

City of Agoura Hills

Liberty Canyon Office Expansion Project

Final **Initial Study and Mitigated Negative Declaration**

April 2008

agreement would need to be recorded that would run with the land to establish an easement being granted to the applicant for use of the SMMC property in this manner.

Across the northern edge of the site is the Liberty Canyon Wildlife Corridor, as identified in the City's General Plan Open Space and Conservation Element. This corridor, along with the SMMC-owned area just northwest of the project site (which is adjacent to the corridor), would be preserved and enhanced as part of the project. This would include the removal of existing pavement and replanting with native plants conducive to continual wildlife movement through the area, as shown on the project landscape plans. This corridor "swath", which proceeds east-west, varies from a width of 25 feet to 70 feet.

Other site improvements would include the removal of several walls fences and a driveway; the construction of berms; the installation of signs; and the relocation and undergrounding of utilities. In addition, as part of the proposed project, the existing raised median on Liberty Canyon Road would be extended closer to the US 101 ramps with an opening and a left-turn pocket to accommodate inbound traffic from the northbound Liberty Canyon Road.

Site preparation would require the removal of 12 oak trees protected under the City's Oak Tree Ordinance and the encroachment into the protected zones of 27 other protected oak trees (oak trees larger than two inches in diameter). Additionally, site preparation would involve grading and earth moving activities that would involve 12,500 cubic yards of fill material, which would require the import of 6,500 cubic yards of cut material. The proposed grading plan is shown in Figures 7A and 7B.

The approvals being requested by the City include: Vesting Tentative Parcel Map 67397, Site Plan Review (06-SPR-009) and Oak Tree Permit (06-OTP-021).

**PUBLIC AGENCIES WHOSE APPROVAL MAY BE REQUIRED FOR
SUBSEQUENT ACTIONS (e.g. permits, financing approval, or participation
agreement):**

The drainage onsite may be considered waters of the U.S. as defined in Section 401 of the Clean Water Act. If so, the proposed project may require the approval of the U.S. Army Corps of Engineers (Corps), the Regional Water Quality Control Board (RWQCB) and/or the Department of Fish and Game (CDFG).



ENVIRONMENTAL FACTORS AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that could be lessened to a level of insignificance through incorporation of mitigation.

- | | | |
|--|--|---|
| <input checked="" type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture Resources | <input type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input checked="" type="checkbox"/> Geology / Soils |
| <input type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Hydrology / Water Quality | <input type="checkbox"/> Land Use / Planning |
| <input type="checkbox"/> Mineral Resources | <input checked="" type="checkbox"/> Noise | <input type="checkbox"/> Population / Housing |
| <input type="checkbox"/> Public Services | <input type="checkbox"/> Recreation | <input type="checkbox"/> Transportation/Traffic |
| <input type="checkbox"/> Utilities / Service Systems | | |



DETERMINATION

On the basis of this initial evaluation:

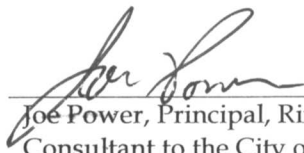
- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION would be prepared.
- I find that although the proposed project could have a significant effect on the environment, there would not be a significant effect in this case because revisions in the project have been made by or agreed to by the applicant. A MITIGATED NEGATIVE DECLARATION would 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 the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" 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 pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



Sean Wazlaw, Planner, Rincon Consultants, Inc.
Consultant to the City of Agoura Hills

Date

4/22/08



Joe Power, Principal, Rincon Consultants, Inc.
Consultant to the City of Agoura Hills

Date

4/22/08



EVALUATION OF ENVIRONMENTAL IMPACTS

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
I. <u>AESTHETICS</u> – Would the project:				
a) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Create a new source of substantial light or glare that would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

a, c. An existing 24,540 sf office building is located in the northwestern portion of the project site. Parking lots are located in the northeastern portion of the site and along the western site boundary. The remainder of the site is previously disturbed, vacant land. Twelve protected oak trees would be removed and/or encroached upon by project development. (Refer to Section IV., Biological Resources, for further discussion and mitigation associated with potential impacts to trees.) However, the proposed project would add a screen of landscaping (including trees, shrubs and ground cover) along Liberty Canyon Road and Agoura Road (see Figures 6A and 6B for proposed landscape plan and Figures 8-10 for post-project views of the project site) and would generally maintain the site’s current topography. The substantial landscaping proposed would beneficially contribute to the aesthetics of the site. The applicant is also proposing to retain the existing oak tree grove onsite and to replant oak trees onsite.

The project site is surrounded by US 101 to the north, Agoura Road to the south, a vacant building and vacant land to the west (owned by the SMMC/MCRA) and Liberty Canyon Road to the east (see Figure 2 for the site location). According to the City of Agoura Hills General Plan Scenic Highways Element (1993), US 101 is designated as a local scenic highway and a Los Angeles County scenic highway and is eligible for state scenic highway designation. In addition, Agoura Road is designated as a local scenic highway. As shown on Figures 8-10, the proposed project would be visible from both the US 101 and Agoura Road.

The project site is within the Business Park – Office Retail District (BP-OR). The purpose of the BP-OR district is to provide for smaller planned developments, including offices and incidental related retail commercial uses that are harmonious with the adjacent commercial or residential development. The site is also within the Freeway Corridor Overlay District (FC overlay district). The purpose of the FC overlay district is to recognize the importance of not just land use, but architectural design and the appearance of development within the freeway corridor, which is a gateway into the City of Agoura Hills. The standards of the FC overlay district include requirements for naturalistic and native landscaping; use of compatible colors and materials to preserve and enhance scenic quality; and screening of unsightly uses with berms, decorative walls or landscaping. Moreover, development in this zone is required to be low



intensity, compatible with a semi-rural character and have building facades that are articulated on all sides, and are treated with natural materials and earth tones.

The proposed design of the facility utilizes rustic, natural components, such as stone enhanced building sides and natural colors, and is well articulated from a variety of viewpoints. The height of the proposed buildings would not exceed 35 feet, thereby meeting the maximum allowed height of 35 feet and/or two stories. As shown on Figure 3, an existing 24,540 sf two-story office building (Building A) is located in the northwestern portion of the site. The surrounding uses include a two-story office building to the east, across Liberty Canyon Road; two-story, multi-family residences to the south, across Agoura Road; a vacant one-story building adjacent to the west of the project site; and Vendell Road and US 101 to the north. The proposed building coverage of the project site would be about 20% (33,336 sf on a 164,481 sf site), consistent with the 40% maximum allowable building coverage.

The project incorporates landscaping on about 38% of the site (61,826 square feet of landscaping on a 164,481 square foot site), which exceeds the required landscaping coverage of 20%. As shown on Figures 6A and 6B, the proposed landscaping would include replacement oak trees, site perimeter and building area trees, shrubs, groundcovers and vines. Most of the proposed species are native and/or drought-tolerant species, and include, but are not limited to, purple sage, western redbud and California sycamore. Along the north side of the site is a wildlife corridor to be landscaped with native plants. The placement and selection of such native and drought tolerant species would be consistent with the Freeway Corridor Overlay requirement of the Municipal Code for native and naturalistic landscaping.

As discussed above, the proposed project would be compatible with surrounding uses and the design standards for the BP-OR-FC district. It would also not adversely affect a scenic vista such as U.S. 101 freeway and Agoura Road, given the compatible building design and naturalistic landscaping that serves to screen the project visually from both transportation corridors. Moreover, along the northern edge of the site, there is a large existing berm that is part of the U.S. 101 freeway southbound off ramp, which substantially reduces visibility to the project from the freeway (see Figure 8). As such, impacts would be **less than significant**.

b. The project site does not contain rock outcroppings, historic buildings or other substantial scenic resources, although it does contain 50 oak trees. As discussed above, U.S. 101 is not officially designated as a state scenic highway, but is eligible for such designation. Both U.S. 101 and Agoura Road are designated as local scenic highways. As shown in the photosimulation on Figure 8, while the proposed project would be visible from U.S. 101, it would not obstruct views of hillsides to the south or north or other scenic resources. Therefore, **no impact** would occur.

d. The existing onsite office building creates light and glare in the vicinity of the project site. Figure 11 shows the proposed photometric lighting plan for the project site. Although lighting would be limited along the northern edge of the site, adjacent to the wildlife corridor, it is expected that the proposed project would incorporate lighting at pedestrian access locations and in the parking areas. In addition, light would be cast from windows on the first and second floors. The use of structural lighting would not be out of character with the existing onsite office development or with that of the office development to the east across Liberty Canyon



Road, or the residential development to the south, across Agoura Road. Nevertheless, although the proposed project would not substantially alter lighting conditions, mitigation measures are required to minimize the potential for project-generated nighttime lighting that may adversely affect neighboring properties, particularly the residential development to the south of the project site.

The proposed project would introduce new sources of glare from windows on the first and second floors. Additional sources of glare may include exterior building materials and surface paving materials. The metal roof, however, will have a mat finish, which would substantially reduce the glare emitted. Therefore, impacts related to lighting and glare would be **potentially significant unless mitigation incorporated.**

Mitigation Measures

Mitigation Measure AES-1 is required to reduce potential impacts related to lighting and glare to a less than significant level.

AES-1 Light and Glare. The proposed project shall adhere to the City’s Lighting Standards and Guidelines. These may include, but are not limited to the following:

- Lighting shall be kept to the minimum necessary to ensure adequate illumination of the project site, particularly the portions of the project fronting U.S. 101, along the wildlife corridor.
- Lighting pole heights and other fixture heights shall be limited.
- All lighting shall be focused downward and designed to minimize light spillover and glare affecting adjacent areas.
- Fixtures and poles shall be designed and placed in a manner consistent and compatible with the overall site and building design.

AES-2 Lighting Plan. A final lighting plan and photometric plan shall be submitted for review and approval to the Planning and Community Development Department prior to issuance of a Building Permit.

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:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>



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:

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?

Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a. A two-story office building is located on a portion of the project site, and the remainder of the site is previously disturbed, vacant land. The project site is zoned Business Park Office Retail (BP-OR) and is designated by the General Plan as Business Park Office Retail (BP-OR). The Farmland Mapping and Monitoring Program classifies the project site as Urban and Built-Up Land (California Department of Conservation, 2004). **No impact** would occur.

b. The project site is zoned Business Park Office Retail (BP-OR). There is no agricultural zoning or Williamson Act contracts in the City. **No impact** would occur.

c. A portion of the project site contains a two-story office building while the remainder of the project site is previously disturbed, vacant land. Construction of the project would not result in the loss of farmland. **No impact** would occur.

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?

Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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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 that exceed quantitative thresholds for ozone precursors)?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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d) Result in a temporary increase in the concentration of criteria pollutants (i.e., as a result of the operation of machinery or grading activities)?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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e) Expose sensitive receptors to substantial pollutant concentrations?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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f) Create objectionable odors affecting a substantial number of people?

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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The following air quality analysis is partially based on an air quality impact report (November 2006) conducted by Impact Sciences, Inc.. The air quality impact report is contained in Appendix A.

a. The project site is located in the South Coast Air Basin, which is within the jurisdiction of the South Coast Air Quality Management District (SCAQMD). According to the SCAQMD Guidelines, to be consistent with the Air Quality Management Plan (AQMP), a project must conform to the local General Plan and must not result in or contribute to an exceedance of the City's projected population growth forecast. Development of the proposed office buildings would not generate population growth, as the project does not involve any residential development. Therefore, the project would not contribute to an exceedance of the City's projected population growth forecast. The project is consistent with the City's General Plan. Therefore, the project's potential impact associated with air quality management plans would be **less than significant**.

b, c. The project site is located in the South Coast Air Basin, which is in nonattainment for the federal 8-hour ozone standard, the State 1-hour ozone standard, the federal 24-hour PM10 standard, and the State 24-hour and annual PM10 standards. The South Coast Air Basin is designated as attainment or unclassified for all other federal and state ambient air quality standards. The ozone precursors VOC and NO_x, in addition to fine particulate matter (PM_{2.5} and PM₁₀), are the pollutants of primary concern for projects located in the SCAQMD.

Based on SCAQMD thresholds, a project would have a significant adverse impact on regional air quality if it generates emissions exceeding any of the thresholds found in Table 1.

Table 1
SCAQMD Regional Air Quality Thresholds

Pollutant	Construction	Operation
NO _x	100 lbs/day	55 lbs/day
VOC	75 lbs/day	55 lbs/day
PM ₁₀	150 lbs/day	150 lbs/day
PM _{2.5}	55 lbs/day	55 lbs/day
CO	550 lbs/day	550 lbs/day

Source: SCAQMD CEQA Air Quality Handbook, 1993.

The SCAQMD has also developed Localized Significance Thresholds (LSTs) in response to the Governing Board's Environmental Justice Enhancement Initiative (1-4), which was prepared to update the SCAQMD's CEQA Air Quality Handbook. LSTs were devised in response to concern regarding exposure of individuals to criteria pollutants in local communities. LSTs represent the maximum emissions from a project that will not cause or contribute to an air quality exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest sensitive receptor, taking into consideration ambient concentrations in each source receptor area (SRA), project size, distance to the sensitive receptor, etc. However, LSTs only apply to emissions within a fixed stationary location, including idling emissions during



both project construction and operation, and LSTs have been developed only for NO_x, CO, PM₁₀ and PM_{2.5}. LSTs are not applicable to mobile sources such as cars on a roadway (Final Localized Significance Threshold Methodology, SCAQMD, June 2003). As such, LSTs for operational emissions would not apply to the proposed project as the majority of emissions would be generated by cars on the roadways.

LSTs have been developed for emissions within areas up to 5 acres in size, with air pollutant modeling recommended for activity within larger areas. The SCAQMD provides lookup table for project sites that measure 1, 2 or 5 acres. The project site is 4.18 acres and is located in Source Receptor Area 6 (SRA-6) which is designated by the SCAQMD as the West San Fernando Valley and includes the City of Agoura Hills. The LST construction emission thresholds shown in Table 2 were interpolated for a 4.18-acre site from the LST lookup tables for 2-acre and 5-acre project sites.

The nearest sensitive receptors are the single-family and multi-family residences located approximately 80 feet south of the project site. SCAQMD indicates that the thresholds for sensitive receptors 82 feet (25 meters) from the project site's boundary should be used for all distance less than 82 feet (Final Localized Significance Threshold Methodology, SCAQMD, June 2003).

Table 2
SCAQMD LSTs for Construction in SRA-6

Pollutant	Allowable emissions 82 feet from the 4.18-acre site boundary (lbs/day)*
Gradual conversion of NO _x to NO ₂	295
CO	1,014
PM ₁₀ (10.4 mg/m ³)	11
PM _{2.5} (10.4 mg/m ³)	6

*Thresholds interpolated from a 2-acre and 5-acre project site.
Source: <http://www.aqmd.gov/CEQA/handbook/LST/appC.pdf>, accessed online May 2007

A project would also result in significant air quality impacts if it would generate vehicle trips that cause a CO "hotspot" or if the project could be occupied by sensitive receptors that would be exposed to a CO "hotspot." A CO "hotspot" occurs if motor vehicle emissions at an intersection would cause or contribute to exceedances of the federal or state ambient air quality standards for CO. The simplified CALINE4 screening procedure was used to predict cumulative future CO concentrations at 0 and 25 feet from the intersections in the study area. The simplified model is intended as a screening analysis that identifies a potential CO hotspot. If a hotspot is identified, the complete CALINE4 model is then utilized to determine precisely the CO concentrations predicted at the intersections in question. Background CO concentrations used for the model were obtained from the Reseda air monitoring station.



In the November 2006 air quality impact report conducted by Impact Sciences, Inc., the long-term air quality emissions associated with the proposed project were estimated using the URBEMIS 2002 v.8.7 air quality model. Since the publication of the air impact quality report by Impact Sciences, Inc., the California Air Resources Board (ARB) updated the URBEMIS model. Long-term emissions associated with the proposed project were estimated using the URBEMIS 2007 v.9.2.2 computer model. Operational emissions were determined based on the proposed square footage with a trip generation rate of 11.01 daily trips per 1,000 sf of General Office space and 36.13 daily trips per 1,000 sf of Medical Office space (Fehr & Peers/Kaku Associates, 2007). Appendix A contains the modeling assumptions and detailed results. Project emissions estimates, as determined in the modeling analysis, are presented in Table 3. Mobile emissions are those associated with vehicle trips, while the use of natural gas and landscaping maintenance equipment are included in the area emissions.

As shown in Table 3, the emissions generated by the proposed project would not exceed the SCAQMD's daily operational thresholds for any pollutant; therefore, regional air quality impacts would be **less than significant**.

Table 3
Operational Emissions (pounds per day)

Emission Source	Emissions (lbs/day)				
	ROG	NO _x	CO	PM ₁₀	PM _{2.5}
Mobile Emissions	8.20	11.85	97.66	13.67	2.71
Area Emissions	0.45	0.24	3.38	0.01	0.01
Gross Emissions	8.65	12.09	101.04	13.68	2.72
<i>SCAQMD Thresholds</i>	<i>75</i>	<i>100</i>	<i>550</i>	<i>150</i>	<i>55</i>
<i>Exceed SCAQMD Thresholds?</i>	<i>NO</i>	<i>NO</i>	<i>NO</i>	<i>NO</i>	<i>NO</i>

Mobile emissions are based on trip generation rates determined by Fehr & Peers/Kaku Associates, Inc. See Appendix B for the Traffic Study.

Source: URBEMIS 2007 v.9.2.2 (See Appendix A for model assumptions and results)

The results of the CO hotspots screening model for the proposed project are shown in Table 4. Values in Table 4 reflect the ambient air quality impacts of motor vehicles emissions resulting from cumulative traffic increases due to growth in the area and related projects, along with traffic generated by the proposed project based on the traffic impact analysis prepared by Fehr & Peers/Kaku Associates.

As shown in Table 4, the state and federal 1-hour and 8-hour CO standards would not be exceeded at any of the modeled intersections. Thus, the project's long-term impact to regional air quality is **less than significant** and no mitigation is required.



Liberty Canyon Office Expansion Project

Final

Initial Study and Mitigated Negative Declaration

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April 2008

**Table 4
Carbon Monoxide Concentrations with Cumulative Plus Project Traffic
(2008) (Parts per Million)**

Intersection	At Edge of Roadway		25 Feet	
	1-Hour ¹	8-Hour ²	1-Hour ¹	8-Hour ²
Liberty Canyon Rd. & US 101 South Bound Ramp	8.2	6.8	7.6	6.4
Liberty Canyon Rd. & Agoura Rd.	8.5	7.0	7.9	6.6

¹ State standard is 20 ppm. Federal standard is 35 ppm.

² State standard is 9.0 ppm. Federal standard is 9.0 ppm.

Source: Impact Sciences, Inc.(see Appendix A for CO concentration calculations)

d. Construction vehicles and equipment traveling along unpaved roads, grading, trenching, and stockpiled soils have the potential to generate fugitive dust (PM₁₀) through the exposure of soil to wind erosion and dust entrainment. In addition, exhaust emissions associated with heavy construction equipment would potentially degrade air quality. PM₁₀ and exhaust emissions associated with construction activities are considered to be temporary air quality impacts.

Temporary construction emissions were estimated using ARB’s URBEMIS 2007 v.9.2.2 computer model (see Appendix A for air quality data). The number and type of equipment to be used during construction were estimated based on construction projects similar in size to the proposed project. During project site preparation, the soils that underlie portions of the site could be turned over and pushed around, exposing the soil to wind erosion and dust entrainment by onsite operating equipment. The majority of emissions associated with construction activities on site come from off-road vehicles such as cranes and backhoes, but some emissions are also associated with construction worker trips and the application of architectural coatings, which release volatile or reactive organic gases (ROG) during the drying phase. Rule 403 of the SCAQMD Handbook requires implementation of measures to minimize emissions for all dust generating activity, regardless of whether it exceeds the thresholds. The non-attainment status of the South Coast Air Basin for PM₁₀ dust emissions requires that Best Available Control Measures (BACMs) be used to minimize regional cumulative PM₁₀ impacts from all construction activities, even if any single project does not cause the thresholds to be exceeded. Additionally, the non-attainment basin status and the cumulative impact of all construction suggests that all reasonably available control measures for diesel exhaust shall be implemented even if individual thresholds are not exceeded.

Table 5 shows the maximum daily construction emissions that would occur during construction of the proposed project. As indicated in Table 5, emissions generated by the construction of the proposed project would be below SCAQMD regional thresholds and localized significance thresholds (LSTs). Therefore, impacts would be **less than significant**. Nevertheless, Mitigation Measure AQ-1 outlines SCAQMD’s required BACMs for dust and exhaust emissions. Implementation of SCAQMD rules would further ensure construction impacts to air quality would be less than significant.



e. Certain population groups are considered particularly sensitive to air pollution. Sensitive receptors consist of land uses that are more likely to be used by these population groups. Sensitive receptors include health care facilities, retirement homes, school and playground facilities, and residential areas. Single and multi-family residences are located approximately 80 feet south of the project site, across Agoura Road. As shown in sections b, c and d above the project would not result in an exceedance of any thresholds for construction or operational emissions, nor would project operation create a CO hotspot. As such, the proposed project would not the residences to the south of the project site to substantial pollutant concentrations. Impacts from the proposed project would therefore be **less than significant**.

Table 5
Maximum Daily Construction Emissions¹ (pounds per day)

Emission Source	ROG	NO _x	CO	PM ₁₀	PM _{2.5}
Demolition	1.36	9.38	6.41	1.02	0.85
Grading	3.50	30.06	15.56	8.51	1.47
Building Construction and Paving	34.29	9.62	7.50	1.13	1.03
SCAQMD Thresholds (peak day)	75	100	550	150	55
Exceed SCAQMD Thresholds?	NO	NO	NO	NO	NO
Localized Significance Thresholds	n/a	260	532	9	4
Exceed Localized Significance Thresholds?	NO	NO	NO	NO	NO

Note: The grading phase and the building construction phase do not occur simultaneously.

¹Includes worker trips and architectural coatings.

²Threshold interpolated from 2-acre and 5-acre sites.

Source: URBEMIS 2007 v9.2.2 and Impacts Sciences, Inc. (See Appendix A for model assumptions and results)

f. The proposed office buildings are not anticipated to generate any objectionable odors. The proposed use of the site is not shown in Figure 5-5 “Land Uses Associated with Odor Complaints” of the 1993 SCAQMD’s CEQA Air Quality Handbook. Therefore, it is unlikely that the proposed project would generate objectionable odors affecting a substantial number of people. Therefore, impacts associated with odors would be **less than significant**.

Mitigation Measure

Implementation of the following measure would meet SCAQMD requirements for minimizing emissions for dust generating activities.

AQ-1 Dust Minimization. Pursuant to Rule 403 of the SCAQMD, the following dust minimizing measures shall be implemented.



- a) The simultaneous disturbance of the site shall be minimized to the extent feasible.
- b) The project proponent shall comply with all applicable SCAQMD Rules and Regulations, including Rule 403 insuring the clean up of construction-related dirt on approach routes to the site. Rule 403 prohibits the release of fugitive dust emissions from any active operation, open storage pile or disturbed surface area visible beyond the property line of the emission source. Particulate matter on public roadways is also prohibited.
- c) The project proponent shall comply with all SCAQMD established minimum requirements for construction activities to reduce fugitive dust and PM-10 emissions.
- d) Adequate watering techniques shall be employed to mitigate the impact of construction-related dust particulates. Portions of the site that are undergoing surface earth moving operations shall be watered such that a crust will be formed on the ground surface, and then watered again at the end of each day. Site watering shall be performed as necessary to adequately mitigate blowing dust.
- e) Any vegetative cover to be utilized onsite shall be planted as soon as possible to reduce the disturbed area subject to wind erosion. Irrigation systems required for these plants shall be installed as soon as possible to maintain good ground cover and to minimize wind erosion of the soil.
- f) Any construction access roads (other than temporary access roads) shall be paved as soon as possible and cleaned up after each work day. The maximum vehicle speed on unpaved roads shall be 15 mph.
- g) Grading operations shall be suspended during first stage ozone episodes or when winds exceed 25 mph. A high wind response plan shall be formulated for enhanced dust control if winds are forecast to exceed 25 mph in any upcoming 24-hour period.
- h) Any construction equipment using direct internal combustion engines shall use a diesel fuel with a maximum of 0.05 percent sulfur and a four-degree retard.
- i) Construction operations affecting off-site roadways shall be scheduled by implementing traffic hours and shall minimize obstruction of through traffic lanes.
- j) The engines of idling trucks or heavy equipment shall be turned off if the expected duration of idling exceeds five (5) minutes.
- k) On-site heavy equipment used during grading and construction shall be equipped with diesel particulate filters unless it is demonstrated that such equipment is not available or its use is not cost-competitive.
- l) All haul trucks leaving or entering the site shall be covered or have at least two feet of freeboard.
- m) Any on-site stockpiles of debris, dirt or other dusty material shall be covered or watered three times daily.
- n) Any site access points within 30 minutes of any visible dirt deposition on any public roadway shall be swept or washed.



