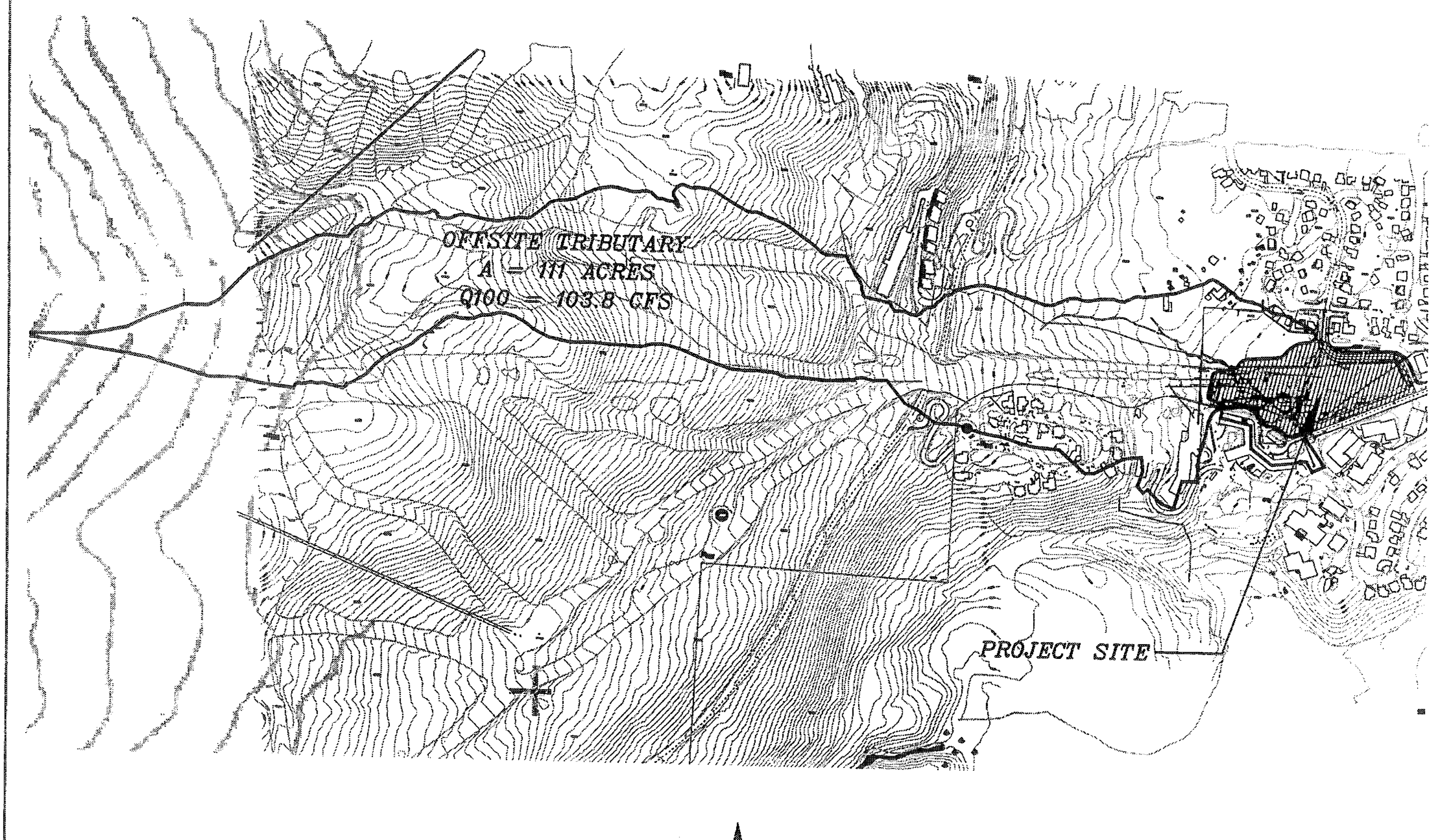


EAGLE LODGE BASE AREA

EXHIBIT 2 – VICINITY MAP

JOB NO. 1737.2 DWG SMF	triad/holmes associates	08–10–06

X:\01 Mammoth\1737-2 Grading Plan\1737-2 Drainage Drawings 1.dwg Aug 11,2006 – 8:38am

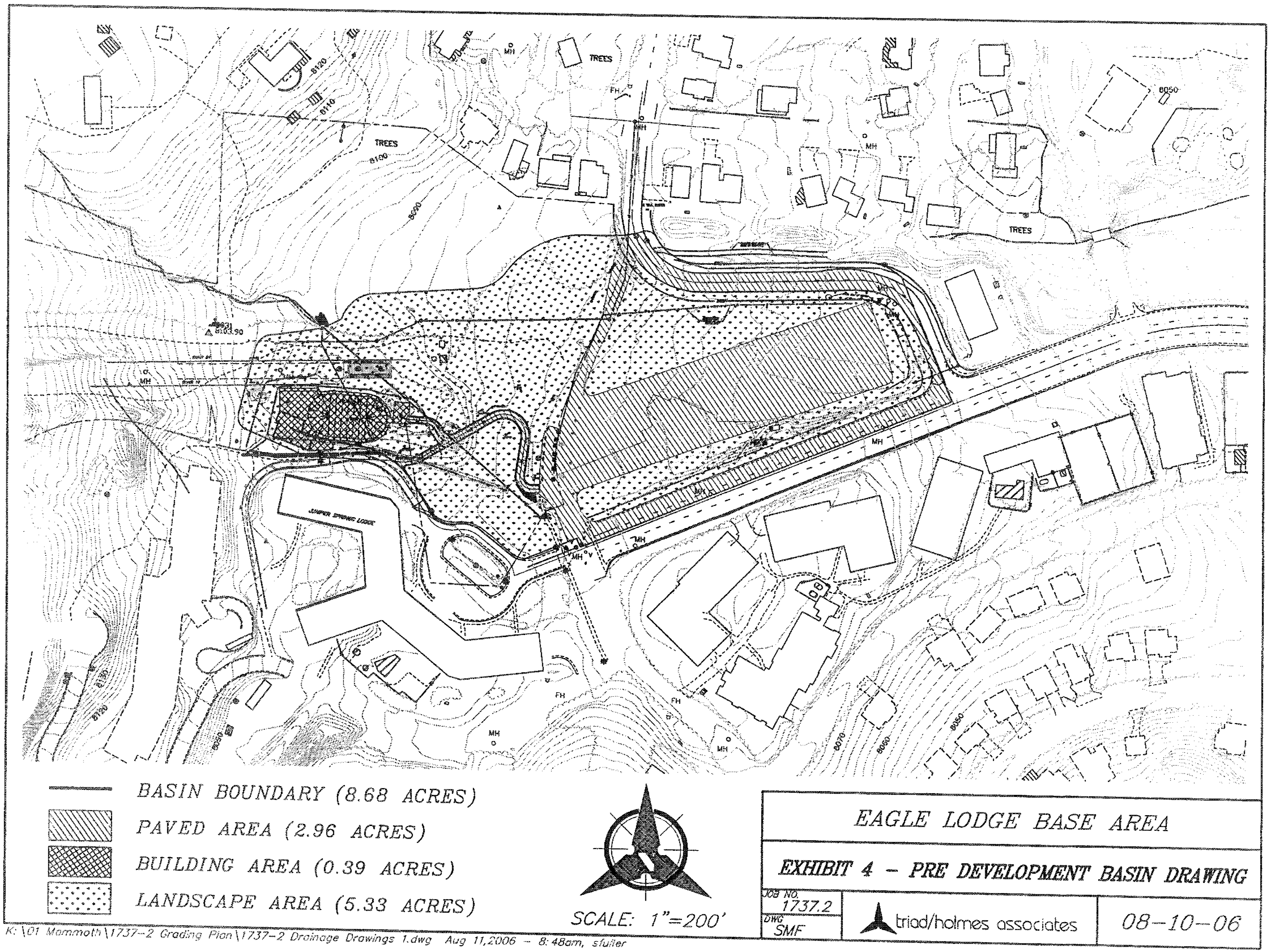


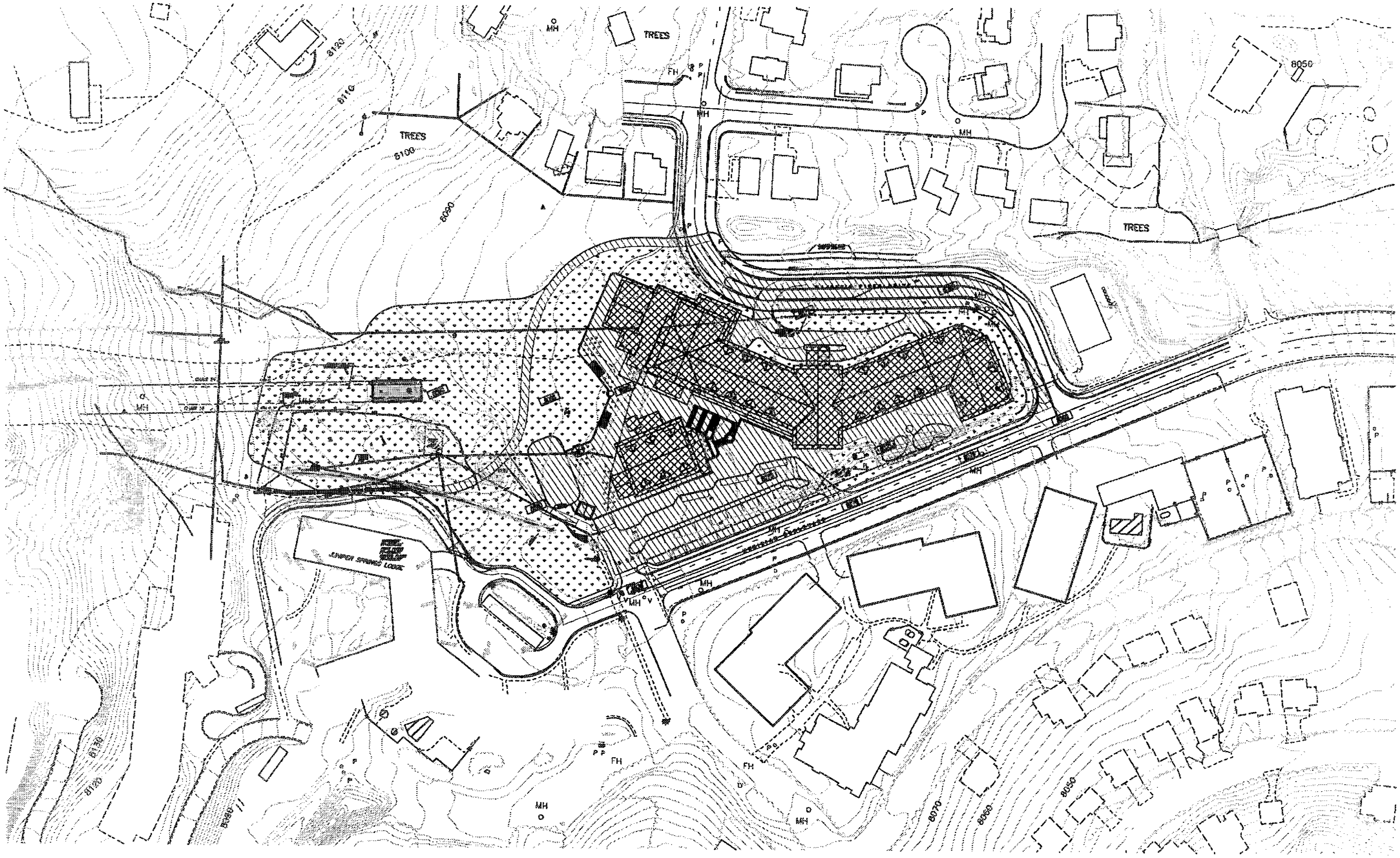
EAGLE LODGE BASE AREA

EXHIBIT 3 - AREA BASIN DRAWING

JOB NO. 1737.2 DWG SMF	triad/holmes associates	08-10-06

K:\01 Mammoth\1737-2 Grading Plan\1737-2 Drainage Drawings 1.dwg Aug 11,2006 - 8:39am, sfuller


TREES
8120
8110
8100
8090
8050
8060
8070
8130
MH
FH
JUNIPER SPRINGS LODGE
BASIN BOUNDARY (8.68 ACRES)
PAVED AREA (2.96 ACRES)
BUILDING AREA (0.39 ACRES)
LANDSCAPE AREA (5.33 ACRES)
SCALE: 1"=200'
EAGLE LODGE BASE AREA
EXHIBIT 4 - PRE DEVELOPMENT BASIN DRAWING
JOB NO. 1737.2
DWG SMF
triad/holmes associates
08-10-06
K:\01 Mammoth\1737-2 Grading Plan\1737-2 Drainage Drawings 1.dwg Aug 11,2006 - 8:48am, sfuller



BASIN BOUNDARY (8.68 ACRES)
PAVED AREA (3.15 ACRES)
BUILDING AREA (1.64 ACRES)
LANDSCAPE AREA (3.89 ACRES)

SCALE: 1"=200'

EAGLE LODGE BASE AREA		
EXHIBIT 5 - POST DEVELOPMENT BASIN DRAWING		
JOB NO. 1737.2 DWG SMF	triad/holmes associates	08-10-06

K:\01 Mammoth\1737-2 Grading Plan\1737-2 Drainage Drawings 1.dwg Aug 11,2006 - 8:49am, sfuller

Preliminary Drainage Study

FOR

Eagle Lodge

APPENDIX B

HYDROLOGY

EAGLE LODGE

Hydrology Calculations - Summary

Area	Code	Design Q	Exceedance Interval for Design	Winter Q at Exceedence Interval	Winter Intensity	Winter Average Cfactor	Summer Q at Exceedance Interval	Summer Intensity	Summer Average Cfactor	Acres	Calc Page	Comments
Offsite Tributary	1	103.8	Q100	103.8	1.3	0.7	82.6	1.7	0.4	111	2	
PreDevelopment	2	8.4	Q100	8.4	1.4	0.7	8.1	1.8	0.5	8.68	4	Existing Basin Drawing
PostDevelopment	3	9.9	Q100	9.1	1.4	0.8	9.9	1.8	0.6	8.68	6	Proposed Basin Drawing

Area Description:	Offsite Tributary	1

Q=1.008CIA	Q2	Q5	Q10	Q20	Q50	Q100
Winter	14.4	28.3	43.1	57.2	81.6	103.8
Summer	14.9	29.2	38.1	51.6	67.3	82.6

C

Weighted C Factor

Storm Frequency	2 Year	5 Year	10 Year	20 Year	50 Year	100 Year
Roofs	0.10	0.10	0.10	0.10	0.10	0.10
Paving	0.09	0.09	0.09	0.09	0.09	0.09
Agg drives & walks	0.00	0.00	0.00	0.00	0.00	0.00
unpaved corp yards	0.00	0.00	0.00	0.00	0.00	0.00
Winter "B" Soils	0.15	0.24	0.31	0.37	0.46	0.50
Winter "C" Soils	0.00	0.00	0.00	0.00	0.00	0.00
Winter "D" Soils	0.00	0.00	0.00	0.00	0.00	0.00
Summer "B" Soils	0.07	0.11	0.14	0.18	0.21	0.24
Summer "C" Soils	0.00	0.00	0.00	0.00	0.00	0.00
Summer "D" Soils	0.00	0.00	0.00	0.00	0.00	0.00
Winter Coefficient	**0.34**	**0.42**	**0.50**	**0.55**	**0.64**	**0.69**
Summer Coefficient	**0.25**	**0.30**	**0.32**	**0.36**	**0.40**	**0.43**

I

Intensity

Winter Precipitation Design Curve (Figure 1-4)				(tc = 1.03)		
Storm Frequency	2 Year	5 Year	10 Year	20 Year	50 Year	100 Year
Precipitation, in.	0.39	0.62	0.80	0.95	1.17	1.39
Intensity	0.38	0.60	0.78	0.92	1.14	1.35
Winter Precipitation Design Curve (Figure 1-4)				**(tc = 1.)**		
Storm Frequency	2 Year	5 Year	10 Year	20 Year	50 Year	100 Year
Precipitation, in.	0.38	0.60	0.78	0.93	1.15	1.36
Intensity	0.38	0.60	0.78	0.93	1.15	1.36
Summer Precipitation Design Curve (Figure 1-5)				**(tc = .404)**		
Storm Frequency	2 Year	5 Year	10 Year	20 Year	50 Year	100 Year
Precipitation, in.	0.21	0.35	0.43	0.52	0.61	0.70
Intensity	0.53	0.88	1.05	1.28	1.50	1.74
Summer Precipitation Design Curve (Figure 1-5)				**(tc = 1.)**		
Storm Frequency	2 Year	5 Year	10 Year	20 Year	50 Year	100 Year
Precipitation, in.	0.36	0.58	0.71	0.86	1.03	1.20
Intensity	0.36	0.58	0.71	0.86	1.03	1.20

A

Areas

type of area	Coefficient Winter, C	% of area	Acreage	Weighted C
Roofs	0.95	10%	11.10	0.10
Paving	0.90	10%	11.10	0.09
Agg drives & walks	0.80	0%	0.00	0.00
unpaved corp yards	0.75	0%	0.00	0.00
"B" Soils (RF*RR*NF)	varies	80%	88.80	varies
"C" Soils (RF*RR*NF)	varies	0%	0.00	
"D" Soils (RF*RR*NF)	varies	0%	0.00	
Total		100%	111.00	

Area Description: Offsite Tributary 1

Time of Concentration

Overland Flow tc Component, tco (Figure 1-2) Winter					
Overland Condition		Length, feet	slope	Lo/So	tco, hours
Unpaved and Unplowed in Winter		1500	0.2	7500	1.03
Paved and never Plowed in Winter		0	0.02	0	0.00
unpaved and plowed in winter		0	0.02	0	0.00
paved and plowed winter		0	0.02	0	0.00
				tco winter	1.03
				tcc	0.00
				Total time of concentration winter, tc	1.03

Overland Flow tc Component, tco (Figure 1-2) Summer					
Unpaved Summer		1500	0.2	7500	0.40
paved summer		0	0.01	0	0.00
				tco summer	0.40
				tcc	0.00
				Total time of concentration summer, tc	0.40

Channel Flow tc Component, tcc (Figure 1-3)					
Channel Description			Length, feet	slope	tcc, hours
Unimproved Channel			0	0.02	0.00
Riprap-Lined Channel			0	0.02	0.00
Pipe or Concrete-Lined Channel			0	0.02	0.00
				Total Time of Concentration, Channel, tcc	0.00

Natural Area Runoff Factor, RF (Figure 1-6)

Storm Frequency	2 Year	5 Year	10 Year	20 Year	50 Year	100 Year
Winter Storm "B" Soils, RF	0.19	0.30	0.39	0.46	0.57	0.63
Cn=RF*RR*NF	0.19	0.30	0.39	0.46	0.57	0.63
Winter Storm "C" Soils, RF	0.34	0.53	0.65	0.73	0.80	0.84
Cn=RF*RR*NF	0.00	0.00	0.00	0.00	0.00	0.00
Barren Rocky Soil "D", RF	0.81	0.84	0.85	0.87	0.89	0.90
Cn=RF*RR*NF	0.00	0.00	0.00	0.00	0.00	0.00

Storm Frequency	2 Year	5 Year	10 Year	20 Year	50 Year	100 Year
Summer Storm "B" Soils, RF	0.08	0.14	0.17	0.22	0.27	0.30
Cn=RF*RR*NF	0.08	0.14	0.17	0.22	0.27	0.30
Summer Storm "C" Soils, RF	0.18	0.29	0.35	0.43	0.51	0.59
Cn=RF*RR*NF	0.00	0.00	0.00	0.00	0.00	0.00
Barren Rocky Soil "D", RF	0.81	0.83	0.85	0.86	0.88	0.89
Cn=RF*RR*NF	0.00	0.00	0.00	0.00	0.00	0.00

Reduction Ratio, RR (Figure 1-6)

Soil Type	Overland Slope	Slope Reduction Ration, RR
"B"	20%	1.00
"C"	0%	0.73
"D"	0%	0.73

Natural Area Size Factor, NF (Figure 1-8)

Soil Type	Tributary Area	Natural Area Reduction Factor, NF
"B"	88.8	1.00
"C"	0.0	0
"D"	0.0	0

Area Description:	PreDevelopment	2

Q=1.008CIA	Q2	Q5	Q10	Q20	Q50	Q100
Winter	1.5	2.7	3.9	5.0	6.8	8.4
Summer	1.9	3.4	4.3	5.5	6.8	8.1

C Weighted C Factor

Storm Frequency	2 Year	5 Year	10 Year	20 Year	50 Year	100 Year
Roofs	0.04	0.04	0.04	0.04	0.04	0.04
Paving	0.31	0.31	0.31	0.31	0.31	0.31
Agg drives & walks	0.00	0.00	0.00	0.00	0.00	0.00
unpaved corp yards	0.00	0.00	0.00	0.00	0.00	0.00
Winter "B" Soils	0.11	0.17	0.22	0.26	0.33	0.36
Winter "C" Soils	0.00	0.00	0.00	0.00	0.00	0.00
Winter "D" Soils	0.00	0.00	0.00	0.00	0.00	0.00
Summer "B" Soils	0.05	0.08	0.10	0.13	0.15	0.17
Summer "C" Soils	0.00	0.00	0.00	0.00	0.00	0.00
Summer "D" Soils	0.00	0.00	0.00	0.00	0.00	0.00
Winter Coefficient	**0.46**	**0.52**	**0.57**	**0.61**	**0.67**	**0.71**
Summer Coefficient	**0.40**	**0.43**	**0.45**	**0.48**	**0.50**	**0.52**

I Intensity

Winter Precipitation Design Curve (Figure 1-4)				(tcc = 1.)		
Storm Frequency	2 Year	5 Year	10 Year	20 Year	50 Year	100 Year
Precipitation, in.	0.39	0.60	0.79	0.93	1.15	1.36
Intensity	0.38	0.60	0.78	0.93	1.15	1.36
Winter Precipitation Design Curve (Figure 1-4)				**(tcc = 1.0)**		
Storm Frequency	2 Year	5 Year	10 Year	20 Year	50 Year	100 Year
Precipitation, in.	0.38	0.60	0.78	0.93	1.15	1.36
Intensity	0.38	0.60	0.78	0.93	1.15	1.36
Summer Precipitation Design Curve (Figure 1-5)				**(tcc = .38)**		
Storm Frequency	2 Year	5 Year	10 Year	20 Year	50 Year	100 Year
Precipitation, in.	0.21	0.34	0.41	0.50	0.58	0.67
Intensity	0.54	0.91	1.09	1.32	1.55	1.79
Summer Precipitation Design Curve (Figure 1-5)				**(tcc = 1.0)**		
Storm Frequency	2 Year	5 Year	10 Year	20 Year	50 Year	100 Year
Precipitation, in.	0.36	0.58	0.71	0.86	1.03	1.20
Intensity	0.36	0.58	0.71	0.86	1.03	1.20

A Areas

type of area	Coefficient Winter, C	% of area	Acreage	Weighted C
Roofs	0.95	4%	0.39	0.04
Paving	0.90	34%	2.96	0.31
Agg drives & walks	0.80	0%	0.00	0.00
unpaved corp yards	0.75	0%	0.00	0.00
"B" Soils (RF*RR*NF)	varies	61%	5.33	varies
"C" Soils (RF*RR*NF)	varies	0%	0.00	
"D" Soils (RF*RR*NF)	varies	0%	0.00	
Total		100%	8.68	

Area Description: PreDevelopment 2

Time of Concentration

Overland Flow tc Component, tco (Figure 1-2) Winter					
Overland Condition		Length, feet	slope	Lo/So	tco, hours
Unpaved and Unplowed in Winter		600	0.1	6000	1.00
Paved and never Plowed in Winter		0	0.02	0	0.00
unpaved and plowed in winter		0	0.02	0	0.00
paved and plowed winter		0	0.02	0	0.00
				tco winter	1.00
				tcc	0.00
				Total time of concentration winter, tc	1.00
Overland Flow tc Component, tco (Figure 1-2) Summer					
Unpaved Summer		600	0.1	6000	0.38
paved summer		0	0.01	0	0.00
				tco summer	0.38
				tcc	0.00
				Total time of concentration summer, tc	0.38
Channel Flow tc Component, tcc (Figure 1-3)					
Channel Description			Length, feet	slope	tcc, hours
Unimproved Channel			0	0.02	0.00
Riprap-Lined Channel			0	0.02	0.00
Pipe or Concrete-Lined Channel			0	0.02	0.00
				Total Time of Concentration, Channel, tcc	0.00

Natural Area Runoff Factor, RF (Figure 1-6)

Storm Frequency	2 Year	5 Year	10 Year	20 Year	50 Year	100 Year
Winter Storm "B" Soils, RF	0.19	0.30	0.39	0.46	0.57	0.63
Cn=RF*RR*NF	0.18	0.28	0.36	0.43	0.53	0.59
Winter Storm "C" Soils, RF	0.34	0.53	0.65	0.73	0.80	0.84
Cn=RF*RR*NF	0.00	0.00	0.00	0.00	0.00	0.00
Barren Rocky Soil "D", RF	0.81	0.84	0.85	0.87	0.89	0.90
Cn=RF*RR*NF	0.00	0.00	0.00	0.00	0.00	0.00

Storm Frequency	2 Year	5 Year	10 Year	20 Year	50 Year	100 Year
Summer Storm "B" Soils, RF	0.08	0.14	0.17	0.22	0.27	0.30
Cn=RF*RR*NF	0.08	0.13	0.16	0.20	0.25	0.28
Summer Storm "C" Soils, RF	0.18	0.29	0.35	0.43	0.51	0.59
Cn=RF*RR*NF	0.00	0.00	0.00	0.00	0.00	0.00
Barren Rocky Soil "D", RF	0.81	0.83	0.85	0.86	0.88	0.89
Cn=RF*RR*NF	0.00	0.00	0.00	0.00	0.00	0.00

Reduction Ratio, RR (Figure 1-6)

Soil Type	Overland Slope	Slope Reduction Ration, RR
"B"	10%	0.93
"C"	0%	0.73
"D"	0%	0.73

Natural Area Size Factor, NF (Figure 1-8)

Soil Type	Tributary Area	Natural Area Reduction Factor, NF
"B"	5.3	1.00
"C"	0.0	0
"D"	0.0	0

Area Description: PostDevelopment 3

Q=1.008CIA	Q2	Q5	Q10	Q20	Q50	Q100
Winter	2.0	3.3	4.6	5.7	7.5	9.1
Summer	2.6	4.5	5.5	6.9	8.4	9.9

C — Weighted C Factor

Storm Frequency	2 Year	5 Year	10 Year	20 Year	50 Year	100 Year
Roofs	0.18	0.18	0.18	0.18	0.18	0.18
Paving	0.33	0.33	0.33	0.33	0.33	0.33
Agg drives & walks	0.00	0.00	0.00	0.00	0.00	0.00
unpaved corp yards	0.00	0.00	0.00	0.00	0.00	0.00
Winter "B" Soils	0.08	0.12	0.16	0.19	0.24	0.26
Winter "C" Soils	0.00	0.00	0.00	0.00	0.00	0.00
Winter "D" Soils	0.00	0.00	0.00	0.00	0.00	0.00
Summer "B" Soils	0.04	0.06	0.07	0.09	0.11	0.13
Summer "C" Soils	0.00	0.00	0.00	0.00	0.00	0.00
Summer "D" Soils	0.00	0.00	0.00	0.00	0.00	0.00
Winter Coefficient	**0.59**	**0.63**	**0.67**	**0.70**	**0.74**	**0.77**
Summer Coefficient	**0.54**	**0.56**	**0.58**	**0.60**	**0.62**	**0.63**

I — Intensity

Winter Precipitation Design Curve (Figure 1-4)				**(tcc = 1.)**		
Storm Frequency	2 Year	5 Year	10 Year	20 Year	50 Year	100 Year
Precipitation, in.	0.39	0.60	0.79	0.93	1.15	1.36
Intensity	0.38	0.60	0.78	0.93	1.15	1.36
Winter Precipitation Design Curve (Figure 1-4)				**(tcc = 1.0)**		
Storm Frequency	2 Year	5 Year	10 Year	20 Year	50 Year	100 Year
Precipitation, in.	0.38	0.60	0.78	0.93	1.15	1.36
Intensity	0.38	0.60	0.78	0.93	1.15	1.36
Summer Precipitation Design Curve (Figure 1-5)				**(tcc = .38)**		
Storm Frequency	2 Year	5 Year	10 Year	20 Year	50 Year	100 Year
Precipitation, in.	0.21	0.34	0.41	0.50	0.58	0.67
Intensity	0.54	0.91	1.09	1.32	1.55	1.79
Summer Precipitation Design Curve (Figure 1-5)				**(tcc = 1.0)**		
Storm Frequency	2 Year	5 Year	10 Year	20 Year	50 Year	100 Year
Precipitation, in.	0.36	0.58	0.71	0.86	1.03	1.20
Intensity	0.36	0.58	0.71	0.86	1.03	1.20

A — Areas

type of area	Coefficient Winter, C	% of area	Acreage	Weighted C
Roofs	0.95	**19%**	1.64	0.18
Paving	0.90	**36%**	3.15	0.33
Agg drives & walks	0.80	**0%**	0.00	0.00
unpaved corp yards	0.75	**0%**	0.00	0.00
"B" Soils (RF*RR*NF)	varies	**45%**	3.89	varies
"C" Soils (RF*RR*NF)	varies	**0%**	0.00	
"D" Soils (RF*RR*NF)	varies	**0%**	0.00	
Total		100%	8.68	

Area Description: PostDevelopment 3

Time of Concentration

Overland Flow tc Component, tco (Figure 1-2) Winter				
Overland Condition	Length, feet	slope	Lo/So	tco, hours
Unpaved and Unplowed in Winter	600	0.1	6000	1.00
Paved and never Plowed in Winter	0	0.02	0	0.00
unpaved and plowed in winter	0	0.02	0	0.00
paved and plowed winter	0	0.02	0	0.00
			tco winter	1.00
			tcc	0.00
			Total time of concentration winter, tc	1.00