IV. <u>BIOLOGICAL RESOURCES</u> – Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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 wildlife nursery sites?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The following analysis of biological resources is partially based on the *Biological Constraints Evaluation* conducted by Impact Sciences, Inc. for the project site in August 2007. Rincon conducted a field survey of the project site on December 31, 2007, to supplement Impact Sciences' biological study. The oak tree impact analysis is partially based on an oak tree study conducted for the project site by Richard W. Campbell in September 6, 2007. The biological report and the oak tree study, along with related memos from City staff and City consultants are contained in Appendix C.

The majority of the project site has been disturbed and influenced by human activity. The project site currently includes an office building with a paved parking lot and driveway surrounding the building. Immediately west of the office building is an abandoned single-story structure and pavement to be demolished. The southeast corner of the property is frequently disced or plowed for fire prevention, leaving very little native vegetation. These disturbed open areas are predominated by pioneering introduced and often invasive plant species; although, several native species were observed attempting to succeed back in. An ephemeral drainage exists onsite, which includes mature oak trees, cottonwoods, and sycamores. The two predominant plant communities observed onsite in the undeveloped areas of the property



include Ruderal Grassland and Valley Oak Woodland. In addition, a restoration site immediately west of, and adjacent to, the project site is creating a transitional habitat consisting of transitional riparian and coastal sage scrub plant species.

Ruderal Grassland is the most predominant habitat type onsite. Ruderal Grassland is typically in early successional stages resulting from severe disturbance by natural or human causes, and/or is due to recurrent disturbance. The predominant introduced onsite grass species, which constitute the Ruderal Grassland areas onsite, include: wild oat (*Avena fatua*), ripgut grass (*Bromus diandrus*), soft chess (*Bromus hordeaceus*), red brome (*Bromus madritensis* ssp. *rubens*), and summer barley (*Hordeum murinum*). Other introduced weedy species observed in the open disced fields onsite include: black mustard (*Brassica nigra*), tocalote (*Centaurea melitensis*), sweet fennel (*Foeniculum vulgare*), prickly lettuce (*Lactuca serriola*), Russian thistle (*Salsola tragus*), red-stem filaree (*Erodium cicutarium*), summer mustard (*Hirschfeldia incana*), and white horehound (*Marrubium vulgare*). The native plant species observed succeeding back in between disturbances include: coyote brush (*Baccharis pilularis*), coastal goldenbush (*Isocoma menziessi* var. *vernonioides*), and narrow-leaved milkweed (*Asclepias fascicularis*).

Impact Sciences (2007) reports 44 plant species in their Biological Constraints Evaluation. In addition, Rincon observed an additional 19 plant species onsite. Therefore, 63 plant species are currently known onsite and immediately nearby, including 37 native plant species (59%) and 26 introduced plant species (41%). The disturbed nature of the property has resulted in a lower ratio of native plant species than typically found for the flora of California (approximately 70% native) (Hickman 1993).

Rincon observed many of the same wildlife species that were observed by Impact Sciences. Only two additional wildlife species were observed onsite or nearby and they include common raven (*Corvus corax*), observed flying overhead, and a long-eared woodrat (*Neotoma fuscipes macrotis* [formerly dusky-footed woodrat]) nest, observed in the drainage of the restoration site just west of the project site.

a. A five-mile radius from the project site was queried and mapped using California Department of Fish and Game's (CDFG's) California Natural Diversity Data Base (CNDDDB) (CDFG 2007a [database current as of December 31, 2007]) to indicate the nearest location of any potential special-status species (see Figure 12) in relation to the project site. This database search was conducted to account for special-status species tracked by CDFG in the area and with potential to occur at the project site. The potential for special-status species to occur onsite is based on the proximity of the site to tracked occurrences, known geographic ranges, surrounding land uses, and onsite habitat suitability. A list of the 12 special-status plant species and 19 special-status wildlife species tracked by CNDDDB within the 5-mile radius buffer from this project site is provided below in Tables 6 and 7, respectively. Although CNDDDB did not track black walnut, mountain lion, and Cooper's hawk within the 5-mile radius search, these species are included in this analysis since black walnut was observed onsite, mountain lion may periodically pass through the site, and Cooper's hawk has the potential to nest on the project site. Rincon's literature review also includes a search of California Native Plant Society's Inventory of Rare and Endangered Plants of California (CNPS 2001, 2006) and the CNDDDB Special Animals List (CDFG 2007b).



Of the 12 special-status plant species tracked by CNDDDB in the vicinity of the project site, one (1) was observed onsite (*Juglans californica* var. *californica* [southern California black walnut]), and three (3) have the potential to occur onsite, including *California macrophylla* (round-leaved filaree), *Calochortus clavatus* var. *gracilis* (slender mariposa-lily), and *Calochortus plummerae* (Plummer's mariposa-lily). These species have some potential of occurring onsite based on the proximity of tracked occurrences of the species to the project site, known geographic ranges, surrounding land uses, and onsite habitat suitability. Although these species have a potential to occur onsite, the potential is low due to frequent discing of undeveloped portions of the project site, the land uses in the surrounding areas, and a high ratio of nonnative plant species.

The project site natural areas are continuously disturbed (frequent discing likely for fuel management) and onsite vegetation is best characterized as ruderal, with the exception of the patches of Valley Oak Woodland. (Subsection *e* of this section further discusses impacts associated with the removal/encroachment of oak trees.) Due to the disturbed nature of the project site and the surrounding area, the probability of state and/or federally listed plant species onsite is low. Impacts to existing onsite *Juglans californica* are not expected to occur as this species are located within the defined bed and bank of the creek where development would not occur. As discussed above, there is the potential for status plant species, including, but not limited to round-leaved filaree, slender mariposa-lily and Plummer's mariposa-lily to occur onsite. As such, project implementation has the potential to adversely affect these special plant species. Therefore, impacts to special-status plant species would be **potentially significant unless mitigation incorporated**.

No special-status wildlife species were observed in the vicinity of the project site. Of the 19 special-status wildlife species tracked by CNDDDB nearby, 6 have potential to occur onsite, including: Santa Monica grasshopper (*Trimerotropis occidentiloides*), coast (San Diego) horned lizard (*Phrynosoma coronatum* [*blainvillii* population]), two-striped garter snake (*Thamnophis hammondi*), Cooper's hawk (*Accipiter cooperii*), western mastiff bat (*Eumops perotis californicus*), western red bat (*Lasiurus blossevillii*), and mountain lion (*Puma concolor*). These species have a potential of occurring onsite based on the proximity of tracked occurrences of the species to the project site, known geographic ranges, surrounding land uses, and onsite habitat suitability. Although these species have some potential to occur onsite, the potential is low due to the disturbed nature of the property and land uses onsite and in surrounding areas.

The project site has been previously graded/disc'd and onsite vegetation is best characterized as ruderal, with the exception of Valley Oak Woodland. Due to the disturbed nature of the project site and the surrounding area, the probability of state and/or federally listed-wildlife species to roost, nest, or breed onsite is low. Nonetheless, Mitigation Measures BIO-2 a through BIO-2e are required to avoid the accidental take of any special-status species. Potential impacts to special-status wildlife species potentially onsite would be less than significant with implementation of Mitigation Measures BIO-2a to BIO-2e.

b. The project site does not exist within any designated critical habitat areas; however Valley Oak Woodland is a sensitive habitat that was observed onsite. Valley Oak Woodland only exists as clusters of trees scattered throughout the undeveloped areas of the property, but is



most predominant as a strip of vegetation associated with the ephemeral drainage onsite and mostly immediately west of the project site. Valley Oak Woodland is described below.

Valley Oak Woodland is dominated by *Quercus lobata* (valley oak), which is a tall deciduous tree with light grayish bark and deeply lobed leaves. This uncommon oak species is found in slopes, valleys, and savannahs at elevations below 1,700 meters. The National Inventory of Wetland Plants (Reed 1988) lists *Quercus lobata* with a wetland indicator status of FAC (a Facultative species that is equally likely to occur in wetlands as in nonwetlands). Valley Oak Woodland forms up to a 30-meter-tall open woodland canopy with occasional shrubs growing below and a grassy ground layer. This plant community requires intermittently flooded soils, and occurs in floodplains, valley bottoms, gentle slopes, and summit valleys (Sawyer and Keeler-Wolf 1998). Valley Oak Woodland was observed as clusters of trees scattered throughout the undeveloped areas of the property, but was most predominant inhabiting the ephemeral drainage that drains offsite to the west. Associate native tree species observed contributing to the valley oak plant community onsite include: coast live oak (*Quercus agrifolia* ssp. *agrifolia*), southern California black walnut (*Juglans californica* var. *californica*), California sycamore (*Platanus racemosa*), and Fremont cottonwood (*Populus fremontii* ssp. *fremontii*). Native shrubs growing below include California coffeeberry (*Rhamnus californica*), mulefat (*Baccharis salicifolia*), mugwort (*Artemisia douglasiana*), Pacific blackberry (*Rubus ursinus*), California wild rose (*Rosa californica*), and western ragweed (*Ambrosia psilostachya* var. *californica*).

According to the City's Landscape and Oak Tree Consultant, Kay Greeley (memo dated October 9, 2007), 12 oak trees are proposed to be removed as a result of grading, paving, site construction, and road widening; and 27 additional oak trees will be encroached upon resulting from demolition, grading, and site clearing. (Subsection *e* of this section discusses in detail the impacts associated with the removal/encroachment of oak trees.) Impacts to individual oak trees onsite would adversely affect Valley Oak Woodland as a sensitive plant community. Therefore, impacts to the onsite Valley Oak Woodland would be **potentially significant unless mitigation incorporated.**



Table 6
Special-Status Plant Species Tracked by CNDDB in the Vicinity of
Liberty Canyon Project Site

Scientific Name	Common Name	Federal ¹	State	CNPS ²	Habitat Requirement
<i>Astragalus brauntonii</i>	Braunton's milk-vetch	E	-	1B.1	Closed-cone coniferous forest, chaparral, coastal scrub, valley and foothill grassland. Recent burns or disturbed areas; in stiff gravelly clay soils overlying granite or limestone. 4-640m.
<i>Baccharis malibuensis</i>	Malibu baccharis	-	-	1B.1	Coastal scrub, chaparral, cismontane woodland. In Conejo volcanic substrates, often on exposed roadcuts. Sometimes occupies oak woodland habitat. 150-260m.
<i>California macrophylla</i>	Round-leaved filaree	-	-	1B.1	Cismontane woodland, valley and foothill grassland. Clay soils. 15-1200m.
<i>Calochortus clavatus</i> var. <i>gracilis</i>	Slender mariposa-lily	-	-	1B.2	Chaparral, coastal scrub. Shaded foothill canyons; often on grassy slopes within other habitat. 420-760m
<i>Calochortus plummerae</i>	Plummer's mariposa-lily	-	-	1B.2	Coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, lower montane coniferous forest. Occurs on rocky and sandy sites, usually of granitic or alluvial material. Can be very common after fire. 90-1610m.
<i>Chorizanthe parryi</i> var. <i>fernandina</i>	San Fernando Valley spineflower	C	E	1B.1	Coastal scrub. Sandy soils. 3-1035m.
<i>Deinandra minthornii</i>	Santa Susana tarplant	-	R	1B.2	Chaparral, coastal scrub. On sandstone outcrops and crevices, in shrubland. 280-760m.
<i>Dudleya cymosa</i> ssp. <i>agourensis</i>	Agoura Hills dudleya	T		1B.2	Chaparral, cismontane woodland. Rocky, volcanic breccia. 200-500m.
<i>Dudleya cymosa</i> ssp. <i>marcescens</i>	Marcescent dudleya	T	R	1B.2	Chaparral. On sheer rock surfaces and rocky volcanic cliffs. 180-520m.
<i>Juglans californica</i> var. <i>californica</i>	Southern California black walnut	-	-	4.2	Chaparral, coastal scrub, cismontane woodland. Slopes, canyons, alluvial habitats. 50-900m.
<i>Nolina cismontana</i>	Chaparral nolina	-	-	1B.2	Chaparral, coastal scrub. Primarily on sandstone and shale substrates; also known from gabbro. 140-1275m.
<i>Pentachaeta lyonii</i>	Lyon's pentachaeta	E	E	1B.1	Chaparral, valley and foothill grassland. Edges of clearings in chap., usually at the ecotone between grassland and chaparral or edges of firebreaks. 30-630m.

¹ Federal and State Status: T = Threatened, E = Endangered, R = Rare, C = Candidate.

² CNPS List:

- 1A = Presumed Extinct in California
- 1B = Rare, Threatened, or Endangered in California and elsewhere
- 2 = Rare, Threatened, or Endangered in California, but more common elsewhere
- 3 = Need more information (a Review List)
- 4 = Plants of Limited Distribution (a Watch List)

CNPS Threat Code Extension:

- .1 = Seriously endangered in California (>80% of occurrences threatened/high degree & immediacy of threat)
- .2 = Fairly endangered in California (20-80% occurrences threatened)
- .3 = Not very endangered in California (<20% of occurrences threatened)



Table 7
Special-Status Wildlife Species Tracked by CNDDDB in the Vicinity of
Liberty Canyon Project Site

Scientific Name	Common Name	Federal	State	CDFG	Habitat Requirements
Invertebrates					
<i>Socalchemmis gertschi</i>	Gertsch's socalchemmis spider	-	-	-	Known from only 2 localities in Los Angeles County: Brentwood (type locality) and Topanga Canyon.
<i>Trimerotropis occidentiloides</i>	Santa Monica grasshopper	-	-	-	Known only from the Santa Monica Mountains. Found on bare hillsides and along dirt trails in chaparral.
Fish					
<i>Gila orcuttii</i>	Arroyo chub	-	-	SC	Los Angeles basin south coastal streams. Slow water stream sections with mud or sand bottoms. Feeds heavily on aquatic vegetation & associated invertebrates.
Amphibians					
<i>Rana aurora draytonii</i>	California red-legged frog	T	-	SC	Lowlands & foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development. Must have access to estivation habitat.
Reptiles					
<i>Aspidoscelis tigris stejnegeri</i>	Coastal western whiptail	-	-	-	Found in deserts & semiarid areas with sparse vegetation and open areas. Also found in woodland & riparian areas. Ground may be firm, sandy, or rocky.
<i>Phrynosoma coronatum (blainvillii population)</i>	Coast (San Diego) horned lizard	-	-	SC	Inhabits coastal sage scrub and chaparral in arid and semi-arid climate conditions. Prefers friable, rocky, or shallow sandy soils.
<i>Thamnophis hammondi</i>	Two-striped garter snake	-	-	SC	Coastal California from vicinity of Salinas to northwest Baja California. From sea to about 7,000 ft elevation. Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth.
Birds					
<i>Accipiter cooperii</i>	Cooper's hawk	-	-	SC	Woodland, chiefly of open, interrupted or marginal type. Nest sites mainly in riparian growths of deciduous trees, as in canyon bottoms on river flood-plains;
<i>Aquila chrysaetos</i>	Golden eagle	-	-	SC	Rolling foothills, mountain areas, sage-juniper flats, & desert. Cliff-walled canyons provide nesting habitat; also, large trees in open areas.
<i>Athene cunicularia</i>	Burrowing owl	-	-	SC	Open, dry annual or perennial grasslands, deserts & scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably, California ground squirrel.
<i>Polioptila californica californica</i>	Coastal California gnatcatcher	T	-	SC	Obligate, permanent resident of coastal sage scrub below 2,500 ft in southern California. Low, coastal sage scrub in arid washes, on mesas & slopes. Not all areas of coastal sage scrub occupied.
Mammals					
<i>Euderma maculatum</i>	Spotted bat	-	-	SC	Occupies a wide variety of habitats from arid deserts and grasslands through mixed conifer forests. Feeds over water and along washes. Feeds almost entirely on moths. Needs rock crevices in cliffs or caves for roosting.



<i>Eumops perotis californicus</i>	Western mastiff bat	-	-	SC	Many open, semi-arid to arid habitats, including conifer & deciduous woodlands, coastal scrub, grasslands, chaparral etc. Roosts in crevices in cliff faces, high buildings, trees & tunnels.
<i>Lasiurus blossevillii</i>	Western red bat	-	-	-	Roosts primarily in trees, 2-40 ft above ground, from sea level up through mixed conifer forests. Prefers habitat edges & mosaics with trees that are protected from above & open below with open areas for foraging.
<i>Lasiurus cinereus</i>	Hoary bat	-	-	SC	Prefers open habitats or habitat mosaics, with access to trees for cover & open areas or habitat edges for feeding. Roosts in dense foliage of medium to large trees. Feeds primarily on moths. Requires water.
<i>Macrotus californicus</i>	California leaf-nosed bat	-	-	SC	Desert riparian, desert wash, desert scrub, desert succulent scrub, alkali scrub and palm oasis habitats. Needs rocky, rugged terrain with mines or caves for roosting.
<i>Myotis ciliolabrum</i>	Western small-footed myotis	-	-	-	Wide range of habitats mostly arid wooded & brushy uplands near water. Seeks cover in caves, buildings, mines and crevices. Prefers open stands in forests and woodlands. Requires drinking water. Feeds on variety of small flying insects.
<i>Myotis yumanensis</i>	Yuma myotis	-	-	-	Optimal habitats are open forests and woodlands with sources of water over which to feed. Distribution is closely tied to bodies of water. Maternity colonies in caves, mines, buildings or crevices.
<i>Puma concolor</i>	Mountain lion	-	-	FP	Adapted to a variety of habitats. Vendell Road has potential to provide movement corridor from Santa Monica Mountains to open areas north of Highway 101.

¹ Federal and State Status: T = Threatened, E = Endangered, R = Rare.
CDFG Status: SC = California Species of Special Concern, FP = Fully Protected.



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c. An ephemeral drainage (likely federally protected wetlands) extends through the site in a north to south direction and then meanders offsite into the adjacent restoration area to the west, at the southwest corner of the site. This drainage diverts flows from the unincorporated open space areas north of Highway 101 through an approximately 5-foot-diameter culvert that extends underneath Highway 101 and underneath the existing onsite building. The culvert terminates at the south side of the building, where flows are then directed into an open channel. This drainage is dominated by valley oak with other canopy contributors including coast live oak, southern California black walnut, Fremont cottonwood and California sycamore.

The drainage onsite has well-defined bed and banks. Potential impacts to streams, drainages, and wetlands are regulated by Section 404 of the Clean Water Act as well as by Sections 1600 through 1602 of the Fish and Game Code. The drainage onsite may be considered waters of the U.S. as defined in Section 401 of the Clean Water Act, which are regulated by the U.S. Army Corps of Engineers (Corps) and the Regional Water Quality Control Board (RWQCB). The California Department of Fish and Game (CDFG) may regulate the entire riparian corridor, which includes plants that are dependent upon the ephemeral drainage for survival.

It is not anticipated that construction activity associated with the proposed project would occur within the onsite drainage. However, in the event that activity within the drainage does occur, impacts to riparian species could occur and the Corps and CDFG may have jurisdiction to regulate such activity. Therefore, impacts to wetlands would **potentially significant unless mitigation incorporated.**

d. According to the wildlife movement analysis in the Biological Constraints Evaluation prepared for the project (Impact Sciences, Inc., 2007), Highway 101 fragments open space and habitats to the north and south of the highway. The Liberty Canyon underpass is a designated Wildlife Migration Choke Point (City of Agoura Hills General Plan Update 1992) that provides access to animals migrating between those wildlife habitat areas. In addition, Vendell Road provides linkage between the Santa Monica Mountains and the Liberty Canyon underpass. Liberty Canyon is considered the only currently viable corridor capable of connecting the biota of the Santa Monica Mountains with the hills of Simi Valley and native populations to the north (Edelman, 1990). However, a three-week wildlife movement study conducted by Impact Sciences, which utilized two infrared movement cameras placed on the project site, was did not detect mammals using Vendell Road or the culvert extending under the existing office building.

Although no mammals were detected during the surveys, the significance of the Liberty Canyon wildlife corridor is broadly accepted. Future development proposed in the vicinity of the project site risks further degradation of the corridor. Commercial development, residential neighborhoods, city streets, Highway 101 and ambient nighttime lighting have cumulatively created barriers that discourage the use of the Liberty Canyon underpass by target species (Ng, 2000). Development of the proposed project would incrementally contribute to the cumulative degradation of the Liberty Canyon wildlife corridor by increasing noise and lighting, and generally altering the existing condition of the project site. As such, impacts to the Liberty Canyon Wildlife Corridor as a result of the proposed project would be **potentially significant unless mitigation incorporated.**



It should be noted, however, that as part of the project, the applicant is proposing to restore the wildlife corridor to a better condition than existing, which would improve the wildlife habitat. As such, the project has already substantially addressed the potential impacts. However, Mitigation Measures BIO-6 and BIO-7 incorporate and augment the restoration that the applicant is proposing.

e. Oak trees (*Quercus* spp.) within the City of Agoura Hills are protected by the City's Oak Tree Ordinance (City Council Resolution No. 374). For an oak tree larger than two inches in diameter, measured 3.5 feet above the tree's natural grade, a permit is required to cut, move, or remove any oak tree. In addition, a permit is required for encroachment within a qualified oak tree's protected zone, which is defined as extending five feet beyond the dripline, and in all cases shall be at least 15 feet from the trunk.

According to the City's Landscape and Oak Tree Consultant, there are 50 oak trees onsite (see full oak tree report contained in Appendix C). Of the 50 existing onsite oak trees:

- *Grading, paving, site construction and road widening would require the removal of 12 oak trees (Tree numbers T-11, T-13, T-19, T-29, T-30, to T-33, T-2842, T-43, T-44, T-47, T-48 and T-50T-45, and T-46);*
- *Demolition, grading and site clearing would encroach upon the protected zones of 27 oak trees (Tree numbers T-1 to T-10, T-12, T-17, T-18, T-21, T-23, T-27, T-31, T-32, T-34 to T-41, and T-49); and*
- *11 oak trees would be protected in place with no impacts or encroachments.*

The removal and encroachment of oak trees, as detailed above, would result in the loss of 787 171 inches of trunk diameter and would adversely affect approximately 24% of the oak canopy onsite, which exceeds the 10% allowance per the Zoning Code. Therefore, impacts to oak trees would be **potentially significant unless mitigation incorporated**.

f. The project site is located within an urban area that is not subject to an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state habitat conservation plan (City of Agoura Hills General Plan Update 1992). **No impact** would occur.

Mitigation Measures

Mitigation Measures BIO-1 and BIO-2 are required to avoid potential impacts to any potential special-status species. Implementation of Mitigation Measures BIO-1 and BIO-2 would reduce impacts to special-status species to a less than significant level.

- BIO-1 Special-Status Plant and Wildlife Species.** Prior to vegetation trimming/removal, discing and grading associated with fuel management and the proposed project, focused surveys shall be conducted during the prior flowering season to determine the presence or absence of any special-status plants including *California macrophylla* (round-leaved filaree), *Calochortus clavatus* var. *gracilis* (slender mariposa-lily), and *Calochortus plummerae* (Plummer's mariposa-lily). If no special-status plants are found



within the development footprint or fire clearance zone, then no additional mitigation is required.