Overland Flow tc Component, tco (Figure 1-2) Summer				
Unpaved Summer	600	0.1	6000	0.38
paved summer	0	0.01	0	0.00
			tco summer	0.38
			tcc	0.00
			Total time of concentration summer, tc	0.38

Channel Flow tc Component, tcc (Figure 1-3)			
Channel Description	Length, feet	slope	tcc, hours
Unimproved Channel	0	0.02	0.00
Riprap-Lined Channel	0	0.02	0.00
Pipe or Concrete-Lined Channel	0	0.02	0.00
		Total Time of Concentration, Channel, tcc	0.00

Natural Area Runoff Factor, RF (Figure 1-6)

Storm Frequency	2 Year	5 Year	10 Year	20 Year	50 Year	100 Year
Winter Storm "B" Soils, RF	0.19	0.30	0.39	0.46	0.57	0.63
Cn=RF*RR*NF	0.18	0.28	0.36	0.43	0.53	0.59
Winter Storm "C" Soils, RF	0.34	0.53	0.65	0.73	0.80	0.84
Cn=RF*RR*NF	0.00	0.00	0.00	0.00	0.00	0.00
Barren Rocky Soil "D", RF	0.81	0.84	0.85	0.87	0.89	0.90
Cn=RF*RR*NF	0.00	0.00	0.00	0.00	0.00	0.00

Storm Frequency	2 Year	5 Year	10 Year	20 Year	50 Year	100 Year
Summer Storm "B" Soils, RF	0.08	0.14	0.17	0.22	0.27	0.30
Cn=RF*RR*NF	0.08	0.13	0.16	0.20	0.25	0.28
Summer Storm "C" Soils, RF	0.18	0.29	0.35	0.43	0.51	0.59
Cn=RF*RR*NF	0.00	0.00	0.00	0.00	0.00	0.00
Barren Rocky Soil "D", RF	0.81	0.83	0.85	0.86	0.88	0.89
Cn=RF*RR*NF	0.00	0.00	0.00	0.00	0.00	0.00

Reduction Ratio, RR (Figure 1-6)

Soil Type	Overland Slope	Slope Reduction Ration, RR
"B"	10%	0.93
"C"	0%	0.73
"D"	0%	0.73

Natural Area Size Factor, NF (Figure 1-8)

Soil Type	Tributary Area	Natural Area Reduction Factor, NF
"B"	3.9	1.00
"C"	0.0	0
"D"	0.0	0

Preliminary Drainage Study

FOR

Eagle Lodge

APPENDIX C

HYDRAULICS

18" cmp

	enter	calced
Pipe Diameter (inches)	18	18
Pipe Diameter (feet)		1.50
Slope (s)	0.018	
Friction Factor(n)	0.018	
Depth (inches)		18
Depth (feet)		1.50
Depth (percentage)	100%	100%
Area		1.77
Wetted Perimeter		4.71
Hydraulic radius		0.38
Quantity (cfs)		**10.18**
Quantity (gpm)		4570.1
Velocity (fps)		**5.76**
radius		0.75
cos length		-0.75
angle (radians)		3.14
angle degrees		180.0
sin length		0.00
two triangle areas		0.00
sector area		1.77
total area of pipe		1.77
area at depth		1.77
Wetted Perimeter at depth		4.71
Circumfirence		4.71

36" hancor

	enter	calced
Pipe Diameter (inches)	36	36
Pipe Diameter (feet)		3.00
Slope (s)	0.021	
Friction Factor(n)	0.012	
Depth (inches)		36
Depth (feet)		3.00
Depth (percentage)	100%	100%
Area		7.07
Wetted Perimeter		9.42
Hydraulic radius		0.75
Quantity (cfs)		**104.71**
Quantity (gpm)		47014.7
Velocity (fps)		**14.81**
radius		1.50
cos length		-1.50
angle (radians)		3.14
angle degrees		180.0
sin length		0.00
two triangle areas		0.00
sector area		7.07
total area of pipe		7.07
area at depth		7.07
Wetted Perimeter at depth		9.42
Circumfirence		9.42

42" hancor

	enter	calced
Pipe Diameter (inches)	42	42
Pipe Diameter (feet)		3.50
Slope (s)	0.01	
Friction Factor(n)	0.012	
Depth (inches)		42
Depth (feet)		3.50
Depth (percentage)	100%	100%
Area		9.62
Wetted Perimeter		11.00
Hydraulic radius		0.88
Quantity (cfs)		**108.99**
Quantity (gpm)		48938.3
Velocity (fps)		**11.33**
radius		1.75
cos length		-1.75
angle (radians)		3.14
angle degrees		180.0
sin length		0.00
two triangle areas		0.00
sector area		9.62
total area of pipe		9.62
area at depth		9.62
Wetted Perimeter at depth		11.00
Circumfirence		11.00

Preliminary Drainage Study

FOR

Eagle Lodge

APPENDIX D

RETENTION / INFILTRATION BASIN

Triad/Holmes Associates

Job No. **1737.2**

Date: **8/11/2006**

Bishop Fax: (760) 873-8024
Mammoth Lakes Fax: (760) 934-5619
San Luis Obispo Fax: (805) 544-8932
Napa Fax: (707) 251-9108
Redwood City Fax: (650) 366-0298

Runoff Volume and Drywell Sizing Calulation

based on Lahontan RWQCB Design Parameters

Input

Rainfall (First Inch)	1 in/hr =	0.083 ft/hr
Percolation Rate	0 in/hr =	0 ft/hr

(Initial assumptions are for 0 percolation rate. This may be revised based on percolation testing.)

Tributary Area			Runoff Coefficient
Roof Area	71438.4 S.F.	19%	0.95 Roof Area
Pavement Area	137214 S.F.	36%	0.9 Pavement Area
Gravel/Aggregate Area	0 S.F.	0%	0.8 Gravel/Aggregate Area
Unpaved Industrial Area	0 S.F.	0%	0.75 Unpaved Industrial Area
Landscaping Area	169448.4 S.F.	45%	0.46 Landscaping Area
Total Area	378100.8 S.F.		0.71 Average Runoff Coefficient

Average Runoff Volume = Total Area * Average Runoff Coefficient * Rainfall (First Inch)

Average Runoff Volume = **22442 C.F.** **Storage capacity required**

(This sizing is preliminary, final sizing will be determined during the design process)

Approximate Drywell Sizing Options

		Typical Cubic foot storage per square foot of facility	approximate square footage required	approximate size width	approximate size length
Option A	Drywells (10 foot deep)	3	7481	20	374
Option B	Conspan	8	2805	20	140
Option C	Rainstore 3 (6 foot deep)	5	4488	20	224
Option D	Hancor (3 foot diameter pipes)	2.5	8977	20	449

(These options have been considered to allow for initial space requirements.)

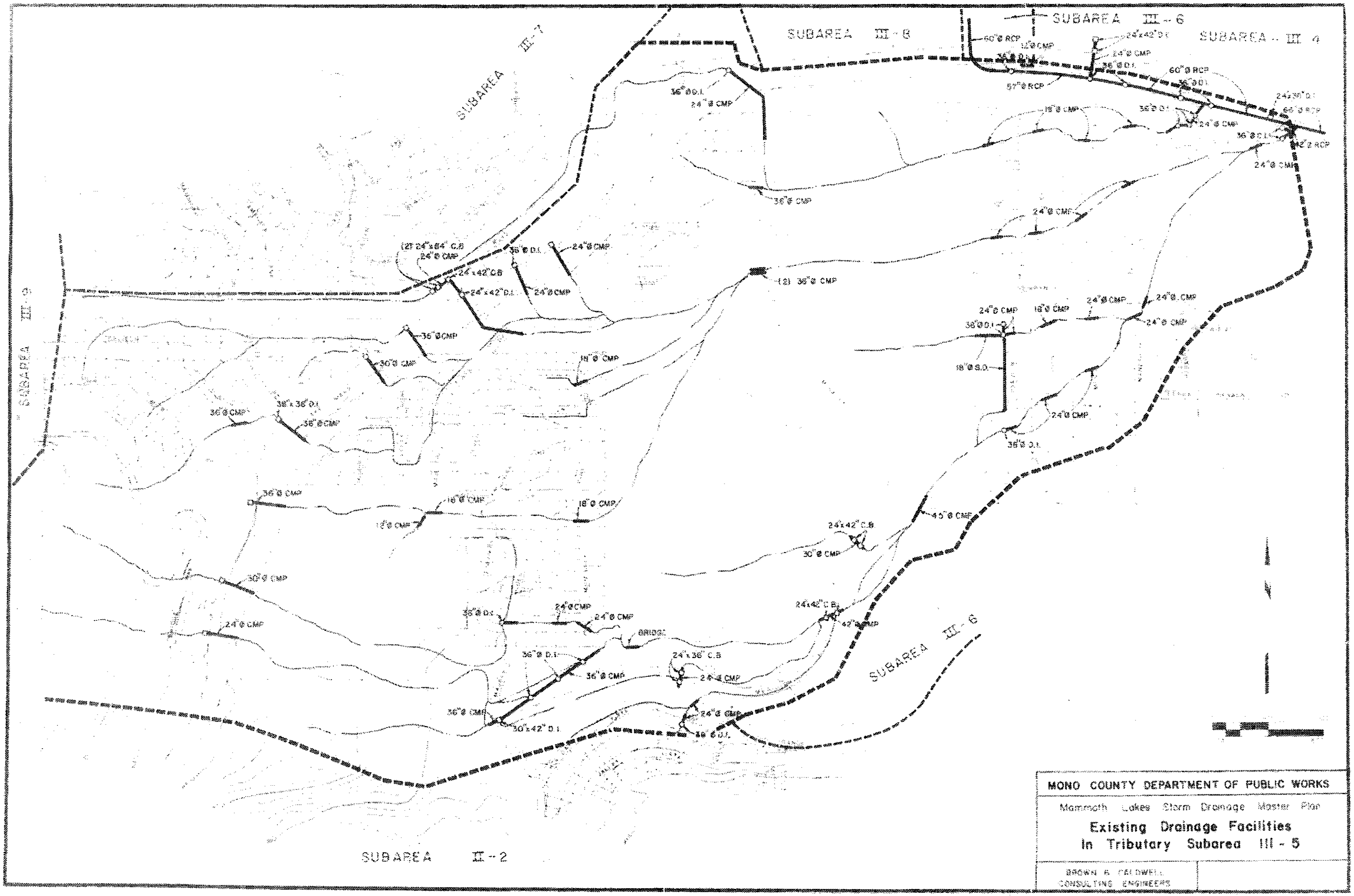
Preliminary Drainage Study

FOR

Eagle Lodge

APPENDIX E

REFERENCE MATERIAL



MONO COUNTY DEPARTMENT OF PUBLIC WORKS

Mammoth Lakes Storm Drainage Master Plan

Existing Drainage Facilities In Tributary Subarea III - 5

BROWN & CALDWELL CONSULTING ENGINEERS

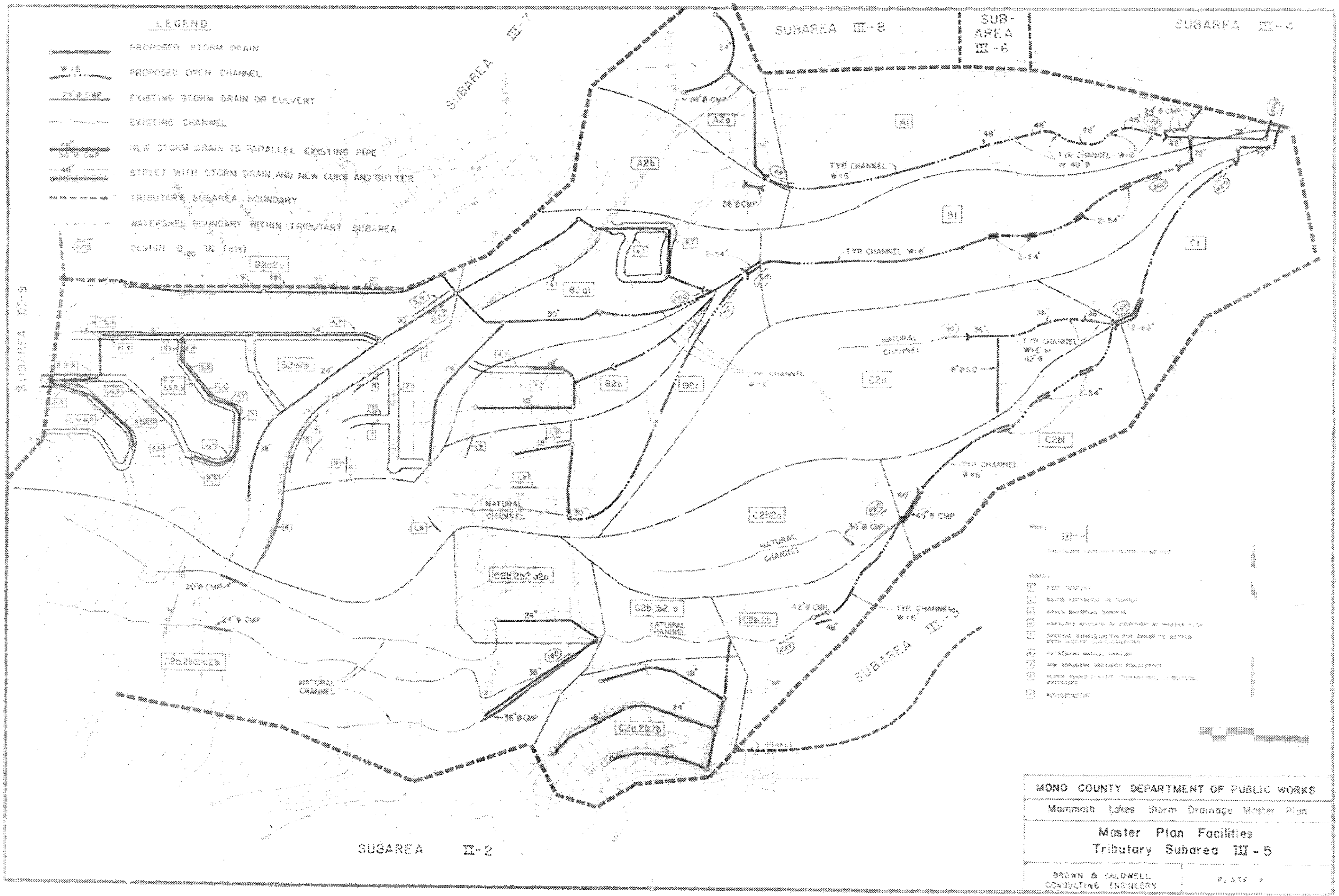

LEGEND
PROPOSED STORM DRAIN
PROPOSED OPEN CHANNEL
EXISTING STORM DRAIN OR CULVERT
EXISTING CHANNEL
NEW STORM DRAIN TO PARALLEL EXISTING PIPE
STREET WITH STORM DRAIN AND NEW CURB AND GUTTER
TRIBUTARY SUBAREA BOUNDARY
WATERSHED BOUNDARY WITHIN TRIBUTARY SUBAREA
SUBAREA III-8
SUB-AREA III-6
SUBAREA III-5
SUBAREA III-2
SUBAREA III-9
TYP CHANNEL
NATURAL CHANNEL
MONO COUNTY DEPARTMENT OF PUBLIC WORKS
Mammoth Lakes Storm Drainage Master Plan
Master Plan Facilities
Tributary Subarea III-5
BROWN & CALDWELL
CONSULTING ENGINEERS

Table 6-1. Master Plan Design Flows, cfs, continued

Watershed	Q_{20}	Q_{50}	Q_{100}	Design Season[a]
Subarea III-3				
A2b.2a	55	69	86	W
A2b.2b	31	37	46	W
A2b.2	82	104	130	W
A2b.1	20	25	31	W
A2b	97	124	152	W
A2a	39	48	62	S
A2	130	161	200	W
A1	4	5	6	W
A	134	172	212	W
Subarea total	134	172	212	W
Subarea III-4				
B	89	132	177	W
A	52	73	95	W
Subarea total	141	205	272	W
Subarea III-5				
C2b.2b2.a2b	105	145	180	W
C2b.2b2.a2a	12	15	18	S
C2b.2b2.a2	115	158	195	W
C2b.2b2.a	121	166	210	W
C2b.2b2.b	21	25	30	S
C2b.2b	136	188	233	W
C2b.2a	28	34	41	S
C2b.2	171	232	290	W
C2b	187	253	310	W
C2a	59	71	90	S
C2	234	313	390	W
C	257	343	420	W
B2a.2b	70	84	105	S
B2a.2a	26	32	38	S
B2a.2	96	114	140	S
B2a	136	164	200	S
B2b	13	17	22	S
B2c	41	54	70	W
B2	168	218	270	W
B	198	245	300	S
A2a	23	27	36	S
A2b	22	27	36	S
A2	45	54	69	S
A1	48	56	70	S
A	91	108	135	S
Subarea total	510	660	800	W