If any special-status plant species are found during the pre-construction survey, avoidance of sensitive plant species shall be the primary mitigation measure. If avoidance is not feasible, then a mitigation and monitoring program, including a salvage and relocation program shall be prepared and implemented. The restoration plan shall identify the number of plants to be replanted and the methods that will be used to preserve this species in this location. The plan shall include the measures necessary for the establishment of self-sustaining populations in suitable open space areas designated by the City to ensure the long-term survivability of the species in the vicinity. Salvage and relocation activities will include: seed and/or topsoil collection, germination of seed by a qualified horticulturist in a nursery setting, transplanting seedlings, and hand broadcasting seed into the appropriate open space habitats. Seed salvage shall only be used as a last resort and shall only be used as a means to protect the genetic record in a herbarium for the onsite population that would be destroyed. Annual monitoring for at least five years will also be required to ensure no-net-loss of acres of habitat for this species. The acreage ratio of lost special-status plant species habitat to habitat replaced shall be no less than 1:1.

Prior to grading activities associated with the proposed project, focused surveys shall be conducted to determine the presence or absence of any special-status wildlife that may potentially occur onsite, including Santa Monica grasshopper (*Trimerotropis occidentiloides*), coast (San Diego) horned lizard (*Phrynosoma coronatum [blainvillii population]*), two-striped garter snake (*Thamnophis hammondi*), western mastiff bat (*Eumops perotis californicus*), and western red bat (*Lasiurus blossevillii*). If no special-status wildlife species or sign of special-status wildlife species are found within the development footprint or fire clearance zone, then no mitigation is required.

If any special-status wildlife species are found during pre-construction surveys, a mitigation plan shall be developed and implemented to minimize impacts to any special-status wildlife species and to ensure successful mitigation for impacts to special-status wildlife species. The mitigation plan shall include measures to safely relocate the sensitive wildlife species (may include trapping), to allow wildlife species to escape from harm, and to ensure installation of appropriate temporary fencing prior to development to prevent re-entry.

Take Permits. If any state or federal endangered or threatened species are detected during the pre-development survey, the city and respective regulatory agencies shall be immediately notified, and development shall not be permitted until such time as a letter of no-effect or the appropriate take permit(s) is issued.



Construction Monitoring. If a special-status wildlife species is found, construction monitoring by a qualified biologist shall be conducted to ensure no harm or impacts to special-status wildlife species occurs during construction activities. If any wildlife species, including special-status wildlife species, is observed during construction activities, the contractor shall allow the animal to escape or a qualified biologist shall relocate the animal to a preserved/undeveloped area with similar required habitat. If a special-status wildlife species is observed onsite, the biological monitor, City, and appropriate regulatory agency shall be notified to implement all measures necessary to protect the sensitive species. Pursuant to the California Endangered Species Act, if pre-construction surveys determine that impacts to State-listed wildlife species could occur, CDFG shall be consulted prior to project approval. The equipment operators shall be informed of the species' presence and/or be provided with pictures in order to help avoid impacts to this species to the maximum extent possible.

Once the pre-construction special-status wildlife species surveys are conducted by a qualified biologist during the proper seasons, the report results, including survey dates, exact species observed and location of species onsite, shall be submitted to the City and other necessary regulatory agencies for review and approval. No construction shall begin prior to this approval.

BIO-2 Migratory Bird Species Act. To avoid the accidental take of any migratory bird species or raptors, such as Cooper's hawk (*Accipiter cooperii*), the removal or pruning of trees shall be conducted between September 15 and February 15, outside of the typical breeding season, as feasible. Should avoidance of the nesting season not be feasible, a qualified biologist/ornithologist satisfactory to the City's Environmental Analyst shall conduct focused nesting surveys weekly for 30 days prior to grading or initial construction activity. The results of the nest survey shall be submitted to the City within one week of completion for review via a letter report prior to initiation of grading or other construction activity with the last survey conducted no more than three days prior to any clearance of vegetation or other construction activity. In the event that a nesting migratory bird species or raptor is observed in the habitat to be removed or in other habitat within 300 feet of the construction work areas (500 feet for raptors), the applicant has the option of delaying all construction work in the suitable habitat area or within 300 feet thereof (500 feet for raptors), until after September 15, or continuing focused surveys in order to locate any nests. If an active nest is found, clearing and construction within 300 feet (500 feet for raptors) of the nest shall be postponed until the nest is vacated and juveniles have fledged, and there is no evidence of a second attempt at nesting. Limits of construction to avoid a nest site shall be established in the field with flagging and stakes or construction fencing. Construction personnel shall be instructed on the ecological sensitivity of the area.



The project proponent shall record the results of the abovementioned protective measures to document compliance with applicable State and federal laws pertaining to the protection of native birds.

Once the pre-construction bird/bat surveys are conducted by a qualified biologist during the proper seasons, the report results, including survey dates, exact species observed and location of species onsite, shall be submitted to the City and other necessary regulatory agencies for review and approval. No construction shall begin prior to this approval.

Potential impacts to jurisdictional waters or wetlands onsite would be less than significant with implementation of Mitigation Measures BIO-3 through BIO-5.

BIO-3 **Creek Protection Program.** A riparian habitat and creek protection program for onsite and adjacent offsite areas prepared by a qualified biologist shall be implemented. The program shall include, but not be limited to, the following components:

1. *A minimum of a 10-foot buffer from the top of bank, or at least five feet from the outside of any riparian canopy (whichever is greater), along the open channel/drainage shall be protected. The edge of the buffer area shall be fenced with chain link and a silt fence during construction to prevent intrusion into the open channel/drainage culvert. The location of the habitat fencing shall be conducted under the direction of a qualified biologist. The fencing shall be installed to the satisfaction of the City Planning and Community Development Department prior to the start of any grading, vegetation clearing or building. The fencing shall be removed upon completion of construction.*
2. *Riparian areas located outside of the construction footprint shall be indicated on all grading and construction plans. Construction personnel shall be informed of the sensitivity and location of riparian habitat on the project site; and*
3. *All ground disturbances, including grading for buildings, access ways, easements, subsurface grading, and utilities, as well as vegetation removal, shall be prohibited within the fenced riparian area.*

If it is determined that work adjacent to or in the drainage is necessary, including connection of storm water drain facilities, the following Mitigation Measures BIO-4 and BIO-5 would be required:

BIO-4 **Jurisdictional Delineation.** If impacts to the drainage or open channel onsite are anticipated, a jurisdictional delineation shall be conducted by a qualified biologist, prior to any activities that may impact the onsite drainage, to delineate the boundaries of regulated areas. The delineation shall be verified by the regulating agencies, and appropriate mitigation measures shall be established in consultation with the agencies. Specifically, if impacts are proposed within the drainage onsite, the applicant shall obtain a permit from the U.S. Army Corps of Engineers pursuant to Section 404 of the Clean Water Act, a water quality certification from the Regional Water Quality Control Board (RWQCB) pursuant to Section 401 of the Clean Water Act, and/or a Streambed Alteration Agreement from the California Department of Fish and



Game pursuant to Section 1600 et seq. of the California Fish and Game Code for any grading or fill activity within drainages and wetlands and trimming/removal of riparian vegetation. It is recommended that the applicant contact these agencies prior to final plan submittal in order to incorporate any additional requirements into the project design. Evidence of required permits shall be submitted to the City Planning and Community Development Department prior to issuance of a grading or building permit.

BIO-5 Habitat Mitigation Plan and Monitoring Program. If CDFG, RWQB or Corps permits are required for any grading or fill activity within the open channel or drainage onsite, a compensatory habitat creation/restoration program shall be required as part of the permitting process to mitigate impacts to jurisdictional areas. The plan shall be written and implemented by a biologist familiar with restoration and mitigation techniques. Compensatory mitigation shall occur onsite (if feasible) using regionally collected native plant material at a minimum ratio of 1:1 (habitat created to habitat impacted). The CDFG and RWQCB may require a higher mitigation ratio. At the discretion of the regulatory agencies, including the City, payment into an in-lieu fee program is occasionally considered acceptable mitigation if onsite mitigation is not feasible. The restoration/mitigation plan shall include, but not be limited to the following components:

1. *Description of the project/impact site (i.e.: location, responsible parties, jurisdictional areas to be filled/impacted by habitat type);*
2. *Goal(s) and performance criteria of the compensatory mitigation project (habitat types, areas, specific functions, and values of habitat to be established, restored, enhanced, and/or preserved);*
3. *Description of the proposed compensatory mitigation-site (location and size, ownership status, existing functions and values of the compensatory mitigation-site);*
4. *Implementation plan for the compensatory mitigation-site (rationale for expecting implementation success, responsible parties, schedule, site preparation, planting plan);*
5. *Maintenance activities during the monitoring period (activities, responsible parties, schedule);*
6. *Irrigation method/schedule (i.e., how much water is needed, where and for how long);*
7. *Monitoring plan for the compensatory mitigation-site (performance standards, target functions and values, target hydrological regime, target jurisdictional and non-jurisdictional acreages to be established, restored, enhanced, and/or preserved, annual monitoring reports);*
8. *Completion of compensatory mitigation (notification of completion, agency confirmation); and*
9. *Contingency measures (initiating procedures, alternative locations for contingency compensatory mitigation, funding mechanism).*
10. *The mitigation and monitoring plan shall be submitted to the City Planning and Community Development Department for review and approval (in addition to any*



necessary review and approval from the regulatory agencies) prior to issuance of a grading permit.

Mitigation Measures BIO-6 and BIO-7 are based on discussions between City staff and SMMC staff. The mitigation measures incorporate and augment the restoration that the applicant is proposing to conduct along the northern edge of the site, as shown on the project landscape plans. Implementation of Mitigation Measures BIO-6 and BIO-7 would reduce impacts to the Liberty Canyon wildlife corridor to a less than significant level.

BIO-6 Protection of Wildlife Corridor During Construction. Construction shall be limited to the hours between 7:00 AM and 5:00 PM. Best Management Practices shall be employed during construction activities. Avoid any obstruction on Vendell Road, such as chain-link fences, cinderblock walls, or hardscape, and no barriers shall be created within the drainage or culvert that traverses the project site. Lighting shall be shielded downward to avoid offsite spillage.

BIO-7 Wildlife Corridor Restoration and Monitoring Plan. The applicant shall submit a wildlife corridor maintenance and monitoring plan for a minimum of three years for the proposed wildlife corridor and “transition area” (see Item 2 below) restoration plantings. The plan shall be prepared by a qualified biologist, and shall include measurable goals for removal of nonnative plant species. The plan shall also include performance thresholds for planting survival, native plant density, and native plant coverage. Existing native plants shall be tagged prior to demolition for retention by a qualified biologist. The plan shall be submitted to the City for review and approval by the Landscape Consultant and Planning and Community Development Department prior to issuance of a grading permit. The wildlife corridor restoration and monitoring plan shall include, but not be limited to the following measures to enhance and protect wildlife movement:

1. The wildlife corridor restoration area plant palette shall be revised to be more naturalistic and native. This can be accomplished by increasing the diversity of plantings and by using more native species. In particular, all nonnative and invasive plant species in the wildlife corridor restoration area and the western restoration area shall be replaced with native plant species. The wildlife corridor area between the Caltrans Right-of-Way (ROW) and the new building shall be landscaped with locally native plant material. Since the SMMC notes that wildlife travel throughout the entire site, the parking lot areas throughout the project shall have plant material appropriate to provide habitat and accommodate wildlife travel. Cultivars and hybrids are not allowed. Plant material/seed must come from local sources in the Santa Monica Mountains, and shall be supplied by a nursery specializing in local native plants and restoration. Final approval of the plant palette shall be made by the City’s Landscape and Oak Tree Consultant. Native plant materials for restoration planting shall include:



- *California coffeeberry (Rhamnus californica)*
 - *Coast live oak (Quercus agrifolia)*
 - *Toyon (Heteromeles arbutifolia)*
 - *Purple needlegrass (Nassella pulchra)*
 - *Nodding needlegrass (Nassella crenua)*
 - *California melic grass (Melica californica)*
 - *Narrow-leaved milkweed (Asclepias fascicularis)*
 - *Heart-leaved bush penstemon (Keckiella cordifolia)*
 - *California wild rose (Rosa californica)*
 - *Common phacelia (Phacelia distans)*
 - *Sticky bush monkeyflower (Mimulus aurantiacus)*
 - *Redberry (Rhamnus crocea)*
 - *Spreading rush (Juncus patens)*
 - *Rough sedge (Carex senta)*
 - *Coyote brush (Baccharis pilularis)*
2. The applicant shall restore the area northwest of the project site on SMMC/MCRA land (the “transition zone” adjacent to the walnuts and the oaks). The applicant shall remove the asphalt in this area. Native trees and shrubs used by wildlife shall be planted in this restoration area and shall include the following:
- *Coast live oak (Quercus agrifolia)*
 - *Valley oak (Quercus lobata)*
 - *Blue elderberry (Sambucus mexicana)*
 - *California sycamore (Platanus racemosa)*
 - *Southern California black walnut (Juglans californica var. californica)*
 - *Mugwort (Artemisia californica)*
 - *California coffeeberry (Rhamnus californica)*
 - *Leafy California Buckwheat (Eriogonum fasciculatum var. fasciculatum)*
 - *Toyon (Heteromeles arbutifolia)*
 - *Spreading rush (Juncus patens)*
 - *Rough sedge (Carex senta)*
 - *Narrow-leaved milkweed (Asclepias fascicularis)*
 - *Foothill penstemon (Penstemon heterophyllus)*
3. The wildlife corridor restoration area irrigation system shall be separate from the irrigation for the rest of the project landscaping. The corridor area shall be on valves and controllers separate from the rest of the site. The irrigation shall consist of temporary, aboveground, brown-line irrigation with automated valves on automatic controllers. Two quick couplers for the corridor landscape irrigation behind the buildings shall be provided by the applicant to the MRCA for maintenance in perpetuity, and shall be shown on the final landscaping plan. Irrigation shall be installed and maintained by the applicant for a minimum of three years after final acceptance by the City. These irrigation details shall be



- indicated on project plans that shall be submitted prior to issuance of a grading of building permit.
4. The graded slopes adjacent to Liberty Canyon Road shall not exceed 3:1.
 5. No lighting shall be placed in or bordering the wildlife corridor. All exterior building and parking lot lights shall be on a timer that turns on at sundown and shuts off at midnight. Wall-mounted lighting on the north side of the buildings shall be shielded. The illumination boundaries shall be shown on photometric plans submitted prior to issuance of a grading of building permit. The western parking lot shall be paved with porous concrete that is colored light brown.
 6. The western parking lot shall be paved with porous concrete that is colored light brown.
 7. The chain link fence at the northwest corner of the parcel shall be removed prior to commencement of the construction to encourage wildlife across.
 8. The applicant shall plant natives in the fall season just prior to the first rain event, which should be stipulated in the final planting plans.
 9. The applicant shall provide proof of a conservation easement or other similar legal agreement acceptable to SMMC/MRCA and the City regarding the wildlife corridor area adjacent to the Caltrans ROW. This agreement shall include a restriction on fencing to allow the free movement of wildlife. As well as stipulate other relevant items outlined in these mitigation measures for the "transition zone", at the northwest corner of the site, along with the proposed western parking lot, a restrictive use easement agreement shall be established between the SMMC/MRCA and the applicant. This agreement shall stipulate use of the parking lot and other relevant items as outlined in these mitigation measures. The conservation and restrictive easement boundaries shall include all landscape areas on the perimeter of the property, as well as the internal areas that are free of any buildings and fencing. If the final agreements are not completed, recorded, and filed with the City, the applicant shall produce written evidence from SMMC/MRCA that the agreement is in process to the satisfaction of both parties. All of this shall occur prior to Certificate of Occupancy.
 10. Any yellow star thistle (*Centaurea solstitialis*) or tocalote (*Centaurea melitensis*) on the SMMC/MRCA (adjacent to the project site on the west) shall be eradicated as part of site preparation and development, with such measures indicated on the landscape plans submitted for a building or grading permit. The applicant shall also completely eradicate all Mexican fan palm (*Washingtonia robusta*) and California fan palm (*Washingtonia filifera*) from the property, and such activity shall be indicated in the final plans submitted for a building or grading permit. The applicant shall replace liquidambar (*Liquidambar styraciflua*) and star jasmine (*Trachelospermum jasminoides*) with other appropriate native species (such as those listed above in number 2 and 3) with final



approval by the City’s Landscape Consultant and Environmental Analyst.

11. No trees shall be planted within the canopy of oak trees T-3 and T-36 to avoid competition with the mature trees.

Mitigation Measures BIO-8 and BIO-9 shall be implemented in order to reduce impacts to oak trees and sensitive Valley Oak Woodland to a less than significant level.

BIO-8 Oak Tree Replacement. Per the City’s Landscape and Oak Tree Consultant, at least 48 oak trees shall be planted onsite. Of the 48 new oak tree plantings, at least 12 must be 36-inch box size, and at least 24 must be 24-inch box size. This replacement mitigation shall be required in addition to any other code requirements for oak planting.

BIO-9 Oak Tree Protection. The applicant shall comply with all City-approved or applicable items listed in the Liberty Canyon Oak Tree Report (Campbell 2006), including those items detailed in the work procedures, tree protection, and construction and maintenance procedures sections. These items are to ensure protection of the oak trees to remain and ensure survival of the oak trees planted.

<u>V. CULTURAL RESOURCES</u> – Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

a. An existing two-story office building is located on the project site. The rest of project site is vacant and therefore lacking known historical resources (Rincon Consultants, Inc. site visit, January 15, 2008). No impacts to historical resources would occur.

b-d. The project site is not known to contain any archaeological resources, paleontological resources or human remains (City of Agoura Hills General Plan Update, 1993). Although no archaeological resources, paleontological resources or human remains are known to be present onsite, site grading has the potential to disturb as yet undiscovered cultural resources. This is a **potentially significant impact** that would be mitigated to a less than significant level through implementation of mitigation measures CR-1 and CR-2.



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Mitigation Measures

Implementation of Mitigation Measures CR-1 and CR-2 would reduce impacts to unknown archaeological resources and human remains to a less than significant level.

CR-1 Monitoring. A qualified archaeologist shall monitor any grading, trenching, excavation, or other subsurface work that occurs in undisturbed soil. If artifacts are discovered, the developer shall notify the City of Agoura Hills’ Environmental Analyst immediately, and construction activities shall cease until the archaeologist has documented and recovered the resources. Equipment stoppages prescribed by the archaeologist shall only involve those pieces of equipment that have actually encountered significant or potentially significant resources, and should not be construed to require stoppage of all equipment on the site unless the resources are thought by the archaeologist to be distributed throughout the entire site. The purpose of stopping the equipment is to protect cultural/scientific resources that would otherwise be impacted, and said equipment may undertake work in other areas of the site away from the discovered resources. If the find is determined by the archaeologist to be a unique archaeological resource, as defined by Section 2103.2 of the Public Resources Code, the site shall be treated in accordance with the provisions of Section 21083.2 of the Public Resources Code with mitigation as appropriate. If the find is determined not to be a unique archaeological resource, no further action is necessary and construction may continue.

CR-2 Evaluation and Notification. Should archaeological resources be discovered and avoidance proves infeasible, the importance of the site shall be evaluated by a qualified archaeologist. In general, the following guidelines shall be followed:

- *Preservation of sites in-place is the preferred manner of avoiding damage to historic and prehistoric archaeological resources.*
- *In the event of discovery of human remains, work shall stop until the coroner has determined that no investigation of the cause of death is required; or, if descendants have made a recommendation of the property owner regarding proper disposal of the remains, or until descendants have failed to make a recommendation within 24 hours of notification. If no recommendation is received, remains shall be interred with appropriate dignity on the property in a location not subject to future development.*

<u>VI. GEOLOGY AND SOILS</u> – Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<p>a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:</p> <p>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</p>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



VI. GEOLOGY AND SOILS – Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
Division of Mines and Geology Special Publication 42.				
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

A geotechnical report of the site was conducted for the proposed project by GeoSoils Consultants, Inc (GCI). A review of the report was conducted by the City of Agoura Hills and comments were made and addressed. The following analysis was based on these documents, which can be reviewed at the City of Agoura Hills Planning Department, located at 30001 Ladyface Court in Agoura Hills.

a (i). The GCI Updated Geotechnical Report (2006) indicated that there were no known active faults within the property. Ancient inactive faults exist on and around the property, though these are similar to thousands that exist throughout the Santa Monica Mountains and present no hazard to planned land use and development. Therefore, impacts relating to rupture of a known fault would be **less than significant**.

a (ii, iii). Several active and/or potentially active faults in the surrounding region could produce ground shaking at the site. These faults include the Malibu Coast fault San Fernando, Northridge, San Andreas, Newport-Inglewood and Malibu Coast Faults. Each of these faults is located in close enough proximity to cause significant earth shaking during high magnitude earthquakes (GeoSoils, 2006). Design and construction of the proposed structures shall adhere to recommendations listed in the standard procedures of the California Building Code (CBC) and Uniform Building Code (UBC) to reduce any potential impacts from seismic related activity affecting the site. Additionally, with incorporation of design considerations and the recommendations of the Updated Geotechnical Report and associated responses, impacts would be **less than significant**.



a (iv). The proposed project is not located in an area delineated as a seismic landslide hazard zone by the California Department of Conservation Seismic Hazards Zone Map (1998) and the City of Agoura Safety Element (1992). Therefore, impacts would be **less than significant**.

b. The proposed project involves the construction of two new commercial buildings with associated parking, which would increase the amount of impervious surface by approximately 50% (Westland Civil, 2006). During construction the potential for soil erosion exists due to wind entrainment or sediment traveling in stormwater runoff. To reduce these impacts, dust control measures (AQMD Rule 403) and a Stormwater Pollution Prevention Plan are required for project development (refer to Section VIII, *Hydrology and Water Quality*) serve to reduce the potential for soil loss within the project site to a **less than significant** level.

c. Soil materials encountered in the borings consisted of artificial fill, alluvium, topsoil/slope debris and bedrock. GCI completed multiple ground borings to determine the status of the underlying soil and to assess liquefaction potential. The results considered the liquefaction potential to be low for the project site (2007). Therefore, impacts are considered to be **less than significant**.

d. GCI (2006) performed compaction and expansion tests to analyze the shrink/swell potential of soils on the project site. Their tests report that surface and near-surface soils have a medium to high expansion potential. However, GCI has reported that the geologic structure is favorably oriented for the project site (2006). Further, while GCI has indicated that the site is satisfactory for the proposed development, they suggest structural and grading recommendations that would serve as mitigation to reduce potential impacts. Impacts would be **less than significant with mitigation incorporated**.

e. The proposed project would be connected to the City's sewer system and would not use a septic system. **No impact** would occur.

Mitigation Measure

Implementation of the Mitigation Measure GEO-1 would reduce impacts related to expansive soils to a less than significant level.

GEO-1 Design and Construction. The proposed project shall incorporate design and construction recommendations contained in the Updated Geotechnical Report, conducted by GeoSoils, Inc. on July 17, 2006, and the Responses to the City of Agoura (2007) as accepted by the City Engineer. The reports contains recommendations that address site preparation, soil expansiveness, foundation recommendations, slabs-on-grade specifications, site drainage, manufactured slope construction and maintenance, and retaining wall design. Compliance would be verified by the City of Agoura Hills Building Department prior to issuance of a grading permit, through submission of a letter from the Project Engineer that documents incorporation of all applicable design and construction recommendations.



VII. HAZARDS AND HAZARDOUS MATERIALS – Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
a) The proposed project would involve the construction of two new commercial buildings and associated parking areas. Commercial uses such as those proposed are not likely to involve the routine transport, use or disposal of hazardous substances, other than minor amounts typically used for maintenance. Impacts would be less than significant .				
b) There would be no hazardous materials, substances, or waste associated with project development other than those typically used for routine maintenance. Therefore, the project would have no impact with release of hazardous materials into the environment or near any school.				
c) As stated above, there would be no hazardous materials, substances, or waste associated with project development other than those typically used for routine maintenance. No schools are present within ¼ mile of the project site. The closest school is the Arthur E. Wright Middle				



School located 1.25 miles away. Further, there are no proposed schools that would be located within ¼ mile of the project site. **No impact** would occur.

d) The project site does not appear on any hazardous material site list compiled pursuant to Government Code Section 65962.5. The following databases were checked (January 7, 2008) for known hazardous materials contamination at the project site:

- *Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) database;*
- *Geotracker search for leaking underground fuel tanks;*
- *Investigations- Cleanups (SLIC) and Landfill sites, Cortese list of Hazardous Waste and Substances Sites; and*
- *The Department of Toxic Substances Control’s Site Mitigation and Brownfields Database.*

The project site does not appear on any of the above lists; thus, **no impact** is anticipated with respect to this issue.

e, f) There are no airports or airstrips located within the project vicinity. Therefore, the project site is not within an area covered by an airport land use plan, nor is it located in the vicinity of a private air strip. **No impact** would occur.

g. The proposed project involves the development of two commercial buildings and associated parking on an existing parcel surrounded by development, Agoura Road, and the US-101. Implementation of the proposed project would not interfere with existing emergency evacuation plans, or emergency response plans and may increase circulation and access in the area. **No impact** would occur.

h. The project involves construction of two commercial buildings and associated parking areas. Wildland fires are a major concern due to the hilly, mountainous, and undeveloped character of much of the surrounding areas of Agoura Hills (Public Safety Element, 1992). However, the City of Agoura includes building and design standards that help to prevent the threat of loss during a wildland fire. Impacts related to wildland fire would be **less than significant** with mandatory compliance with building standards and regulations.

<u>VIII. HYDROLOGY AND WATER QUALITY</u> – Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



VIII. HYDROLOGY AND WATER QUALITY – Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Result in temporary modifications to existing drainage patterns that may increase the flow rate of stormwater, violate water quality discharge requirements, or result in substantial erosion on or off-site due to construction activities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
i) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
k) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

A Preliminary Drainage Report of the site was conducted for the proposed project by Westland Civil, Inc. The following analysis was partially based on this document, which can be found in its entirety in Appendix D.

a, d-g. Currently, drainage onsite consists of overland sheet flow towards an existing 72-inch pipe of reinforced concrete, and the open channel onsite. The open channel is partly concrete and partly earthen, and drains to a reinforced box culvert (County maintained) at the southwest corner of the site, running underneath Agoura Road. At present, the area north of the site and adjacent to the US. 101 freeway drains through the site in a north/south direction via the 72-inch pipe, and then enters the open channel.

The proposed project involves the construction of two commercial buildings with associated parking areas. It would result in an increase by 0.14 cubic feet per second for a 10-year storm



event, which is considered less than significant (Westland Civil, Inc., 2006). Drainage patterns would change slightly with the project. The majority of the drainage would continue to sheet flow on the proposed parking lots and would be collected by catch basins with hydrocarbon filters, connecting to the existing open channel and box culvert. For the western parking lot, the surface of which would be permeable, the runoff would percolate, with any remaining runoff draining to a proposed concrete swale in the parking lot that enters a vegetated filter at the southwest corner of the parking lot on SMMC land. The SMMC has indicated its acceptance of this excess drainage onto its site as a means of sustaining habitat.

The existing drainage facilities are adequate to handle the increase in runoff. Since the majority of the runoff would connect to the existing box culvert at Agoura Road, which is a non-erodeable facility, detention is not required under County SUSMP guidelines (Westland Civil, Inc., 2006). Any potential concerns regarding water quality would be addressed through the use of filters – both in the catch basins and the vegetated filter for the western parking lot. Operational impacts related to water quality and applicable stormwater requirements would be **less than significant**.

The majority of the site is paved. Construction of the proposed project would include grading of soils that would have the potential to escape from the site during rains. The amount of material potentially eroded from the site during construction is greater than under existing conditions due to the loss of vegetation and movement of soils. In the event that runoff occurs during construction periods, potentially significant impacts would exist. To reduce these impacts, the proposed project would be required to submit a site-specific Storm Water Pollution Prevention Plan (SWPPP), a Wet-Weather Erosion-Control Plan, and a Standard Urban Storm Water Mitigation Plan (SUSMP). These items are explained below.

Regulations under the federal Clean Water Act require that a NPDES storm water permit be obtained for projects that would disturb greater than one acre during construction. Per State regulations, the applicant would need to file a Notice of Intent with the Los Angeles Regional Water Quality Control Board (LARWQCB) and prepare a Storm Water Pollution Prevention Plan (SWPPP) that is kept at the construction site and implemented during construction activities. The SWPPP would list a series of measures, such as best management practices, to be employed during construction to prevent storm water runoff pollution. Also as part of the SWPPP, the applicant would need to prepare a Wet Weather Erosion Control Plan to minimize erosion from the site and potential pollution of local waterways and ultimately the Pacific Ocean. Lastly, the applicant would be required to prepare a Standard Urban Storm Water Mitigation Plan (SUSMP), to address post construction best management practices to reduce the potential for pollutants to enter the storm drain system. These measures would be ongoing for the life of the project. The SWPPP, Wet Weather Erosion Control Plan, and SUSMP would need to be provided to the City prior to issuance of a grading or building permit. Therefore, while the project has the potential to result in significant water quality impacts from runoff during construction, the state and federal requirements for the preparation of the aforementioned plans would reduce potential impacts to a **less than significant** level.

b. The proposed project involves the construction of commercial buildings and associate parking areas. The project would utilize water from the Las Virgenes Municipal Water District (LVMWD), which has no local sources of water. The LVMWD receives water from the State



Water Project. Therefore, the project would not substantially deplete ground water supplies. Project development would incrementally increase impermeable surface area onsite, which may incrementally reduce groundwater recharge. However, because of the size of the site and depth to groundwater (10.5 to 16 feet below the existing ground surface), the project would not be expected to adversely affect groundwater. Therefore, impacts would be **less than significant**.

c. The drainage pattern throughout the site would be substantially modified by project development. However, the potential for adverse erosion and sedimentation effects is diminished to a level of less than significant with preparation and implementation of a SWPPP, a “site-specific wet weather erosion-control plan,” and a Stormwater Management Plan, as mentioned above under issue a. Therefore, impacts would be **less than significant**.

h,i,j. The proposed project involves construction of office buildings and parking lots. It does not involve the construction of housing. Furthermore, the project is sited outside the 100-year flood hazard zone. Therefore, **no impact** related to flood risk would occur (Agoura Hills Public Safety Element, December 1992).

k. Seiches are oscillations of the surface of an inland body of water that varies in period from a few minutes to several hours. Seismic excitations can induce such oscillations. Tsunamis are large sea waves produced by submarine earthquakes or volcanic eruptions. Since the site is not located close to an inland body of water and is at an elevation sufficiently above sea level to be outside the zone of a tsunami run-up, the risk of these two hazards is not relevant to the project site. Therefore, **no impact** would occur.

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
<u>IX. LAND USE AND PLANNING</u> – Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a. The proposed project would not divide an established community. Instead, it would provide infill development on a commercial site surrounded by business to the east, vacant land to the west, U.S. 101 to the north, and apartment buildings to the south. Moreover, the site is already established with office uses. The scale of the proposed buildings would be similar to the surrounding commercial uses. The apartment buildings to the south are across Agoura Road, and are not directly adjacent to the site. Therefore, the project would not divide an established community and impacts would be **less than significant**.



b. The proposed project includes two commercial buildings with associated parking areas. This development is consistent with the General Plan land use designation of Business Park – Office Retail and the zoning designation of Business Park – Office Retail – Freeway Corridor.

The proposed project includes signage that would require separate permits, which if approved would not result in impacts to land use.

Additionally, the proposed project would require the removal of 12 oak trees protected under the City’s Oak Tree Ordinance and the encroachment into the protected zones of 27 other protected oak trees (oak trees larger than two inches in diameter). The project proponent would be required to acquire an Oak Tree Permit from the City Department of Planning and Community Development prior to the issuance of a grading permit. With the acquisition of an oak tree permit, impacts would be **less than significant**.

c. The project site is within an urban area and is not subject to an adopted habitat conservation plan (HCP) or natural community conservation plan (NCCP) (General Plan Update 1993). There are no HCPs or NCCPs in the project vicinity. **No impact** would occur.

<u>X. MINERAL RESOURCES</u> -- Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a, b. According to the California Division of Mines and Geology (DMG), no significant mineral deposits are known to exist within the City of Agoura Hills (City of Agoura Hills, General Plan Update 1993). The majority of the City north of Agoura Road is classified as MRZ-1. This classification is used to delineate areas where adequate information is available to determine that not mineral deposits are present, and/or there is little likelihood for significant deposits to be present. There are, however, areas in Liberty Canyon classified as MRZ-3, which are areas containing mineral deposits, of which the significance cannot be determined. Nonetheless, the proposed project site is surrounded by development, and the conversion of the project site to mining is unlikely. Impacts would be **less than significant**.

<u>XI. NOISE</u> – Would the project result in:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



XI. NOISE – Would the project result in:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity due to construction activities above levels existing without the project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Noise level (or volume) is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound power levels to be consistent with that of human hearing response, which is most sensitive to frequencies around 4,000 Hertz (about the highest note on a piano) and less sensitive to low frequencies (below 100 Hertz). For the most sensitive uses, such as single family residential, 60 dBA Day-Night average level (Ldn) is the maximum normally acceptable exterior level. Ldn is the time average of all A-weighted levels for a 24-hour period, with a 10 dB upward adjustment added to those noise levels occurring between 10:00 p.m. and 7:00 a.m. to account for the general increased sensitivity of people to nighttime noise levels. The Community Noise Equivalent Level (CNEL) is similar to the Ldn except that it adds 5 dB to evening noise levels (7:00 p.m. to 10:00 p.m.). The City of Agoura Hills utilizes the CNEL for measuring noise levels.

a, c. Given the nature of office uses, operation of the proposed office buildings would not substantially increase ambient noise levels. Instead, the primary source of noise would be that associated with project-generated traffic. The noise sensitive uses in the vicinity of the project site that could be affected by project-generated traffic noise are the multi-family residences located approximately 80 feet south of the project site, across Agoura Road, and to a lesser extent, the single- and multi-family residences located on the west side of Liberty Canyon Road, south of Agoura Road. Table 8 shows Agoura Hills’ exterior noise standards for residential properties. Table 9 shows the interior noise standards for residential properties, per the City’s Zoning Code (Division 6 – Noise Regulations, Section 9656.2).

A 20-minute noise measurement was taken at the southern edge of the project site, approximately 35 feet from the centerline of Agoura Road, at 9:15 AM on Monday, January 14, 2008. The noise measurement indicated an average ambient noise level of 65.7 dBA Leq.



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Table 8
Exterior Noise Standards for Residential Properties

Noise Level	Time Period
55 dB(A)	7:00 a.m. – 10:00 p.m.
50 dB(A)	10:00 p.m. – 7:00 a.m.

Source: City of Agoura Hills Zoning Ordinance, Division 6 – Noise Regulations, Section 9656.2 A.

Table 9
Interior Noise Standards for Residential Properties

Noise Level	Time Period
45 dB(A)	7:00 a.m. – 10:00 p.m.
45 dB(A)	10:00 p.m. – 7:00 a.m.

Source: City of Agoura Hills Zoning Ordinance, Division 6 – Noise Regulations, Section 9656.3 A.

Development of the proposed project would increase the amount of vehicle trips to and from the site, which has the potential to generate an increase in traffic noise on area roadways; and therefore, increase noise at neighboring uses. These include commercial and residential uses. A spreadsheet version of the Traffic Noise Model (TNM) was used to estimate noise based on traffic estimates in the traffic study conducted by Fehr & Peers/Kaku Associates, Inc. in February 2007.

The criteria shown in Table 10 were used to determine whether or not increases in traffic noise would be significant. These criteria are based on the recommendations of the Federal Interagency Committee on Noise (FICON). The FICON recommendations were developed as a result of studies that relate aircraft noise levels to the percentage of people highly disturbed by various noise levels. Although these recommendations were developed specifically for aircraft noise impacts, they are considered applicable to all noise sources that use noise exposure metrics such as the Ldn and CNEL.

Based on the traffic study, the following roadway segments were determined to have some potential for noise impacts due to their proximity to existing sensitive receptors and the estimated change in the roadway volume to capacity ratio:

- *Agoura Road (west of liberty Canyon Road)*
- *Liberty Canyon Road (south of Agoura Road)*



Table 10
Significance of Changes in
Operational Roadway Noise Exposure

Ambient Noise Level Without Project (Ldn or CNEL)	Significant Impact
< 60 dB	+ 5.0 dB or more
60 – 65 dB	+ 3.0 dB or more
> 65 dB	+ 1.5 dB or more

Existing noise levels for the street segments listed above were calculated by estimating existing volumes for each street segment analyzed. The existing volumes for street segments were estimated by taking the highest peak hour volume for the adjoining intersection (provided in the traffic study found in Appendix B), and multiplying it by 10 to estimate the average daily trips (ADT) for that street segment. As shown in Table 11, existing traffic noise levels along these street segments are estimated to range from 62.9 to 64.5 dBA CNEL.

Section 9656.2 C. of the City of Agoura Hills Municipal Code, Division 6 – Noise Regulations stipulates that for residential properties, in the event that the ambient noise level exceeds any of the noise limit categories, the noise level applicable to the categories shall be increased to reflect the ambient noise. Therefore, for the proposed project, the residential exterior noise standard would be the 62.9 to 64.5 dBA CNEL existing ambient noise level for the roadways.

Table 11
Projected Noise Levels along Roads
with Project and Cumulative Traffic (dBA)

Roadway	Noise Level (dBA CNEL)		Cumulative Noise Level Change	Project Contribution	Significant Project Impact?
	Existing (2007)	Cumulative + Project			
Agoura Road (west of liberty Canyon Road)	64.5	64.9	0.4	0.2	NO
Liberty Canyon Road (south of Agoura Road)	62.9	63.6	0.7	0.2	NO

The modeled distance is 50 feet from the road centerline. See Appendix E for calculations. Modeled noise levels do not account for the presence of sound walls, which would reduce exterior noise levels by 5-7 dBA.

The increases in ADT from the traffic study were used to model the change in noise levels resulting from project-generated traffic along the four roadway segments analyzed for noise. Noise model results for each roadway segment analyzed can be found in Appendix E. As shown in Table 11, model results indicate that the largest increase in noise from project-generated traffic would be an increase of 0.2 dBA. The project-related increases would not be audible since they are well below the 3 dBA increase at which noise increases are generally audible. In addition, project-related noise increases would not exceed FICON recommended



significance thresholds, as listed in Table 10. Therefore, noise associated with project-generated traffic would be **less than significant**.

Traffic increases associated with cumulative development within the City would incrementally increase noise levels along roadways and would potentially subject sensitive receptors to noise exceeding City standards. As shown in Table 11, the estimated increase resulting from cumulative development in the City on the two studied road segments would be in the 0.2-0.5 dBA range and would not be audible. Thus, cumulative roadway noise impacts would be **less than significant**.

b. The project site is not located in an area of excessive groundborne vibration and would not expose people to excessive levels of groundborne vibration. The project involves construction of two office buildings. Given the nature of the proposed use, the project would not be expected to generate substantial groundborne vibration. **No impact** would occur.

d. Construction activity would generate a temporary increase in noise in the site vicinity. Maximum noise levels relating to construction range from 75-95 decibels (dB) at a distance of 50 feet (US EPA, 1971). Sensitive receptors are generally considered residential units, libraries, hospitals, and nursing homes. The sensitive receptors in the vicinity of the project site are the residences to the south of the project site, across Agoura Road. Construction activities would generate temporary noise increases that could adversely affect these receptors. Therefore, although the construction noise would be temporary and occur mostly during the workday, project construction could result in significant noise impacts to the residences located south of the project site, across Agoura Road. Impacts would be **less than significant with mitigation incorporated**.

e, f. The project site is not located within the vicinity of an airport or private airstrip; and therefore, would not be affected by air traffic noise impacts. **No impact** would occur.

Mitigation Measure

The following mitigation measure would reduce impacts related to construction activity noise to a less than significant level. Please note that Mitigation Measure BIO-7 further restricts construction to the hours of 7 AM to 5 PM in order to protect the wildlife corridor. From a strictly human noise disturbance prospective, the following mitigation measure would be adequate. However, the more restrictive of the two mitigation measure would apply regarding construction hours.

- N-1 Construction Activity Timing.** Onsite construction activity involving the use of equipment or machinery that generates noise levels in excess of 60 dB(A) during the daytime shall be limited to between the hours of 7:00 AM and 7:00 PM, Monday through Saturday pursuant to Article IV, Chapter 1, of the City's Municipal Code. No construction activity shall occur between 7:00 PM and 7:00 AM that generates noise in excess of the 50 dBA nighttime standard. No construction activity shall take place on Sundays or legal holidays.



<u>XII. POPULATION AND HOUSING</u> – Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a. The proposed project involves the construction of two office buildings. The proposed project does not involve the construction of new housing and would not induce population growth. The facility would employ a limited number of workers, thereby generating some new jobs. The Southern California Association of Governments (SCAG) makes projections of housing and employment growth in each of several subregions within Southern California. Agoura Hills is located within the Las Virgenes, Malibu, Conejo Council of Governments (COG) subregion. According to SCAG projections, about 1,883 jobs are projected to be added in the subregion by 2010 and 2,799 jobs are expected to be added by 2020. Any new jobs created by this facility would be within SCAG projections. As the additional jobs created would be minimal, the project is not expected to create a significant demand for housing in the City. Overall, the City has more housing than jobs (General Plan Housing Element, 2001). As the project would be consistent with the SCAG projections for jobs, would not generate a significant demand for housing, and would not require the extension of infrastructure or roads, impacts would be less than significant. Therefore, impacts related to population growth would be **less than significant**.

b, c. A two-story office building with a driveway and parking lots are located on the project site. The remainder of the site is vacant, unused land. Thus, project implementation would not displace people or housing. **No impact** would occur.

<u>XIII. PUBLIC SERVICES</u>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
i. Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



<u>XIII. PUBLIC SERVICES</u>	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
ii. Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iii. Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv. Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
v. Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

a.i. The City of Agoura Hills is served by the Los Angeles County Fire Department (LACFD). Fire Station #125, located at 5215 North Las Virgenes Road in Calabasas, approximately two miles northeast of the project site, serves the project site and surrounding areas (Captain Fina, January 2008). The proposed project is not anticipated to require additional fire protection, as the project site is already within a developed area currently served by the LACFD. The project would be required to comply with Fire Code and LACFD standards, including specific construction specifications, access design, location of fire hydrants, and other design requirements. The proposed project’s impacts with respect to fire services would be **less than significant**.

ii. The City of Agoura Hills receives police protection from the Los Angeles County Sheriff’s Department (LACSD). The proposed project is not anticipated to require additional police services, as the project site is already within a developed area currently served by the LACSD. The project itself is not expected to adversely affect police services as it would not increase population, and the development of the vacant portion of the project site with the proposed office buildings is not likely to increase crime potential. The proposed project’s impacts with respect to police services would be **less than significant**.

iii. The proposed project would not directly generate an increase in population. Therefore, there would be no increase in students that would warrant the construction of new schools. Nevertheless, the applicant would be required to pay state-mandated school impact fees. Pursuant to Section 65995 (3)(h) of the California Government Code (Senate Bill 50, chaptered August 27, 1998), the payment of statutory fees “...is deemed to be full and complete mitigation of the impacts of any legislative or adjudicative act, or both, involving, but not limited to, the planning, use, or development of real property, or any change in governmental organization or reorganization.” Thus, impacts would be **less than significant**.

iv-v. The proposed project would place two new office buildings on a site where a two-story office building already exists. The proposed project would not introduce residential uses or generate population growth and, thus, would not increase citywide demand for parks or result in a change to the City’s parkland to population ratio. Therefore, there would be **no impact** to parks and other public services.



XIV. RECREATION

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a-b. The proposed project involves construction of approximately 30,000 sf of office space. It would not directly affect any existing park or recreational facilities, nor would it substantially increase demand for parks or recreational facilities. Therefore, impacts would be **less than significant**.

XV. TRANSPORTATION/TRAFFIC – Would the project:

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Cause an increase in traffic that 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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Result in the temporary street or lane closures that would result in either a change of traffic patterns or capacity that is substantial in relation to the existing traffic load and capacity of the street system during construction activities (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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Result in inadequate parking capacity resulting in an impact on traffic or circulation?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The following analysis is partially based upon a traffic impact analysis performed by Fehr & Peers/Kaku Associates (July 2007), which analyzed the proposed project's traffic impacts. In



addition, a letter was prepared by Fehr & Peers/Kaku Associates in April 2008 to address a change in the proposed parking supply. The complete study and letter is contained in Appendix B.

The project site is located at the northwest corner of Liberty Canyon Road and Agoura Road in the City of Agoura Hills. The location of the project within the surrounding street network is shown on Figure 1 of the traffic study. Regional access to this area is provided by U.S. 101. The nearest access to US 101 is via the eastbound on and off-ramps at Liberty Canyon Road, immediately north of the project site. The nearest US 101 westbound on and off-ramps are located approximately 300 feet north of the project site, on the northern side of the US 101. Note that for the purposes of this traffic impact analysis, all streets that run parallel to US 101 are described as east/west streets, and all streets that run parallel to Liberty Canyon Road are described as north/south streets.

a, b. The traffic study examined two intersections in the vicinity of the project site for each of the three traffic scenarios. The study intersections, selected in consultation with the City traffic engineer, are listed below and illustrated on Figure 1 of the traffic study:

- *Liberty Canyon Road and US 101 Eastbound off-ramp*
- *Liberty Canyon Road and Agoura Road*

The qualitative measure used to describe the condition of traffic flow is Level of Service (LOS). LOS ranges from A to F, where LOS A would be excellent conditions and LOS F would be overload conditions. The analyzed intersection of Liberty Canyon Road and Agoura Road is controlled by traffic signals. Table 2 of the traffic study provides LOS definitions for signalized intersections. The intersection capacity utilization (ICU) method of intersection analysis was used to determine the intersection volume-to-capacity (V/C) ratio and the corresponding LOS for this signalized intersection.

The other analyzed intersection of Liberty Canyon Road and the US 101 eastbound off-ramp is unsignalized. A stop sign currently controls the vehicles on the US 101 eastbound off-ramp. The intersection was analyzed using the "Two-Way Stop-Controlled" method from the *2000 Highway Capacity Manual* (HCM) (Transportation Research Board, 2000). The HCM methodology determines the average vehicle delay to find the corresponding LOS based on the definitions in Table 3 of the traffic study.

Table 12 summarizes the peak hour V/C ratio along with the corresponding LOS at the two study intersections under existing conditions on weekdays. The stop-controlled intersection of Liberty Canyon Road at the US 101 eastbound off-ramp currently operates at LOS B during both the weekday morning and afternoon peak hours. The signalized intersection at Liberty Canyon Road and Agoura Road currently operates at LOS A during both the weekday morning and afternoon peak hours.



**Table 12
Existing Weekday Intersection Peak Hour Levels of Service**

Intersection	Peak Hour	Cumulative Base	
		Delay or V/C	LOS
Liberty Canyon Rd. & Us 101 EB Off-Ramp*	AM	11 sec.	B
	PM	11 sec.	B
Liberty Canyon Rd. & Agoura Rd.	AM	0.387	A
	PM	0.369	A

*Intersection is two-way stop-controlled. Average vehicular delay in seconds per vehicle is reported rather than V/C ratio for worst approach.

SOURCE: Fehr & Peers/Kaku Associates, July 2007. See Appendix B for complete traffic study.

Significance Thresholds. According to the City of Agoura Hills criteria, a project would be considered to have a significant traffic impact if the following conditions are met:

Intersection Conditions with Project Traffic

Project-related Increase in V/C Ratio

LOS

V/C Ratio

D, E or F

>0.800

Equal to or greater than 0.020

Using these criteria, a project would not have a significant impact at an intersection if it were projected to operate at LOS A, B or C after the addition of project traffic, regardless of the magnitude of the increase in the V/C ratio. If the intersection, however, were operating at LOS D, E or F after the addition of project traffic and the incremental change in the V/C ratio were 0.020 or greater, the project would be considered to have a significant impact.

Project Trip Generation. The trip generation estimates for the proposed project were prepared using trip generation rates from the Institute of Transportation Engineers' *Trip Generation, 7th Edition*. Table 13 presents the trip generation rates and estimates for the proposed project. Figure 7B of the traffic study shows the traffic volumes added by the proposed project at the study intersections.