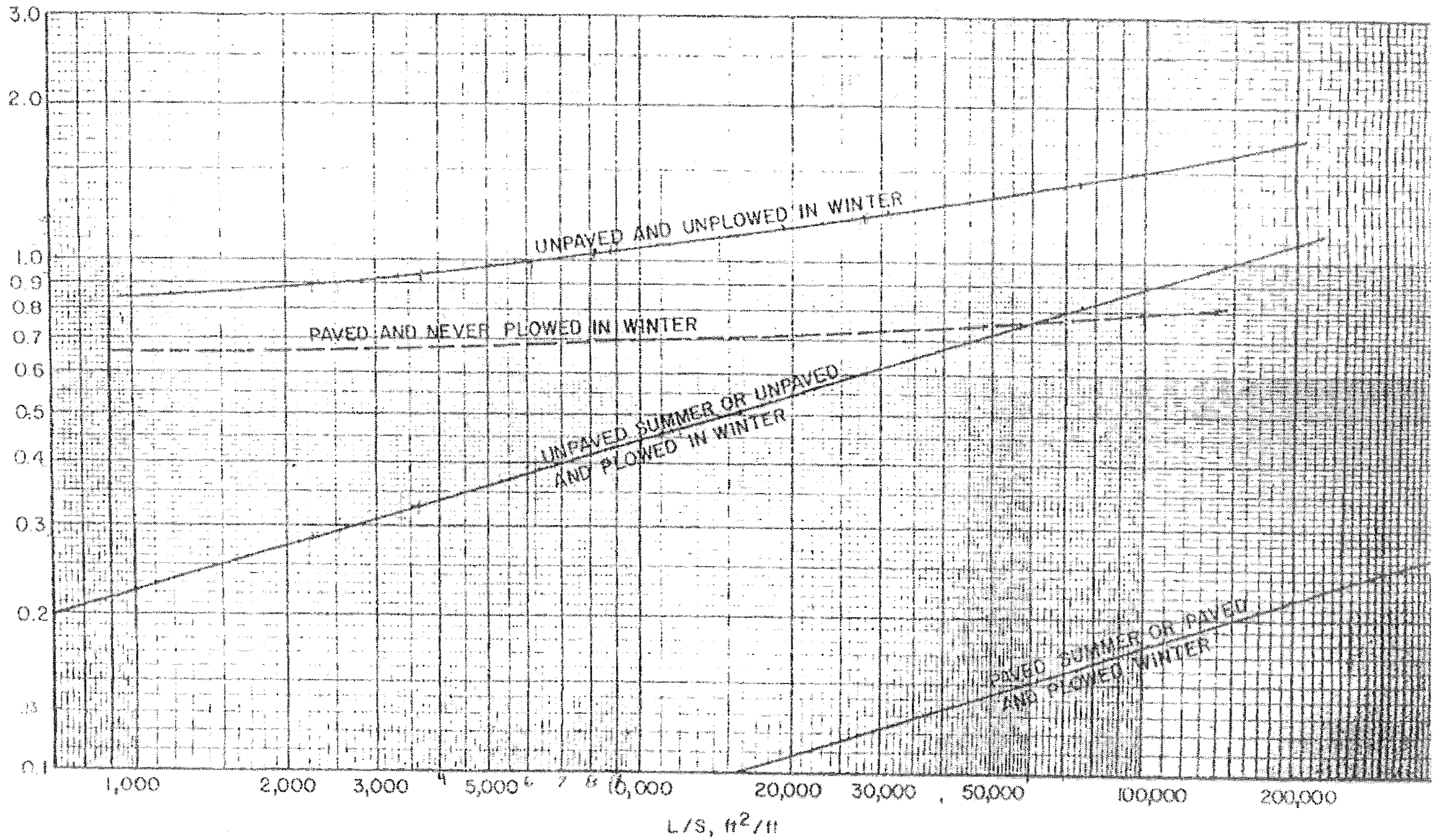


Figure I-2 Overland Flow tc Component, tco

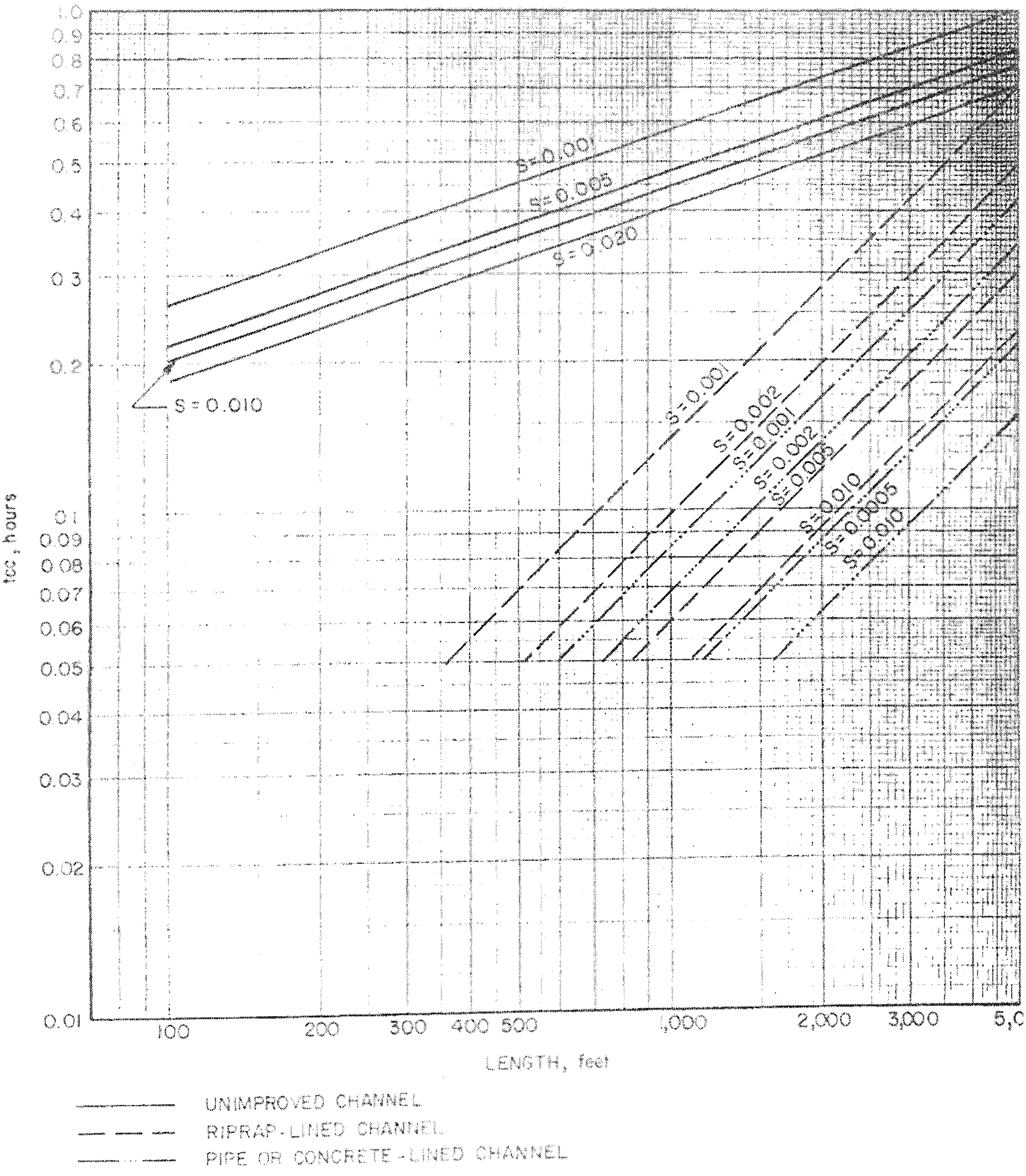


Figure I-3 Channel Flow tc Component, tcc

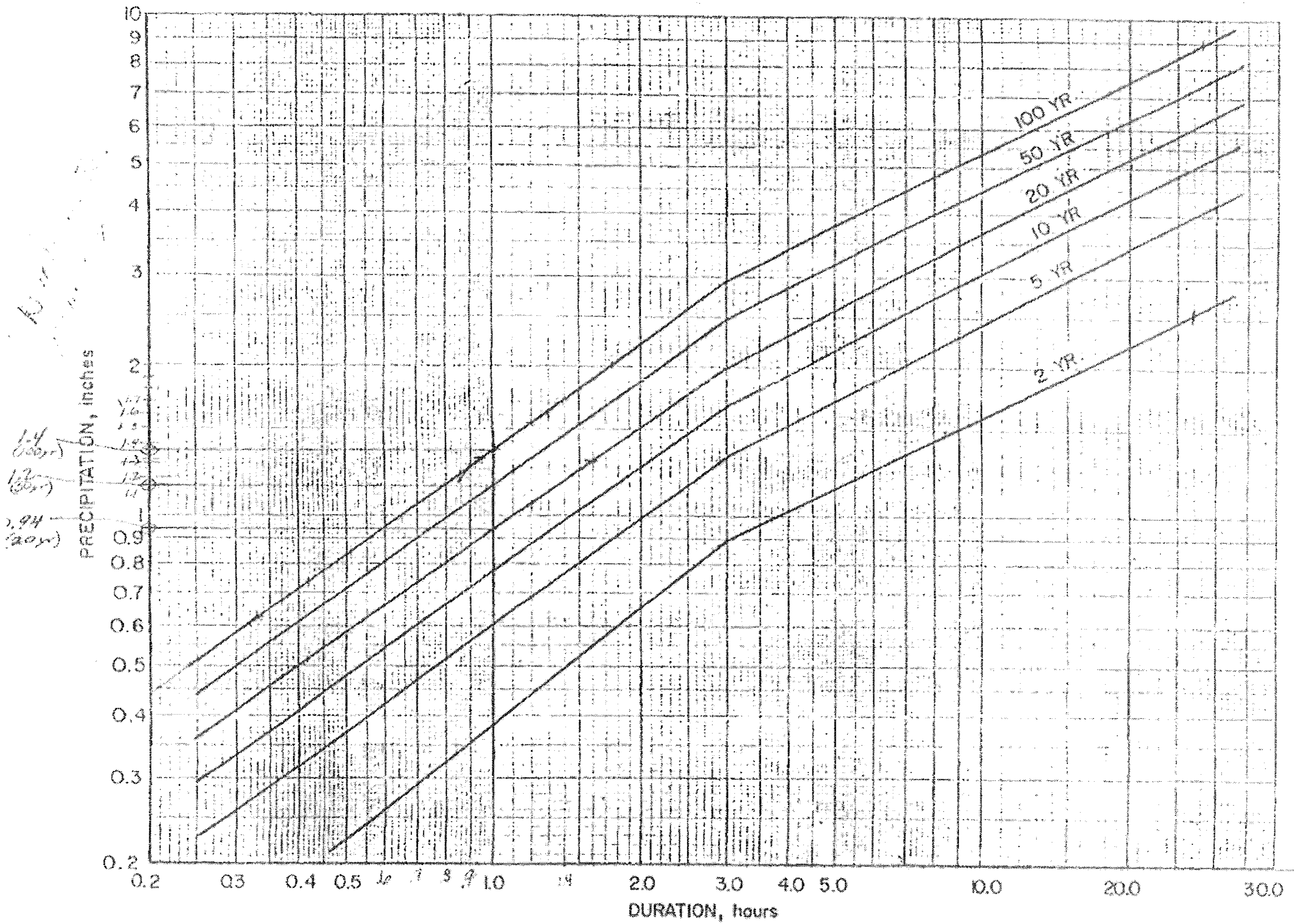


Figure I-4 Winter Precipitation Design Curve

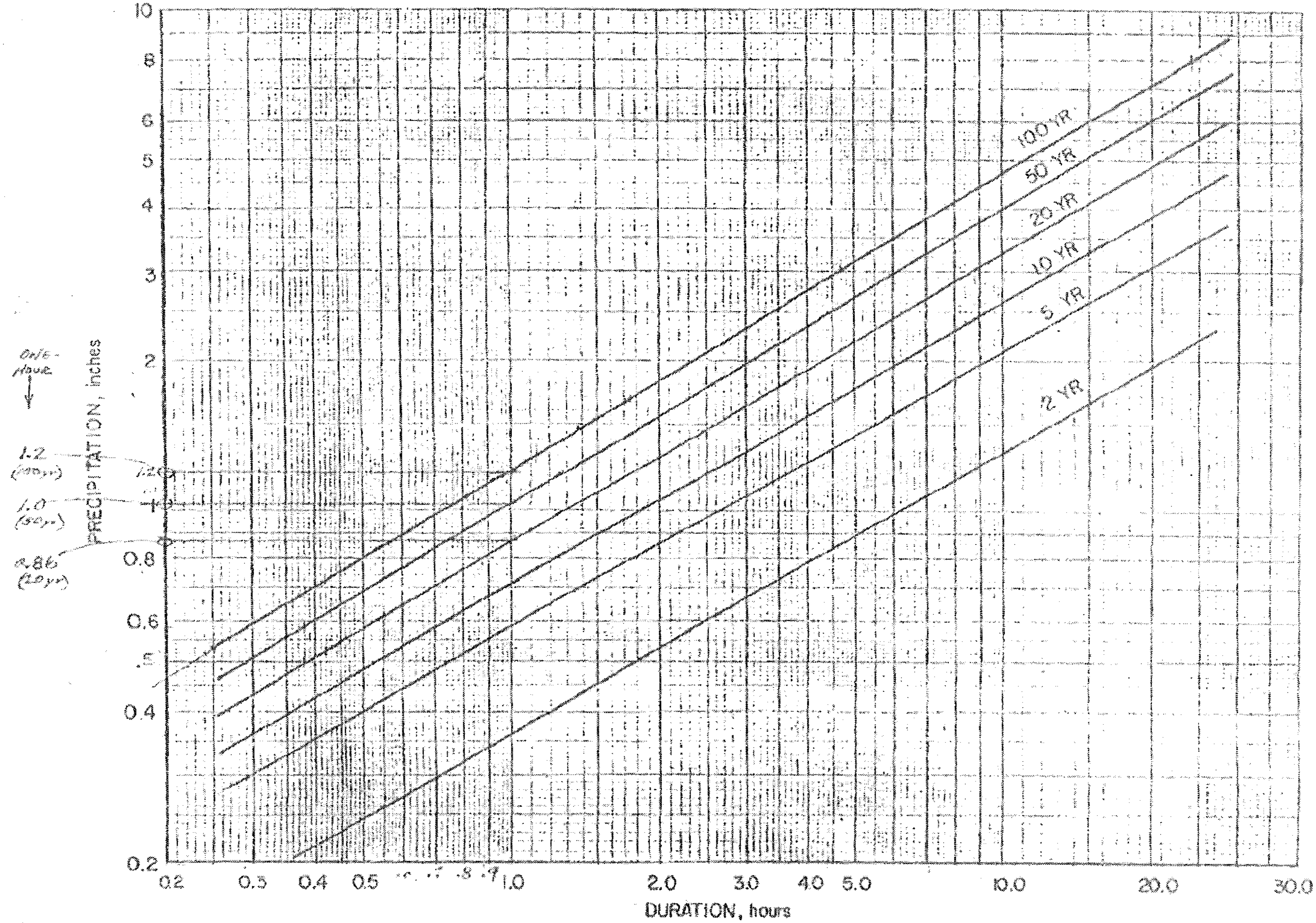
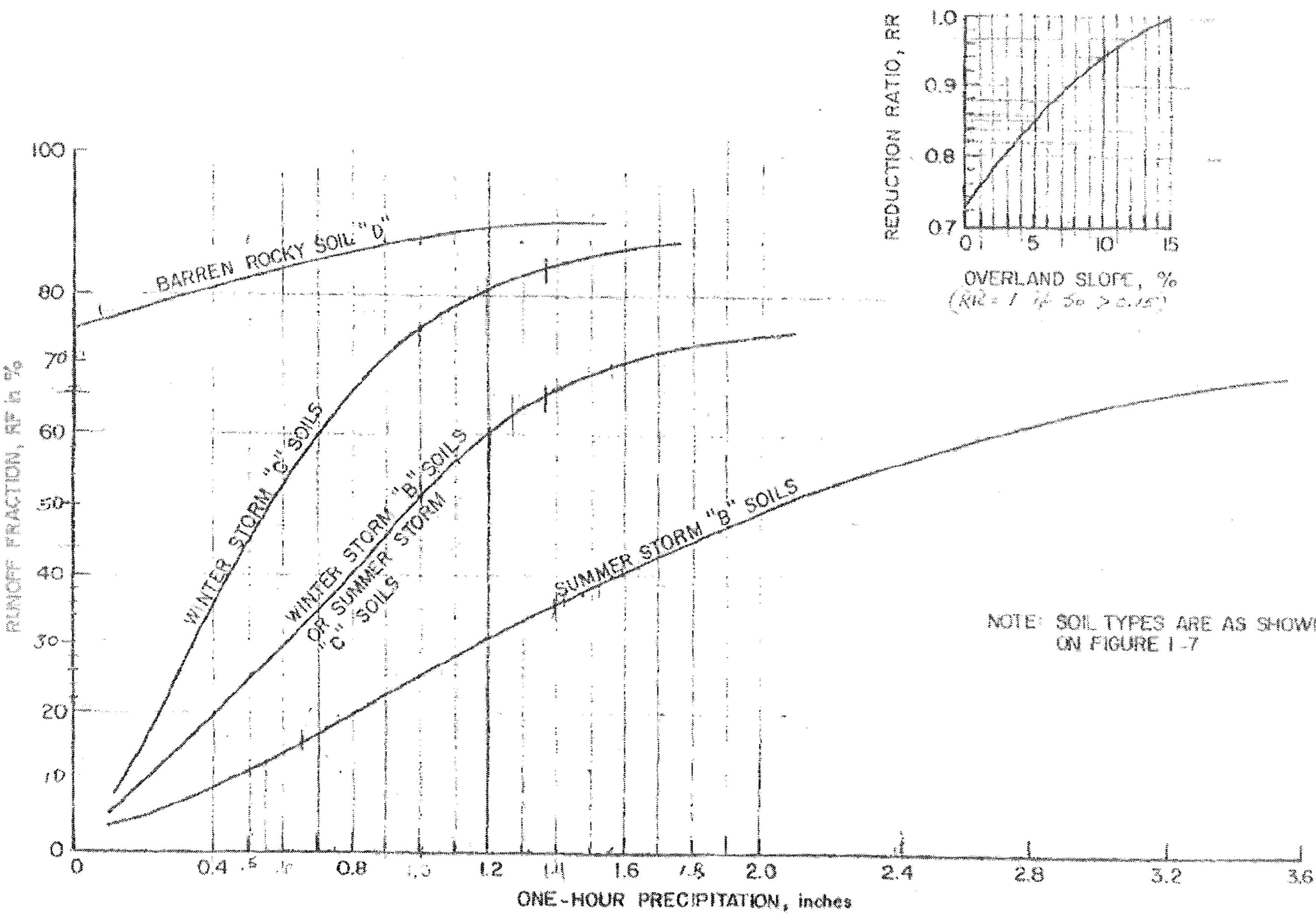