As indicated in Table 13, the proposed addition of Buildings B and C would result in an increase of approximately 847 vehicular trips to the site on a typical weekday, including 67 morning peak hour trips (54 inbound, 34 outbound) and 91 (24 inbound, 67 outbound) afternoon peak hour trips.



**Table 13
 Trip Generation Rates And Estimates**

Land Use	Size	Daily Trips	AM Peak Hour			PM Peak Hour		
			In	Out	Total	In	Out	Total
Existing Condition								
General Office (Building A Only)	24.540 ksf	270	33	5	38	6	31	37
Future Condition								
General Office (Existing Building A)	24.540 ksf	(270)	(33)	(5)	(38)	(6)	(31)	(37)
General Office (New Building B)	9.658 ksf	110	14	2	16	3	12	15
Medical Office (New Building C)	20.002 ksf	737	40	11	51	21	55	76
Subtotal		1,117	87	18	105	30	98	128
Net Incremental Trips		847	54	13	67	24	67	91

Notes:

ksf = 1,000 square feet

Trip generation rates from Institute of Transportation Engineers' (ITE) Trip Generation, Seventh Edition, 2003.

SOURCE: Fehr & Peers/Kaku Associates, July 2007. See Appendix B for complete traffic study.

Cumulative Base Traffic Conditions. The first step in the impact analysis was to analyze the projected operating conditions at each of the intersections under future conditions without the project, i.e., the cumulative base scenario. The cumulative base traffic volumes for weekday peak hours were analyzed to determine the V/C ratio and corresponding LOS for each location under these conditions. As shown in Table 14, both analyzed intersections are projected to continue to operate at LOS B or better during both the morning and afternoon peak hours.

Project Impacts. Table 14 summarizes the future levels of service. Figure 8 of the traffic study shows the cumulative base plus project traffic volumes at study intersections. As shown in Table 14, under cumulative plus project conditions, the intersection of Liberty Canyon Road and US 101 eastbound off-ramp would continue to operate at LOS B and the intersection of Liberty Canyon Road and Agoura Road would continue to operate at LOS A.

Using the traffic impact significance criteria described above, the proposed project would not have a significant impact at either of the two study intersections during the morning and afternoon peak hours. Therefore, impacts would be **less than significant**.



**Table 14
 Future (2008) Weekday Intersection Peak Hour Levels of Service**

Intersection	Peak Hour	Cumulative Base		Cumulative plus Project			
		Delay or V/C	LOS	Delay or V/C	LOS	Project Increase in V/C	Significant Project Impact?
Liberty Canyon Rd. & Us 101 EB Off-Ramp*	AM	12 sec.	B	12	B		
	PM	11 sec.	B	12	B		
	AM	0.371		0.387		0.016	NO
	PM	0.483		0.503		0.020	NO
Liberty Canyon Rd. & Agoura Rd.	AM	0.402	A	0.410	A	0.008	NO
	PM	0.388	A	0.419	A	0.031	NO

**Intersections are controlled by stop signs on the minor approach, the US 101 eastbound off-ramp. For the purpose of evaluating the operating condition of the intersection, the top row shows analysis using the HCM stop-controlled methodology and average vehicular delay in seconds on the most constrained approach is reported. For the purpose of application of City of Agoura Hills criteria, the V/C ratios are also shown, assuming the presence of a two-phase signal.*

SOURCE: Fehr & Peers/Kaku Associates, July 2007. See Appendix B for complete traffic study.

b. Construction of the proposed project may require temporary lane detours or closures. However, due to the size of the project site and the temporary nature of the lane alterations, it would not be expected to result in a change in traffic that is substantial in relation to existing traffic patterns or capacity. Therefore, impacts would be **less than significant**.

c. The Los Angeles County Congestion Management Program (CMP) requires a regional traffic impact analysis (TIA) for:

- All CMP arterial monitoring intersections where a proposed project would add 50 or more trips during either the AM or PM weekday peak hours of adjacent street traffic.
- All CMP mainline freeway monitoring locations where the proposed project would add 150 or more trips, in either direction, during either the AM or PM weekday peak hours.

The nearest CMP arterial monitoring intersection to the project site is on the U.S. 101 north of Reyes Adobe. Based on the project trip generation and distribution shown in Table 13, the proposed project would generate fewer than 150 trips (in either direction) during either the weekday morning or afternoon peak hours at the aforementioned CMP freeway monitoring station in the project vicinity. As such, further traffic analysis is not required.

None of the CMP arterial monitoring stations identified in the CMP are located within a five-mile radius of the project site. According to the project trip generation and distribution described in Table 13, the proposed would add fewer than 50 trips to any of the CMP monitoring intersections during either the weekday morning or afternoon peak hours. As such, impacts would be **less than significant** and further traffic analysis is not required.



INTRODUCTION

This Draft Initial Study and Mitigated Negative Declaration (IS/MND) addresses the potential environmental effects resulting from the construction of 29,660 square feet of office space at the northwest corner of Liberty Canyon Road and Agoura Road in Agoura Hills.

LEGAL AUTHORITY AND FINDINGS

This Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared in accordance with the *CEQA Guidelines* and relevant provisions of the California Environmental Quality Act (CEQA) of 1970, as amended.

Initial Study. Section 15063(c) of the *CEQA Guidelines* defines an Initial Study as the proper preliminary method of analyzing the potential environmental consequences of a project. The purposes of an Initial Study are:

- (1) To provide the Lead Agency with the necessary information to decide whether to prepare an Environmental Impact Report (EIR) or a Mitigated Negative Declaration;
- (2) To enable the Lead Agency to modify a project, mitigating adverse impacts, thus avoiding the need to prepare an EIR; and
- (3) To provide sufficient technical analysis of the environmental effects of a project to permit a judgment based on the record as a whole, that the environmental effects of a project have been adequately mitigated.

Negative Declaration or Mitigated Negative Declaration. Section 15070 of the *CEQA Guidelines* states that a public agency shall prepare a negative declaration or mitigated negative declaration for a project subject to CEQA when:

- (a) The initial study shows that there is no substantial evidence, in light of the whole record before the agency, that the project may have a significant effect on the environment; or
- (b) The Initial Study identifies potentially significant effects but:
 1. Revisions in the project plans or proposals made by, or agreed to by the applicant before a proposed mitigated negative declaration and initial study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur; and
 2. There is no substantial evidence, in light of the whole record before the agency, that the project as revised may have a significant effect on the environment.

An IS/MND may be used to satisfy the requirements of CEQA when the physical effects of the proposed project are anticipated to have no significant unmitigable effects on the environment. As discussed further in subsequent sections of this document, implementation of the proposed



d. Given the nature and scope of the proposed project, and that there are no airports or airstrips in the project vicinity, the project would not change any air traffic patterns. **No impact** to air traffic would occur.

e, f. As discussed in Section XIII, Public Services, the proposed project would be required to comply with Fire Code and LACFD standards including access design requirements. The project itself is not expected to generate emergency access or hazardous internal design impacts. Therefore, impacts **would be less than significant**.

g. The City of Agoura Hills Municipal Code requires that proposed development projects provide adequate supply of parking spaces based on the proposed land use for the site. A project is considered to have a significant parking impact if proposed parking supply does not meet the parking demand specified by the Code. Table 15 shows the City’s parking requirements.

Table 15
Summary of Parking Requirements* and Proposed Supply

Land Use	Size	Parking Ratio	Required Parking Spaces
Existing Office Building A	24,540 sf	1 space per 300 sf	82
New Office Building B	9,658 sf	1 space per 300 sf	32
New Medical Office Building C	20,002 sf	1 space per 200 sf	100
Total Spaces Required by Code			214

*City of Agoura Hills Municipal Code, March 2003.

SOURCE: Fehr & Peers/Kaku Associates, July 2007. See Appendix B for complete traffic study.

As indicated in Table 15, 214 parking spaces would be required pursuant to the City’s Municipal Code. The proposed project would provide 215 onsite parking spaces, thereby exceeding the code requirement by one (1) space. Therefore, the proposed project would provide sufficient parking for the existing office building and the proposed new buildings and **no impact** related to parking would occur.

<u>XVI. UTILITIES AND SERVICE SYSTEMS</u> – Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



<u>XVI. UTILITIES AND SERVICE SYSTEMS</u> – Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

a,b,e. Wastewater generated in the Agoura Hills area is treated at the Tapia Water Reclamation Facility (TWRP), operated by Las Virgenes Municipal Water District (LVMWD). TWRP has a capacity of 16 million gallons per day (mgd) and currently treats an average of 9.5 mgd (LVMWD, 2005). Therefore, there is a surplus capacity of 6.5 mgd. Wastewater generation factors from the County Sanitation Districts of Los Angeles County were used to determine the proposed project's impact on the TWRP. As shown in Table 16, the proposed project would generate an estimated 4,531 gallons per day (gpd) of wastewater.

Wastewater generated by the proposed project would account for less than 0.07% of the Tapia Water Reclamation Facility's available treatment capacity. Therefore, impacts to wastewater treatment systems would be **less than significant**.

Table 16
Projected Wastewater Generation

Land Use	Area (square feet)	Generation Factor	Flow (Gallons Per Day)
Office	9,658 sf	200 gpd/1,000 sf	1,931 gpd
Medical Office	20,002 sf	130 gpd/1,000 sf	2,600 gpd
Total	29,660 sf		4,531 gpd

^a gpd = square feet

^b sf = gallons per day

Source: Los Angeles County Sanitation Districts, LA City Planning



c. The proposed project involves the construction of two commercial buildings and associated parking on a 4.2-acre site. Refer to Section VIII, Hydrology and Water Quality, for further discussion of onsite runoff. Implementation of the requirements of the Los Angeles County Stormwater Ordinance would reduce impacts to a **less than significant level**.

d. The Las Virgenes Municipal Water District (LVMWD) supplies potable water in the City of Agoura Hills. The LVMWD has no local sources of water and obtains all of its potable water supply from the Metropolitan Water District of Southern California (MWD), which in turn receives water from the State Water Project. The LVMWD's potable water system currently operates with a storage deficit in the Jed Smith Zone and pumping deficits at the Twin Lakes, Mulwood, and Seminole zones (LVMWD Potable Water Updated Master Plan, 2007). Recommendations and improvements are currently being addressed and improvements are being planned. Using the accepted factor for determining water demand (wastewater usage x 1.2 = project water demand), and assuming 675 gpd/acre for landscaping, the proposed project would require approximately 6,382 gpd. This would be a reasonably small amount of water considering the LVMWD supplies more than 30 million gpd. With the planned improvements, impacts related to water supply would be **less than significant**.

f, g. The Calabasas Sanitary Landfill, located adjacent to the Ventura Freeway on Lost Hills Road, would receive the solid waste generated by the proposed project. The total capacity of the Calabasas Landfill is 69.7 million cubic yards and its remaining capacity is approximately 16.9 million cubic yards (CIWMB, 2004). Based on current intake rates, the Calabasas Landfill is expected to reach capacity in 2028. Currently, the Calabasas Landfill has a daily capacity of 3,500 tons/day and the average daily intake is 1,800 tons/day. Therefore, 1,700 tons/day of capacity are available.

The following disposal rates from the California Integrated Waste Management Board (CIWMB) were used to calculate the amount of solid waste generated by the proposed project: office uses generate 0.0108 tons/ square foot/year. Based on this disposal rate, the proposed project would generate approximately 320 tons per year, or 1,758 pounds (less than one ton) per day. The daily total represents approximately 0.05% of Calabasas Landfill's daily surplus; therefore, sufficient landfill capacity is available to serve the project and impacts related to solid waste would be **less than significant**.



XVII. MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

a. As discussed in Section IV, Biological Resources, Mitigation Measures BIO-1 through BIO-9 would be required to reduce impacts to biological resources to a less than significant level. As discussed in Section V, Cultural Resources, Mitigation Measures CR-1 and CR-2 would be required to reduce impacts to cultural resources to a less than significant level. With the implementation of the aforementioned mitigation measures, the proposed project would not significantly 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. Therefore, impacts to biological resources and cultural resources would be **less than significant with mitigation incorporated**.

b. The proposed project would not create any significant impacts that cannot be mitigated. Furthermore, the project's contribution to cumulative impacts would be **less than significant**.

c. Implementation of Mitigation Measure N-1 listed in Section XI, *Noise*, compliance with the City of Agoura Hills Municipal Code, State of California Regional Water Quality Control Board requirements, and all applicable state and federal regulations would reduce potential adverse affects to human beings to a less than significant level. As such, impacts to human beings would be **less than significant with mitigation incorporated**.



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PERSONS CONTACTED

Captain Fina, Los Angeles County Fire Department, January 2008.



project would not result in any significant effects on the environment that cannot be reduced to below of a level of significance with the mitigation measures included herein.

IMPACT ANALYSIS AND SIGNIFICANCE CLASSIFICATION

The following sections of this IS/MND provide discussions of the possible environmental effects of the proposed project for specific issue areas that have been identified on the CEQA Initial Study Checklist. For each issue area, potential effects are discussed and evaluated.

A “significant effect” is defined by Section 15382 of the *CEQA Guidelines* as “a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by a project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance.” According to the *CEQA Guidelines*, “an economic or social change by itself shall not be considered a significant effect on the environment, but may be considered in determining whether the physical change is significant.”

Following the evaluation of each environmental effect determined to be potentially significant is a discussion of mitigation measures and the residual effects or level of significance remaining after the implementation of the measures. In those cases where a mitigation measure for an impact could have a significant environmental impact in another issue area, this impact is discussed as a residual effect.

USE OF PREVIOUS ENVIRONMENTAL DOCUMENTS IN THIS ANALYSIS

The following environmental analyses and technical studies were used as a basis for this document. Each study is available upon request at the City of Agoura Hills Planning Department Front Counter.

- *Air Quality Impact Report, Liberty Canyon Office Expansion Project. Impact Sciences, Inc. November 2006.*
- *Biological Constraints Evaluation, 27489 Agoura Road, LLC Project Site. Impact Sciences, August 2007.*
- *City of Agoura Hills - General Plan Update EIR. March 12, 1993.*
- *Updated Geotechnical Report, Proposed Commercial Buildings B and C and Associated Parking Areas, 27489 Agoura Road. GeoSoils Consultants, Inc. July 17, 2006.*
- *Oak Tree Report. Liberty Canyon Agoura Road, LLC. Richard W. Campbell. September 6, 2007.*
- *Preliminary Drainage Report for Liberty Center Office Buildings, Westland Civil Inc. July 2006.*
- *Traffic Study for the Liberty Canyon Road Office Expansion Project. Fehr & Peers/Kaku Associates. January 2007.*



INITIAL STUDY

PROJECT TITLE

Liberty Canyon Office Expansion Project

LEAD AGENCY and CONTACT PERSON

City of Agoura Hills
30001 Ladyface Court
Agoura Hills, CA 91301
Contact: Valerie Darbouze, Associate Planner

PROJECT PROPONENT

27489 Agoura Road LLC
5000 North Parkway Calabasas #100
Calabasas, California 91302

PROJECT SITE CHARACTERISTICS

Location: The project site is located at the northwest corner of Liberty Canyon Road and Agoura Road in Agoura Hills, Los Angeles County (refer to Figures 1 and 2).

Assessor Parcel Numbers: The project site is identified by Assessor's Parcel Nos. 2064-006-006, 007, 009, 016, 018 & 019.

Existing General Plan Designation: The City of Agoura Hills General Plan land use designation is Business Park Office Retail (BP-OR).

Existing Zoning: The project site is zoned Business Park – Office Retail – Freeway Corridor (BP-OR-FC).

Surrounding Land Uses: The project site is located adjacent to Highway 101 to the north. Multi-family residential development is located south of the project site across Agoura Road. A commercial building is located east of the project site across Liberty Canyon Road, within the County of Los Angeles. Vacant land is located adjacent to the project site to the west, which is owned by the Santa Monica Mountains Conservancy (SMMC)/Mountains Conservation and Recreation Authority (MCRA).

DESCRIPTION OF THE PROJECT

As part of the proposed project, the approval of the proposed Vesting Tentative Parcel Map 67397, which would merge six (6) parcels (Assessor's Parcel Nos. 2064-006-006, 007, 009, 016, 018 & 019), would be required. The project site is an irregularly shaped parcel measuring 182,081 square feet (sf) or about 4.18 acres. As shown on Figure 3, an existing 24,540 sf two-story office building (Building A) is located in the northwestern portion of the site. Two



parking lots currently serve the existing office building; one in the northeastern portion of the site and one in the western portion of the site. Existing site access is provided by a driveway on Liberty Canyon Road and another driveway on Agoura Road (not currently used). The driveway on Liberty Canyon Road is currently limited to right-in and right-out operation, while the driveway on Agoura Road allows two-way operation.

The proposed project involves the construction of a two-story office building (Building B) measuring 9,658 sf and a two-story medical office building (Building C) measuring 20,002 sf, as well as reconfiguring parking lots and adding a new parking lot just west of the project site. The total parking provided would be 215 stalls. Figure 4 shows the proposed site plan. Both of the proposed buildings would have maximum rooftop elevations of 35 feet (ft). Figures 5A and 5B show the proposed building elevations.

Building B

Building B would be situated in the northeastern portion of the project site. The 9,658 sf of office space in Building B would be constructed over 18 parking spaces on the ground level. Access to the second level would be via an elevator and stairway located in the lobby in the southwestern corner of the ground level. A stairway in the southeastern corner of the ground level would provide additional access to the second level. Immediately north of Building B, there would be additional parking spaces at ground level. Vehicular access to Building B and the 32 parking spaces would be via a driveway in the northeastern portion of the project site on Liberty Canyon Road and would be configured to restrict the project outbound traffic to southbound Liberty Canyon Road.

Building C

Building C would be situated in the southwestern portion of the project site. The 20,002 sf of medical office space in Building C would be divided between the first and second levels. Access to the second level would be via an elevator and stairway located in the lobby in the southeastern corner of the building. A stairway in the northwestern corner of the building would provide additional access to the second level. Parking for Building C would be provided in parking lots located to the north, west and east of the proposed building. Vehicular access to Building C and the existing Building A would be from the common parking area via a two-way driveway in the southwestern portion of the project site on Agoura Road.

Proposed landscaping would cover approximately 38% of the project site and would include replacement oak trees, site perimeter and building area trees, shrubs, groundcovers and vines. Figures 6A and 6B show the proposed landscape plan.

The proposed parking lot on the western edge of the site is located on SMMC-owned land. The SMMC has given tentative approval for use of this land for the parking lot. In return, the SMMC has requested, and the applicant has incorporated into the project, the demolition of the existing single story building on the SMMC site and the restoration of habitat on both a portion of the SMMC site, as well as the office project site, as described in the following paragraph. The SMMC has also requested that the western parking lot be of permeable materials. An





Appendix A

Air Quality

AK

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**AIR QUALITY IMPACT REPORT
LIBERTY CANYON OFFICE EXPANSION PROJECT
AGOURA HILLS, CALIFORNIA**

Prepared for:

27489 Agoura Road, LLC
5000 North Parkway Calabasas, #100
Calabasas, California 91302

Prepared by:

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November 2006

AIR QUALITY IMPACT REPORT
LIBERTY CANYON OFFICE EXPANSION PROJECT
AGOURA HILLS, CALIFORNIA

Prepared by:
Impact Sciences, Inc.

SUMMARY

The implementation of the proposed Liberty Canyon Office Expansion Project (Project) will result in the generation of air pollutants during both the Project's construction and operational phases. The construction phase will include grubbing, grading, and building construction that includes the erection of structures, the application of architectural coatings, asphalt and concrete paving, and landscaping. The operational phase takes into account air pollutant emissions associated with the normal operations of the building complex. These emissions include exhaust from the building and water heating systems, volatilization of cleaning products, and exhaust from delivery and service vehicles as well as from tenant and customer vehicles.

Specific air pollutants emitted during the construction phase will consist of particulate matter less than 10 microns in aerodynamic diameter (PM₁₀) emitted by diesel equipment and vehicles, fugitive dust generated by on-site construction activities, and volatile organic compounds (VOC), carbon monoxide (CO), and oxides of nitrogen (NO_x) emitted by heavy equipment diesel exhaust. The primary operational pollutant emissions will consist of VOC, NO_x, and CO from building and water heating systems and landscape maintenance equipment, as well as NO_x, CO, and PM₁₀ from employee and client motor vehicle exhaust and road dust. URBEMIS2002 (Version 8.7.0), a land use and air emissions estimation model, was used to estimate the unmitigated construction and operational emissions. The unmitigated results from this model run show that the thresholds of significance for VOC, NO_x, CO, Sulfur Oxides (SO_x), and PM₁₀ would not be exceeded, and the air quality impacts of Project would be less than significant.

INTRODUCTION

The Project is located in the western edge of the South Coast Air Basin (SCAB). The SCAB is a severe-17 nonattainment area for the federal 8-hour ozone standard and an extreme nonattainment area with respect to the California 1-hour ozone standard. The SCAB is a serious nonattainment area with respect to the federal 24-hour PM₁₀ standard and designated as nonattainment with respect to the California 24-hour and annual PM₁₀ standards. It is designated as attainment or unclassified for all other federal and state ambient air quality standards. The ozone precursors VOC and NO_x, in addition to PM₁₀, are the

pollutants of concern for projects located in the South Coast Air Quality Management District (SCAQMD), which governs sources of air pollutants in the SCAB.

The Project consists of the construction of a one-story, 10,000-square-foot office building, and a two-story, 20,400-square-foot medical office building on the 4.18-acre site at corner of Liberty Canyon Road and Agoura Road in the City of Agoura Hills. The new buildings will adjoin an existing two-story, 24,540-square-foot office building.

THRESHOLDS OF SIGNIFICANCE

Table 1, Thresholds of Significance, shows the threshold criteria for construction and operational emissions recommended by the SCAQMD for determining whether a development project has the potential to generate significant adverse air quality impacts. Tests of significance are not limited to the criteria listed below.

Table 1
Thresholds of Significance

Pollutant	Construction (lbs/day) ¹	Operations (lbs/day) ¹
VOC	75	55
NO _x	100	55
CO	550	550
SO _x	150	150
PM ₁₀	150	150

¹ Source: California Environmental Quality Act (CEQA) Air Quality Handbook, SCAQMD, 1993.

In addition to the above listed emission-based thresholds, the SCAQMD also recommends that the potential impacts on ambient air concentrations due to construction emissions be evaluated. This evaluation requires that anticipated ambient air concentrations, determined using a computer-based air quality dispersion model, be compared to localized significance thresholds for PM₁₀, nitrogen dioxide (NO₂), and CO.¹ The significance threshold for PM₁₀ represents compliance with Rule 403 (Fugitive Dust), while the thresholds for NO₂ and CO represent the allowable increase in concentrations above background levels in the vicinity of the project that would not cause or contribute to an exceedance of the relevant ambient air quality standards. For project sites of 5 acres or less, the SCAQMD *Localized Significance Threshold Methodology* (LST document) includes "lookup tables" for 1-, 2-, and 5-acre project

¹ South Coast Air Quality Management District, *Final Localized Significance Threshold Methodology* (Diamond Bar, California: South Coast Air Quality Management District, June 2003).

sites, which can be used to determine the maximum allowable daily emissions that would satisfy the localized significance criteria (i.e., not cause an exceedance of the applicable concentration limits) without project-specific dispersion modeling. The allowable emission rates depend on (a) the Source Receptor Area (SRA) in which the project is located, (b) the size of the project site, and (c) the distance between the project site and the nearest sensitive receptor (e.g., residences, schools, hospitals).

A project would also be considered to result in significant air quality impacts if it could generate vehicle trips that cause a CO "hotspot" or if the project could be occupied by sensitive receptors that would be exposed to a CO "hotspot." A CO "hotspot" occurs if motor vehicle emissions at an intersection would cause or contribute to exceedances of the federal or state ambient air quality standards for CO.

ESTIMATED EMISSIONS AND IMPACTS

URBEMIS2002 (Version 8.7.0) was used to estimate the emissions for criteria pollutants as directed by SCAQMD's *CEQA Air Quality Handbook*. Results for the construction and operational phases were prepared separately. Construction periods, heavy-duty equipment mix, and architectural coating types were supplied by the contractor. Construction emission estimates for fugitive PM₁₀ assumes compliance with Rule 403. No mitigation measures applied to the model run.

The following assumptions were made to estimate the Project's construction emissions:

- URBEMIS Run:
 - Pass-by and Diverted trips were eliminated because these trips are related to internal trips between residential and commercial land uses, and the majority of the Project trips would be dedicated trips to and from the Project;
 - The VOC architectural coating factor was reduced to 0.0116 pounds per square foot coated in accordance with SCAQMD recommendations;
 - The year analyzed was 2008, which is the year that construction would be completed;
 - "Demolition" consisted of grubbing that will be conducted over a period of five days. The emissions associated with this component were added to the grading phase;
 - The grading and construction equipment list was provided by the applicant; and
 - Asphalt acreage was provided by the applicant.
- LST Analysis
 - The project is located in the SCAQMD SRA 6. Allowable Emission Values for NO_x and CO were based on ambient air monitoring data collected at the SCAQMD Reseda Air Quality Monitoring Station and a distance to the nearest sensitive receptor of 25 meters;

- The emissions associated with construction worker trips were eliminated for the LST analysis because these emissions are for the most part off site;
- The actual Allowable Emission Values were interpolated from the values in the SCAQMD lookup tables for 2- and 5-acre project sites to the Project area of 4.18 acres.

The construction emission results presented in **Table 2, Estimated Unmitigated Grading and Construction Emissions**, are less than the thresholds of significance for construction.

Table 2
Estimated Unmitigated Grading and Construction Emissions

Year	Emissions in Pounds per Day				
	VOC	NO _x	CO	SO _x	PM ₁₀
2007	10.84	70.03	91.04	0.00	2.87
2008	4.37	24.47	34.46	0.00	0.76
Maximum Emissions in Any Year	10.84	70.03	91.04	0.00	2.87
SCAQMD Thresholds	75	100	550	150	150
Exceeds Thresholds?	NO	NO	NO	NO	NO

Source: Impact Sciences, Inc. Emissions calculations are provided in **Attachment 1**.

Totals in table may not appear to add exactly due to rounding in the computer model calculations.

Assumes compliance with SCAQMD Rule 403 (Fugitive Dust).

As indicated in the discussion of the thresholds of significance, the SCAQMD recommends that the localized construction impacts on the ambient air concentrations due to construction emissions of NO_x, CO, and PM₁₀ be evaluated. The SCAQMD LST document includes "lookup tables" that can be used to determine the maximum allowable daily emissions that would satisfy the localized significance criteria (i.e., not cause an exceedance of the applicable concentration limits). The allowable emission rates depend on (a) the SRA in which the project is located, (b) the size of the project site, and (c) the distance between the project site and the nearest sensitive receptor (e.g., residences, schools, hospitals). The project-specific localized significance thresholds for SRA 6 (West San Fernando Valley) are shown in **Table 3, Localized Significance Thresholds Analysis During Construction**, and are compared with the maximum daily on-site construction emissions. The construction site is 4.18 acres. The LST construction emission thresholds shown below were interpolated for a 4.18-acre site from the LST lookup tables for 2-acre and 5-acre project sites. The nearest sensitive receptors (single-family and multi-family residences) are located approximately 25 meters south of the construction site boundary.

Table 3
Localized Significance Thresholds Analysis During Construction

Pollutant	Averaging Period	On-Site Emissions lbs/day	LST Criteria ¹ lbs/day	Exceeds LST?
Respirable Particulate Matter (PM ₁₀)	24 hours	2.87	9	NO
Nitrogen Dioxide (NO ₂)	1 hour	70.03	260	NO
Carbon Monoxide (CO)	1 hour	91.04	532	NO
	8 hours	91.04	532	NO

Source: Impact Sciences, Inc.

¹ South Coast Air Quality Management District, Final Localized Significance Threshold Methodology, June 2003, <http://www.aqmd.gov/ceqa/handbook/LST/appC.pdf>

The operational emission results presented in Table 4, Estimated Operational Emissions without Mitigation, are substantially less than the operational thresholds of significance. The operational emissions were based on the trip generation provided in the traffic impact analysis for the Project² and the default assumptions in URBEMIS2002.

Table 4
Estimated Operational Emissions without Mitigation

Emissions Source	Emissions in Pounds per Day				
	VOC	NO _x	CO	SO _x	PM ₁₀
Summertime Emissions ¹					
Operational (Mobile) Sources	0.24	0.32	1.39	0.00	0.00
Area/Stationary Sources	0.26	0.02	3.29	0.00	0.33
Summertime Emission Totals	0.50	0.34	4.68	0.00	0.33
SCAQMD Threshold	55	55	550	150	150
Exceeds Threshold?	NO	NO	NO	NO	NO
Wintertime Emissions ²					
Operational (Mobile) Sources	0.26	0.46	3.22	0.00	0.33
Area/Stationary Sources	0.03	0.01	0.01	0.00	0.00
Wintertime Emission Totals	0.29	0.47	3.23	0.00	0.33
Recommended Threshold	55	55	550	150	150
Exceeds Threshold?	NO	NO	NO	NO	NO

Source: Impact Sciences, Inc. Emissions calculations are provided in Attachment 1.

Totals in table may not appear to add exactly due to rounding in the computer model calculations.

¹ "Summertime Emissions" are representative of worst-case conditions that may occur during the ozone season (May 1 to October 31).

² "Wintertime Emissions" are representative of worst-case conditions that may occur during the balance of the year (November 1 to April 30).

² Kaku Associates. 2006. Draft Traffic Study for the Liberty Canyon Road Office Expansion Project, October.

CO HOTSPOTS

The simplified CALINE4 screening procedure was used to predict cumulative future CO concentrations at 0 and 25 feet from the intersections in the study area. The simplified model is intended as a screening analysis that identifies a potential CO hotspot. If a hotspot is identified, the complete CALINE4 model is then utilized to determine precisely the CO concentrations predicted at the intersections in question. This methodology assumes worst-case conditions (i.e., wind direction is parallel to the primary roadway and 90 degrees to the secondary road, wind speed of less than one meter per second and extreme atmospheric stability) and provides a screening of maximum, worst-case, CO concentrations. According to the *Bay Area Air Quality Management District (BAAQMD) CEQA Guidelines, Assessing the Air Quality Impacts of Projects and Plans*, the simplified approach is acceptable for projects and plans that generate fewer than 10,000 new trips per day. This method is acceptable to the SCAQMD as long as it is used consistently with the *BAAQMD Guidelines*.³ Background CO concentrations used for the model were obtained from the Reseda air monitoring station, the selected monitoring station for SRA 6.

The results of the CO hotspots screening model for the project study area are shown in **Table 5, Carbon Monoxide Concentrations with Cumulative Plus Project Traffic (2008)**. Values in this table reflect the ambient air quality impacts of motor vehicle emissions resulting from cumulative traffic increases due to growth in the area and related projects, along with traffic resulting from the Project as predicted in the traffic impact analysis for the Project.

Table 5
Carbon Monoxide Concentrations with Cumulative Plus Project Traffic (2008)
(Parts Per Million)

Intersection	At Edge of Roadway		25 Feet	
	1-Hour ¹	8-Hour ²	1-Hour ¹	8-Hour ²
Liberty Canyon Rd. and 101 Southbound Ramp	8.2	6.8	7.6	6.4
Liberty Canyon Rd. and Agoura Rd.	8.5	7.0	7.9	6.6

¹ State standard is 20 ppm. Federal standard is 35 ppm.

² State standard is 9.0 ppm. Federal standard is 9 ppm.

Source: Impact Sciences, Inc. The CO concentration calculations are provided in Attachment 2.

³ Personal communication with Steve Smith, Program Supervisor, South Coast Air Quality Management District, Diamond Bar, California, May 12, 2004.

As shown in **Table 5**, the state and federal 1-hour and 8-hour CO standards would not be exceeded at any of the modeled intersections. Thus, the impact on local CO concentrations would be considered less than significant.

CONCLUSION

The estimated construction and operational emissions are below the significance thresholds set by the SCAQMD. The Project's construction emissions would not violate any of the Localized Significance Thresholds. The cumulative plus project traffic would not generate CO hotspots. Therefore, the air quality impacts of the Project would be less than significant.

ATTACHMENT 1

URBEMIS2002 Output

URBEMIS 2002 For Windows 8.7.0

File Name: M:\Camarillo\9. Air Quality\URBEMIS Files\27489 Agoura Road\27489
 Agoura Road.urb
 Project Name: 27489 Agoura Road
 Project Location: South Coast Air Basin (Los Angeles area)
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

SUMMARY REPORT
 (Pounds/Day - Summer)

CONSTRUCTION EMISSION ESTIMATES

					PM10	PM10
	ROG	NOx	CO	SO2	TOTAL	EXHAUST
PM10						
*** 2007 ***						
DUST						
TOTALS (lbs/day, unmitigated)	10.86	69.99	91.56	0.00	6.40	2.87
3.53						
TOTALS (lbs/day, mitigated)	10.86	69.99	91.56	0.00	4.01	2.87
1.14						

					PM10	PM10
	ROG	NOx	CO	SO2	TOTAL	EXHAUST
PM10						
*** 2008 ***						
DUST						
TOTALS (lbs/day, unmitigated)	4.37	24.47	34.46	0.00	0.76	0.75
0.01						
TOTALS (lbs/day, mitigated)	4.37	24.47	34.46	0.00	0.76	0.75
0.01						

AREA SOURCE EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day, unmitigated)	0.24	0.02	1.39	0.00	0.00
TOTALS (lbs/day, mitigated)	0.24	0.02	1.39	0.00	0.00

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day, unmitigated)	0.28	0.34	3.57	0.00	0.36

SUM OF AREA AND OPERATIONAL EMISSION ESTIMATES

	ROG	NOx	CO	SO2	PM10
TOTALS (lbs/day, unmitigated)	0.51	0.36	4.96	0.00	0.36

Both Area and Operational Mitigation must be turned on to get a combined mitigated total.

URBEMIS 2002 For Windows 8.7.0

File Name: M:\Camarillo\9. Air Quality\URBEMIS Files\27489 Agoura Road\27489
 Agoura Road.urb
 Project Name: 27489 Agoura Road
 Project Location: South Coast Air Basin (Los Angeles area)
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
 (Pounds/Day - Winter)

Construction Start Month and Year: April, 2007
 Construction Duration: 13
 Total Land Use Area to be Developed: 0.1 acres
 Maximum Acreage Disturbed Per Day: 0 acres
 Single Family Units: 0 Multi-Family Units: 0
 Retail/Office/Institutional/Industrial Square Footage: 2000

CONSTRUCTION EMISSION ESTIMATES UNMITIGATED (lbs/day)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2007***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	3.52	-	3.52
Off-Road Diesel	10.75	69.72	89.06	-	2.87	2.87	0.00
On-Road Diesel	0.01	0.15	0.03	0.00	0.00	0.00	0.00
Worker Trips	0.10	0.12	2.47	0.00	0.01	0.00	0.01
Maximum lbs/day	10.86	69.99	91.56	0.00	6.40	2.87	3.53
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	3.01	18.04	25.61	-	0.60	0.60	0.00
Bldg Const Worker Trips	0.00	0.00	0.06	0.00	0.00	0.00	0.00
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Asphalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	3.02	18.05	25.67	0.00	0.60	0.60	0.00
Max lbs/day all phases	10.86	69.99	91.56	0.00	6.40	2.87	3.53

*** 2008***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Phase 3 - Building Construction

Bldg Const Off-Road Diesel	3.01	18.04	25.61	-	0.60	0.60	0.00
Bldg Const Worker Trips	0.00	0.00	0.06	0.00	0.00	0.00	0.00
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Asphalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	3.02	18.05	25.67	0.00	0.60	0.60	0.00
Max lbs/day all phases	10.86	69.99	91.56	0.00	4.01	2.87	1.14

*** 2008***

Phase 1 - Demolition Emissions

Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Phase 2 - Site Grading Emissions

Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Phase 3 - Building Construction

Bldg Const Off-Road Diesel	3.01	17.65	25.61	-	0.53	0.53	0.00
Bldg Const Worker Trips	0.00	0.00	0.06	0.00	0.00	0.00	0.00
Arch Coatings Off-Gas	2.11	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.06	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.30	-	-	-	-	-	-
Asphalt Off-Road Diesel	4.00	23.58	33.99	-	0.73	0.73	0.00
Asphalt On-Road Diesel	0.06	0.88	0.21	0.00	0.02	0.02	0.00
Asphalt Worker Trips	0.02	0.01	0.25	0.00	0.00	0.00	0.00
Maximum lbs/day	4.37	24.47	34.46	0.00	0.76	0.75	0.01
Max lbs/day all phases	4.37	24.47	34.46	0.00	0.76	0.75	0.01

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
General office building	0.03	0.05	0.34	0.00	0.04
Medical office building	0.25	0.45	3.10	0.00	0.32
TOTAL EMISSIONS (lbs/day)	0.28	0.50	3.44	0.00	0.36

Does not include correction for passby trips.
 Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2008 Temperature (F): 50 Season: Winter

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
General office building		3.32 trips/1000 sq. ft.	1.00	3.32
Medical office building		36.13 trips/1000 sq. ft.	1.00	36.13
			Sum of Total Trips	39.45
			Total Vehicle Miles Traveled	234.69

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	55.00	1.60	98.00	0.40
Light Truck < 3,750 lbs	15.00	2.70	95.30	2.00
Light Truck 3,751- 5,750	16.20	1.20	97.50	1.30
Med Truck 5,751- 8,500	7.20	1.40	95.80	2.80
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.40	0.00	50.00	50.00
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	1.70	76.50	23.50	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.20	8.30	83.30	8.40

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
Medical office building				7.0	3.5	89.5

URBEMIS 2002 For Windows 8.7.0

File Name: M:\Camarillo\9. Air Quality\URBEMIS Files\27489 Agoura Road\27489 Agoura Road.urb
 Project Name: 27489 Agoura Road
 Project Location: South Coast Air Basin (Los Angeles area)
 On-Road Motor Vehicle Emissions Based on EMFAC2002 version 2.2

DETAIL REPORT
 (Pounds/Day - Summer)

Construction Start Month and Year: April, 2007
 Construction Duration: 13
 Total Land Use Area to be Developed: 0.1 acres
 Maximum Acreage Disturbed Per Day: 0 acres
 Single Family Units: 0 Multi-Family Units: 0
 Retail/Office/Institutional/Industrial Square Footage: 2000

CONSTRUCTION EMISSION ESTIMATES UNMITIGATED (lbs/day)

Source	ROG	NOx	CO	SO2	PM10 TOTAL	PM10 EXHAUST	PM10 DUST
*** 2007***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	3.52	-	3.52
Off-Road Diesel	10.75	69.72	89.06	-	2.87	2.87	0.00
On-Road Diesel	0.01	0.15	0.03	0.00	0.00	0.00	0.00
Worker Trips	0.10	0.12	2.47	0.00	0.01	0.00	0.01
Maximum lbs/day	10.86	69.99	91.56	0.00	6.40	2.87	3.53
Phase 3 - Building Construction							
Bldg Const Off-Road Diesel	3.01	18.04	25.61	-	0.60	0.60	0.00
Bldg Const Worker Trips	0.00	0.00	0.06	0.00	0.00	0.00	0.00
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Asphalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	3.02	18.05	25.67	0.00	0.60	0.60	0.00
Max lbs/day all phases	10.86	69.99	91.56	0.00	6.40	2.87	3.53

*** 2008***							
Phase 1 - Demolition Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Phase 2 - Site Grading Emissions							
Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Phase 3 - Building Construction

Bldg Const Off-Road Diesel	3.01	18.04	25.61	-	0.60	0.60	0.00
Bldg Const Worker Trips	0.00	0.00	0.06	0.00	0.00	0.00	0.00
Arch Coatings Off-Gas	0.00	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.00	-	-	-	-	-	-
Asphalt Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
Asphalt On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Asphalt Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	3.02	18.05	25.67	0.00	0.60	0.60	0.00
Max lbs/day all phases	10.86	69.99	91.56	0.00	4.01	2.87	1.14

*** 2008***

Phase 1 - Demolition Emissions

Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Phase 2 - Site Grading Emissions

Fugitive Dust	-	-	-	-	0.00	-	0.00
Off-Road Diesel	0.00	0.00	0.00	-	0.00	0.00	0.00
On-Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worker Trips	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Maximum lbs/day	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Phase 3 - Building Construction

Bldg Const Off-Road Diesel	3.01	17.65	25.61	-	0.53	0.53	0.00
Bldg Const Worker Trips	0.00	0.00	0.06	0.00	0.00	0.00	0.00
Arch Coatings Off-Gas	2.11	-	-	-	-	-	-
Arch Coatings Worker Trips	0.00	0.00	0.06	0.00	0.00	0.00	0.00
Asphalt Off-Gas	0.30	-	-	-	-	-	-
Asphalt Off-Road Diesel	4.00	23.58	33.99	-	0.73	0.73	0.00
Asphalt On-Road Diesel	0.06	0.88	0.21	0.00	0.02	0.02	0.00
Asphalt Worker Trips	0.02	0.01	0.25	0.00	0.00	0.00	0.00
Maximum lbs/day	4.37	24.47	34.46	0.00	0.76	0.75	0.01
Max lbs/day all phases	4.37	24.47	34.46	0.00	0.76	0.75	0.01

UNMITIGATED OPERATIONAL EMISSIONS

	ROG	NOx	CO	SO2	PM10
General office building	0.04	0.03	0.36	0.00	0.04
Medical office building	0.24	0.31	3.21	0.00	0.32
TOTAL EMISSIONS (lbs/day)	0.28	0.34	3.57	0.00	0.36

Does not include correction for passby trips.
Does not include double counting adjustment for internal trips.

OPERATIONAL (Vehicle) EMISSION ESTIMATES

Analysis Year: 2008 Temperature (F): 90 Season: Summer

EMFAC Version: EMFAC2002 (9/2002)

Summary of Land Uses:

Unit Type	Acreage	Trip Rate	No. Units	Total Trips
General office building		3.32 trips/1000 sq. ft.	1.00	3.32
Medical office building		36.13 trips/1000 sq. ft.	1.00	36.13
			Sum of Total Trips	39.45
			Total Vehicle Miles Traveled	234.69

Vehicle Assumptions:

Fleet Mix:

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	55.00	1.60	98.00	0.40
Light Truck < 3,750 lbs	15.00	2.70	95.30	2.00
Light Truck 3,751- 5,750	16.20	1.20	97.50	1.30
Med Truck 5,751- 8,500	7.20	1.40	95.80	2.80
Lite-Heavy 8,501-10,000	1.10	0.00	81.80	18.20
Lite-Heavy 10,001-14,000	0.40	0.00	50.00	50.00
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	1.70	76.50	23.50	0.00
School Bus	0.10	0.00	0.00	100.00
Motor Home	1.20	8.30	83.30	8.40

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
Medical office building				7.0	3.5	89.5

ATTACHMENT 2

Carbon Monoxide Hotspots Analysis

BAY AREA AQMD SIMPLIFIED CALINE4 ANALYSIS; UPDATED WITH EMFAC2002

Project Title: 27489 Agoura Road
 Intersection: Liberty Rd. and 101 Southbound Ramp
 Analysis Condition: Cumulative (2008) Plus Project
 Nearest Air Monitoring Station measuring CO: 18330 Gault Street, Reseda, CA 91335
 Background 1-hour CO Concentration (ppm): 6.9
 Background 8-hour CO Concentration (ppm): 5.9
 Persistence Factor: 0.7
 Analysis Year: 2008

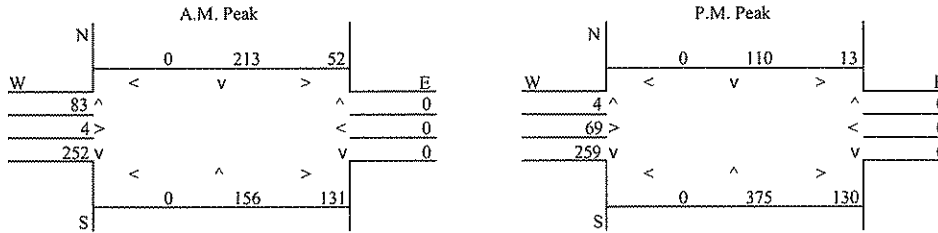
Roadway Type	No. of Lanes	Approach/Departure Speed		
		A.M.	P.M.	
North-South Roadway: Liberty Road	AT GRADE	2	5	5
East-West Roadway: 101 Southbound Ramp	AT GRADE	0	5	5

EMFAC2002 COMPOSITE EMISSION FACTORS FOR CO

Air Basin: South Coast County: Los Angeles
 Assumes lowest mean wintertime temperature of 47 degrees F and 30% humidity.