Figure I-5 Summer Precipitation Design Curve



NOTE: SOIL TYPES ARE AS SHOWN ON FIGURE I-7

Figure I-6 Natural Area Runoff Factor, RF, and Reduction Ratio, RR

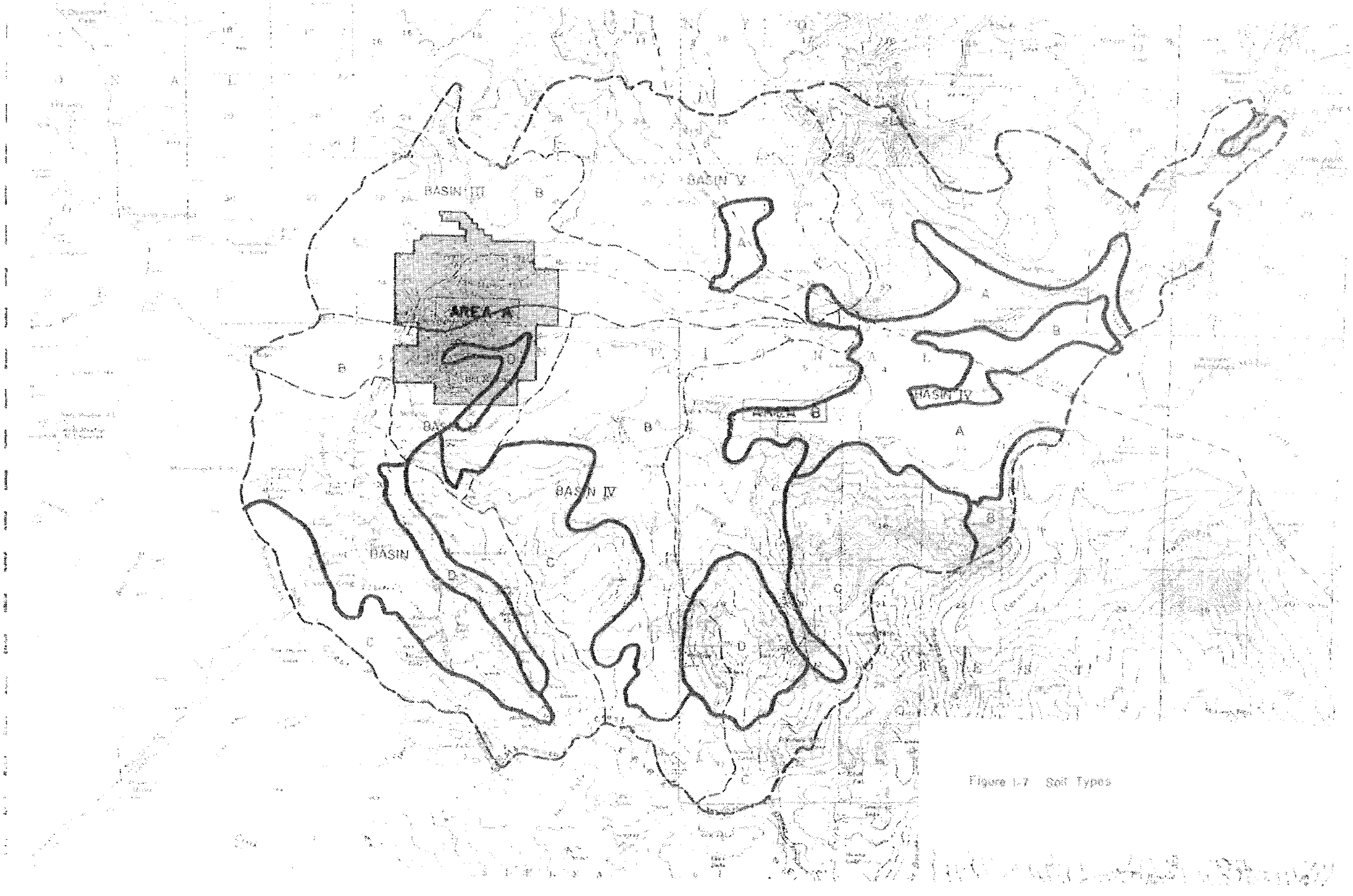


Figure 1-7 Soil Types

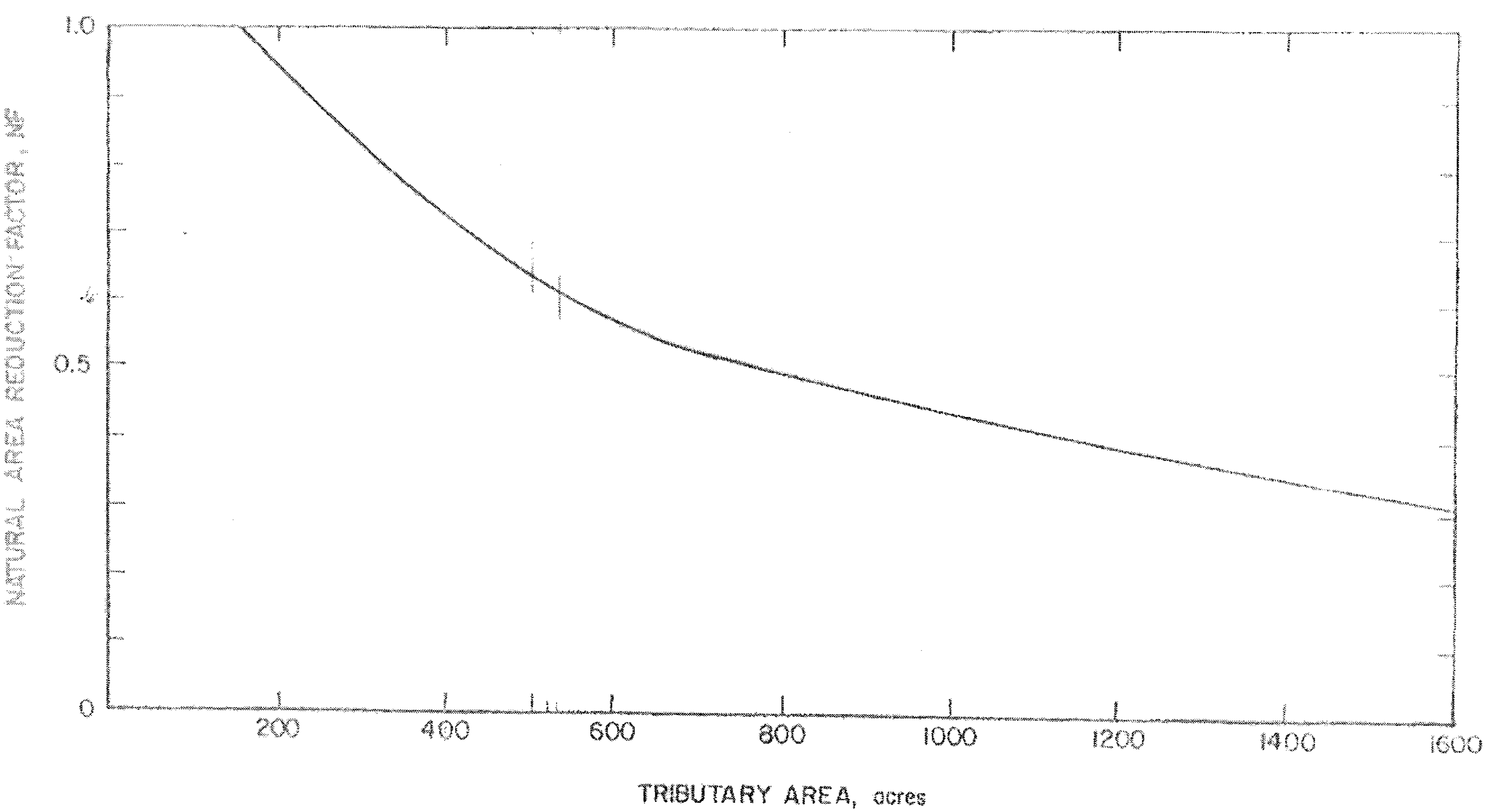


Figure I-8 Natural Area Size Factor, NF

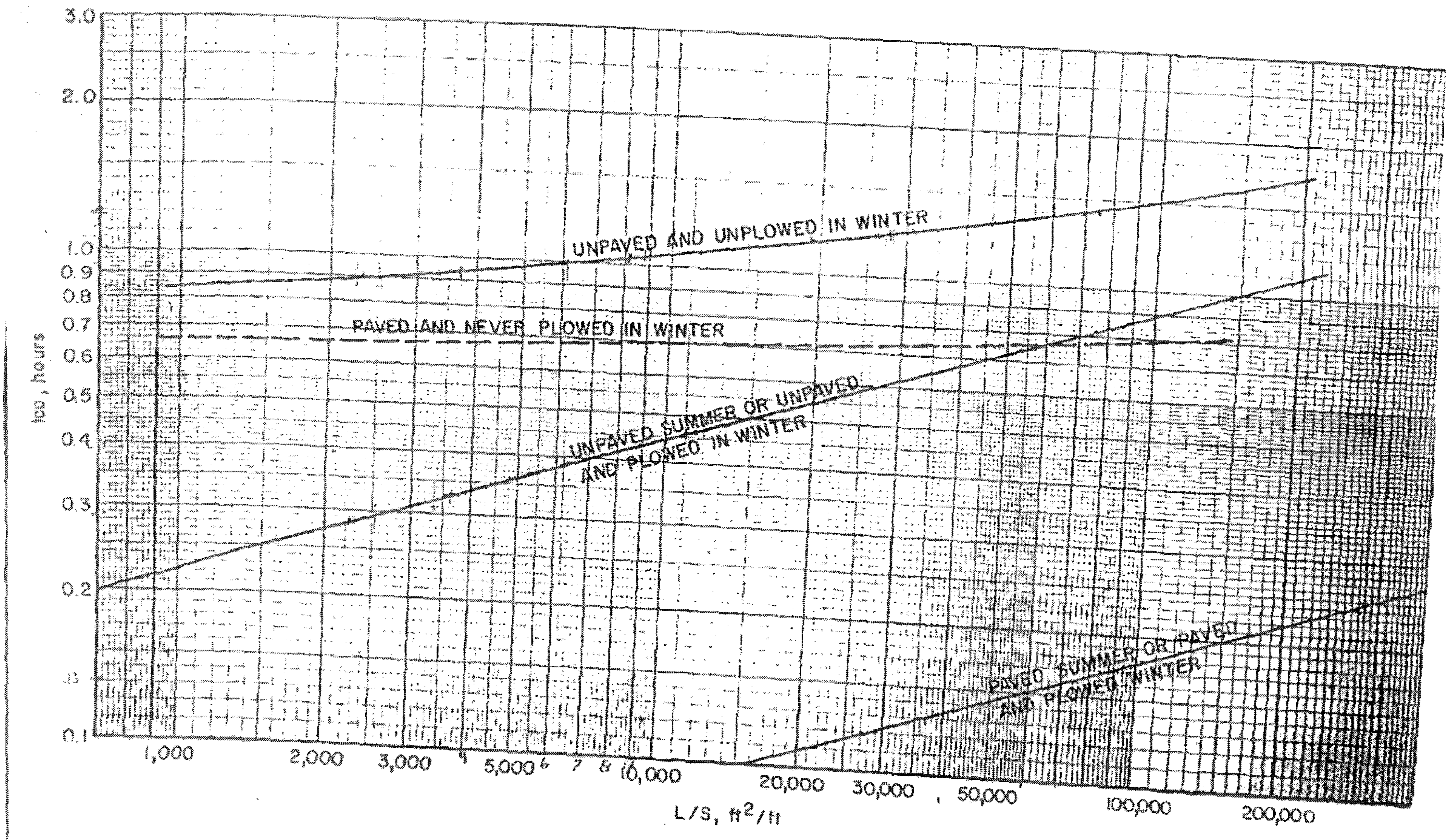


Figure I-2 Overland Flow tc Component, tco

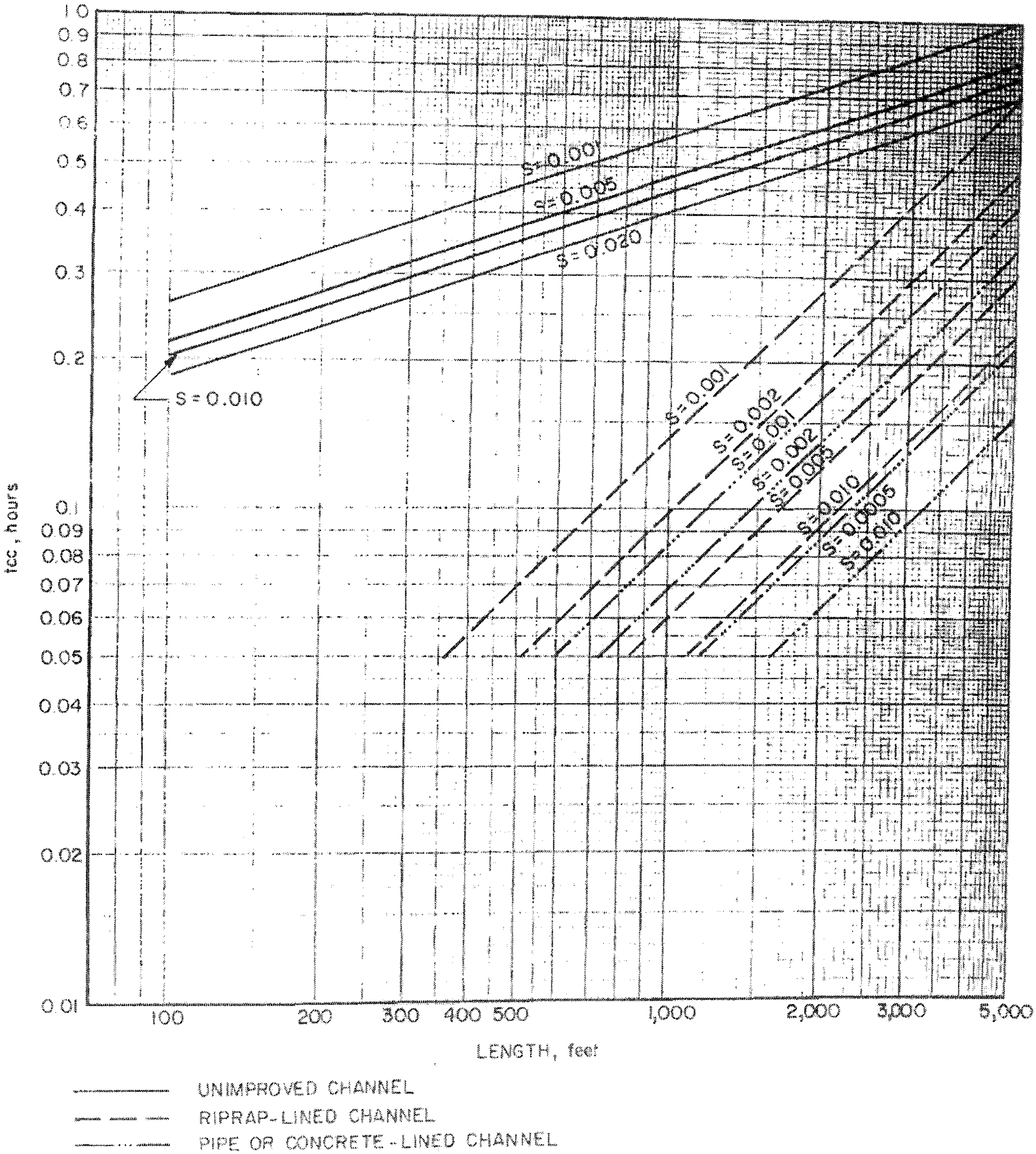


Figure I-3 Channel Flow tc Component, tcc

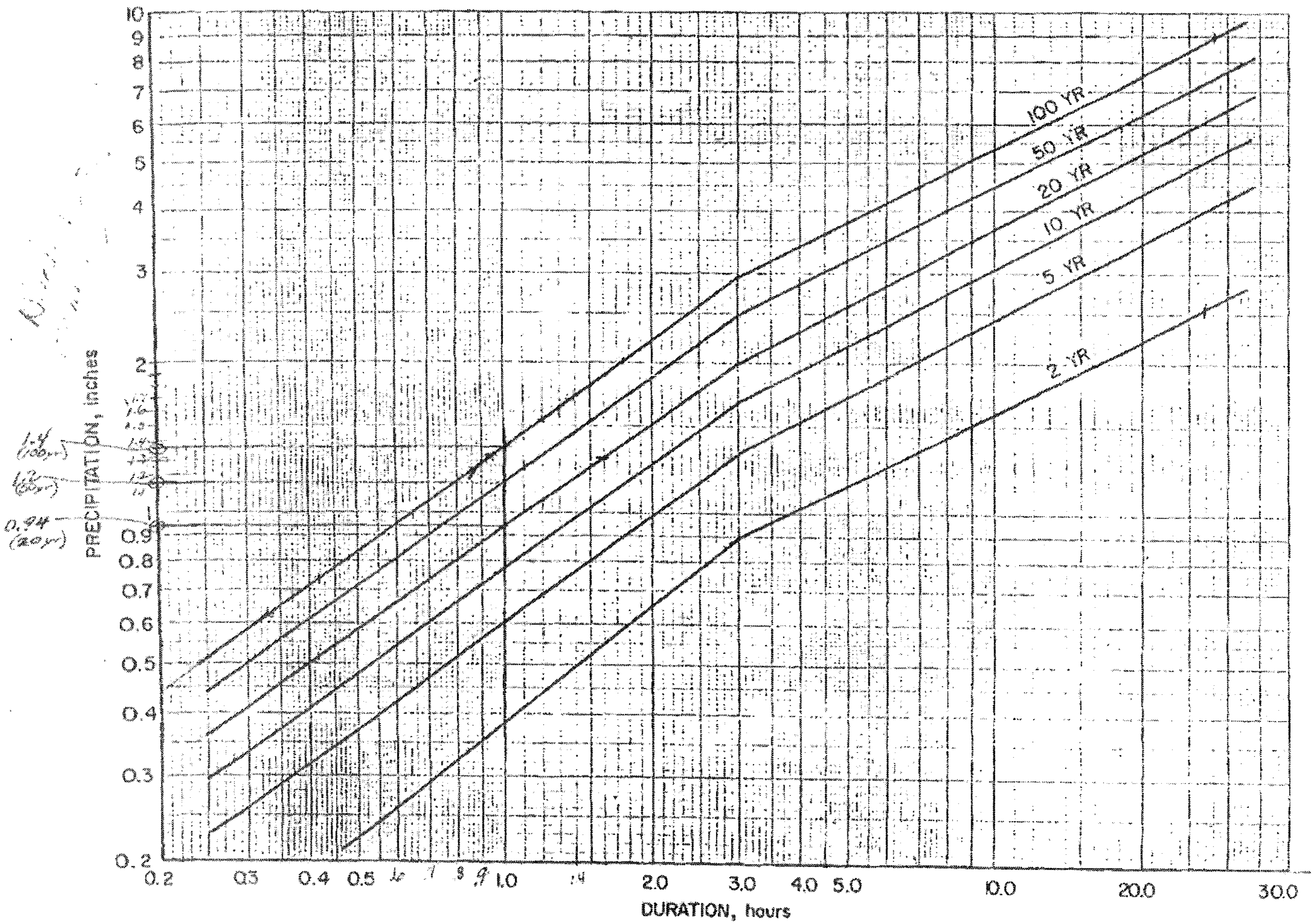


Figure I-4 Winter Precipitation Design Curve

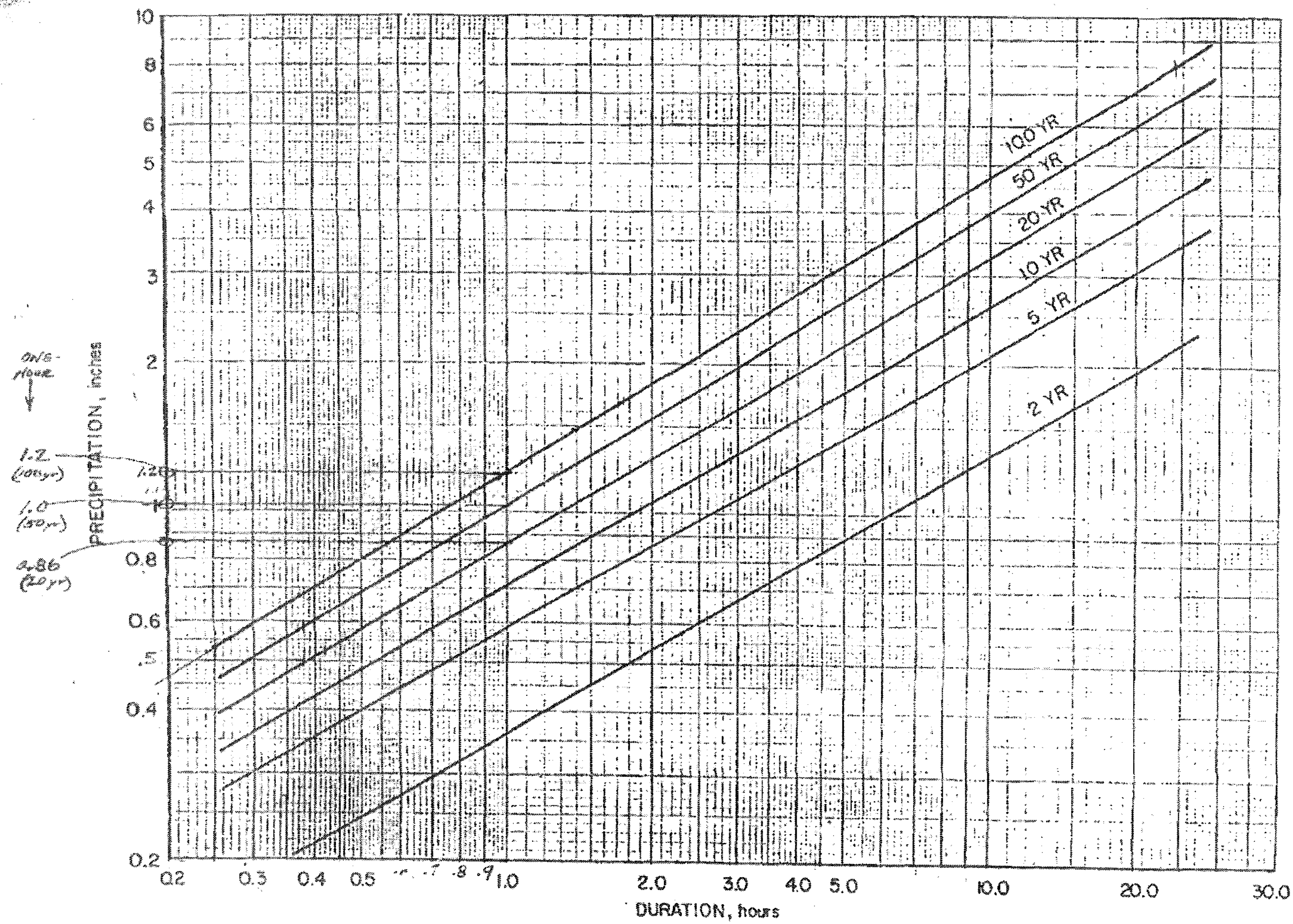


Figure I-5 Summer Precipitation Design Curve

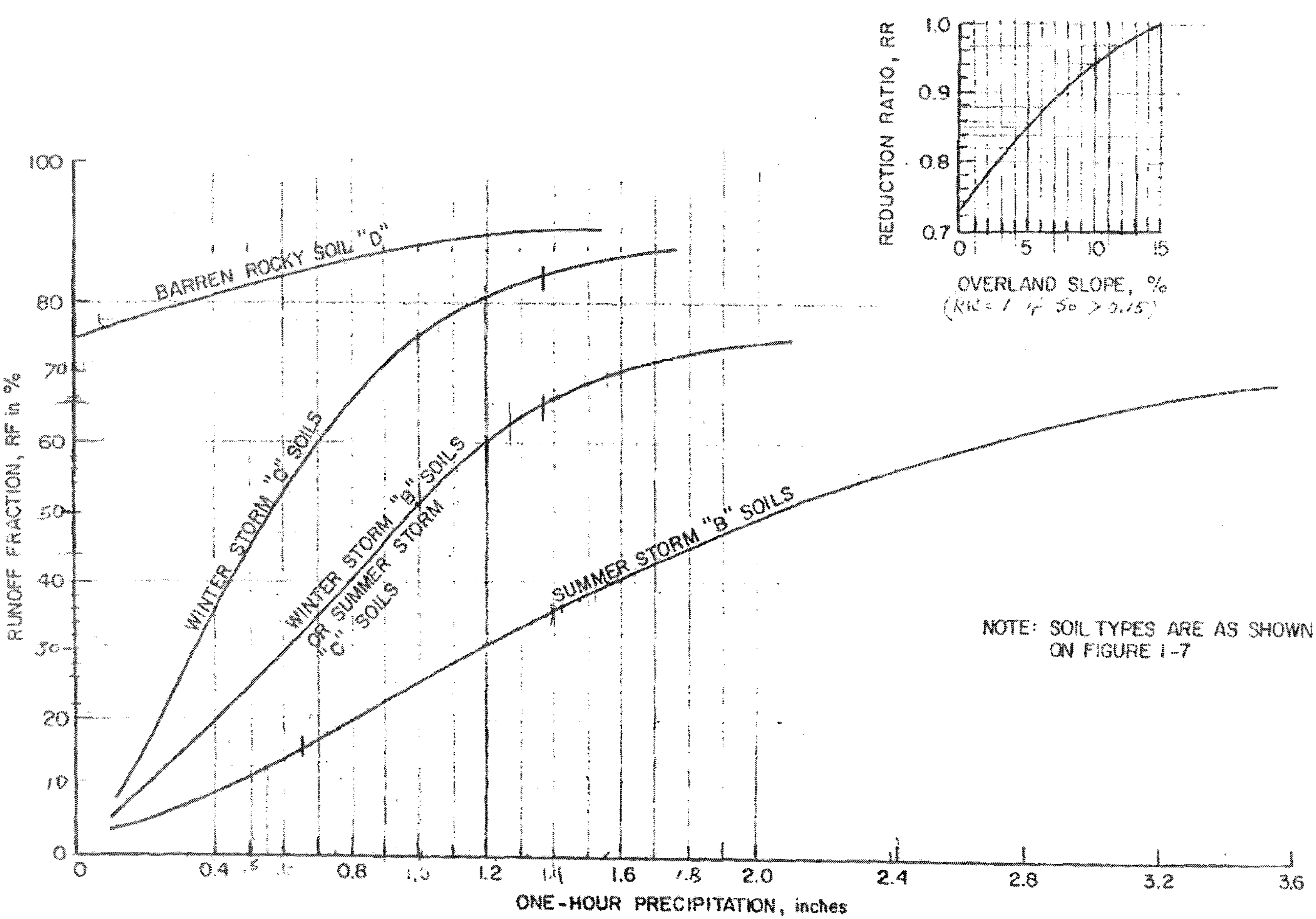


Figure I-6 Natural Area Runoff Factor, RF, and Reduction Ratio, RR

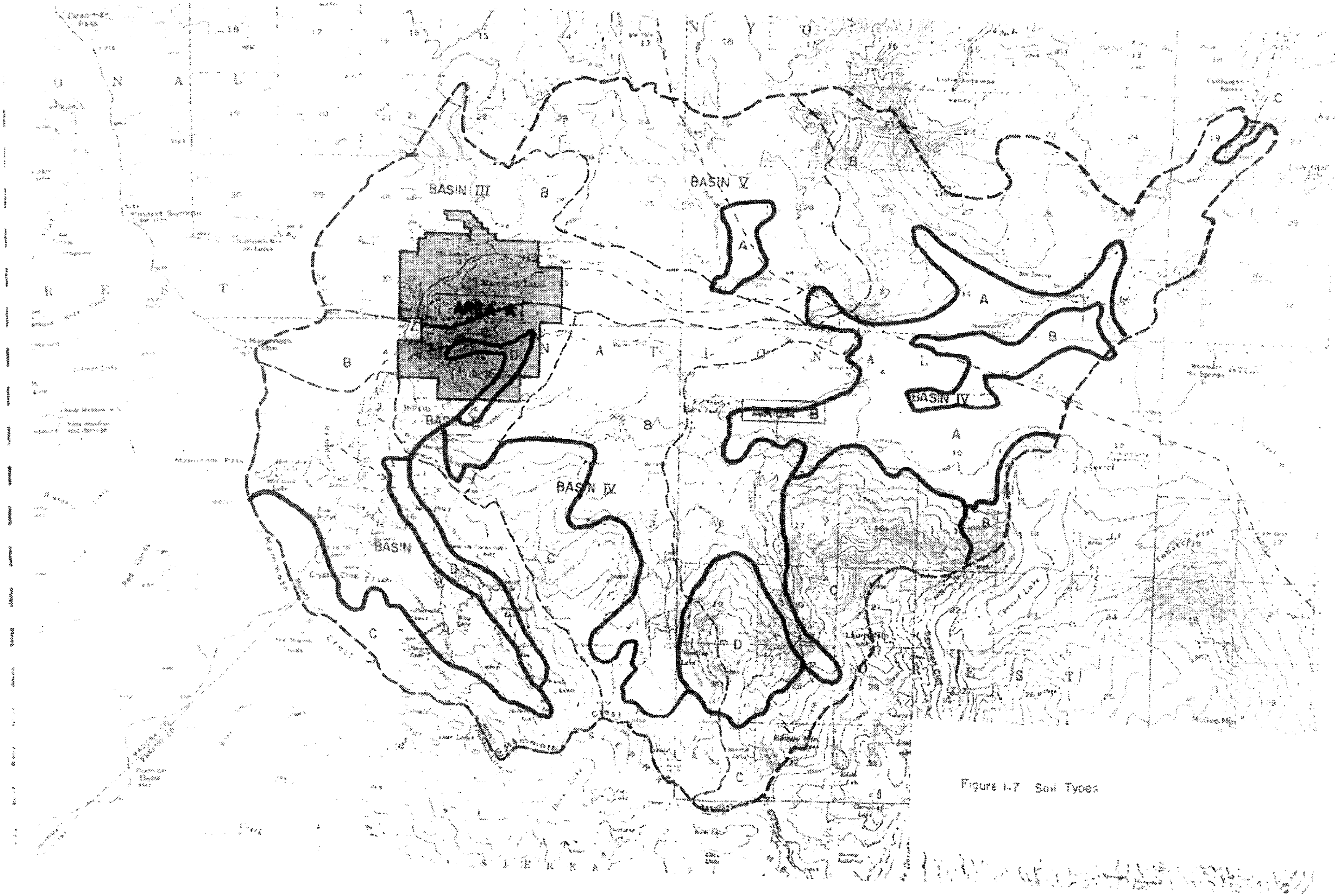


Figure I-7 Soil Types

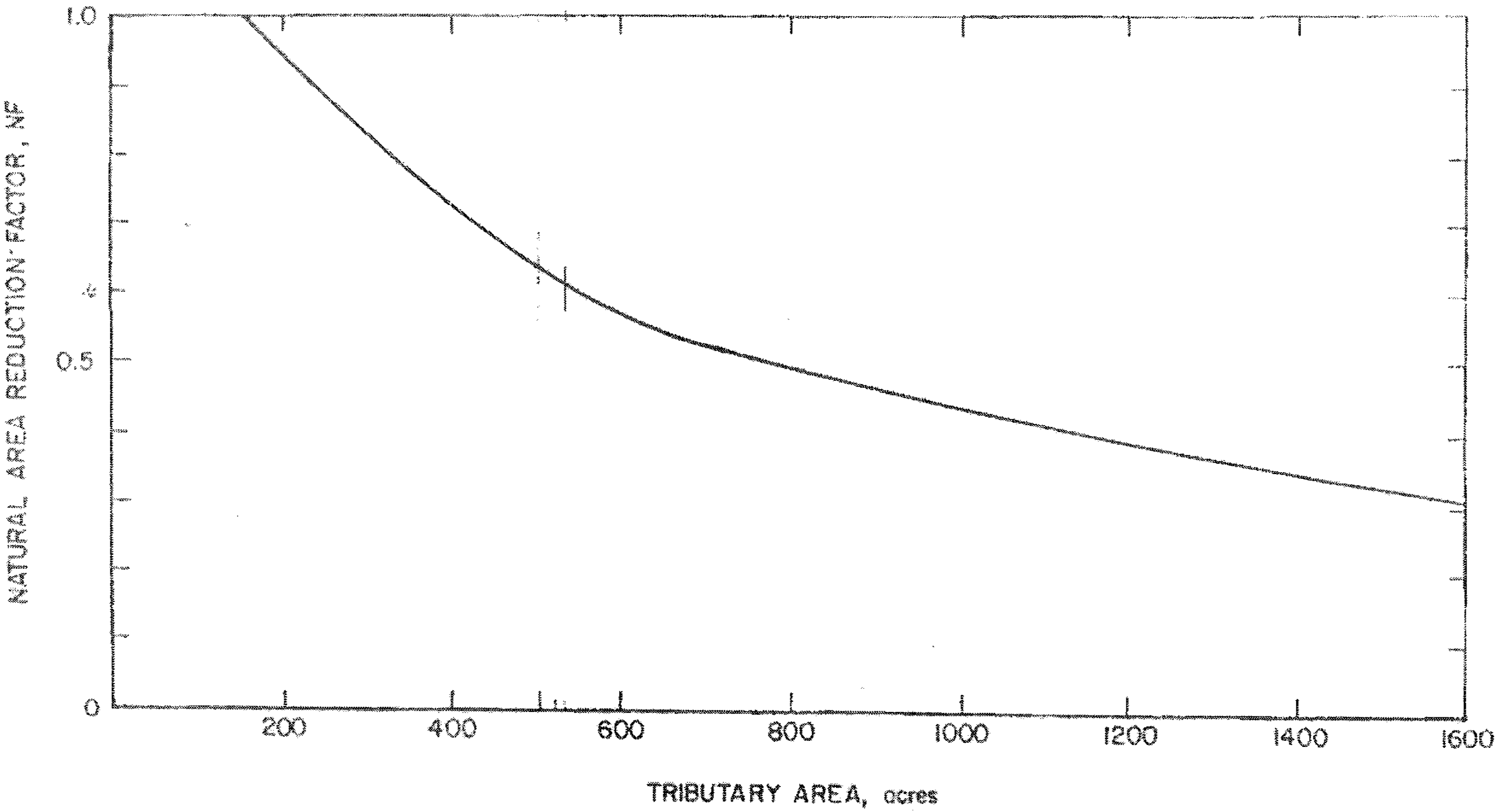


Figure I-8 Natural Area Size Factor, NF

4.8 LAND DEVELOPMENT

The construction and maintenance of urban and commercial developments can impact water quality in many ways. Construction activities inherently disturb soil and vegetation, often resulting in accelerated erosion and sedimentation. Stormwater runoff from developed areas can also contain petroleum products, nutrients, and other contaminants.

This section contains a discussion of the potential water quality impacts expected to result from land development activities, followed by control measures to reduce or offset water quality impacts from such activities.

Construction Activities and Guidelines

Construction activities often produce erosion by disturbing the natural ground surface through scarifying, grading, and filling. Floodplain and wetland disturbances often reduce the ability of the natural environment to retain sediment and assimilate nutrients. Construction materials such as concrete, paints, petroleum products, and other chemicals can contaminate nearby water bodies. Construction impacts such as these are typically associated with subdivisions, commercial developments, and industrial developments.

Control Measures for Construction Activities

The Regional Board regulates the construction of subdivisions, commercial developments, industrial developments, and roadways based upon the level of threat to water quality. The Regional Board will request a Report of Waste Discharge and consider the issuance of an appropriate permit for any proposed project where water quality concerns are identified in the California Environmental Quality Act (CEQA) review process. Any construction activity whose land disturbance activities exceed five acres must also comply with the statewide general NPDES permit for stormwater discharges (see "Stormwater" section of this Chapter).

The following are guidelines for construction projects regulated by the Regional Board, particularly for projects located in portions of the Region where erosion and stormwater threaten sensitive watersheds. The Regional Board recommends that each county within the Region adopt a grading/erosion control ordinance to require implementation of these same guidelines for all soil disturbing activities:

1. Surplus or waste material should not be placed in drainageways or within the 100-year floodplain of any surface water.
2. All loose piles of soil, silt, clay, sand, debris, or other earthen materials should be protected in a reasonable manner to prevent any discharge to waters of the State.
3. Dewatering should be performed in a manner so as to prevent the discharge of earthen material from the site.
4. All disturbed areas should be stabilized by appropriate soil stabilization measures by October 15th of each year.
5. All work performed during the wet season of each year should be conducted in such a manner that the project can be winterized (all soils stabilized to prevent runoff) within 48 hours if necessary. The wet season typically extends from October 15th through May 1st in the higher elevations of the Lahontan Region. The season may be truncated in the desert areas of the Region.
6. Where possible, existing drainage patterns should not be significantly modified.
7. After completion of a construction project, all surplus or waste earthen material should be removed from the site and deposited in an approved disposal location.
8. Drainage swales disturbed by construction activities should be stabilized by appropriate soil stabilization measures to prevent erosion.
9. All non-construction areas should be protected by fencing or other means to prevent unnecessary disturbance.
10. During construction, temporary protected gravel dikes, protected earthen dikes, or sand bag dikes should be used as necessary to prevent discharge of earthen materials from the site

during periods of precipitation or runoff.

11. Impervious areas should be constructed with infiltration trenches along the downgradient sides to dispose of all runoff greater than background levels of the undisturbed site. Infiltration trenches are not recommended in areas where infiltration poses a risk of ground water contamination.

12. Infiltration trenches or similar protection facilities should be constructed on the downgradient side of all structural drip lines.

13. Revegetated areas should be continually maintained in order to assure adequate growth and root development. Physical erosion control facilities should be placed on a routine maintenance and inspection program to provide continued erosion control integrity.

14. Waste drainage waters in excess of that which can be adequately retained on the property should be collected before such waters have a chance to degrade. Collected water shall be treated, if necessary, before discharge from the property.

15. Where construction activities involve the crossing and/or alteration of a stream channel, such activities should be timed to occur during the period in which stream flow is expected to be lowest for the year.

16. Use of materials other than potable water for dust control (i.e., reclaimed wastewater, chemicals such as magnesium chloride, etc.) is strongly encouraged but must have prior Regional Board approval before its use.

Specific Policy and Guidelines for Mammoth Lakes Area

To control erosion and drainage in the Mammoth Lakes watershed at an elevation above 7,000 feet (Figure 4.8-1), the following policy and guidelines apply:

Policy:

A Report of Waste Discharge is required not less than 90 days before the intended start of construction activities of a **new development** of either (a) six or more dwelling units, or (b) commercial developments involving soil disturbance on one-quarter acre or more.

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

Guidelines:

1. Drainage collection, retention, and infiltration facilities shall be constructed and maintained to prevent transport of the runoff from a 20-year, 1-hour design storm from the project site. A 20-year, 1-hour design storm for the Mammoth Lakes area is equal to 1.0 inch (2.5 cm) of rainfall.

2. Surplus or waste materials shall not be placed in drainageways or within the 100-year flood plain of surface waters.

3. All loose piles of soil, silt, clay, sand, debris, or earthen materials shall be protected in a reasonable manner to prevent any discharge to waters of the State.

4. Dewatering shall be done in a manner so as to prevent the discharge of earthen materials from the site.

5. All disturbed areas shall be stabilized by appropriate soil stabilization measures by October 15 of each year.

6. All work performed between October 15th and May 1st of each year shall be conducted in such a manner that the project can be winterized within 48 hours.

7. Where possible, existing drainage patterns shall not be significantly modified.

8. After completion of a construction project, all surplus or waste earthen material shall be removed from the site and deposited at a legal

point of disposal.

9. Drainage swales disturbed by construction activities shall be stabilized by the addition of crushed rock or riprap, as necessary, or other appropriate stabilization methods.

10. All nonconstruction areas shall be protected by fencing or other means to prevent unnecessary disturbance.

11. During construction, temporary erosion control facilities (e.g., impermeable dikes, filter fences, hay bales, etc.) shall be used as necessary to prevent discharge of earthen materials from the site during periods of precipitation or runoff.

12. Revegetated areas shall be regularly and continually maintained in order to assure adequate growth and root development. Physical erosion control facilities shall be placed on a routine maintenance and inspection program to provide continued erosion control integrity.

13. Where construction activities involve the crossing and/or alteration of a stream channel, such activities shall be timed to occur during the period in which streamflow is expected to be lowest for the year.

Land Development/Urban Runoff Control Actions for Susan River Watershed

1. To protect riparian vegetation and wetlands from land disturbance activities, the Regional Board shall recommend that Lassen County and the City of Susanville require new development or any land disturbing activities to include buffer strips of undisturbed land, especially along the Susan River and its tributaries.

2. The Regional Board, with assistance from the City of Susanville and the California Department of Transportation (Caltrans), should conduct monitoring of the Susan River and Piute Creek within the City of Susanville to assess impacts from urban runoff. Control measures should be planned and implemented based on the results of the monitoring. The monitoring plan should be developed to identify nonpoint sources needing control. Monitoring proposals will be submitted by the Regional Board, and work will be conducted as resources allow and as the Susan River gains priority.

3. The Regional Board shall encourage and assist other agencies in watershed restoration efforts along the Susan River.

4. The Regional Board shall encourage the City of Susanville and Lassen County to adopt a comprehensive grading ordinance. These ordinances should require, for all proposed land disturbing activities, the use of Best Management Practices to reduce erosion and stormwater runoff, including but not limited to temporary and permanent erosion control measures.

5. The Regional Board shall encourage the City of Susanville, Lassen County and Caltrans to implement Best Management Practices to reduce erosion and stormwater runoff when constructing and maintaining roads, both paved and unpaved, under their jurisdiction.

Road Construction and Maintenance

Road construction activities often involve extensive earth moving, including clearing, scarifying, excavating for bridge abutments, disturbing or modifying floodplains, cutting, and filling. Additionally, the potential for land disturbance exists from construction materials, equipment maintenance, fuel storage facilities, and general equipment use.

Once constructed, impervious road surfaces create another source of water pollution. Oils, greases, and other petroleum products, along with such toxic materials as battery acid, antifreeze, etc., may be deposited along the road surfaces. These contaminants become suspended or dissolved in any stormwater runoff that is generated on the road surfaces. Unless otherwise treated, these contaminants will flow toward local surface or ground waters. (See "Stormwater" section of this Chapter.)

Road maintenance can be potentially threatening to water quality in a number of ways. Below-grade culverts slowly fill with sediment and are cleaned out periodically, sometimes by flushing accumulated sediment into downstream drainageways. Grading of shoulders and drainageways can detach sediments and increase the risk of erosion into nearby surface waters. Road surfaces may be repainted or resealed with materials that harden quickly, but which can be washed off while still fresh by stormwater runoff.

In the winter, roads are often snowy, icy, or wet. To reduce winter road hazards, maintenance crews may remove the snow or ice, apply sand to provide added traction, and/or apply deicing chemicals to melt the snow and ice. Sand is rapidly dissipated or crushed by the traffic, and must be replaced frequently. Great quantities of sediment enter drainageways and/or surface waters due to this practice. Snow may be removed mechanically via snowplow or snowblower. This practice is not particularly detrimental to water quality in itself, but the snow often carries substances from the roadway when removed. Sediments, chemical deicers, and vehicle fluids may travel much farther than they would otherwise, possibly reaching area surface waters. Ice and small accumulations of snow may be removed with chemical deicers. The deicer in widest use is rock salt (sodium chloride), due to its low cost, high availability, and predictable results.

Winter road maintenance was brought to the forefront in 1989 when significant numbers of roadside trees in the Lake Tahoe Basin suddenly started dying. The public outcry caused many environmental groups and regulatory agencies, including the Regional Board, to look more closely at what had been a more or less unscrutinized, unregulated process in the past. Data began to show that Caltrans was using very high amounts of salt each winter, and the figure seemed to increase from one year to the next. The consensus of the various regulatory agencies was that Caltrans should reduce salt use, explore various alternate deicers, and monitor the impacts of salt applications on soil, water, and vegetation. Salt use decreased significantly from 1989-1992, due to more careful application procedures and to drought conditions.

At least three alternate deicers have been explored: calcium magnesium acetate, potassium acetate, and magnesium chloride with corrosion inhibitors. These products have shown some promise, but further study is required. The cost to switch to an alternate deicer will be significant. The road departments are unwilling to make the switch unless an alternate deicer is demonstrably better environmentally, will not require too much adjustment on the part of the maintenance crews and equipment, and will actually do an effective and predictable job when applied.

However, Caltrans' monitoring of vegetation showed minimal and temporary salt accumulation within the vegetation. During the spring, any salt that had accumulated in the vegetation was flushed out from the plant material. The impacts of chemical deicers on fish and wildlife within the Lahontan Region have not been studied.

Control Measures for Road Construction and Maintenance

(Additional control measures for roads are included in the "Stormwater" section of this Chapter.)

The Regional Board regulates road construction and maintenance projects within the Lahontan Region, concentrating efforts on major construction and construction in sensitive areas. Major construction projects and those projects in sensitive areas are most often regulated under individual WDRs, and are routinely inspected. Less significant projects may be issued conditional waivers of WDRs. The Regional Board has also adopted road maintenance waste discharge requirements for some county governments in the Region. Road construction and maintenance in the Lake Tahoe Basin is also regulated under municipal NPDES Stormwater Permits (see Chapter 5).

For all road projects, the Board requires that construction be conducted in a manner which is protective to water quality, and that, at the end of a given project, the site be restabilized and revegetated. These requirements are detailed in a Management Agency Agreement with Caltrans regarding the implementation of BMPs. Additionally, all road projects are to be in compliance with the Caltrans Statewide 208 Plan (CA Dept. of Transportation 1980), which was approved by the State Board in 1979. This Plan contains a commitment to implement BMPs, but does not include great detail on the BMPs themselves. The State Board should encourage Caltrans to update its 208 plan to provide such detail, with particular attention to:

- stormwater/erosion control along existing highways
- erosion control during highway construction and

maintenance

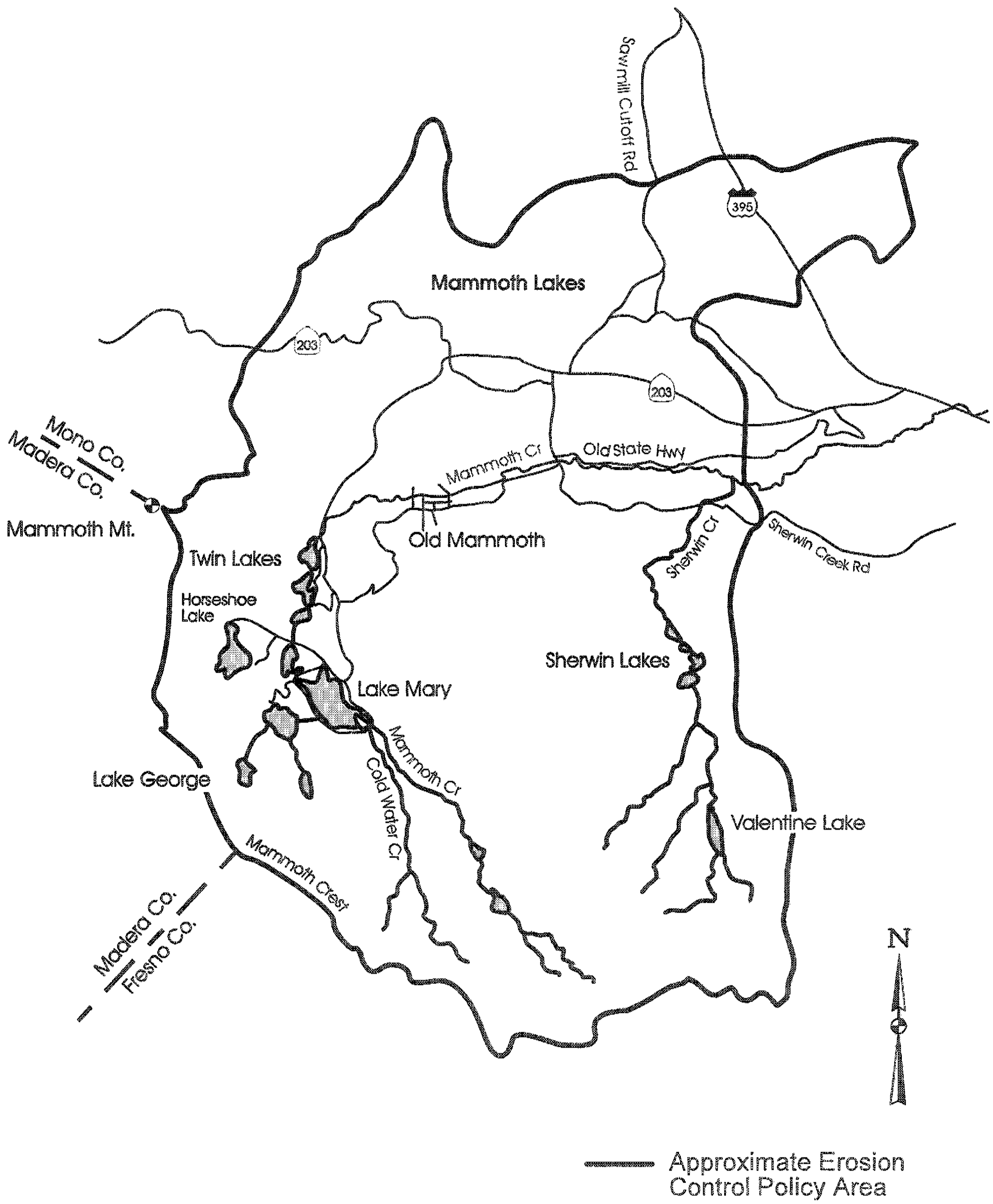
- reduction of direct discharges (e.g., through culverts)
- reduction of runoff velocity
- infiltration, detention and retention practices
- management of deicing compounds, fertilizer, and herbicide use
- spill cleanup measures
- treatment of toxic stormwater pollutants

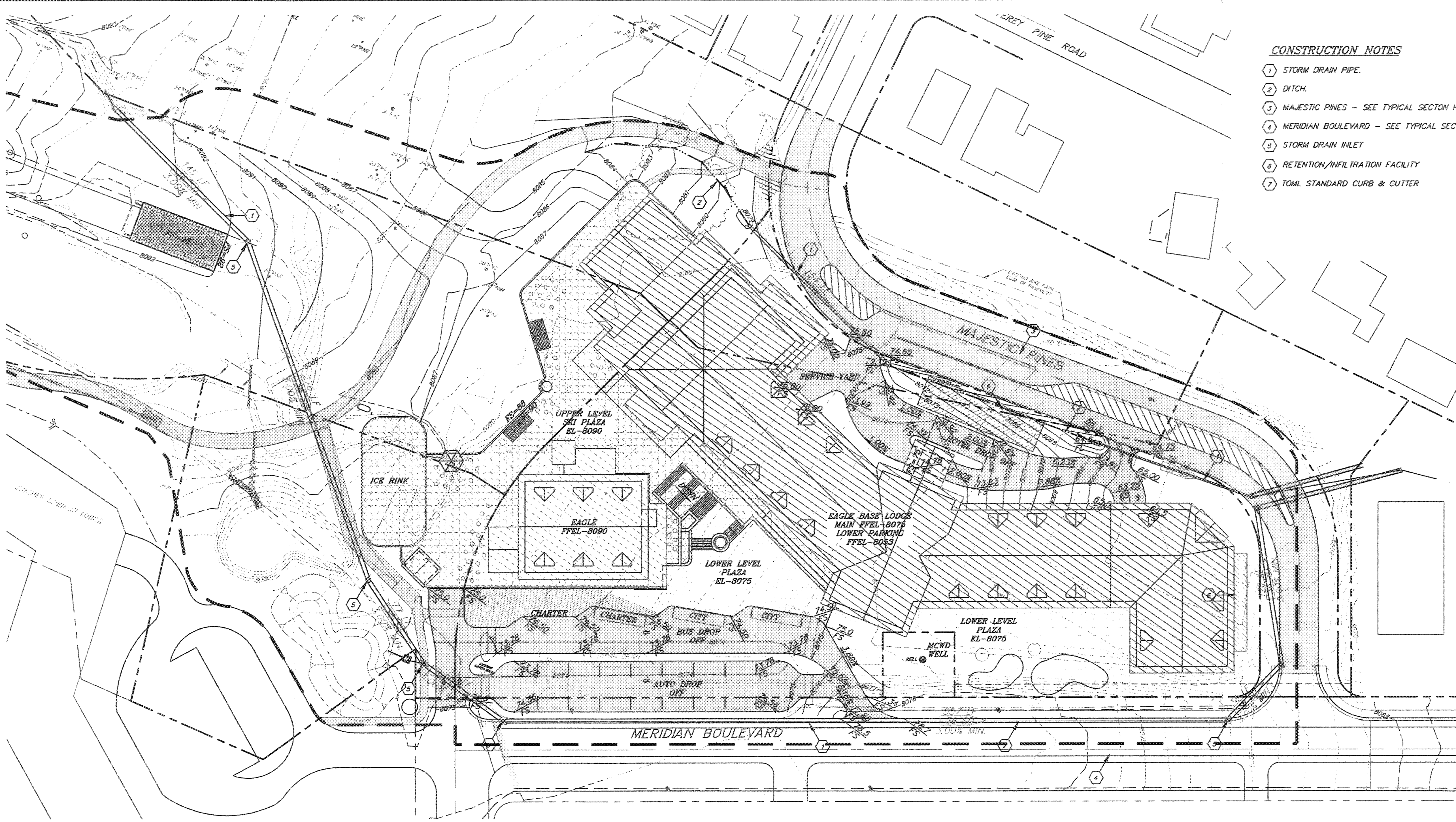
Since much of the implementation of BMPs on highways is done by Caltrans' contractors, the selection of qualified contractors and ongoing education of construction and maintenance personnel on BMP techniques are particularly important.