Year	Average Speed (miles per hour)									
	5	8	11	14	17	20	23	26	29	32
2004	14.389	12.507	11.033	9.862	8.921	8.158	7.535	7.024	6.606	6.266
2005	13.055	11.365	10.039	8.985	8.136	7.447	6.883	6.420	6.040	5.730
2006	12.159	10.599	9.375	8.400	7.615	6.975	6.452	6.021	5.666	5.377
2007	11.221	9.796	8.677	7.784	7.064	6.477	5.995	5.597	5.270	5.002
2008	10.296	9.003	7.985	7.173	6.516	5.979	5.538	5.173	4.872	4.625
2009	9.384	8.218	7.299	6.565	5.969	5.483	5.081	4.749	4.474	4.247
2010	8.524	7.478	6.653	5.992	5.455	5.015	4.652	4.350	4.099	3.892
2011	7.734	6.799	6.058	5.464	4.981	4.583	4.254	3.980	3.752	3.562
2012	7.025	6.187	5.523	4.988	4.553	4.194	3.895	3.646	3.438	3.265
2013	6.384	5.634	5.039	4.558	4.165	3.841	3.570	3.344	3.154	2.995
2014	5.804	5.134	4.600	4.169	3.815	3.521	3.276	3.070	2.896	2.751
2015	5.288	4.689	4.210	3.821	3.501	3.235	3.012	2.824	2.665	2.531
2020	3.367	3.023	2.743	2.512	2.318	2.155	2.015	1.894	1.791	1.701
2025	2.343	2.125	1.945	1.793	1.665	1.554	1.458	1.374	1.300	1.236
2030	1.793	1.627	1.491	1.376	1.279	1.195	1.123	1.059	1.003	0.954
2035	1.491	1.351	1.236	1.140	1.059	0.990	0.930	0.877	0.831	0.791
2040	1.338	1.211	1.107	1.020	0.947	0.885	0.831	0.784	0.744	0.708

PEAK HOUR TURNING VOLUMES



Representative Traffic Volumes (Vehicles per Hour)

N-S Road	752	N-S Road	874
E-W Road	339	E-W Road	332
Primary Road =	N-S Road	Primary Road =	N-S Road

ROADWAY CO CONTRIBUTIONS

Roadway	Reference CO Concentrations			*	Traffic Volume	*	Emission Factor	
	0 Feet	25 Feet	50 Feet					
A.M. Peak Hour								
N-S Road	14.0	7.6	5.7	*	752	*	10.30	+ 100,000
E-W Road	0.0	0.0	0.0	*	339	*	10.30	+ 100,000
P.M. Peak Hour								
N-S Road	14.0	7.6	5.7	*	874	*	10.30	+ 100,000
E-W Road	0.0	0.0	0.0	*	332	*	10.30	+ 100,000

TOTAL CO CONCENTRATIONS (ppm)

	A.M. Peak Hour	P.M. Peak Hour	8-Hour
0 Feet from Roadway Edge	8.0	8.2	6.8
25 Feet from Roadway Edge	7.5	7.6	6.4
50 Feet from Roadway Edge	7.3	7.4	6.3

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Urbemis 2007 Version 9.2.4

Summary Report for Summer Emissions (Pounds/Day)

File Name:

Project Name: Liberty Canyon MND 3-7-08

Project Location: Los Angeles County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10 Dust</u>	<u>PM10 Exhaust</u>	<u>PM10</u>	<u>PM2.5 Dust</u>	<u>PM2.5 Exhaust</u>	<u>PM2.5</u>	<u>CO2</u>
2009 TOTALS (lbs/day unmitigated)	3.50	30.06	15.56	0.01	7.02	1.49	8.51	1.47	1.37	2.84	2,802.17
2010 TOTALS (lbs/day unmitigated)	34.29	9.62	7.21	0.00	0.01	0.60	0.61	0.00	0.55	0.55	1,197.59

AREA SOURCE EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	0.45	0.24	3.38	0.00	0.01	0.01	248.70

OPERATIONAL (VEHICLE) EMISSION ESTIMATES

	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	6.77	9.90	86.33	0.08	13.61	2.65	8,078.64

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SUM OF AREA SOURCE AND OPERATIONAL EMISSION ESTIMATES

	<u>ROG</u>	<u>NOX</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
TOTALS (lbs/day, unmitigated)	7.22	10.14	89.71	0.08	13.62	2.66	8,327.34

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Urbemis 2007 Version 9.2.4

Detail Report for Summer Construction Unmitigated Emissions (Pounds/Day)

File Name:

Project Name: Liberty Canyon MND 3-7-08

Project Location: Los Angeles County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

CONSTRUCTION EMISSION ESTIMATES (Summer Pounds Per Day, Unmitigated)

	ROG	NOx	CO	SO2	PM10 Dust	PM10 Exhaust	PM10 Total	PM2.5 Dust	PM2.5 Exhaust	PM2.5 Total	CO2
Time Slice 3/3/2009-3/20/2009 Active Days: 14	1.36	9.38	6.41	0.00	1.02	0.69	1.71	0.21	0.64	0.85	965.97
Demolition 03/03/2009- 03/21/2009	1.36	9.38	6.41	0.00	1.02	0.69	1.71	0.21	0.64	0.85	965.97
Fugitive Dust	0.00	0.00	0.00	0.00	1.01	0.00	1.01	0.21	0.00	0.21	0.00
Demo Off Road Diesel	1.23	8.15	4.78	0.00	0.00	0.64	0.64	0.00	0.59	0.59	700.30
Demo On Road Diesel	0.09	1.16	0.47	0.00	0.00	0.05	0.06	0.00	0.05	0.05	141.28
Demo Worker Trips	0.04	0.07	1.16	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.39
Time Slice 3/24/2009-6/19/2009 Active Days: 64	<u>3.50</u>	<u>30.06</u>	<u>15.56</u>	<u>0.01</u>	<u>7.02</u>	<u>1.49</u>	<u>8.51</u>	<u>1.47</u>	<u>1.37</u>	<u>2.84</u>	<u>2,802.17</u>
Mass Grading 03/24/2009- 06/20/2009	3.50	30.06	15.56	0.01	7.02	1.49	8.51	1.47	1.37	2.84	2,802.17
Mass Grading Dust	0.00	0.00	0.00	0.00	7.00	0.00	7.00	1.46	0.00	1.46	0.00
Mass Grading Off Road Diesel	3.18	26.46	12.98	0.00	0.00	1.33	1.33	0.00	1.23	1.23	2,247.32
Mass Grading On Road Diesel	0.28	3.53	1.43	0.00	0.01	0.15	0.17	0.00	0.14	0.15	430.46
Mass Grading Worker Trips	0.04	0.07	1.16	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.39

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Time Slice 6/23/2009-7/31/2009 Active Days: 29	3.22	26.53	14.14	0.00	7.01	1.34	8.34	1.46	1.23	2.69	2,371.70
Fine Grading 06/23/2009-08/01/2009	3.22	26.53	14.14	0.00	7.01	1.34	8.34	1.46	1.23	2.69	2,371.70
Fine Grading Dust	0.00	0.00	0.00	0.00	7.00	0.00	7.00	1.46	0.00	1.46	0.00
Fine Grading Off Road Diesel	3.18	26.46	12.98	0.00	0.00	1.33	1.33	0.00	1.23	1.23	2,247.32
Fine Grading On Road Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fine Grading Worker Trips	0.04	0.07	1.16	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.39
Time Slice 8/4/2009-8/14/2009 Active Days: 9	2.22	18.97	9.48	0.00	0.01	0.93	0.94	0.00	0.86	0.86	1,839.02
Trenching 08/04/2009-08/15/2009	2.22	18.97	9.48	0.00	0.01	0.93	0.94	0.00	0.86	0.86	1,839.02
Trenching Off Road Diesel	2.18	18.90	8.32	0.00	0.00	0.93	0.93	0.00	0.86	0.86	1,714.64
Trenching Worker Trips	0.04	0.07	1.16	0.00	0.01	0.00	0.01	0.00	0.00	0.00	124.39
Time Slice 8/18/2009-8/28/2009 Active Days: 9	2.29	13.16	9.28	0.00	0.01	1.11	1.13	0.00	1.02	1.03	1,256.07
Asphalt 08/18/2009-08/29/2009	2.29	13.16	9.28	0.00	0.01	1.11	1.13	0.00	1.02	1.03	1,256.07
Paving Off-Gas	0.10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Paving Off Road Diesel	2.08	12.55	7.05	0.00	0.00	1.09	1.09	0.00	1.00	1.00	979.23
Paving On Road Diesel	0.04	0.49	0.20	0.00	0.00	0.02	0.02	0.00	0.02	0.02	59.17
Paving Worker Trips	0.07	0.12	2.03	0.00	0.01	0.01	0.02	0.00	0.00	0.01	217.67
Time Slice 9/1/2009-12/31/2009 Active Days: 88	1.40	10.29	7.50	0.00	0.01	0.66	0.67	0.00	0.60	0.61	1,197.66
Building 09/01/2009-04/24/2010	1.40	10.29	7.50	0.00	0.01	0.66	0.67	0.00	0.60	0.61	1,197.66
Building Off Road Diesel	1.30	9.79	4.94	0.00	0.00	0.63	0.63	0.00	0.58	0.58	893.39
Building Vendor Trips	0.03	0.37	0.30	0.00	0.00	0.02	0.02	0.00	0.01	0.02	62.27
Building Worker Trips	0.07	0.14	2.26	0.00	0.01	0.01	0.02	0.00	0.01	0.01	242.00
Time Slice 1/1/2010-4/23/2010 Active Days: 81	1.30	9.62	7.21	0.00	0.01	0.60	0.61	0.00	0.55	0.55	1,197.59
Building 09/01/2009-04/24/2010	1.30	9.62	7.21	0.00	0.01	0.60	0.61	0.00	0.55	0.55	1,197.59
Building Off Road Diesel	1.21	9.16	4.81	0.00	0.00	0.58	0.58	0.00	0.53	0.53	893.39
Building Vendor Trips	0.03	0.33	0.28	0.00	0.00	0.01	0.02	0.00	0.01	0.01	62.28
Building Worker Trips	0.07	0.13	2.12	0.00	0.01	0.01	0.02	0.00	0.01	0.01	241.92

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Time Slice 4/27/2010-5/21/2010	34.29	0.03	0.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.74
Active Days: 19												
Coating 04/27/2010-05/22/2010	34.29	0.03	0.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.74
Architectural Coating	34.27	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.01	0.03	0.43	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	49.74

Phase Assumptions

Phase: Demolition 3/3/2009 - 3/21/2009 - Default Demolition Description
 Building Volume Total (cubic feet): 43200
 Building Volume Daily (cubic feet): 2400
 On Road Truck Travel (VMT): 33.33
 Off-Road Equipment:
 1 Concrete/Industrial Saws (10 hp) operating at a 0.73 load factor for 8 hours per day
 1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 1 hours per day
 2 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 6 hours per day

Phase: Fine Grading 6/23/2009 - 8/1/2009 - Default Fine Site Grading/Excavation Description
 Total Acres Disturbed: 1.4
 Maximum Daily Acreage Disturbed: 0.35
 Fugitive Dust Level of Detail: Default
 20 lbs per acre-day
 On Road Truck Travel (VMT): 0
 Off-Road Equipment:
 1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day
 1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day
 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day
 1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Mass Grading 3/24/2009 - 6/20/2009 - Default Mass Site Grading/Excavation Description
 Total Acres Disturbed: 1.4
 Maximum Daily Acreage Disturbed: 0.35
 Fugitive Dust Level of Detail: Default
 20 lbs per acre-day
 On Road Truck Travel (VMT): 101.56

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Off-Road Equipment:

- 1 Graders (174 hp) operating at a 0.61 load factor for 6 hours per day
- 1 Rubber Tired Dozers (357 hp) operating at a 0.59 load factor for 6 hours per day
- 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day
- 1 Water Trucks (189 hp) operating at a 0.5 load factor for 8 hours per day

Phase: Trenching 8/4/2009 - 8/15/2009 - Default Trenching Description

Off-Road Equipment:

- 2 Excavators (168 hp) operating at a 0.57 load factor for 8 hours per day
- 1 Other General Industrial Equipment (238 hp) operating at a 0.51 load factor for 8 hours per day
- 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 0 hours per day

Phase: Paving 8/18/2009 - 8/29/2009 - Default Paving Description

Acres to be Paved: 0.35

Off-Road Equipment:

- 4 Cement and Mortar Mixers (10 hp) operating at a 0.56 load factor for 6 hours per day
- 1 Pavers (100 hp) operating at a 0.62 load factor for 7 hours per day
- 1 Rollers (95 hp) operating at a 0.56 load factor for 7 hours per day
- 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 7 hours per day

Phase: Building Construction 9/1/2009 - 4/24/2010 - Default Building Construction Description

Off-Road Equipment:

- 1 Cranes (399 hp) operating at a 0.43 load factor for 4 hours per day
- 2 Forklifts (145 hp) operating at a 0.3 load factor for 6 hours per day
- 1 Tractors/Loaders/Backhoes (108 hp) operating at a 0.55 load factor for 8 hours per day

Phase: Architectural Coating 4/27/2010 - 5/22/2010 - Default Architectural Coating Description

- Rule: Residential Interior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 100
- Rule: Residential Interior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 50
- Rule: Residential Exterior Coatings begins 1/1/2005 ends 6/30/2008 specifies a VOC of 250
- Rule: Residential Exterior Coatings begins 7/1/2008 ends 12/31/2040 specifies a VOC of 100
- Rule: Nonresidential Interior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250
- Rule: Nonresidential Exterior Coatings begins 1/1/2005 ends 12/31/2040 specifies a VOC of 250

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Urbemis 2007 Version 9.2.4

Detail Report for Summer Area Source Unmitigated Emissions (Pounds/Day)

File Name:

Project Name: Liberty Canyon MND 3-7-08

Project Location: Los Angeles County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

AREA SOURCE EMISSION ESTIMATES (Summer Pounds Per Day, Unmitigated)

<u>Source</u>	<u>ROG</u>	<u>NOx</u>	<u>CO</u>	<u>SO2</u>	<u>PM10</u>	<u>PM2.5</u>	<u>CO2</u>
Natural Gas	0.01	0.20	0.17	0.00	0.00	0.00	243.20
Hearth - No Summer Emissions							
Landscape	0.26	0.04	3.21	0.00	0.01	0.01	5.50
Consumer Products	0.00						
Architectural Coatings	0.18						
TOTALS (lbs/day, unmitigated)	0.45	0.24	3.38	0.00	0.01	0.01	248.70

Area Source Changes to Defaults

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Urbemis 2007 Version 9.2.4

Detail Report for Summer Operational Unmitigated Emissions (Pounds/Day)

File Name:

Project Name: Liberty Canyon MND 3-7-08

Project Location: Los Angeles County

On-Road Vehicle Emissions Based on: Version : Emfac2007 V2.3 Nov 1 2006

Off-Road Vehicle Emissions Based on: OFFROAD2007

OPERATIONAL EMISSION ESTIMATES (Summer Pounds Per Day, Unmitigated)

Source	ROG	NOX	CO	SO2	PM10	PM25	CO2
General office building	1.01	1.40	12.45	0.01	1.94	0.38	1,153.88
Medical office building	5.76	8.50	73.88	0.07	11.67	2.27	6,924.76
TOTALS (lbs/day, unmitigated)	6.77	9.90	86.33	0.08	13.61	2.65	8,078.64

Does not include correction for passby trips

Does not include double counting adjustment for internal trips

Analysis Year: 2009 Temperature (F): 80 Season: Summer

Emfac: Version : Emfac2007 V2.3 Nov 1 2006

Summary of Land Uses

Land Use Type	Acreage	Trip Rate	Unit Type	No. Units	Total Trips	Total VMT
General office building		11.01	1000 sq ft	10.00	110.10	1,120.54
Medical office building		36.13	1000 sq ft	20.40	737.05	6,748.08
					847.15	7,868.62

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Vehicle Fleet Mix

Vehicle Type	Percent Type	Non-Catalyst	Catalyst	Diesel
Light Auto	53.7	1.3	98.3	0.4
Light Truck < 3750 lbs	6.8	2.9	94.2	2.9
Light Truck 3751-5750 lbs	22.8	0.9	99.1	0.0
Med Truck 5751-8500 lbs	10.0	1.0	99.0	0.0
Lite-Heavy Truck 8501-10,000 lbs	1.4	0.0	85.7	14.3
Lite-Heavy Truck 10,001-14,000 lbs	0.5	0.0	60.0	40.0
Med-Heavy Truck 14,001-33,000 lbs	0.9	0.0	22.2	77.8
Heavy-Heavy Truck 33,001-60,000 lbs	0.5	0.0	0.0	100.0
Other Bus	0.1	0.0	0.0	100.0
Urban Bus	0.1	0.0	0.0	100.0
Motorcycle	2.3	73.9	26.1	0.0
School Bus	0.1	0.0	0.0	100.0
Motor Home	0.8	0.0	87.5	12.5

Travel Conditions

	Residential			Commercial		
	Home-Work	Home-Shop	Home-Other	Commute	Non-Work	Customer
Urban Trip Length (miles)	12.7	7.0	9.5	13.3	7.4	8.9
Rural Trip Length (miles)	17.6	12.1	14.9	15.4	9.6	12.6
Trip speeds (mph)	30.0	30.0	30.0	30.0	30.0	30.0
% of Trips - Residential	32.9	18.0	49.1			

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	<u>Travel Conditions</u>				
	Residential	Commercial	Commuter	Customer	
	Home-Work	Home-Shop	Home-Other	Non-Work	
% of Trips - Commercial (by land use)			35.0	17.5	47.5
General office building			7.0	3.5	89.5
Medical office building					

Operational Changes to Defaults

Appendix B

Traffic Study



April 3, 2008

Valerie Darbouze
City of Agoura Hills
30001 Ladyface Court
Agoura Hills, California 91301

Re: Traffic Study for the Liberty Canyon Road
Office Expansion Project, Agoura Hills, CA

Ref: 2064

Dear Mr. Althaus:

In January 2007, Fehr & Peers/Kaku Associates submitted a Revised Draft Traffic Study for the Liberty Canyon Project. This study concluded that there would be no significant traffic impacts and that adequate parking would be provided.

Recently, the site plan has been modified slightly and the total square footage reduced by approximately 1,100 square feet. The parking has been reduced from 219 to 215 spaces, per City Code.

These changes do not alter the conclusions of the January 2007 Traffic Study.

Please feel free to contact me at (310) 458-9916 if you have any questions regarding these conclusions.

Sincerely,

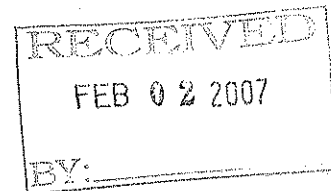


John M. Stutsman, AICP

REVISED DRAFT

**TRAFFIC STUDY
FOR THE
LIBERTY CANYON ROAD OFFICE EXPANSION PROJECT
AGOURA HILLS, CALIFORNIA**

JANUARY 2007



PREPARED FOR
27489 AGOURA ROAD, LLC

PREPARED BY


FEHR & PEERS

KAKU ASSOCIATES

REVISED DRAFT

**TRAFFIC STUDY
FOR THE
LIBERTY CANYON ROAD OFFICE EXPANSION PROJECT
AGOURA HILLS, CALIFORNIA**

January 2007

Prepared for:

27489 AGOURA ROAD, LLC

Prepared by:

FEHR & PEERS/KAKU ASSOCIATES
201 Santa Monica Boulevard, Suite 500
Santa Monica, California 90401
(310) 458-9916

Ref: 2064

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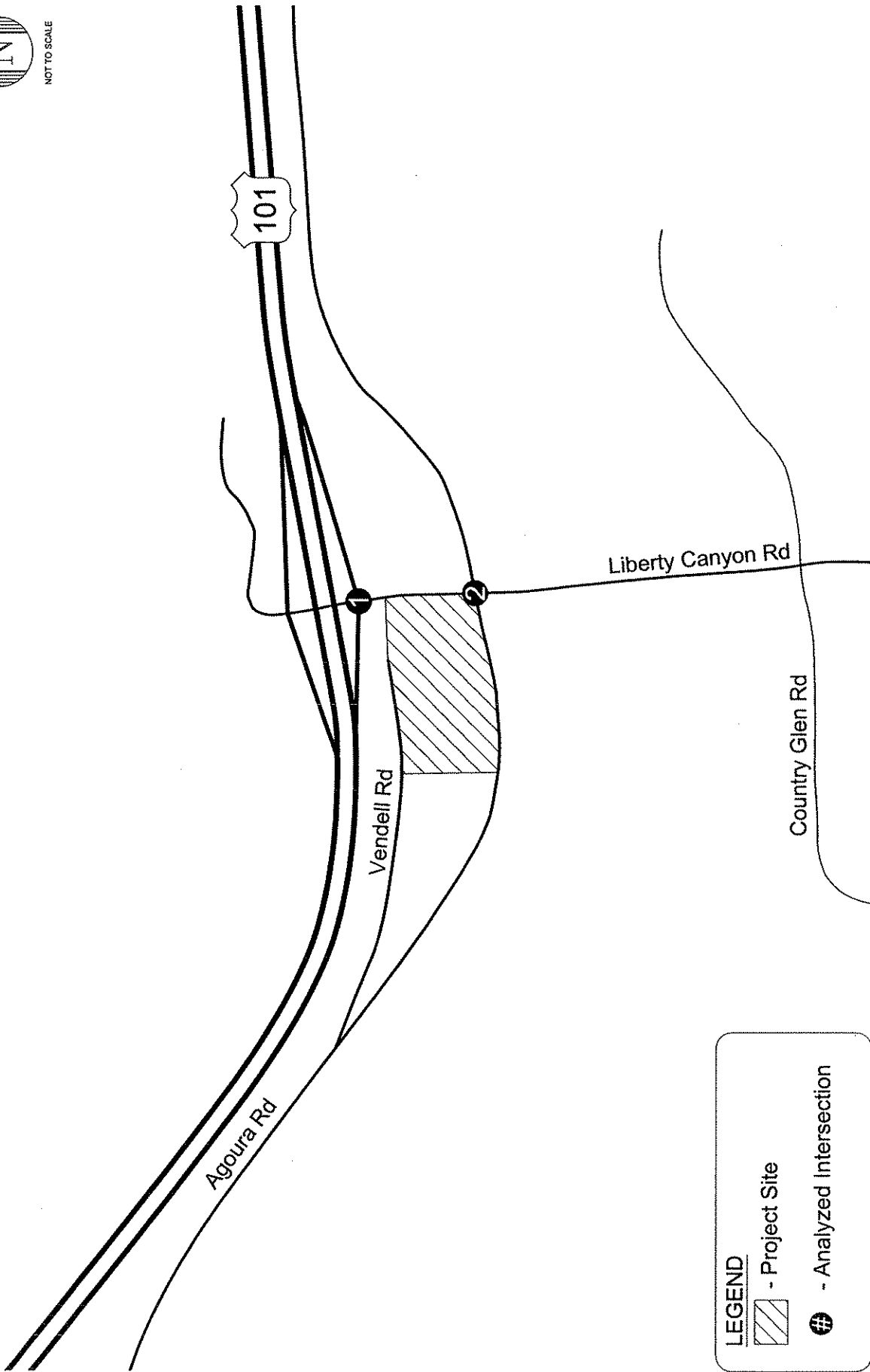
I. INTRODUCTION

This report documents the results of a study conducted by Fehr & Peers/Kaku Associates to evaluate potential traffic impacts of the proposed Liberty Canyon Road office expansion at 27489 Agoura Road, located in the City of Agoura Hills, California.

PROJECT DESCRIPTION

The proposed project, as shown in Figure 1, is located at the northwest corner of the intersection of Liberty Canyon Road and Agoura Road. The proposed 54,940 square foot (sf) project has an existing 24,540 sf general office building and two new buildings in the expansion program: one 10,000 sf building for general office use and one 20,400 sf building for medical office use. Figure 2 shows the conceptual site plan for the existing office building (Building A) and the new office building (Building B) and medical office building (Building C).

Two driveways are currently provided for Building A. The driveway on Liberty Canyon Road is currently limited to right-in and right-out operation, while another driveway on Agoura Road allows two-way operation. Under the proposed site plan, vehicular circulation between the two driveways would no longer be available. The driveway on Liberty Canyon Road, as proposed, would serve the 34-space parking area for the proposed Building B and would be configured to restrict the project outbound traffic to southbound Liberty Canyon Road. As part of the project, the existing raised median on Liberty Canyon Road would also be extended closer to the Ventura Freeway (US-101) ramps with an opening and a left-turn pocket to accommodate inbound traffic from northbound Liberty Canyon Road. Employees and visitors to the proposed Building C and the existing office building would access the 185-space common parking area via the two-way driveway on Agoura Road.

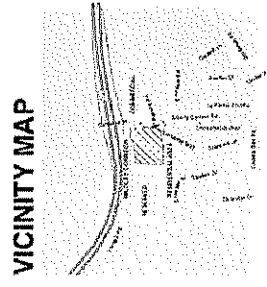


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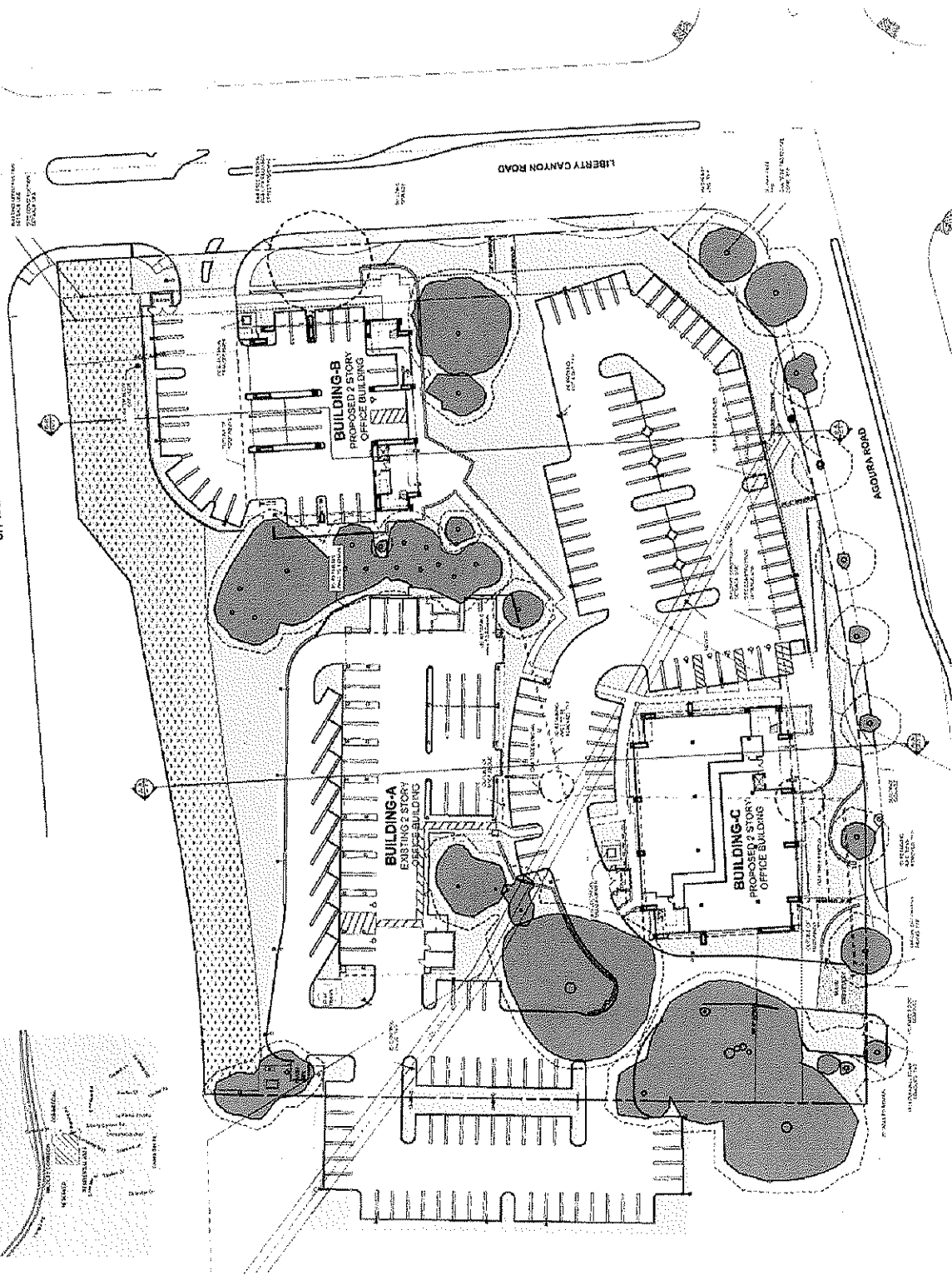
FIGURE 1
STUDY AREA AND ANALYZED INTERSECTIONS



Hwy 101 SB ON RAMP



VICINITY MAP



FEHR & PEERS
KAKU ASSOCIATES

Source: Behr Browsers Architects Inc.