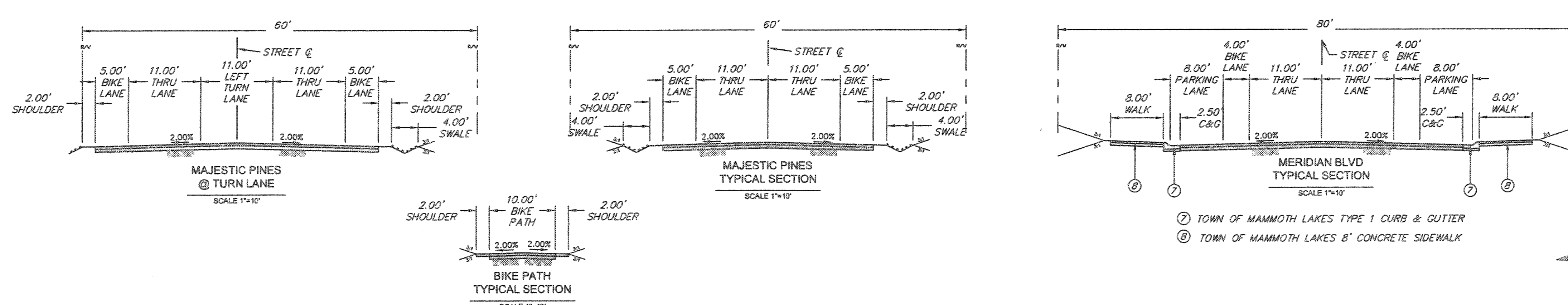
In the Lake Tahoe Basin, all governmental agencies assigned to maintain roads are required to bring all roads in the Lake Tahoe Basin into compliance with current "208" standards within a specified time schedule. That is, all existing facilities must be retrofitted to handle the stormwater runoff from the 20-year, 1-hour storm, and to restabilize all eroding slopes. The twenty-year time frame for this compliance process ends in 2008.

The Regional Board should allow salt use to continue as one component of a comprehensive winter maintenance program. However, the Regional Board should continue to require that it be applied in a careful, well-planned manner, by competent, trained crews. Should even the "proper" application of salt be shown to cause adverse water quality impacts, the Regional Board should then require that it no longer be used in environmentally sensitive areas, such as the Lake Tahoe Basin. Similarly, should an alternate deicer be shown to be effective, environmentally safe, and economically feasible, its use should be encouraged in lieu of salt.

Figure 4.8-1
OWENS HYDROLOGIC UNIT





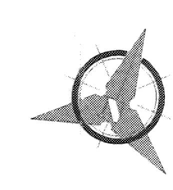


GRAPHIC SCALE

40 0 20 40 80 160

(IN FEET)
1 inch = 40 ft.

SCALE: 1"=40' 22"x34" SHEET
(SEE SCALE BAR ABOVE)
SCALE: 1"=80' 11"x17" SHEET
CONTOUR INTERVAL: 1'



MAMMOTH

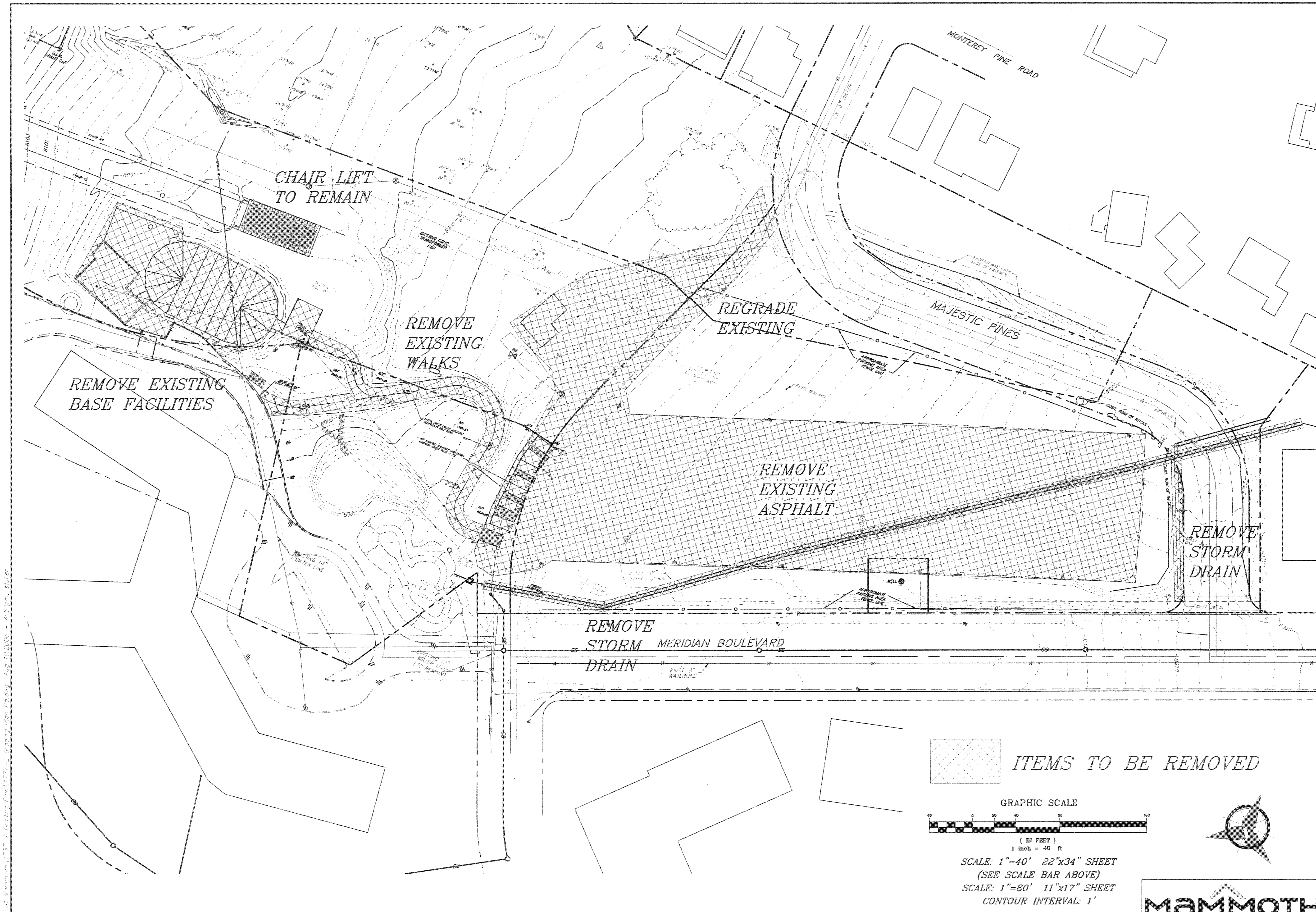
triad/holmes assoc.
civil engineering
land surveying

MAMMOTH LAKES
BISHOP
LOMPOC
NAPA
PLEASANTON
REDWOOD CITY
SAN LUIS OBISPO

PREPARED FOR:
MAMMOTH MOUNTAIN
SKI AREA
ATTN. TOM HODGES
P.O. BOX 24
MAMMOTH LAKES, CA 93546
760-934-2571 EXT. 3243

GRADING AND DRAINAGE PLAN
EAGLE LODGE BASE AREA

DATE	08/10/2006
SCALE	1"=40'
DRAWN	SMF
JOB NO.	1737.2
DWG	C2
SHEET	2 OF 4



triad/holmes assoc.
civil engineering
land surveying

MAMMOTH LAKES
BISHOP
LOMPOC
NAPA
PLEASANTON
REDWOOD CITY
SAN LUIS OBISPO

PREPARED FOR:
MAMMOTH MOUNTAIN SKI AREA
ATTN. TOM HODGES
P.O. BOX 24
MAMMOTH LAKES, CA 93546
760-934-2571 EXT. 3243

EXISTING CONDITIONS AND SITE DEMOLITION PLAN

EAGLE LODGE BASE AREA

DATE 08/10/2006
SCALE 1"=40'
DRAWN SMF
JOB NO. 1737.2
DWG C1
SHEET 1 of 4

EROSION CONTROL NOTES

1. General Permit:

a. This Storm Water Pollution Prevention Plan (SWPPP) is authorized under the Federal Clean Water Act (CWA), General Permit, NPDES CAS00002, and the State Water Quality Control Board (SWRCB) Order No. 99 – 08 – DWQ. This General Permit prohibits the discharge of materials other than storm water and authorized non-storm water discharges.

b. The SWPPP shall remain on the construction site while the site is under construction during working hours, commencing with the initial construction activity and ending with termination of coverage under the General Permit.

c. The SWPPP must be implemented at the appropriate level to protect water quality at all times throughout the life of the project. Non-storm water BMP's (Best Management Practices) must be implemented year round.

d. For the purposes of this General Permit, the SWPPP shall be considered to be this plan, all text included in this SWPPP documentation, and all references made by this SWPPP.

e. Conformance to this SWPPP is the minimum requirement. Modifications must be made as necessary to conform with the intent of the SWRCB Order No. 99 – 08 – DWQ and the NPDES General Permit No. CAS000002.

f. This document is not intended and cannot be relied upon to create rights, substantive or procedural, enforceable by any party in litigation with the United States.

g. The Owner is ultimately responsible for the Storm Water Discharge from this site. The Owner shall inform all Contractors, Subcontractor, Future Owners or any other Authorized Representatives of these SWPPP requirements.

h. All requirements of the Improvement Plan shall be incorporated into this plan by reference.

2. General Erosion Control Measures (based on specific plan):

Construction Phase Strategies, Activities, and Revegetation Plans to reduce short-term and long-term erosion and sedimentation, such as:

a. If excavation occurs during the rainy season, storm runoff shall be regulated by temporary onsite detention basins with multiple discharge points to natural drainages and wetlands. Stockpiles of loose material shall be covered and runoff shall be diverted away from exposed soil material. If work is stopped due to rains, a positive grading away from the slopes shall be provided to carry the surface runoff to areas to where flow can be controlled, such as temporary detention basins. Sediment basin/traps shall be designed with efficiency to trap the modal size of soil particles on the site and shall be located and operated to prevent offsite sediment transport. Any trapped sediment shall be reused or removed to an approved disposal site.

b. Temporary erosion control measures including the placement of properly trenched staked straw rolls and straw matting along the base of disturbed slopes and on drainage ways at the downstream site margins shall be provided until perennial revegetation or landscaping is established and can prevent discharge of sediment into drainages.

c. After completion of grading, erosion protection shall be provided on all slopes including cut and fill slopes to reduce erosion problems during the rainy season. Based on the greater chance of precipitation, permanent or temporary revegetation and/or erosion protection shall be installed within two days of grading sloped areas between November 1 and April 1. Revegetation should be facilitated by mulching, hydroseeding or other methods suitable for landscaping. Temporary revegetation shall use a local annual grass adapted to the naturally low rainfall amounts (e.g. Panoche Red Brome), and shall be continued until permanent revegetation is successfully established. Permanent revegetation /landscaping of slopes shall emphasize perennial ground coverings, shrubs, and trees that are drought-tolerant, including native species, to improve the probability of slope and soil stabilization.

3. Non-Storm Discharges:

This General Permit prohibits the discharge of materials other than storm water and authorized non-storm water discharges. It is recognized that certain non-storm water discharges may be necessary for the completion of construction projects. Such discharges include, but are not limited to, irrigation of vegetative erosion control measures, pipe flushing and testing, street cleaning, and dewatering. Such discharges are allowed by this General Permit provided they are not relied upon to clean up failed or inadequate construction or post-construction BMP's designed to keep materials onsite. These authorized non-storm water discharges shall (1) be infeasible to eliminate, (2) comply with BMP's as described in the SWPPP, and (3) not cause or contribute to a violation of water quality standards. Additionally, these discharges may be required to be permitted by the local RWQCB (e.g., some RWQCB's have adopted General Permits for dewatering discharges). This General Permit is performance-based to the extent that it prohibits the discharge of storm water that causes or threatens to cause pollution, contamination, or nuisance; but it also allows the owner/developer to determine the most economical, effective, and possibly innovative BMP's.

4. Inspections:

a. Weekly inspections shall be performed to verify the performance of BMP's.

b. The construction site shall be inspected prior to anticipated storm events and after actual storm events. During extended storm events, inspections must be made during each 24-hour period.

c. The goals of these inspections are (1) to identify areas contributing to a storm water discharge; (2) to evaluate whether measures to reduce pollutant loadings identified in the SWPPP are adequate and properly installed and functioning in accordance with the terms of the General Permit; and (3) whether additional control practices or corrective maintenance activities are needed. If additional control practices or corrective maintenance activities are determined to be required, they shall be implemented immediately, and the SWPPP updated if necessary.

d. Equipment, materials, and workers must be available for rapid response to failures and emergencies.

e. All corrective maintenance to BMP's shall be performed as soon as possible, depending upon worker safety.

f. These Inspections, along with corrective measures, must be documented, and the documentation must be filed within this SWPPP.

5. Training:

Individuals responsible for installation, inspection, maintenance, and repair of BMP's must be appropriately trained. Documentation of this training shall be filed within this SWPPP. At a minimum:

a. Employees and subcontractors, and those responsible for their installation, maintenance, and inspection shall read and have copies available during use, the appropriate BMP or ACTIVITY sheets from Appendix Q of this SWPPP.

b. Employees and subcontractors shall also be fully trained with this plan and all requirements of this plan and SWRCB Order No. 99 – 08 – DWQ and the NPDES General Permit No. CAS000002.

c. Weekly training meetings shall be held. At these meetings, BMP success and failures shall be discussed, as well as maintenance requirements. Responsible persons shall be assigned with appropriate tasks.

6. Entry:

The discharger shall allow the RWQCB, SWRCB, USEPA, and/or authorized representatives of the municipal operator of the separate storm sewer system receiving the discharge, upon the presentation of credentials and other documents as may be required by law, to enter construction site, access records, inspect construction site, and sample or monitor at reasonable times.

7. Maintenance of BMP's:

BMP's shall be maintained and operated such that they reduce or eliminate pollutants from exiting the site to the greatest extent possible. If selected BMP's are not working as required, the BMP installation must be improved, or new BMP's shall be selected. If construction operations change, the schedule changes or unexpected site conditions are encountered, the SWPPP must be reviewed to verify compliance with the General Permit requirements. If changes are needed, the SWPPP must be updated, amended, or revised to reflect those changes.

8. Compliance and Non-Compliance Reporting:

Discharger must certify annually that construction activities are in compliance with the requirements of the General Permit and the SWPPP. This Certification shall be based on the site inspections, and must be completed by July 1 of each year.

The discharger will give advance notice to the RWQCB and local storm water management agency of any planned changes in the construction activity which may result in noncompliance with General Permit requirements.

9. Monitoring Program for Sedimentation / Siltation:

This site is not located directly on a water body listed for turbidity, so it is not subject to sampling and analysis requirements for sedimentation or siltation based on RWQCB requirements.

10. Monitoring Program for Pollutants Not Visually Detectable in Storm Water:

The sampling and analysis program (section 600) may be required under certain conditions. Examples of construction sites that may require sampling and analysis include: sites that are known to have contaminants spilled or spread on the ground; sites where construction practices include the application of soil amendments, such as gypsum; or sites having uncovered stockpiles of material exposed to storm water. If there is a site discharge that could contain a pollutant, or if specifically requested by the RWQCB, then the sampling and analysis program must be implemented.

11. Penalties for Violations of Permit Conditions

a. Section 309 of the CWA provides significant penalties for any person who violates a permit condition implementing Sections 301, 302, 306, 307, 308, 318, or 405 of the CWA or any permit condition or limitation implementing any such section in a permit issued under Section 402. Any person who violates any permit condition of this General Permit is subject to a civil penalty not to exceed $27,500 per calendar day of such violation, as well as any other appropriate sanction provided by Section 309 of the CWA.

b. The Porter-Cologne Water Quality Control Act also provides for civil and criminal penalties which in some cases are greater than those under the CWA.

12. Oil and Hazardous Substance Spill

In the event of a Oil or Hazardous Substance Spill, An Oil Spill Report (included in Attachment T) shall be filled out and submitted as required.

13. Potential Pollutants

In the event of a significant spill, a significant spill report (included in Attachment T) shall be filled out and submitted as required. The Discharge Reporting Log in Attachment T must also be filled out. These as well as any other Potential Pollutant which may come in contact with Storm Water must be entered onto the Potential Pollutant form (included in Attachment T). At this time Contractor and/or Owner must verify with the Lahontan Regional Water Quality Control Board if testing will be required.

14. Construction Scheduling

Construction Scheduling based on Erosion Control BMP ES-1 shall be provided prior to construction activities.

Grading shall be limited as much as possible. Earth disturbing activities shall be between October 15 and April 15. During this time, the site shall be "Winterized". No graded areas shall be left unstabilized between October 15 and April 15.

The storm drain to collect offsite runoff shall be built prior to the earth disturbing activities.

General Interim Erosion Control Measures (Pre-Construction): (REFER TO APPENDIX Q FOR COMPLETE DESCRIPTION OF BMP'S)

1. Employee / Subcontractor Training: Responsible Managers, Inspectors Contractors, Subcontractors and Employees must be trained appropriately for the Installation, Maintenance and Inspection of BMP's. Proof of training shall be filed in the SWPPP.

2. Preservation of Existing Vegetation (EC-2): Native vegetation shall be retained, protected, and supplemented wherever possible. Exposure of soil areas shall be limited to the immediate area required for construction operations. The native vegetative ground cover shall not be destroyed, removed or disturbed more than 15 days prior to grading.

3. Grading areas shall be clearly marked and no equipment or vehicles shall disturb slopes or drainages outside of the grading area.

4. Contractor shall keep informed to potential weather conditions and Limit excavation and grading activities to the dry weather conditions. This reduces the chance of severe erosion from intense rainfall and surface runoff, as well as the potential for soil saturation in swale areas. Reduce the probability of significant wind erosion during the dry season, which would occur due to the wind regime and fine soils, by implementing a dust abatement program.

General Interim Erosion Control Measures (during construction): (REFER TO APPENDIX Q FOR COMPLETE DESCRIPTION OF BMP'S)

1. Employee / Subcontractor Training: Responsible Managers, Inspectors Contractors, Subcontractors and Employees must be trained appropriately for the Installation, Maintenance and Inspection of BMP's. Proof of training shall be filed in the SWPPP.

2. Efforts must be taken to reduce the tracking of sediment onto public or private roads at all times. Stabilized Construction Entrances (BMP TC-1, TC-2, and TC-3) must be maintained to reduce potential for tracking. Trucks shall not leave site with large amounts of dirt on truck, trailer or tires. Public and private roads shall be inspected and cleaned as necessary (BMP SC-7). Road cleaning operations must be done in such a way as to avoid the washing of accumulated sediment or silt into the storm drain system. Road cleaning operations must also avoid creating dust. Preferable methods of road cleaning include use of road sweepers with water applied prior to sweeping operation and a vacuum system to pick up dirt.

3. Preservation of Existing Vegetation (BMP EC-2): Native vegetation shall be retained, protected, and supplemented wherever possible. Exposure of soil areas shall be limited to the immediate area required for construction operations. The native vegetative ground cover shall not be destroyed, removed or disturbed more than 15 days prior to grading.

4. Limit excavation and grading activities to the dry weather conditions. (BMP EC-1) This reduces the chance of severe erosion from intense rainfall and surface runoff, as well as the potential for soil saturation in swale areas. Reduce the probability of significant wind erosion during the dry season, which would occur due to the wind regime and fine soils, by implementing a dust abatement program (BMP WE-1).

5. Water Conservation Practices shall used for this project (BMP NS-1).

6. Dewatering (BMP NS-2): Dewatering is not anticipated. If dewatering is performed, the contractor shall use sediment controls and test the groundwater for pollution, to prevent or reduce the discharge of pollutants to storm water.

7. Paving Operations (BMP NS-3): Contractor shall prevent or reduce the discharge of pollutants for paving operations, using measures to prevent runon and runoff pollution, properly disposing of wastes and training employees and subcontractors. Drainage courses shall be protected. An onsite mixing plant is not allowed by this SWPPP. A separate industrial activities permit would be required to allow an onsite mixing plant.

8. Vehicle and Equipment Cleaning (BMP NS-8): It is anticipated that offsite facilities shall be used for Equipment Cleaning. If vehicle and equipment cleaning operations are performed onsite, contractor shall conform to this BMP.

9. Vehicle and Equipment Fueling (BMP NS-9): It is anticipated that Vehicle and Equipment fueling will take place offsite. Contractor shall prevent fuel spills and leaks, and reduce their impacts to storm water by using offsite facilities, fueling in designated areas only, enclosing or covering stored fuel, implementing spill controls, and training employees and subcontractors. If vehicle and equipment fueling operations are performed onsite, contractor shall conform to this BMP.

10. Vehicle and Equipment Maintenance (BMP NS-10): Contractor shall prevent or reduce the discharge of pollutants to storm water from vehicle and equipment maintenance by running a "dry site". This involves using offsite facilities, performing work in designated areas only, providing cover for materials stored outside, checking for leaks and spills, containing and cleaning up spills immediately, and training employees and subcontractors. If vehicle and e quipment maintenance operations are performed onsite, contractor shall conform to this BMP.

11. Dust Control (BMP WE-1): Dust control measures shall be used to stabilize soil from wind erosion, and reduce dust generated by construction activities.

12. Material Delivery and Storage (BMP WM-01): Hazardous Materials storage onsite shall be minimized. Specific areas shall be designated for material storage. Designated areas shall not be near drainage paths or waterways. Materials (except soil, gravel and sand) shall not be stored on the ground (consider pallets). Stored materials shall be covered during rainy season, or when a storm is predicted within 24 hours.

13. Material Use (BMP WM-02): Use of hazardous materials; such as fertilizers, herbicides, and pesticides; shall be minimized. Alternate materials (non-hazardous) shall be used where possible and / or use of hazardous material shall be minimized. Employees and subcontractors shall be trained in the use of these materials. Do not over apply fertilizers, herbicides, and pesticides. Stockpile operations shall employ procedures and practices to reduce or eliminate air and stormwater pollution (BMP WM-03).

14. Spill Prevention and Control (BMP WM-04): Hazardous materials shall be protected from vandalism. Place stockpile of spill cleanup materials where it will be readily accessible. Employees shall be trained in spill prevention and cleanup. Designated responsible individual shall be available at all times Hazardous materials are stored onsite.

15. Solid Waste Management (BMP WM-05): Contractor shall prevent or reduce the discharge of pollutants to storm water from solid or construction waster by providing designated waste collection areas and containers, arranging for regular disposal, and training employees and subcontractors.

16. Hazardous Waste Management (BMP WM-06): Hazardous waste materials shall be removed from the site at the earliest convenience. Prevent or reduce the discharge of pollutants to storm water from hazardous waste through proper material use, waste disposal, and training of employees and subcontractors.

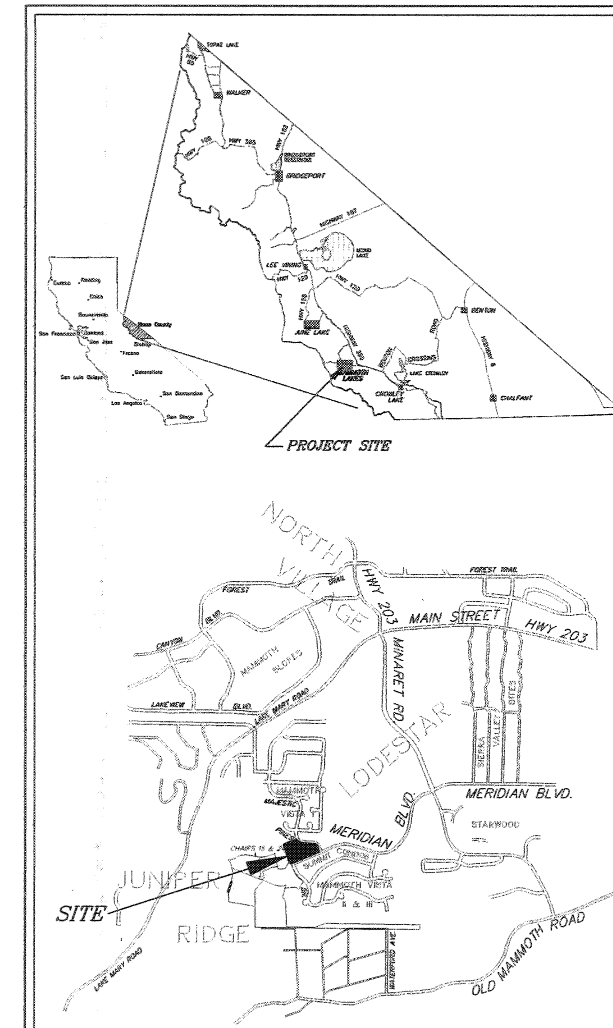
17. Contaminated Soil Management (BMP WM-07): Contaminated soil is not anticipated. Should contaminated soil be encountered, notify the RWQCB and the engineer, and prevent or reduce the discharge of pollutants to storm water from contaminated and highly acidic or alkaline soils by conducting pre-construction surveys, inspecting excavations regularly, and remediating contaminated soil promptly.

18. Concrete Waste Management (BMP WM-08): Whenever possible, concrete washout shall occur offsite. When it must occur onsite, an area must be designated, and employees and subcontractors must be trained in its use. If onsite, a concrete washout must be at least 50 feet from storm drains, open ditches or water bodies. No runoff is allowed from this site. Washout must go into a temporary pit where the concrete can set, be broken up and then disposed of properly.

19. Sanitary / Septic Waster Management (BMP WM-09): Sanitary / septic facilities shall be placed in convenient locations, at least 50 feet from any drainage path. They shall be inspected regularly. Contractor shall arrange for regular waste collection. Untreated raw wastewater shall never be discharged or buried. Portable sanitary facilities must be secured to prevent overturning.

20. Structure Construction and Painting: Contractor shall prevent or reduce the discharge of pollutants to storm water by enclosing or covering or berming building materials storage areas, using good housekeeping practices, using safer alternative products where possible, and training employees and subcontractors.

STORM WATER POLLUTION PREVENTION PLAN (SWPPP) EAGLE LODGE BASE AREA MAMMOTH LAKES, MONO COUNTY, CALIFORNIA



LOCATION MAPS

SWPPP INDEX

SHEET 1 – COVER AND NOTES
SHEET 2 – SWPPP PLAN

ENGINEER OF RECORD
TRIAD/HOLMES ASSOCIATES
P.O. BOX 1570
MAMMOTH LAKES, CA 93546
760-934-7588

PROPERTY LOCATION
WEST END OF MERIDIAN BOULEVARD
MONO COUNTY
MAMMOTH LAKES, CA 93546

SURVEYOR
TRIAD/HOLMES ASSOCIATES
P.O. BOX 1570
MAMMOTH LAKES, CA 93546
760-934-7588

RECORD OWNER
MAMMOTH MOUNTAIN SKI AREA
ATTN. TOM HODGES
P.O. BOX 24
MAMMOTH LAKES, CA 93546
760-934-2571 EXT. 3243

GEOTECHNICAL ENGINEER
SIERRA GEOTECHNICAL SERVICES
P.O. BOX 5024
MAMMOTH LAKES, CA 93546
760-934-3992

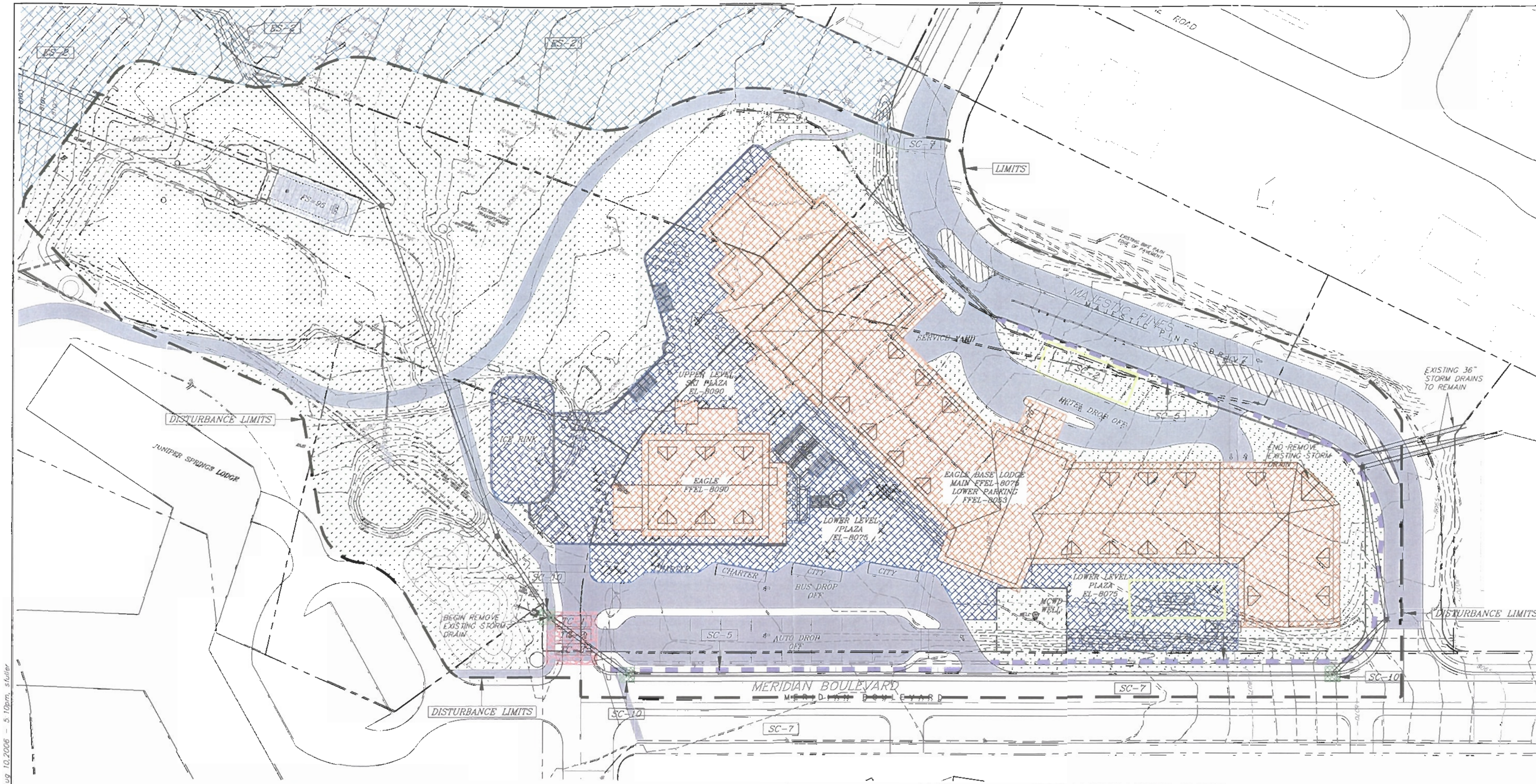
MAMMOTH

triad/holmes assoc.
civil engineering
land surveying
MAMMOTH LAKES
BISHOP
LOMPOC
NAPA
PLEASANTON
REDWOOD CITY
SAN LUIS OBISPO

PREPARED FOR:
MAMMOTH MOUNTAIN SKI AREA
ATTN. TOM HODGES
P.O. BOX 24
MAMMOTH LAKES, CA 93546
760-934-2571 EXT. 3243

EROSION CONTROL NOTES AND
GENERAL INTERIM EROSION CONTROL MEASURES
EAGLE LODGE BASE AREA

DATE 08/10/2006
SCALE 1"=40'
DRAWN SMF
JOB NO. 1737.2
DWG. SWPPP1
SHEET 3 OF 4



SYMBOL	No.	TEMPORARY EROSION CONTROL MEASURE
SEE SWPPP1	ES-1	SCHEDULING (BMP ES-1)
	ES-2	PRESERVATION OF EXISTING VEGETATION (BMP ES-2)
SEE SWPPP1	ES-3	HYDRAULIC MULCH (BMP ES-3)
SEE SWPPP1	ES-4	HYDROSEEDING (BMP ES-4)
SEE SWPPP1	ES-7	GEOTEXTILES & MATS (BMP ES-7)
SEE SWPPP1	ES-9	EARTH DIKES & DRAINAGE SWALES (ES-9)
	SC-2	SEDIMENT BASIN (BMP SC-2)
SEE SWPPP1	SC-3	SEDIMENT TRAP (BMP SC-3)
SEE SWPPP1	SC-4	CHECK DAM (BMP SC-4)
	SC-5	INSTALL FIBER ROLLS OR POTENTIAL ALTERNATIVE AT LIMIT OF CONSTRUCTION PRIOR TO EARTH DISTURBING OPERATIONS (BMP SC-5)
SEE SWPPP1	SC-7	PERFORM STREET SWEEPING AND VACUUMING AS REQUIRED (BMP SC-7)
	SC-10	STORM DRAIN INLET PROTECTION (BMP SC-10)
SEE SWPPP1	WE-1	WIND EROSION CONTROL (BMP WE-1)
	TC-1	STABILIZED CONSTRUCTION ENTRANCE (BMP TC-1)

SYMBOL	No.	TEMPORARY EROSION CONTROL MEASURE
	TC-2	STABILIZED CONSTRUCTION ROADWAY (BMP TC-2)
	TC-3	ENTRANCE/OUTLET TIRE WASH (BMP TC-3)
SEE SWPPP1	NS-1	WATER CONSERVATION PRACTICES (BMP NS-1)
SEE SWPPP1	NS-2	DEWATERING OPERATIONS (BMP NS-2)
SEE SWPPP1	NS-3	PAVING AND GRINDING OPERATIONS (BMP NS-3)
SEE SWPPP1	NS-6	ILLICIT CONNECTION/DISCHARGE (BMP NS-6)
SEE SWPPP1	NS-8	VEHICLE AND EQUIPMENT CLEANING (BMP NS-8)
SEE SWPPP1	NS-9	VEHICLE AND EQUIPMENT FUELING (BMP NS-9)
SEE SWPPP1	NS-10	VEHICLE AND EQUIPMENT MAINTENANCE (BMP NS-10)
SEE SWPPP1	NS-12	CONCRETE CURING (BMP NS-12)
SEE SWPPP1	NS-13	CONCRETE FINISHING (BMP NS-13)
SEE SWPPP1	NS-15	DEMOLITION ADJACENT TO WATER (BMP NS-15)
SEE SWPPP1	WM-1	MATERIAL DELIVERY AND STORAGE (BMP WM-1)
SEE SWPPP1	WM-2	MATERIAL USE (BMP WM-2)
SEE SWPPP1	WM-3	STOCKPILE MANAGEMENT (WM-3)

SYMBOL	No.	TEMPORARY EROSION CONTROL MEASURE
SEE SWPPP1	WM-4	SPILL PREVENTION AND CONTROL (BMP WM-4)
SEE SWPPP1	WM-5	SOLID WASTE MANAGEMENT (BMP WM-5)
SEE SWPPP1	WM-6	HAZARDOUS WASTE MANAGEMENT (BMP WM-6)
SEE SWPPP1	WM-8	CONCRETE WASTE MANAGEMENT (BMP WM-8)
SEE SWPPP1	WM-9	SANITARY/SEPTIC WASTE MANAGEMENT (BMP WM-9)

IMPERVIOUS AREAS

	PLAZA AREAS - 51,485 SQUARE FEET
	BUILDING AREAS - 71,483 SQUARE FEET
	PAVED AREAS - 85,525 SQUARE FEET
	LANDSCAPED AREAS - 196,791 SQUARE FEET

GRAPHIC SCALE

(IN FEET)
1 inch = 40 ft.

SCALE: 1"=40' 22"x34" SHEET
(SEE SCALE BAR ABOVE)
SCALE: 1"=80' 11"x17" SHEET
CONTOUR INTERVAL: 1'

MAMMOTH

K:\01 Mammoth\1737-2 Grading Plan\1737-2 Grading Plan R5.dwg Aug 10,2006 - 5:10pm, sfuller

triad/holmes assoc.
civil engineering
land surveying
MAMMOTH LAKES
BISHOP
LOMPOC
NAPA
PLEASANTON
REDWOOD CITY
SAN LUIS OBISPO

PREPARED FOR:
MAMMOTH MOUNTAIN SKI AREA
ATTN: TOM HODGES
P.O. BOX 24
MAMMOTH LAKES, CA 93546
760-934-2571 EXT. 3243

EROSION CONTROL PLAN & STORMWATER MANAGEMENT PLAN
EAGLE LODGE BASE AREA

DATE 08/10/2006
SCALE 1"=40'
DRAWN SMF
JOB NO. 1737.2
DWG SWPPP2
SHEET 2 OF 4

Attachment C

BMP Consideration Checklist – Eagle Lodge

CONSTRUCTION SITE BMPs CONSIDERATION CHECKLIST					
The BMPs listed here should be considered for every project. Those BMPs that are not included in the SWPPP must be checked as "Not Used" with a brief statement describing why it is not being used.					
EROSION CONTROL BMPs					
BMP No.	**BMP**	**CONSIDERED FOR PROJECT**	**CHECK IF USED**	**CHECK IF NOT USED**	**IF NOT USED, STATE REASON**
ES-1	Scheduling	☑	☑		
ES-2	Preservation of Existing Vegetation	☑	☑		
ES-3	Hydraulic Mulch	☑	☑		
ES-4	Hydroseeding	☑	☑		
ES-5	Soil Binders	☑		☑	Water will be used in lieu of Soil Binders
ES-6	Straw Mulch	☑		☑	This product is typically avoided in our area due to potential to be carried by wind
ES-7	Geotextiles & Mats	☑	☑		
ES-8	Wood Mulching	☑		☑	This product will not be used due to potential to introduce unwanted species
ES-9	Earth Dikes & Drainage Swales	☑	☑		
ES-10	Velocity Dissipation Devices	☑		☑	This project does not have any storm drain outlets that would produce high velocities
ES-11	Slope Drains	☑		☑	This project does not have steep sloped areas

CONSTRUCTION SITE BMPs CONSIDERATION CHECKLIST

The BMPs listed here should be considered for every project. Those BMPs that are not included in the SWPPP must be checked as "Not Used" with a brief statement describing why it is not being used.

BMP No.	BMP	CONSIDERED FOR PROJECT	CHECK IF USED	CHECK IF NOT USED	IF NOT USED, STATE REASON
SEDIMENT CONTROL BMPs					
SC-1	Silt Fence	☑		☑	This project is located in view shed and we are generally directed to avoid this product in lieu of SC-5
SC-2	Sediment Basin	☑	☑		
SC-3	Sediment Trap	☑	☑		
SC-4	Check Dam	☑	☑		
SC-5	Fiber Rolls	☑	☑		
SC-6	Gravel Bag Berm	☑		☑	Will be avoided in lieu of Fiber Rolls
SC-7	Street Sweeping and Vacuuming	☑	☑		
SC-8	Sand Bag Barrier	☑		☑	Sand Bag Barriers have more potential of harm than good
SC-9	Straw Bale Barrier	☑		☑	Has been noted by RWQCB personnel to us that this is not preferred BMP
SC-10	Storm Drain Inlet Protection	☑	☑		
WIND EROSION CONTROL BMPs					
WE-1	Wind Erosion Control	☑	☑		
TRACKING CONTROL BMPs					
TC-1	Stabilized Construction Entrance/Exit	☑	☑		
TC-2	Stabilized Construction Roadway	☑	☑		
TC-3	Entrance/Outlet Tire Wash	☑	☑		

CONSTRUCTION SITE BMPs CONSIDERATION CHECKLIST

The BMPs listed here should be considered for every project. Those BMPs that are not included in the SWPPP must be checked as "Not Used" with a brief statement describing why it is not being used.

NON-STORM WATER MANAGEMENT BMPs

BMP No.	BMP	CONSIDERED FOR PROJECT	CHECK IF USED	CHECK IF NOT USED	IF NOT USED, STATE REASON
NS-1	Water Conservation Practices	☑	☑		
NS-2	Dewatering Operations	☑	☑		
NS-3	Paving and Grinding Operations	☑	☑		
NS-4	Temporary Stream Crossing	☑		☑	There will be no temporary stream crossings
NS-5	Clear Water Diversion	☑		☑	There will be no clear water diversions
NS-6	Illicit Connection/ Discharge	☑	☑		
NS-7	Potable Water/Irrigation	☑		☑	There will be no Potable water / irrigation discharges for this work
NS-8	Vehicle and Equipment Cleaning	☑	☑		
NS-9	Vehicle and Equipment Fueling	☑	☑		
NS-10	Vehicle and Equipment Maintenance	☑	☑		
NS-11	Pile Driving Operations	☑		☑	There will be no pile driving operations
NS-12	Concrete Curing	☑	☑		
NS-13	Concrete Finishing	☑	☑		
NS-14	Material and Equipment Use Over Water	☑		☑	There will not be material usage or equipment usage over water
NS-15	Demolition Adjacent to Water	☑	☑		
NS-16	Temporary Batch Plants	☑		☑	There will not be a temporary batch plant on site

CONSTRUCTION SITE BMPs
CONSIDERATION CHECKLIST

The BMPs listed here should be considered for every project. Those BMPs that are not included in the SWPPP must be checked as "Not Used" with a brief statement describing why it is not being used.

WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL BMPs

BMP No.	BMP	CONSIDERED FOR PROJECT	CHECK IF USED	CHECK IF NOT USED	IF NOT USED, STATE REASON
WM-1	Material Delivery and Storage	☑	☑		
WM-2	Material Use	☑	☑		
WM-3	Stockpile Management	☑	☑		
WM-4	Spill Prevention and Control	☑	☑		
WM-5	Solid Waste Management	☑	☑		
WM-6	Hazardous Waste Management	☑	☑		
WM-7	Contaminated Soil Management	☑		☑	There are no known contaminated soils on site
WM-8	Concrete Waste Management	☑	☑		
WM-9	Sanitary/Septic Waste Management	☑	☑		
WM-10	Liquid Waste Management	☑		☑	Project will not produce Liquid Waste of the type identified in WM10

Attachment G

Program for Maintenance, Inspection, and Repair of Construction Site BMPs

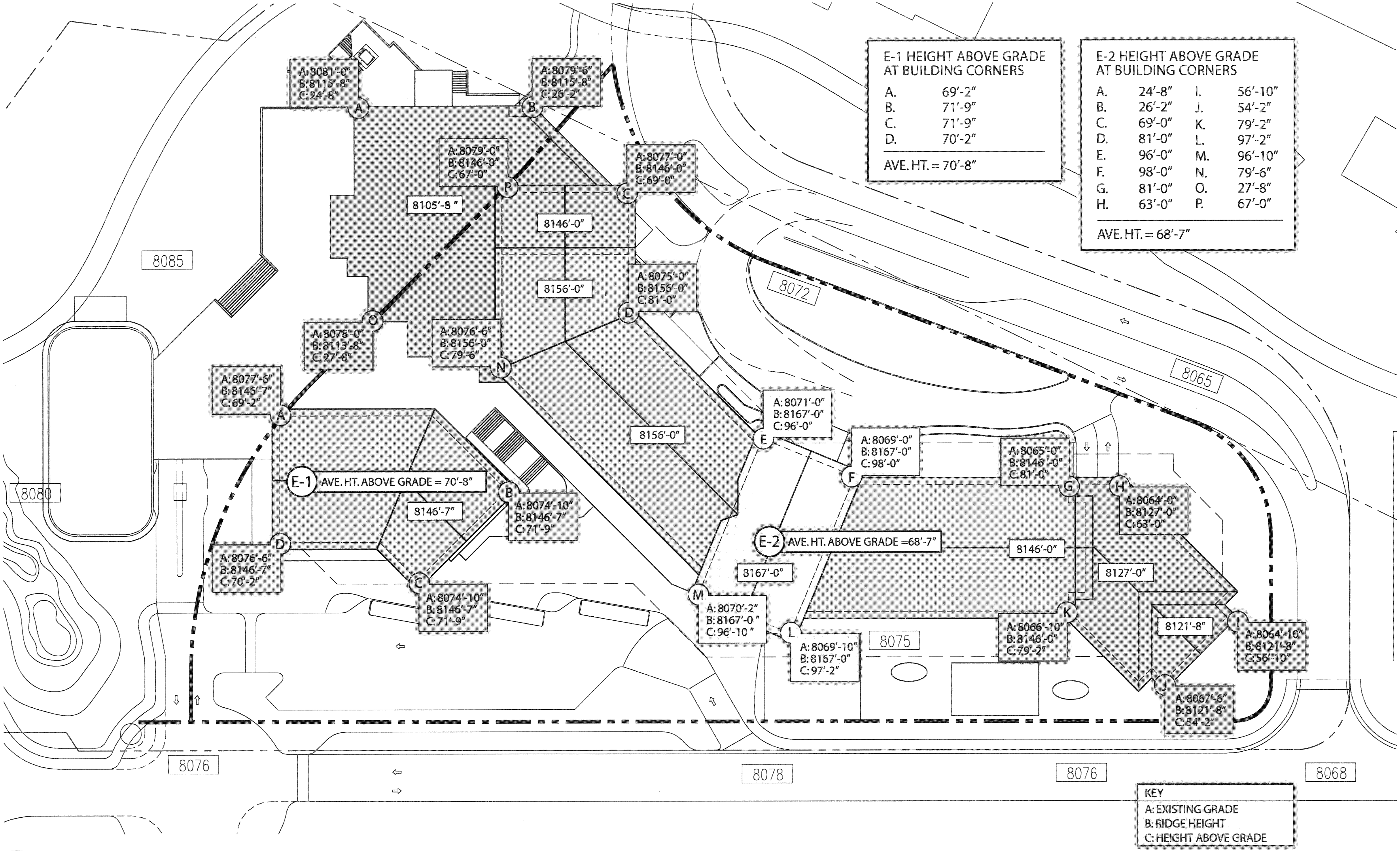
The contractor shall use the following guidelines for maintenance, inspection, and repair of BMPs identified in the SWPPP		
BEST MANAGEMENT PRACTICES (BMPs)	**INSPECTION FREQUENCY (all controls)**	**MAINTENANCE/REPAIR PROGRAM (also see attachment Q)**
	TEMPORARY EROSION CONTROL BMPs	
ES-1 - Scheduling	• Continuous	■ Coordinate work
ES-2 - Preservation of Existing Vegetation	• Bi- weekly during dry season and weekly during wet	■ Inspect existing vegetation and any barrier fence replace as needed
ES-3 – Hydraulic Mulch ES-4 – Hydroseeding ES-7 – Geotextiles & Mats	• Bi- weekly during dry season and weekly during wet • Prior to forecast rain event • Every 24 hr during rain event • After rain event	■ Areas where erosion is evident shall be repaired and BMPs re-applied as soon as possible. Care shall be taken to minimize damage to protected areas. Where seed fails to germinate, area must be re-seeded.
ES-9 – Earth Dikes & Drainage Swales	• Bi- weekly during dry season and weekly during wet • Prior to forecast rain event • Every 24 hr during rain event • After rain event	■ Inspect ditches swales and berms for washouts. Replace lost or damaged linings as needed ■ Inspect channel linings, beds of ditches and swales. Remove debris and sediment and repair linings as needed. ■ Temporary conveyances should be completely removed as soon as the surrounding drainage area has been stabilized or at the completion of construction.

The contractor shall use the following guidelines for maintenance, inspection, and repair of BMPs identified in the SWPPP		
BEST MANAGEMENT PRACTICES (BMPs)	**INSPECTION FREQUENCY (all controls)**	**MAINTENANCE/REPAIR PROGRAM (also see attachment Q)**
TEMPORARY SEDIMENT CONTROL BMPs		
SC-2 – Sediment Basin SC-3 – Sediment Trap	• Bi- weekly during dry season and weekly during wet • Prior to forecast rain event • Every 24 hr during rain event • After rain event	■ Inspect banks for seepage and structural soundness, repair as needed ■ Inspect inlet and outlet structure and spillway for any erosion, damage or obstructions. Repair damage and remove obstructions as needed. ■ Inspect for standing water, corrective measures should be taken if BMP does not dewater completely in 72 hours. ■ Remove sediment load and vegetation and repair damaged BMP per Attachment Q for each BMP. ■ Remove BMP when no longer needed ■ BMPs that require dewatering shall be continuously attended while dewatering takes place. Dewatering BMPs shall be implemented at all times during dewatering activities.
SC-4 - Check Dam SC-5 - Fiber Rolls SC-10 - Storm Drain Inlet Protection	• Bi- weekly during dry season and weekly during wet • Prior to forecast rain event • Every 24 hr during rain event • After rain event	■ Remove sediment load and repair damaged BMP per Attachment Q for each BMP. ■ Remove BMP when no longer needed
SC-7 - Street Sweeping	• Daily during construction activities	■ Inspect site access points, sweep as needed
WIND EROSION CONTROL BMPs		
WE-1 - Wind Erosion Control	• Daily during construction activities • Bi-weekly when project not under construction	■ Apply adequate water to contol dust without causing soil erosion per Attachment Q for WE-1 ■ During non construction periods, if dust becomes a problem, soil palliatives should be considered for disturbed areas.
TRACKING CONTROL BMPs		
TC-1 – Stabilized Construction Entrance / Exit	• Weekly or sooner depending on weather and usage during construction activities • Bi-weekly when project not under construction	■ Clean or replace rock as needed to eliminate excessive soil accumulation, see Attachment Q for TC-1
TC-2 – Stabilized Construction Roadway	• Weekly or sooner depending on weather and usage during construction activities • Bi-weekly when project not under construction	■ This will be installed, if it is determined necessary during construction ■ Maintain as needed per Attachment Q for TC-2

The contractor shall use the following guidelines for maintenance, inspection, and repair of BMPs identified in the SWPPP		
BEST MANAGEMENT PRACTICES (BMPs)	**INSPECTION FREQUENCY (all controls)**	**MAINTENANCE/REPAIR PROGRAM (also see attachment Q)**
TC-3 – Entrance/Outlet Tire Wash	• Weekly or sooner depending on weather and usage during construction activities (if installed) • Bi-weekly when project not under construction (if installed)	■ This will be installed, if it is determined necessary during construction ■ Clean as needed to eliminate excessive soil accumulation see Attachment Q for TC-3
NON-STORM WATER MANAGEMENT BMPs		
NS-1 – Water Conservation NS-2 – Dewatering Operations NS-3 – Paving and Grinding Operations NS-6 – Illicit Connection / Discharge NS-8 – Vehicle and Equipment Cleaning NS-9 – Vehicle and Equipment Fueling NS-10 – Vehicle and Equipment Maintenance NS-12 – Concrete Curing NS-13 – Concrete Finishing NS-15 – Demolition Adjacent to Water	• Inspect and verify that activity based BMPs are in place prior to the commencement of associated activities • Weekly or sooner depending on weather and usage during construction activities • Inspect BMPs subject to non-stormwater discharges daily while non-stormwater discharges occur.	■ Check Attachment Q for the requirements for each NS BMP ■ No construction materials or equipment shall be left on site during periods of no construction activity with the exception of materials for use in implementing BMPs
WASTE MANAGEMENT AND MATERIALS POLLUTION CONTROL BMPs		
WM-1 – Material Delivery & Storage WM-2 – Material Use WM-3 – Stockpile Management WM-4 – Spill Prevention and Control WM-5 – Solid Waste Management WM-6 – Hazardous Waste Management WM-8 – Concrete Waste Management WM-9 – Sanitary / Septic Waste Management	• Weekly or sooner depending on weather and usage during construction activities	■ Implement and maintain these BMPs in accordance with the information provided by Attachment Q for each WM BMP ■ No construction materials or equipment shall be left on site during periods of no construction activity with the exception of materials for use in implementing BMPs

Appendix I

Site Plan, Height Analysis, Visual Simulation, and Detailed Shade/Shadow Analysis for Alternate Design Alternative



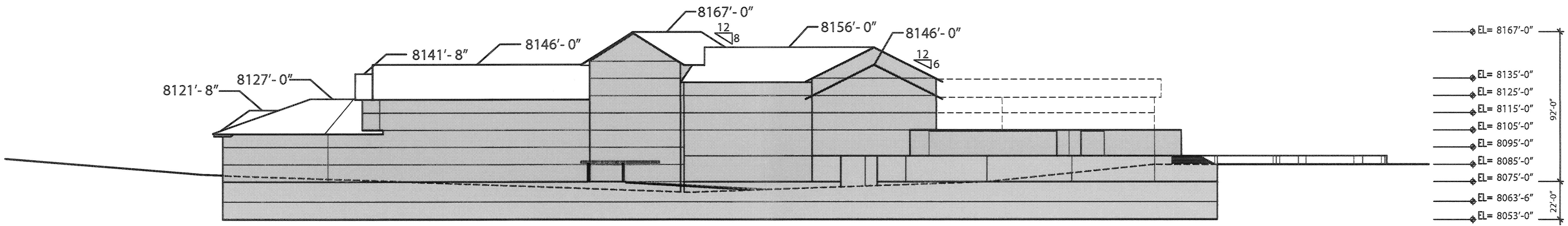
EAGLE LODGE BASE AREA

Mammoth Lakes, CA

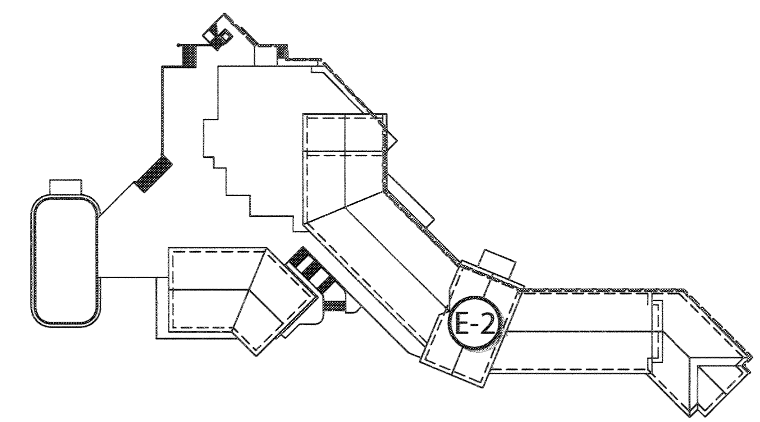
ALTERNATIVE 3 – ALTERNATE DESIGN ALTERNATIVE
ROOF RIDGE HEIGHTS ABOVE GRADE

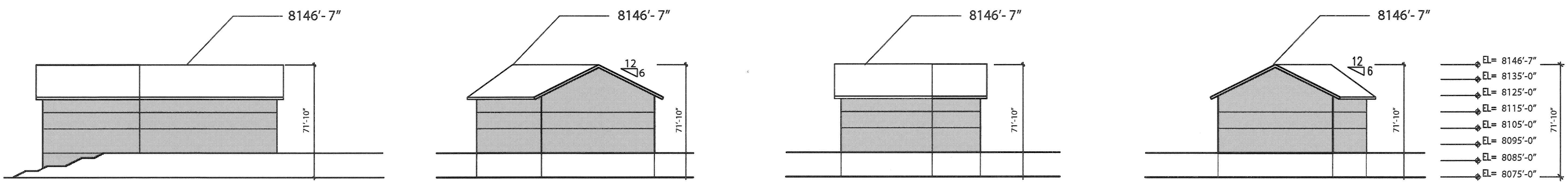
August 10, 2006

Gensler

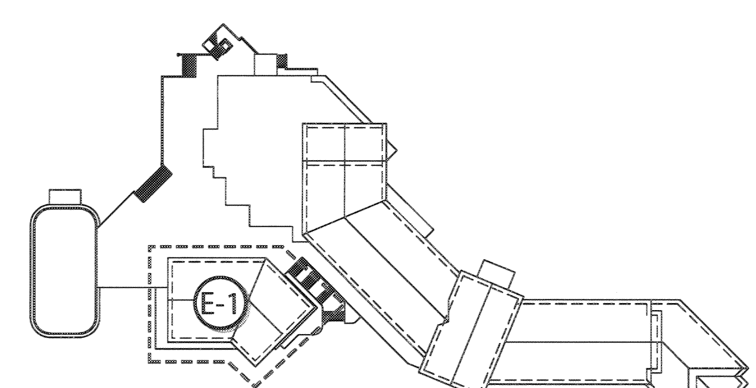


E-2 BUILDING NORTH ELEVATION





NORTH ELEVATION | EAST ELEVATION | SOUTH ELEVATION | WEST ELEVATION



ALTERNATIVE 3 – ALTERNATE DESIGN ALTERNATIVE
BUILDING HEIGHTS

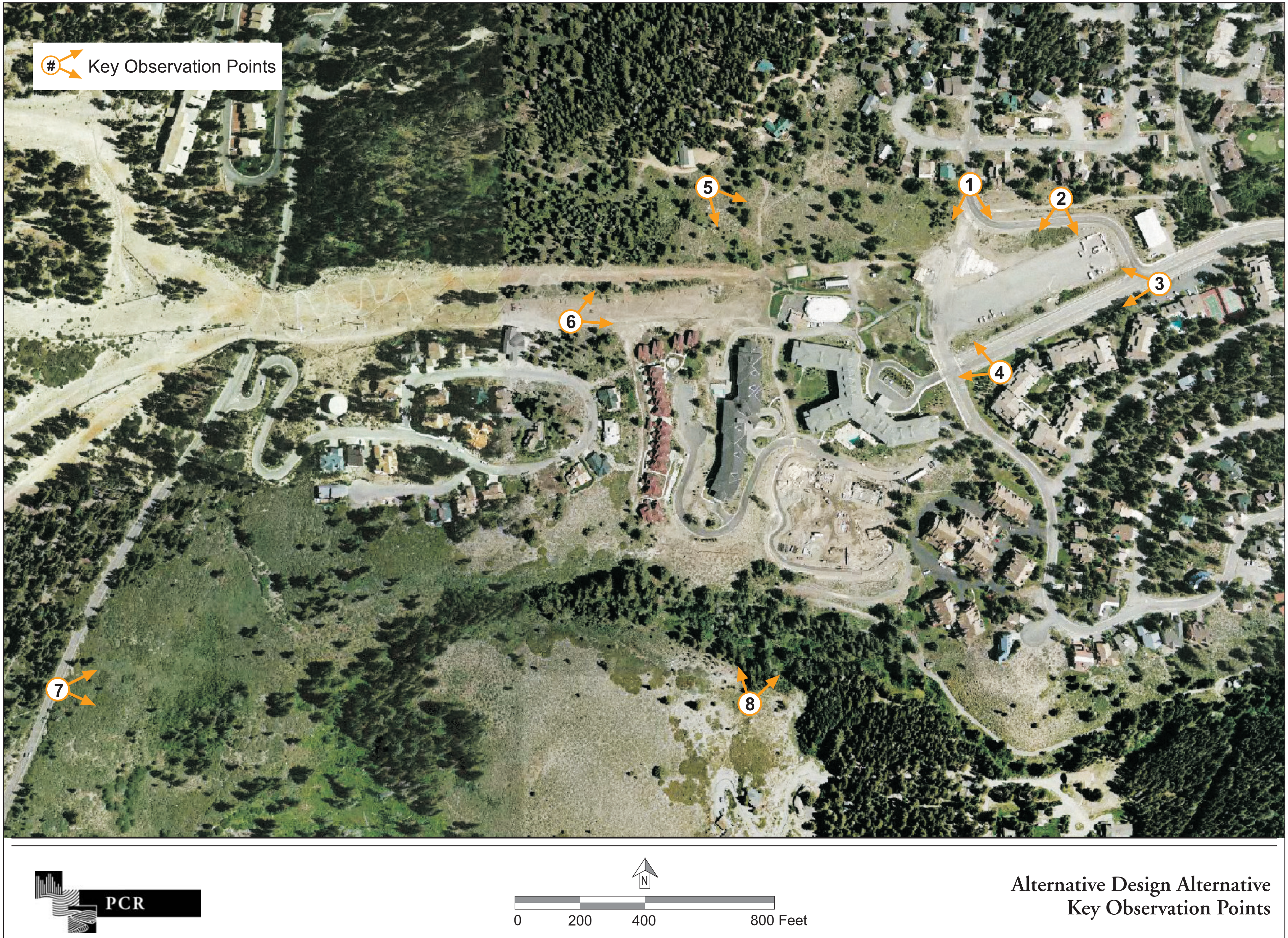
EAGLE LODGE BASE AREA

Mammoth Lakes, CA

Preliminary Height Analysis

August 10, 2006

Gensler

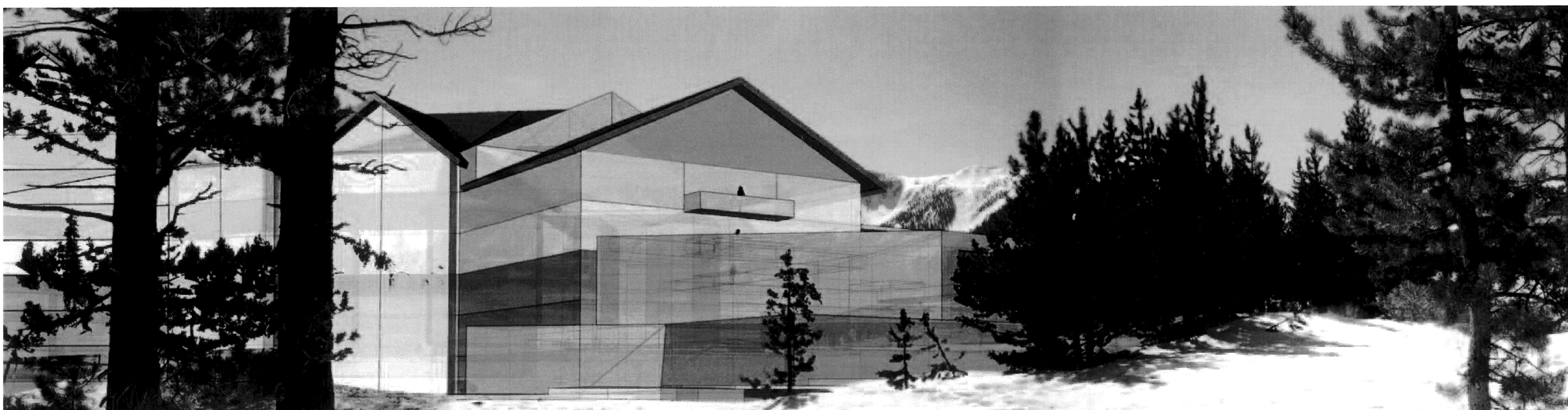


Source: PCR Services Corporation, 2006.

Alternative Design Alternative
Key Observation Points

vantage point 01

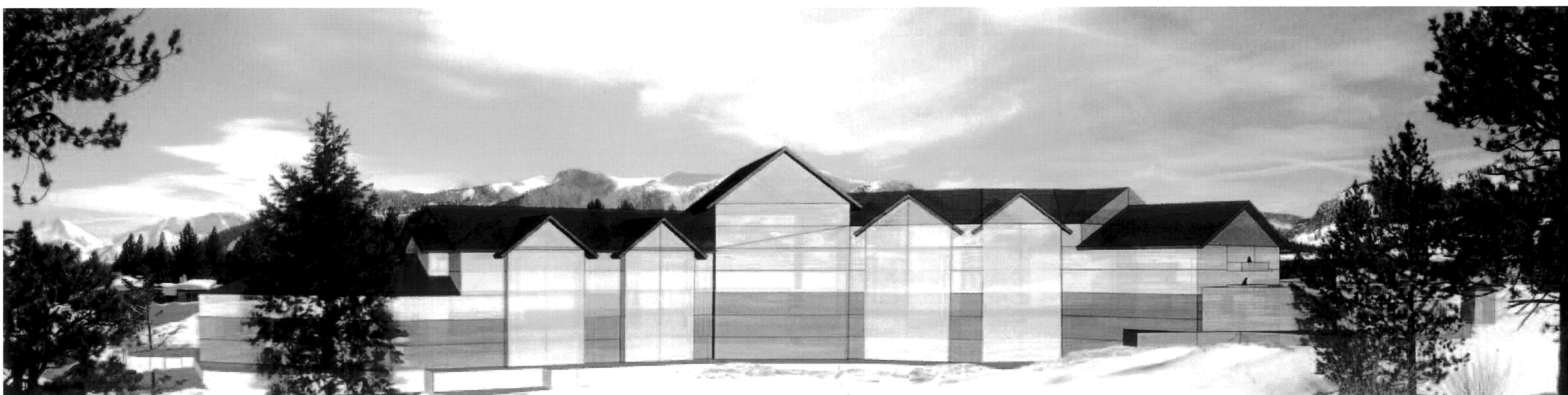
before



after

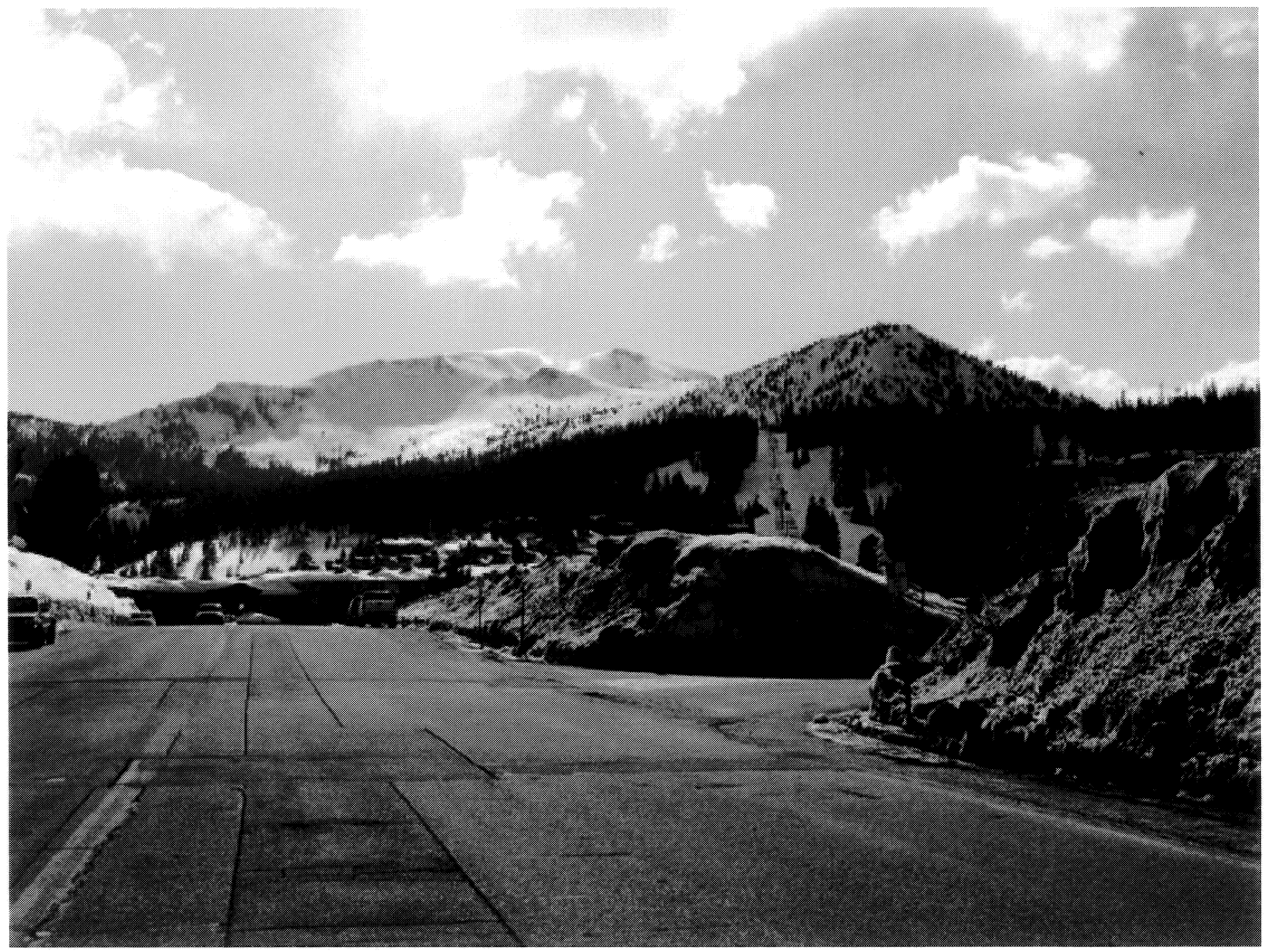
vantage point 02

before



after

vantage point 03



before

after

vantage point 04

before

after

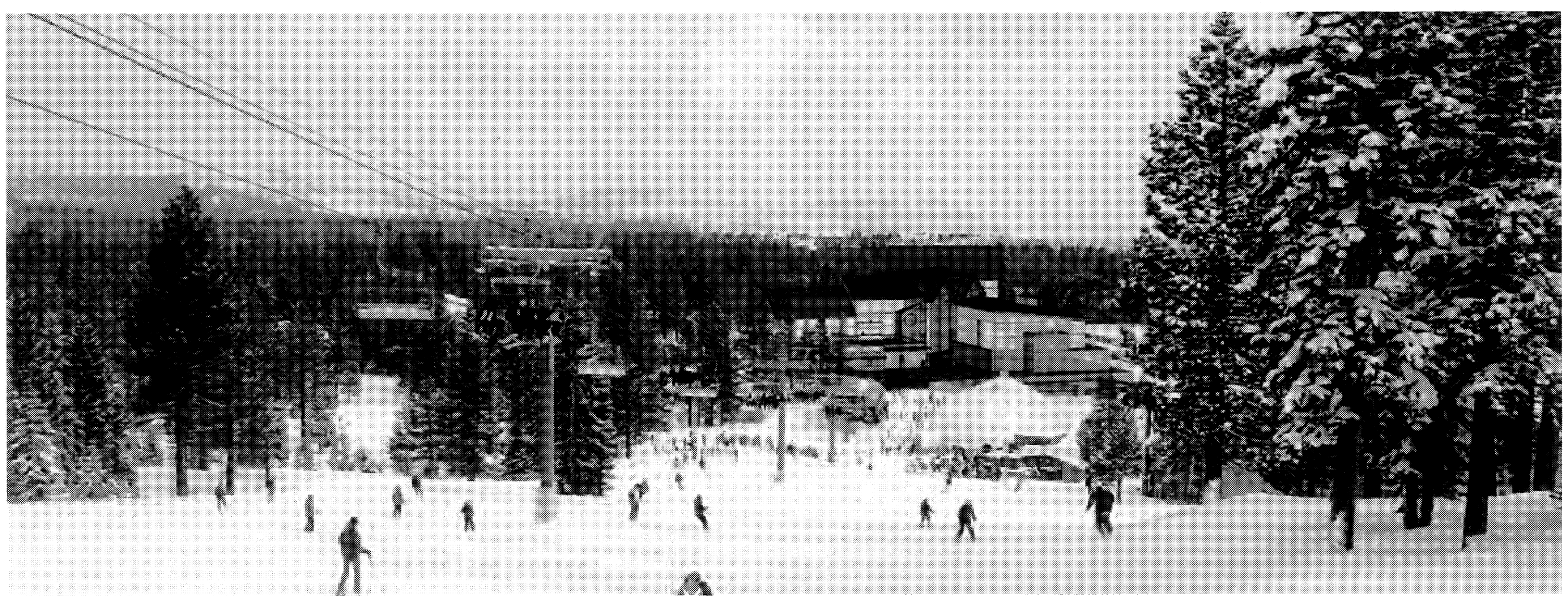
vantage point 05

before

after

vantage point 06

before



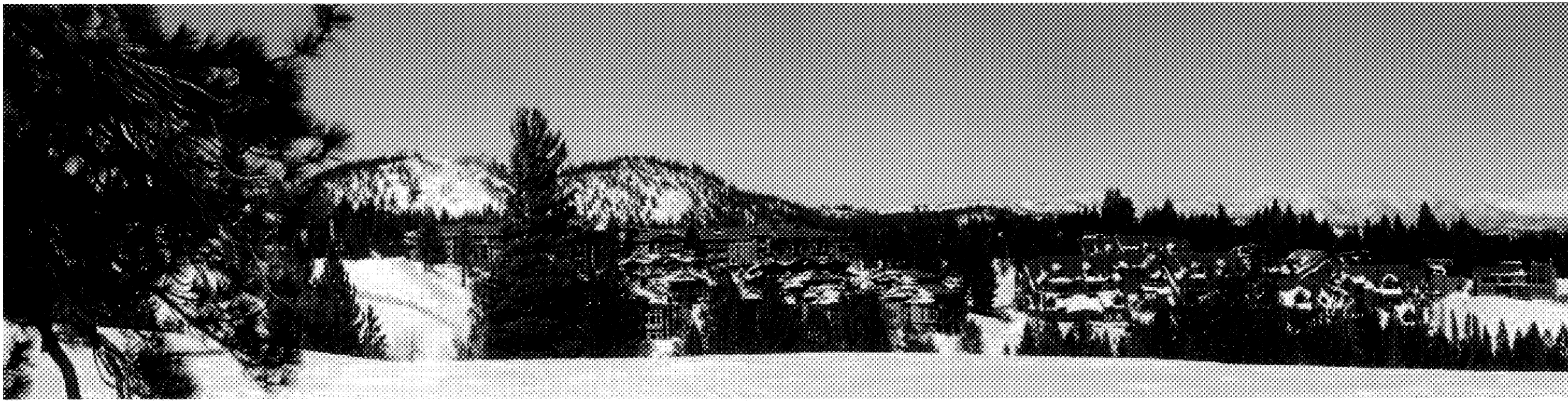
after

vantage point 07

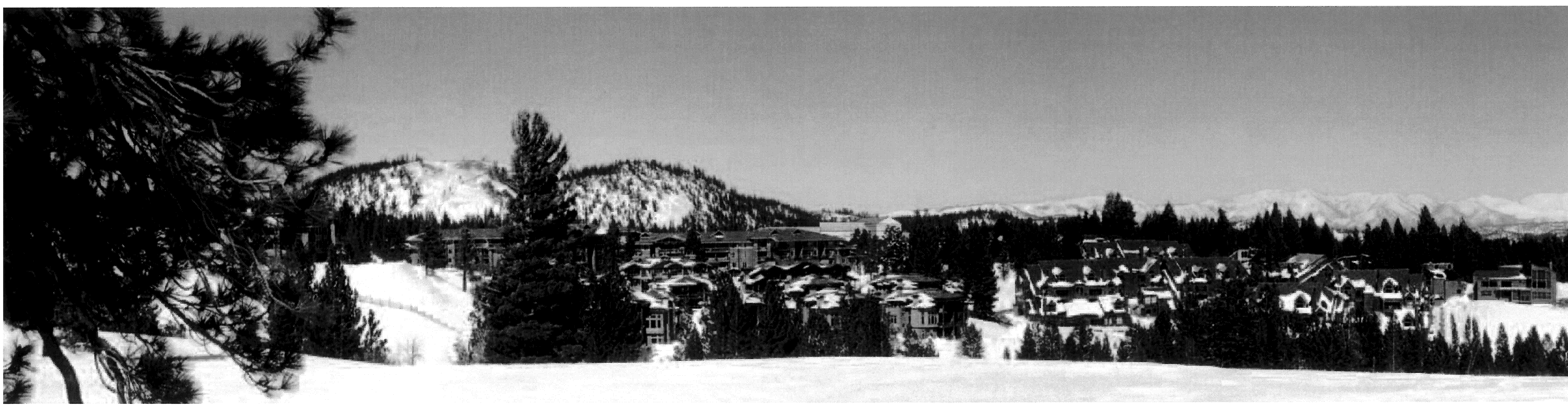
before

after

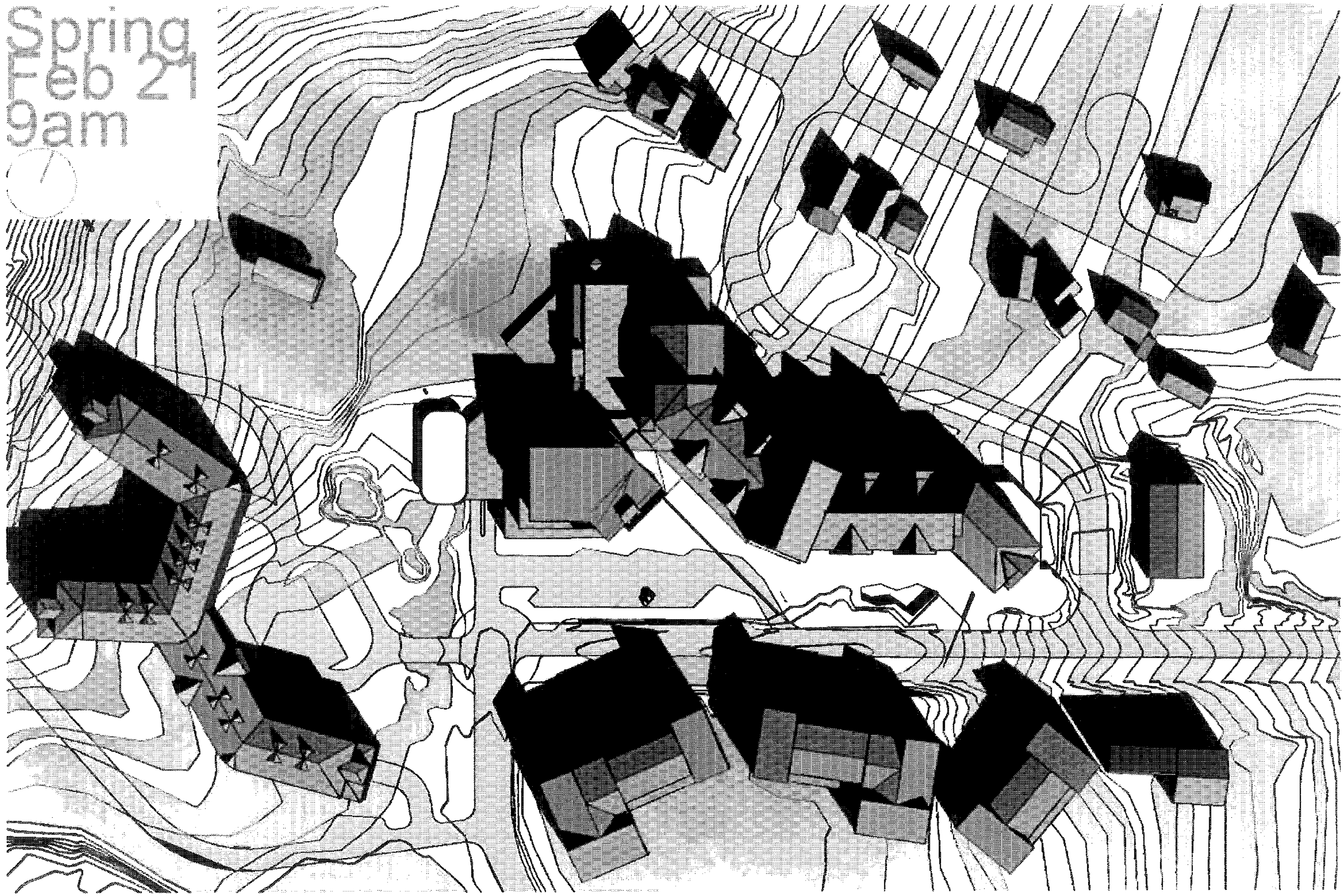
vantage point 08

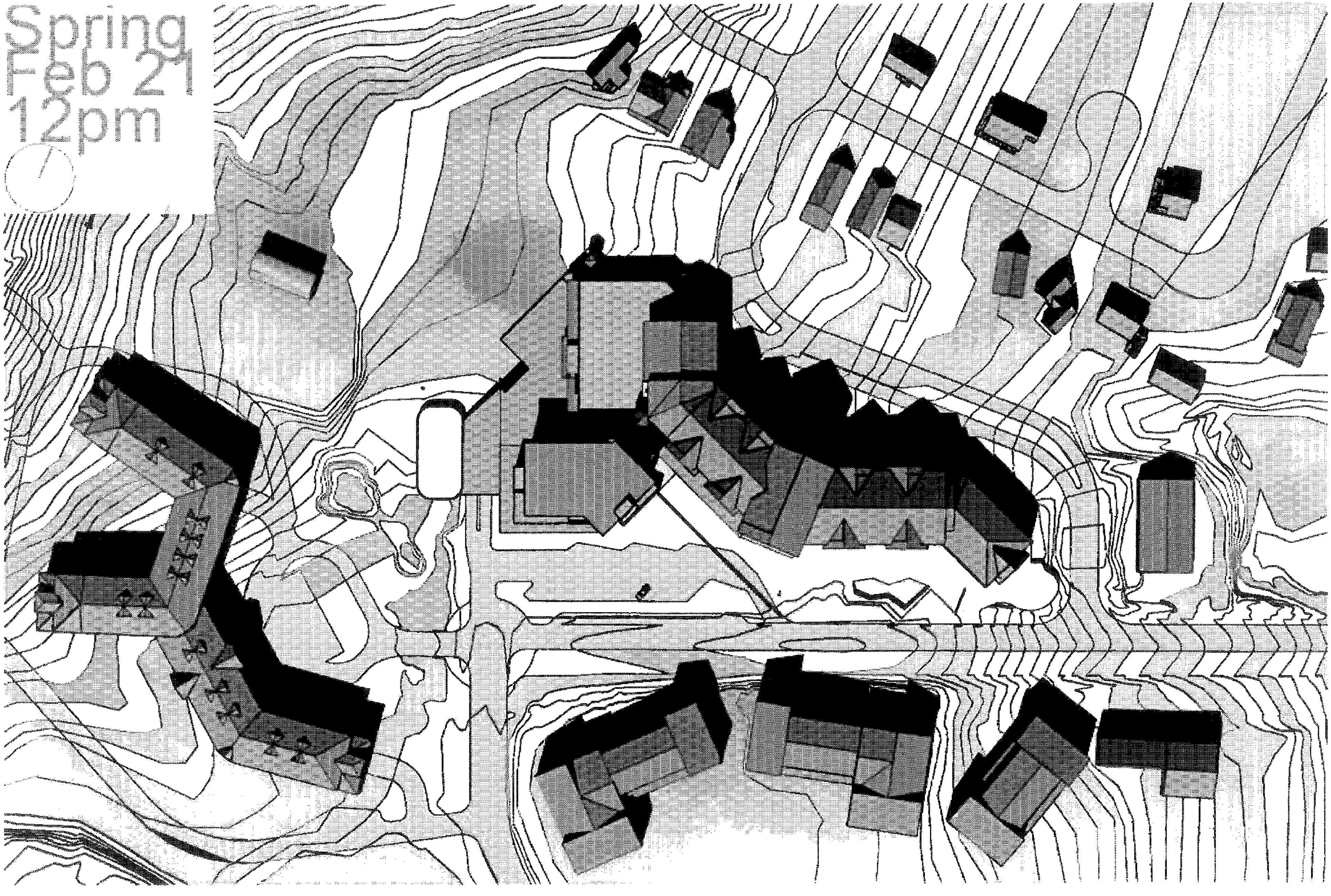


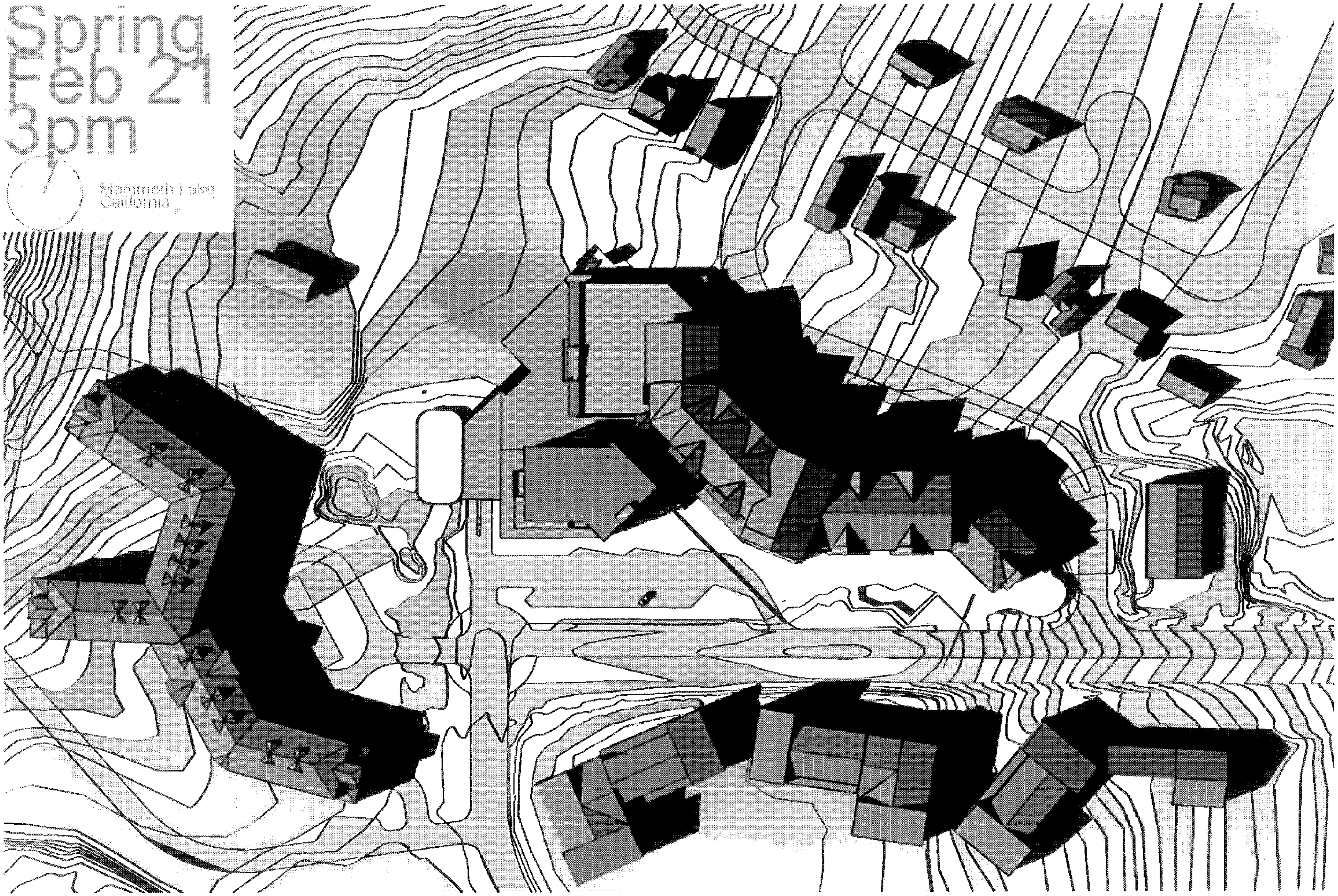
before

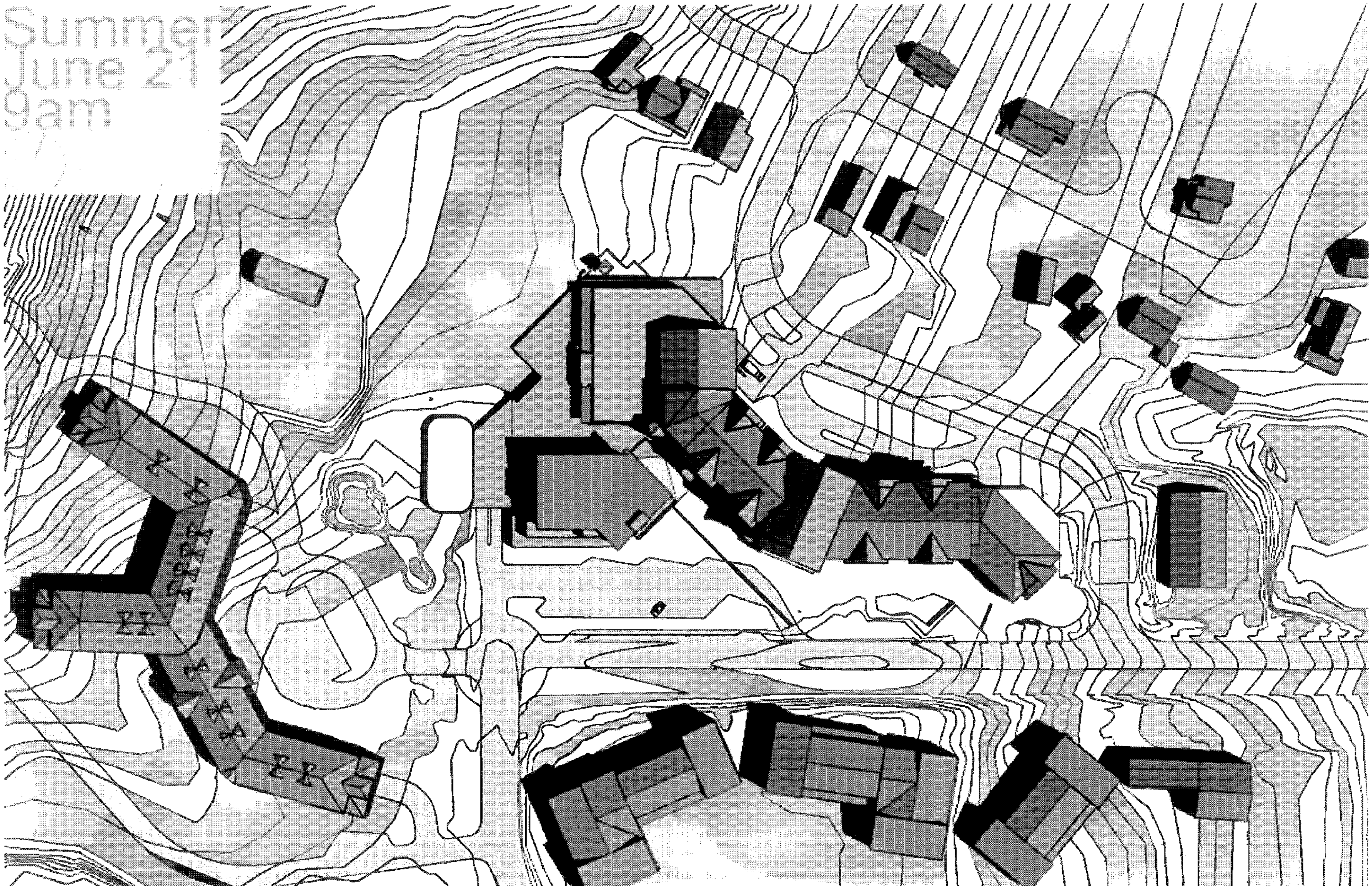


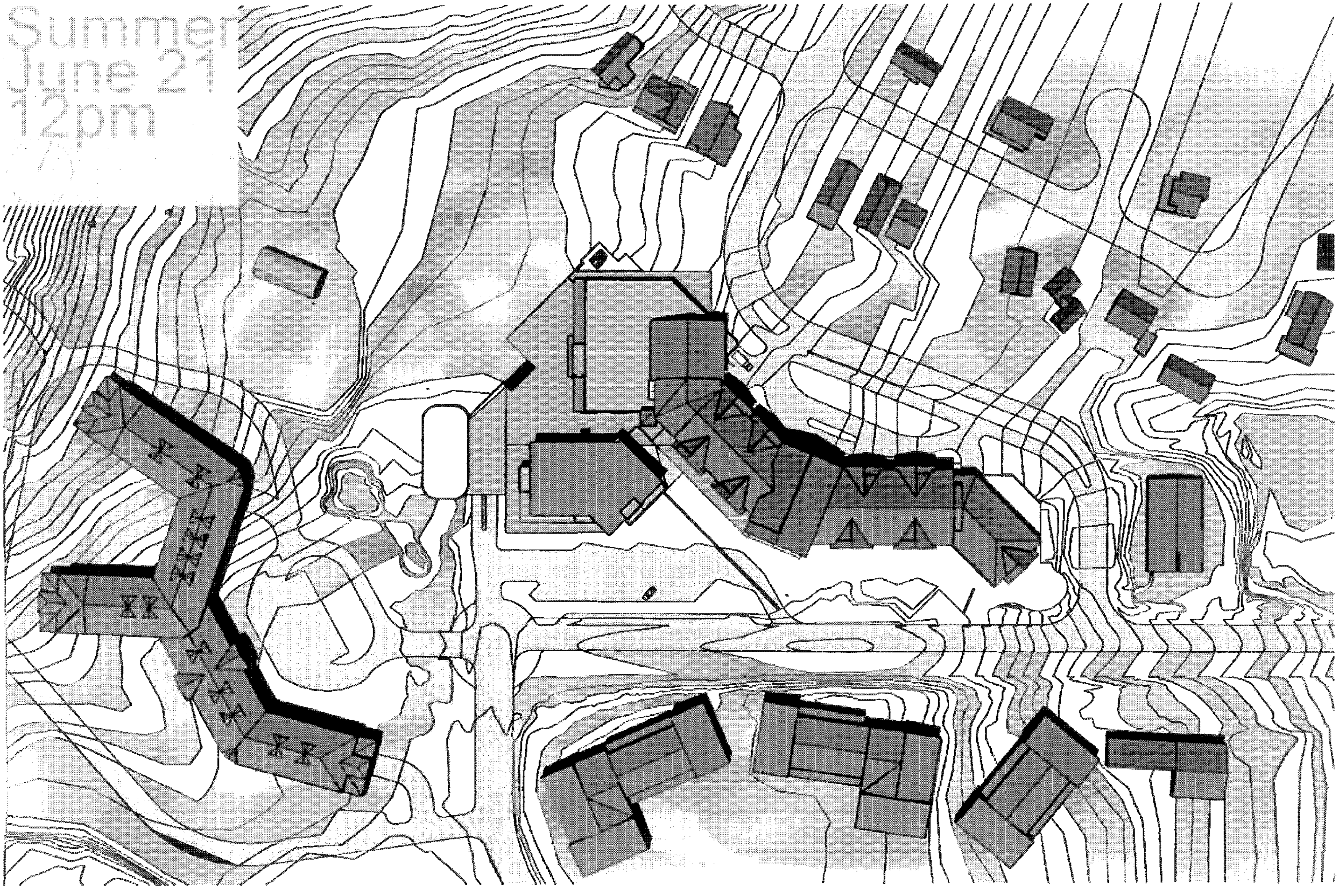
after

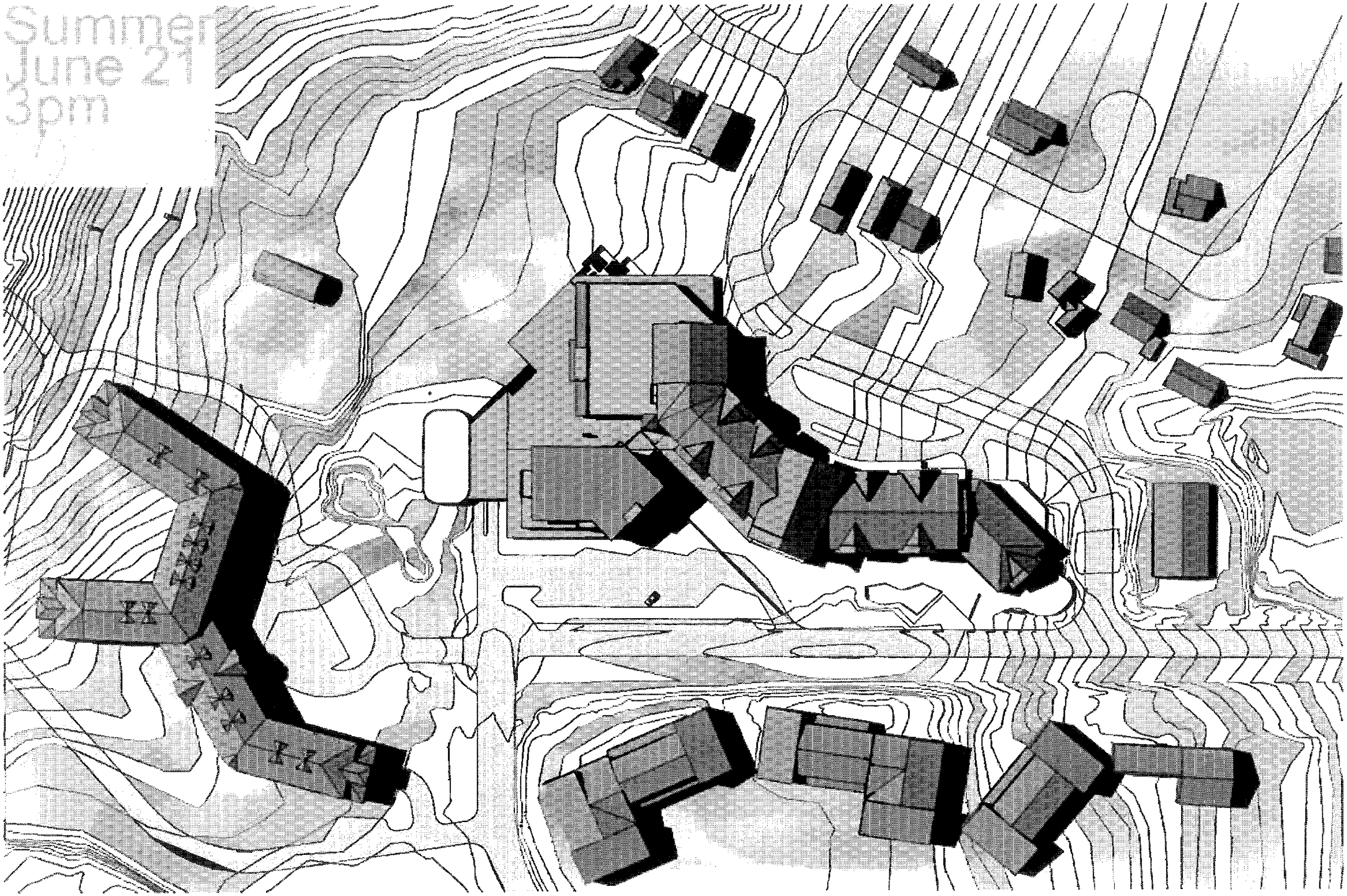

Spring
Feb 21
9am

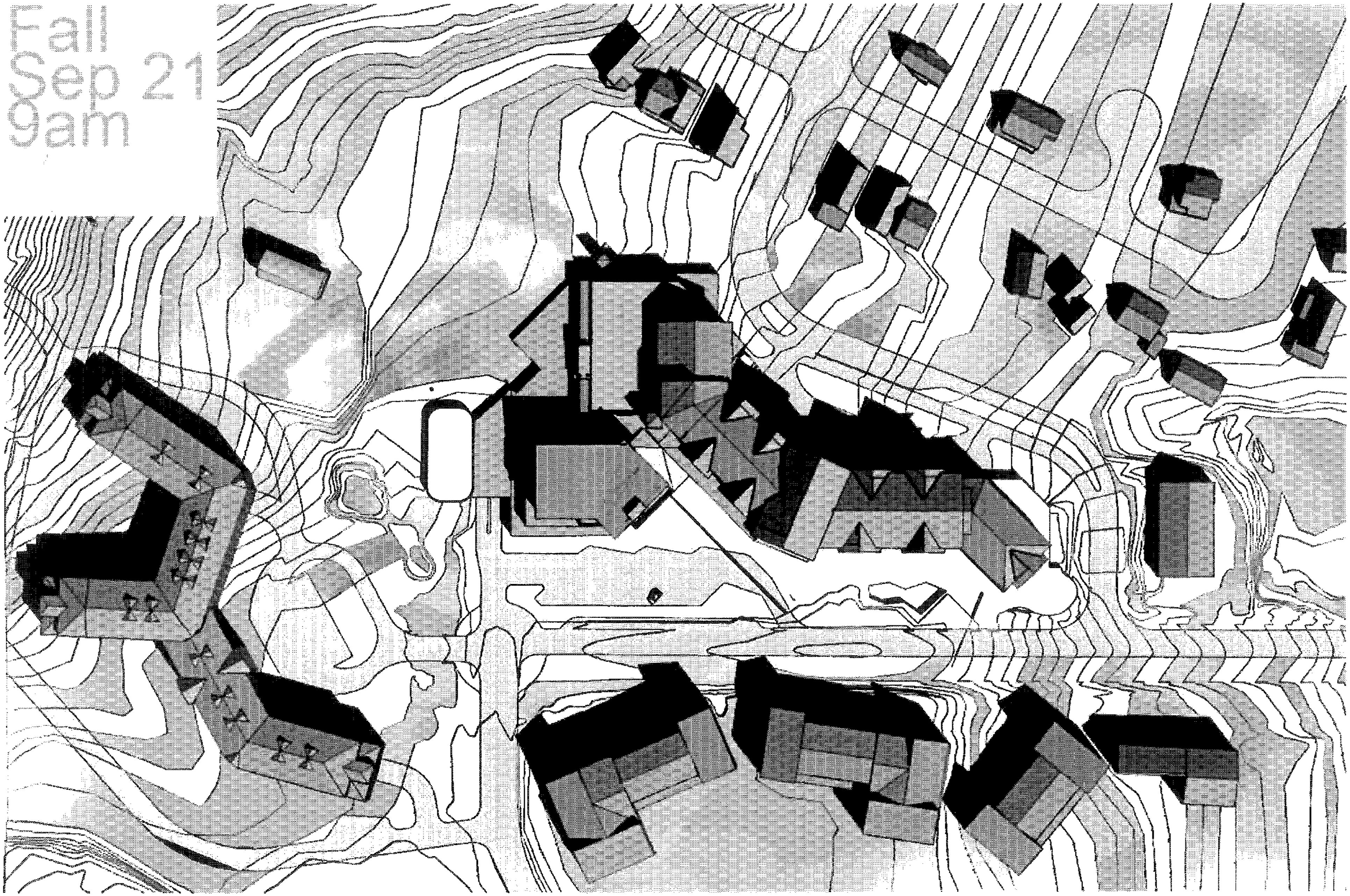

Spring
Feb 21
12pm

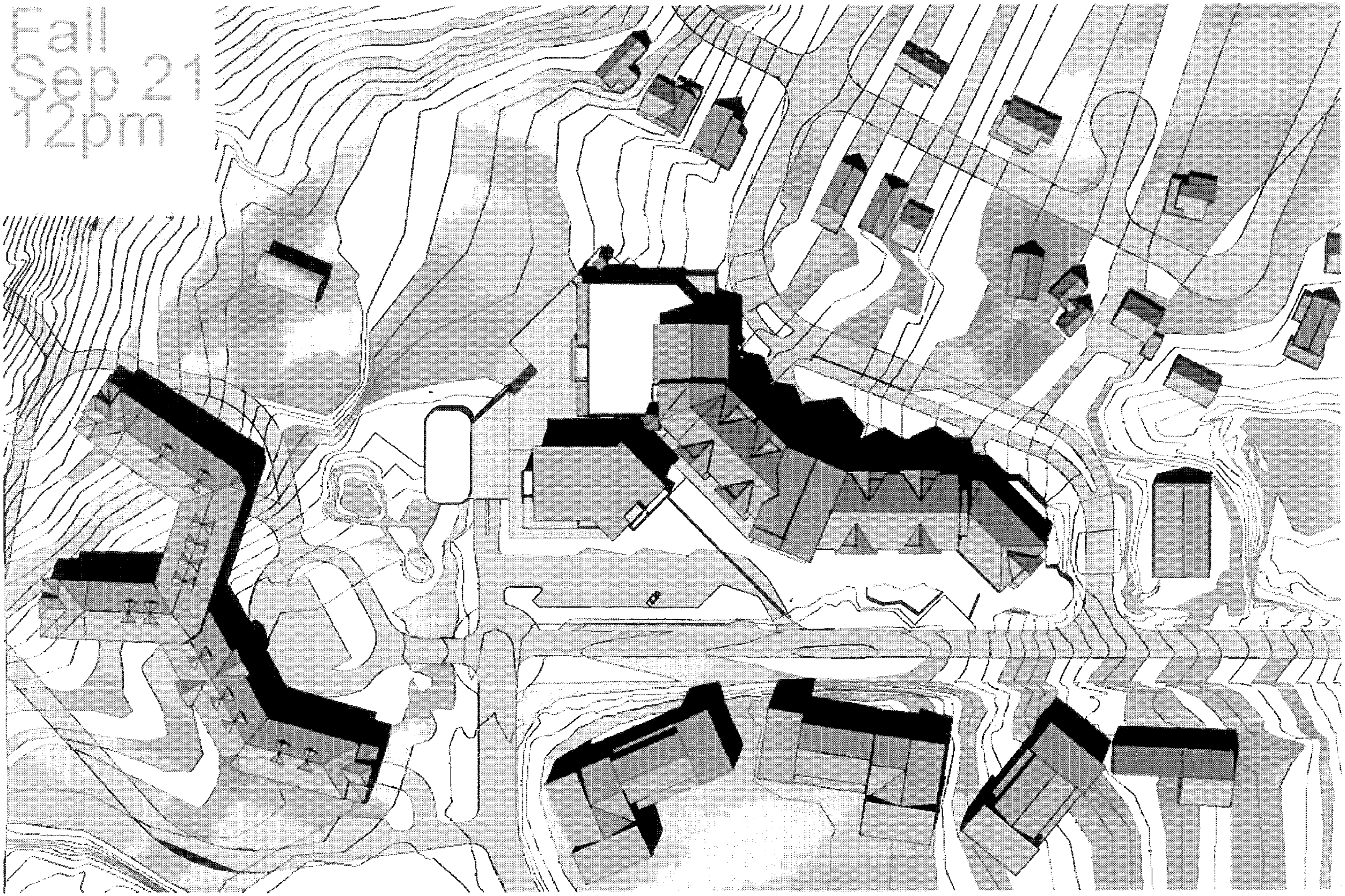

Spring
Feb 21
3pm
Mammoth Lake
California

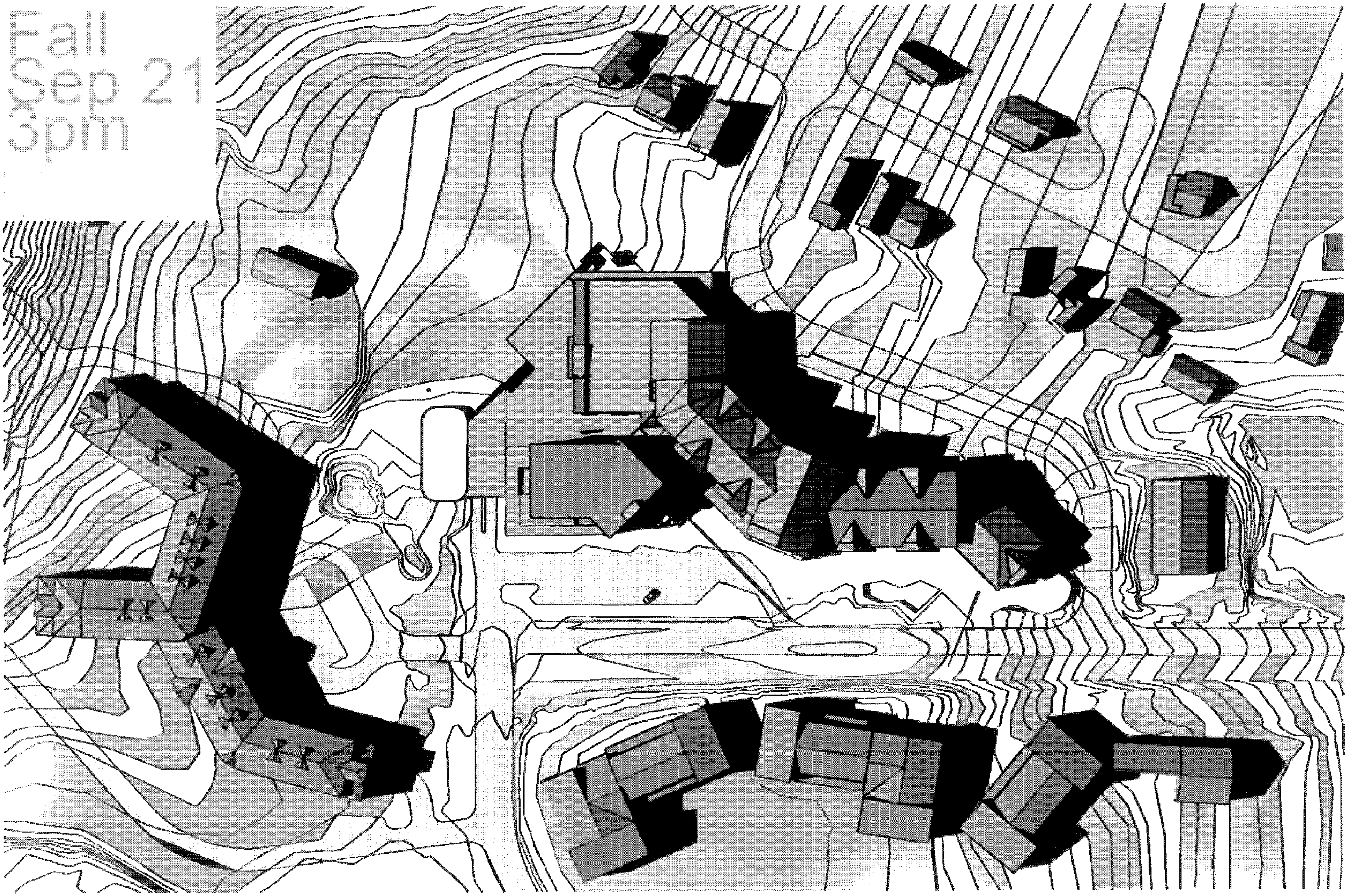

Summer
June 21
9am

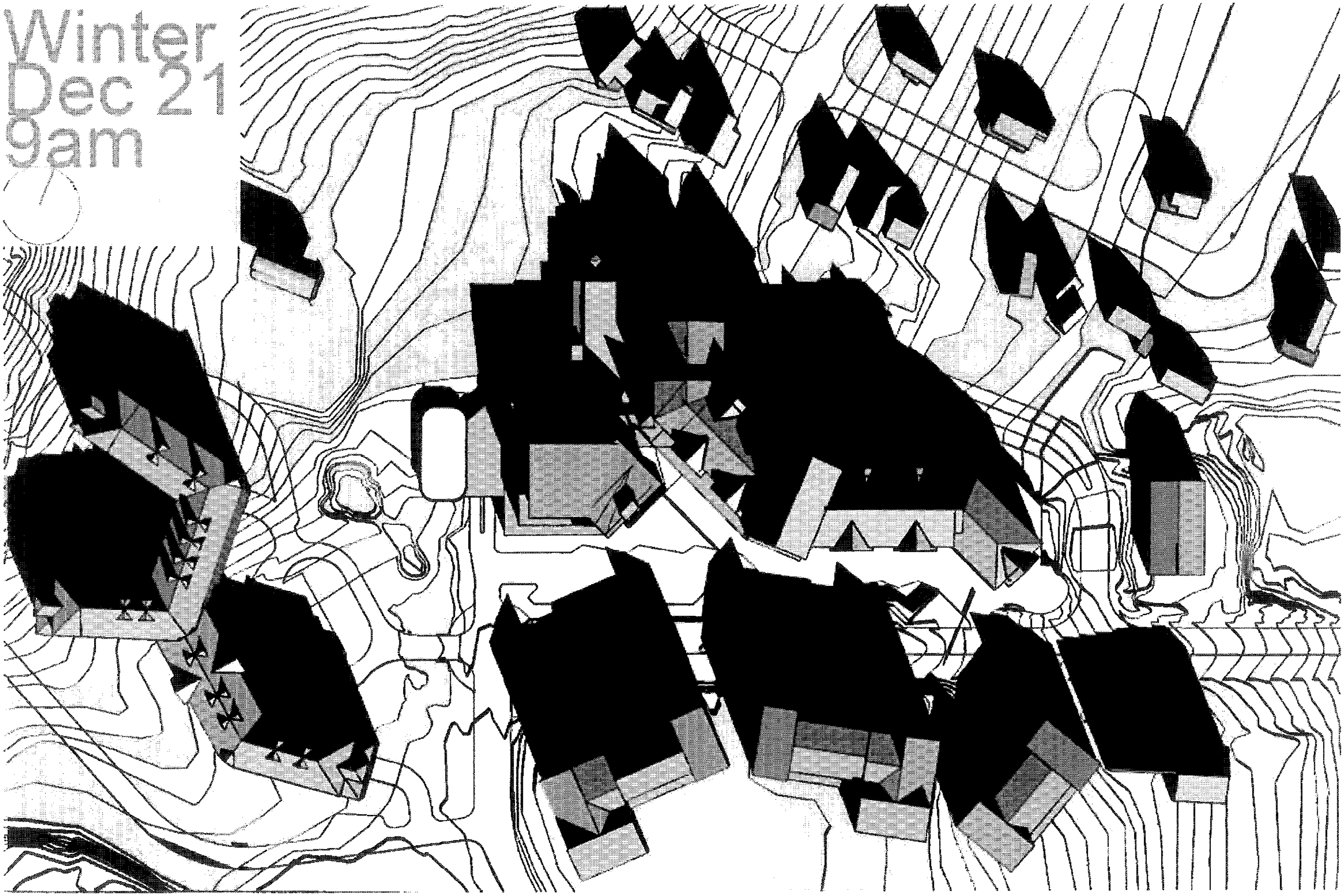

Summer
June 21
12pm

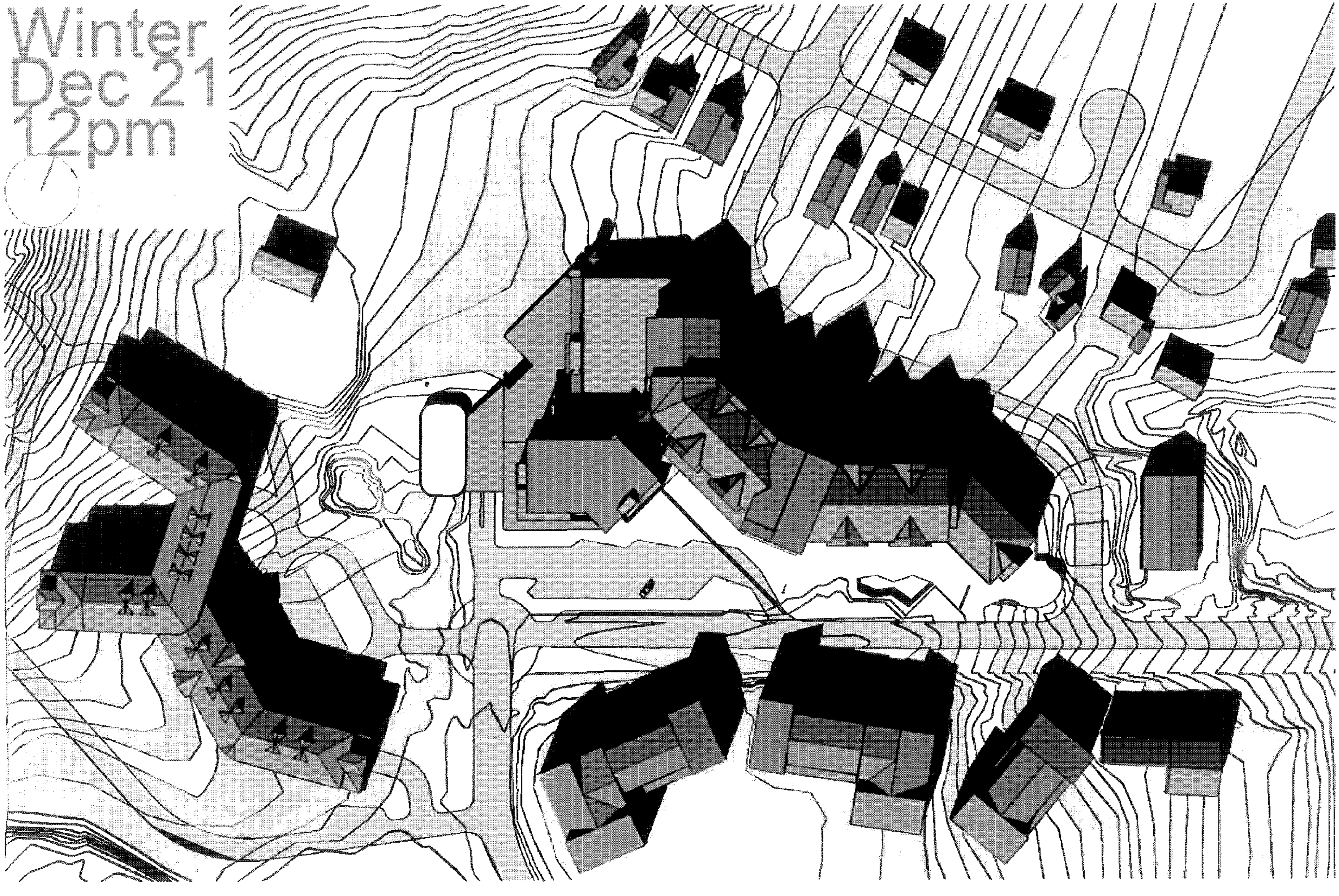

Summer
June 21
3pm

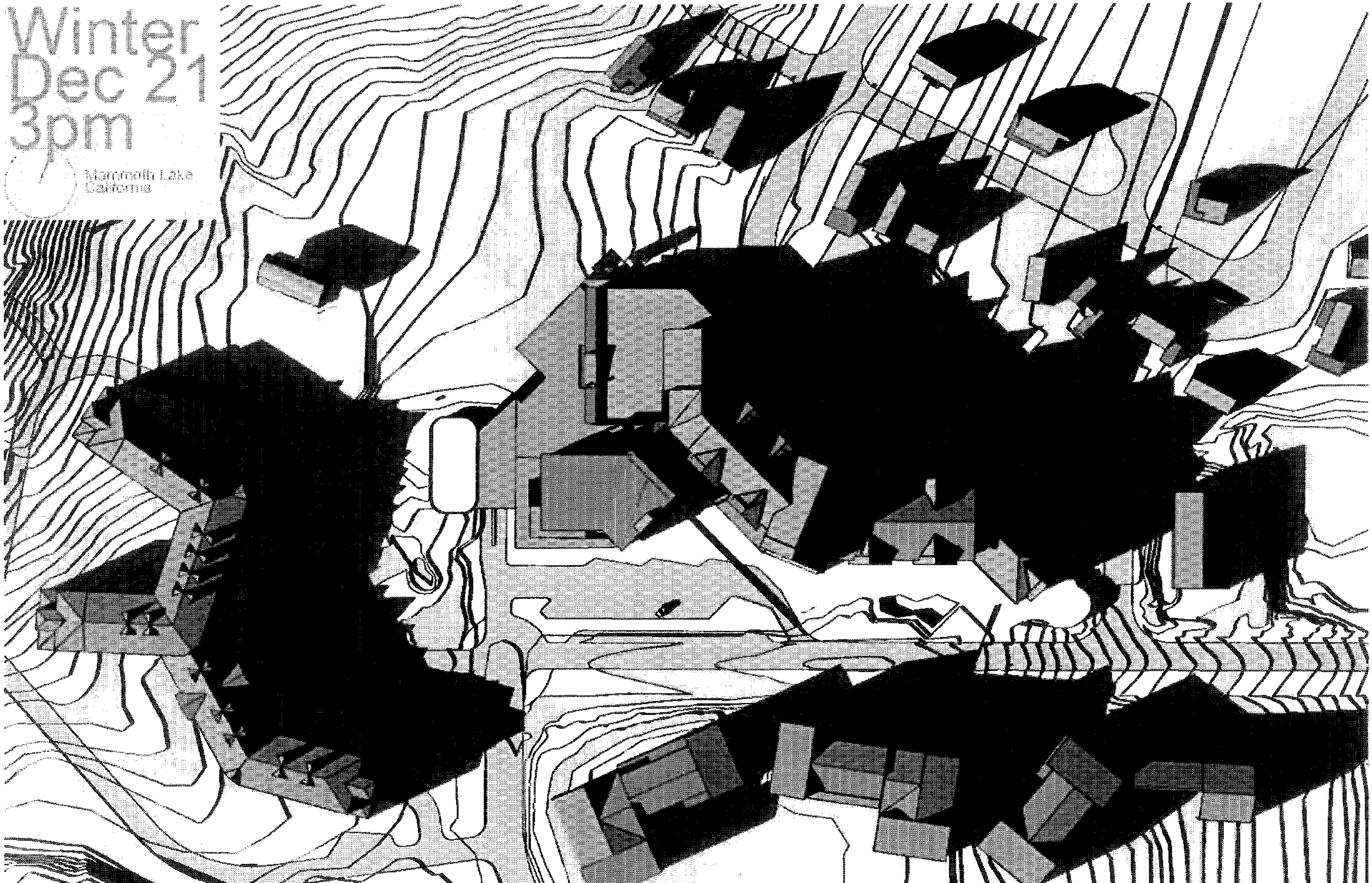

Fall
Sep 21
9am


Fall
Sep 21
12pm


Fall
Sep 21
3pm


Winter
Dec 21
9am


Winter
Dec 21
12pm


Winter
Dec 21
3pm
Mammoth Lake
California

PCR Santa Monica
233 Wilshire Boulevard, Suite 130
Santa Monica, California 90401
Tel 310.451.4488
Fax 310.451.5279

PCR Irvine
One Venture, Suite 150
Irvine, California 92618
Tel 949.753.7001
Fax 949.753.7002

PCR Pasadena
300 North Lake, Suite 1000
Pasadena, California 92618
Tel 626.204.6178
Fax 626.204.6171