FIGURE 2
PROPOSED SITE PLAN

STUDY SCOPE

The scope of analysis for this study was developed in conjunction with the traffic engineer for the City of Agoura Hills. The base assumptions, technical methodologies, and geographic coverage of the study were all identified as part of the study approach.

The study, which analyzed potential project-generated traffic impacts on the adjacent street system, expected that the project would be completed by 2008. The analysis of future year traffic forecasts was based on projected conditions in 2008 both with and without the addition of the project traffic. The following traffic scenarios were developed and analyzed as part of this study:

- Existing Conditions (2006) - The analysis of existing traffic conditions intends to provide a basis for the remainder of the study. The existing conditions analysis includes an assessment of streets and highways, traffic volumes, and operating conditions.
- Cumulative Base Conditions (2008) - Future traffic conditions without the proposed projects are projected for the year 2007. This analysis forecasts future traffic growth and estimates operating conditions that could be expected without the addition of project traffic by the year 2008.
- Cumulative plus Project Conditions (2008) - Future project-only traffic patterns were developed for the proposed project. The existing driveways off Liberty Canyon Road and Agoura Road would be reconfigured. No vehicular circulation would be provided between the two driveways. Employee and visitor traffic to the existing office building would be shifted to use Agoura Road for access. The future traffic pattern for existing and proposed new buildings was compared with the existing office building traffic pattern to obtain the (net) project-only traffic volumes (new traffic generated by Buildings B and C to the site and the traffic shifts of existing Building A). Future project-only traffic was then added to the cumulative base traffic forecasts. The impacts of the proposed project on future traffic operating conditions were then identified

For the purposes of this report, all streets that run parallel to US-101 are described as east/west streets, and all streets that run parallel to Liberty Canyon Road are described as north/south streets. The City traffic engineer identified the following two locations in the project vicinity to be analyzed for each of the scenarios described above:

1. Liberty Canyon Road and US-101 eastbound off-ramp
2. Liberty Canyon Road and Agoura Road

Figure 1 illustrates the locations of these two analyzed intersections.

ORGANIZATION OF REPORT

This report is divided into seven chapters, including this introduction. Chapter II describes the existing circulation system, traffic volumes, and traffic conditions in the study area. The methodologies used to forecast future traffic volumes are described and applied in Chapter III. Chapter IV presents an assessment of potential traffic impacts for the cumulative plus project scenario. Issues related to on-site parking, site access and internal circulation are evaluated in Chapter V. Chapter VI presents the regional Congestion Management Program (CMP) analysis. Chapter VII summarizes the analyses and study conclusions. Details of the technical analysis are included in the appendices.

II. EXISTING CONDITIONS

A comprehensive data collection effort was undertaken to develop a detailed description of existing conditions in the study area. The assessment of conditions relevant to this study includes an inventory of the street system, the traffic volumes on these facilities, operating conditions at key intersections, and transit service in the study area.

EXISTING STREET SYSTEM

The Ventura Freeway provides primary access to the proposed project. The Ventura Freeway is a national route (US-101) aligned in a southeast-northwest direction adjacent to the project that, traveling south, provides access to the Los Angeles area. US-101 provides five travel lanes in each direction in the vicinity of the proposed project and access is available north of the project site via the on- and off-ramps at Liberty Canyon Road.

Liberty Canyon Road and Agoura Road provide local access to the project site. Liberty Canyon Road is a north-south road that provides one to two travel lanes in each direction from Country Glen Road to US-101. Agoura Road is a northwest-southeast road that runs essentially parallel to US-101 in the study area. It provides one travel lane in each direction from Las Virgenes Road in Calabasas to South Westlake Boulevard (also known as the State Route 23) in Thousand Oaks.

Table 1 summarizes the roadway characteristics of the key streets in the study area. Appendix A contains diagrams of the existing lane configurations at the analyzed intersections.

**TABLE 1
EXISTING SURFACE STREET CHARACTERISTICS**

SEGMENT	FROM	TO	LANE		MEDIAN TYPE	PARKING RESTRICTIONS		SPEED LIMIT
			NB/EB	SB/WB		NB/EB	SB/WB	
Agoura Rd	<road end>	Vendell Rd	1	1	SDY	NSAT	NSAT	40
	Vendell Rd	Rondell St	1	1	SDY	NSAT	NSAT	40
	Rondell St	Liberty Canyon Rd	1	2	RM	PA	NSAT	40
	Liberty Canyon Rd	Malibu Hills Road	1/2	1/2	RM	NSAT	NSAT	40
Liberty Canyon Rd	Country Glen	Agoura Rd	1/2	2/1	RM	NSAT	PA	35
	Agoura Rd	US 101 SB Ramps	2/1	1/2	RM/DY	PA	PA	35
	US 101 SB Ramps	US 101 NB Ramps	1	1	DY	NSAT	NSAT	35
Canwood St	US 101 NB Ramps	<road end>	1	1	DY	NSAT	NSAT	35
Vendell Rd	<road end>	Agoura Rd	1	1	UD	NSAT	NSAT	25
Rondell St	Agoura Rd	<road end>	1	1	UD	PA	PA	10

Notes:

MEDIAN TYPE: DY = Double Yellow Centerline

SDY = Single Dashed Yellow Centerline

RM = Raised Median

UD = Undivided Lane

PARKING: PA = Parking Allowed

NSAT = No Stopping Anytime

LANES: # = Number of lanes

EXISTING TRAFFIC VOLUMES AND LEVELS OF SERVICE

The following sections present the existing peak hour traffic volumes, a description of the methodology used to analyze operating conditions, and the resulting level of service (LOS) at each study intersection.

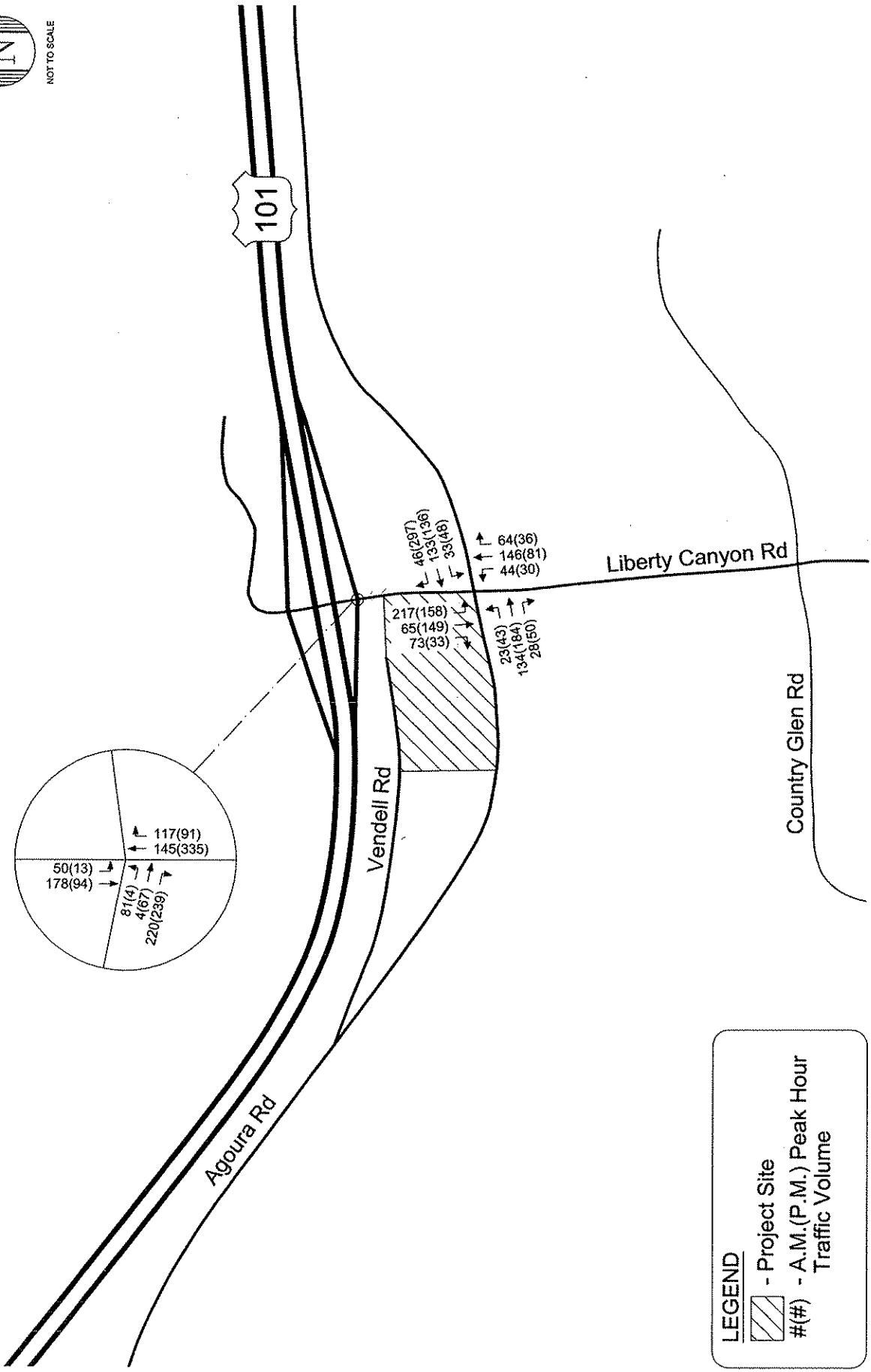
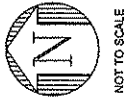
Existing Traffic Volumes

New peak period traffic counts were collected for this project on Tuesday, September 26, 2006 during the weekday morning peak period (7:00 to 9:00 a.m.) and afternoon peak period (4:00 to 6:00 p.m.). Figure 3 illustrates weekday morning and afternoon peak hour traffic volumes.

Level of Service Methodology

LOS is a qualitative measure used to describe the condition of traffic flow, ranging from excellent conditions at LOS A to overload conditions at LOS F. The analyzed intersection of Liberty Canyon Road and Agoura Road is controlled by traffic signals. Table 2 provides LOS definitions for signalized intersections. The intersection capacity utilization (ICU) method of intersection analysis was used to determine the intersection volume-to-capacity (V/C) ratio and the corresponding LOS for this signalized intersection.

The other analyzed intersection of Liberty Canyon Road and the US-101 eastbound off-ramp is unsignalized. A stop sign currently controls the vehicles on the US-101 eastbound off-ramp. This intersection was analyzed using the "Two-Way Stop-Controlled" method from *2000 Highway Capacity Manual (HCM)* (Transportation Research Board, 2000). The HCM methodology determines the average vehicle delay to find the corresponding LOS based on the definitions in Table 3.



FEHR & PEERS
KAKU ASSOCIATES

FIGURE 3
EXISTING PEAK HOUR TRAFFIC VOLUMES

TABLE 2
LEVEL OF SERVICE DEFINITIONS FOR SIGNALIZED INTERSECTIONS

Level of Service	Volume/Capacity Ratio	Definition
A	0.000 - 0.600	EXCELLENT. No vehicle waits longer than one red light and no approach phase is fully used.
B	>0.600 - 0.700	VERY GOOD. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.
C	>0.700 - 0.800	GOOD. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.
D	>0.800 - 0.900	FAIR. Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.
E	>0.900 - 1.00	POOR. Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.
F	>1.000	FAILURE. Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Tremendous delays with continuously increasing queue lengths.

Source: Transportation Research Board.

**TABLE 3
LEVEL OF SERVICE DEFINITIONS FOR
STOP-CONTROLLED INTERSECTIONS
HCM METHODOLOGY**

Level of Service	Average Total Delay (seconds/vehicle)
A	≤ 10
B	> 10 and ≤ 15
C	> 15 and ≤ 25
D	> 25 and ≤ 35
E	> 35 and ≤ 50
F	> 50

Source: *Highway Capacity Manual, Special Report 209*,
Transportation Research Board, 2000.

Existing Levels of Service

Table 4 summarizes the peak hour V/C ratio along with the corresponding LOS at each of the study intersections under existing conditions on weekdays. The stop-controlled intersection of Liberty Canyon Road at the US-101 eastbound off-ramp currently operates at LOS B during both the morning and afternoon peak hours. The signalized intersection at Liberty Canyon Road and Agoura Road currently operates at LOS A during both weekday morning and afternoon peak hours.

EXISTING TRANSIT SERVICE

Existing transit service in the study area is provided by the Los Angeles County Metropolitan Transportation Authority (Metro), LADOT Commuter Express and the City of Agoura Hills Dial-A-Ride service, as described below:

- Metro Line 161: This line provides local service between Thousand Oaks and the Warner Transit Center in Woodland Hills. In the study area, Line 161 travels east and west along Agoura Road.
- Commuter Express Line 422: The LADOT Commuter Express is a limited-stop service. Line 422 travels nonstop between Agoura Hills and the San Fernando Valley, and between the San Fernando Valley and downtown Los Angeles, via the Ventura Freeway. This line travels through the study area but does not provide direct access to the study area. There is, however, a Park & Ride Station at Kanan Road, approximately two miles from the study area.
- Commuter Express Line 423: Line 423 is a limited-stop service that travels through the communities of Newbury Park, Thousand Oaks, Agoura Hills, Calabasas, Woodland Hills, and Encino, and then nonstop to and from downtown Los Angeles by way of the Ventura Freeway. Line 423 travels east and west along the Ventura Freeway in the study area, with stops at the intersection of the Ventura Freeway and Liberty Canyon Road.
- Agoura Hills Dial-A-Ride: Dial-A-Ride is a curb-to-curb transportation service provided to the general public by the City of Agoura Hills. The Dial-A-Ride provides service within and between the city limits of Agoura Hills (including the study area), Oak Park, Lost Hills, and Malibu Lake. Additional transportation is provided to areas in the City of Westlake Village and Thousand Oaks for people with disabilities and/or over the age of 56.

**TABLE 4
EXISTING WEEKDAY INTERSECTION PEAK HOUR LEVELS OF SERVICE**

Intersection	Peak Hour	Cumulative Base	
		Delay or V/C	LOS
1. Liberty Canyon Road & US-101 EB Off-Ramp [a]	A.M.	11	B
	P.M.	11	B
2. Liberty Canyon Road & Agoura Road	A.M.	0.387	A
	P.M.	0.369	A

[a] Intersection is two-way stop-controlled. Average vehicular delay in seconds per vehicle is reported rather than V/C ratio for the worst approach.

III. FUTURE TRAFFIC CONDITIONS

To evaluate the potential impact of the proposed project on the local street system, it was necessary to develop estimates of future traffic conditions both with and without the project. Forecasts of future traffic conditions without the proposed projects, the cumulative base conditions, reflect traffic increases due to general regional growth as well as development and traffic increases generated by other specific developments in the vicinity of the project site. The cumulative base conditions were analyzed for 2008. The estimated project traffic was then added to the cumulative base traffic forecast. This resulted in projected volumes reflecting future conditions with the addition of project traffic. This is known as cumulative plus project conditions.

CUMULATIVE BASE TRAFFIC PROJECTIONS

The cumulative base traffic projections include two elements. The first is growth in the existing background traffic volumes reflecting the effects of overall regional growth and development in and around the study area, referred to as ambient growth. The second is the traffic generated by specific cumulative projects located in or near the study area.

Ambient Growth in Traffic (Year 2008)

The regional ambient growth in traffic was estimated by adjusting upward the existing traffic volumes along Liberty Canyon Road. Based on historical trends, an ambient growth factor of 1.5% per year was used to adjust the existing year 2006 traffic volumes to reflect the effects of regional growth and development by the year 2008, consistent with the growth factor generally used in the adjacent municipalities. With the anticipated completion date of 2008, the existing 2006 traffic volumes were adjusted upward by a factor of 3% to reflect this areawide regional growth.

Traffic Generated by Cumulative Development Projects

Traffic expected from other specific development projects in the study area was also considered. Information regarding potential future projects either under construction or planned for development was obtained from several sources, including recently conducted traffic studies, City of Agoura Hills files, and County of Los Angeles files. Table 5 lists the cumulative projects and Figure 4 shows the locations of these projects.

Although most of the cumulative projects are in the planning stages or under construction, the cumulative base conditions conservatively assume that all of the projects would be fully built by 2008. Trip generation estimates for these projects were either obtained from *Agoura Village Specific Plan Final EIR* (City of Agoura Hills, March 2006) or prepared using rates contained in *Trip Generation, 7th Edition* (Institute of Transportation Engineers, 2003). As shown in Table 5, cumulative projects are projected to generate approximately 1,120 weekday morning peak hour trips, and 1,051 weekday afternoon peak hour trips.

The geographic distribution of the traffic generated by the future development projects depends on several factors. These factors include the type and density of the proposed land use, the geographic distribution of population from which the patrons and employees of the proposed development are drawn, and the location of the projects in relation to the surrounding street system. Because land uses for the projects included in the cumulative projects list in Table 4 would serve the immediate area rather than the entire region, the traffic distribution patterns are generally local in nature, based on the population within the City of Agoura Hills and adjacent Los Angeles County. The traffic from the list of cumulative projects was then assigned to the local street system.

Cumulative Base Traffic Volumes

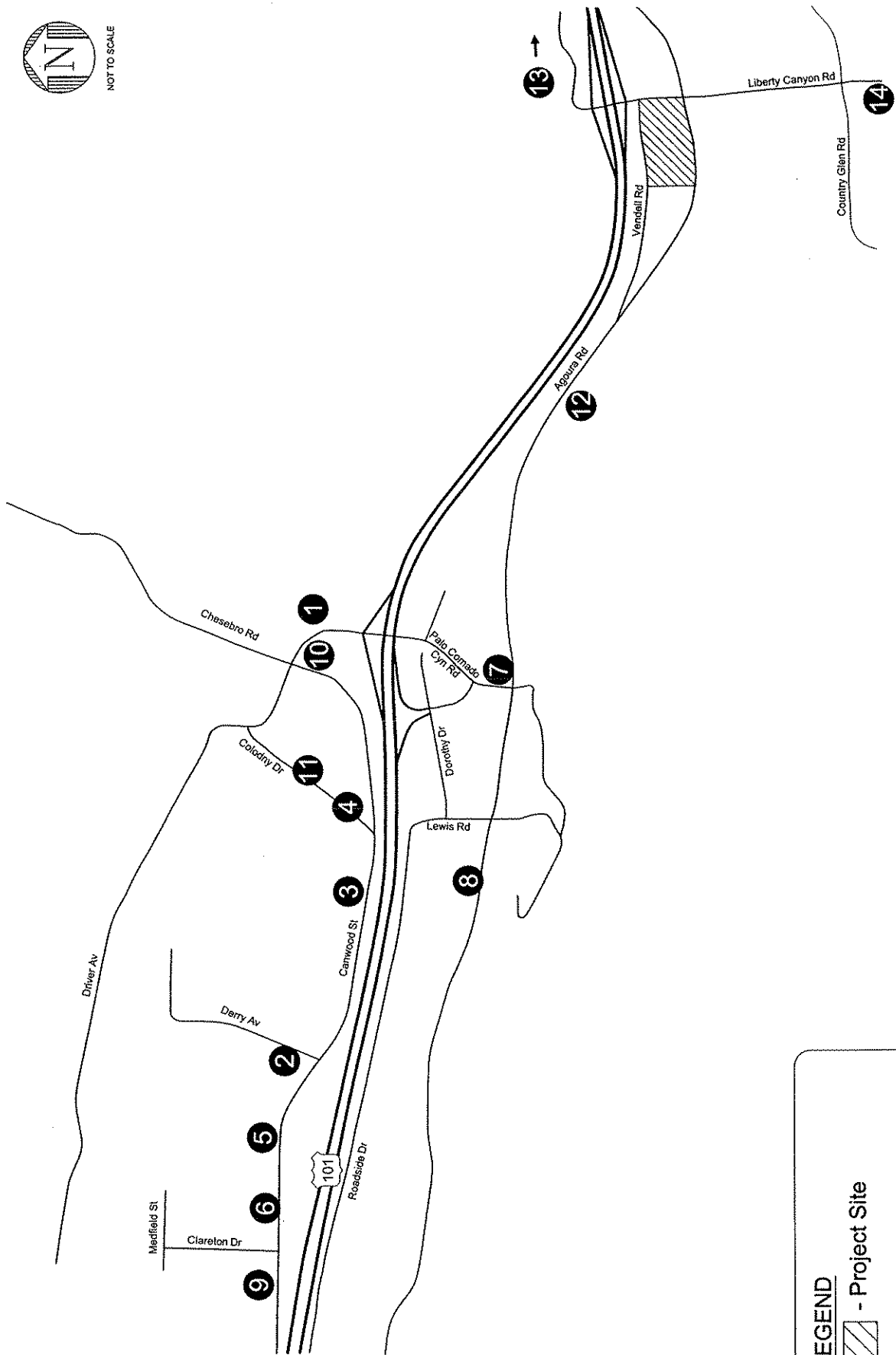
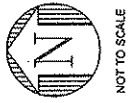
The cumulative base traffic volumes, future conditions without the proposed project, were developed by adding the traffic expected from the cumulative projects to the existing weekday volumes, which were increased by 3.0% to reflect ambient growth. Figure 5 illustrates the

TABLE 5
TRIP GENERATION ESTIMATES FOR RELATED PROJECTS

ID	Project Name	Project Location	Jurisdiction	Project Description	Project Status	Size	A.M. Peak Hour			P.M. Peak Hour		
							In	Out	Total	In	Out	Total
1	Heschel West Day School [d]	East of Palo Comado Canyon Road	Agoura Hills	Private School, K-8	Approved	750 students	371	304	675	215	242	458
2	Agoura Business Center [a]	5301 Derry Avenue	Agoura Hills	Warehouse/Manufacturing/Office	Under Review	20 ksf	8	1	9	2	7	9
3	Adler Realty [a]	Canwood Street between Lewis Road and Derry Avenue	Agoura Hills	Furniture Store	Under Construction	120 ksf	14	6	20	25	30	55
4	Minder [a]	5241 Colony Drive	Agoura Hills	Condominium	Approved	19 DU	1	7	8	7	3	10
5	Shirvanian Family Investment [e]	Between 28700 and 28811 Canwood Street	Agoura Hills	Industrial Park	Under Review	113 ksf	78	17	95	20	77	97
6	Stockton for Levy [a]	28211 Canwood Street	Agoura Hills	Furniture Store General Office	Approved	10 ksf 7 ksf	1 21	1 3	2 24	2 4	3 19	5 23
7	Alasco Development [a]	Northeast Corner of Chesebro and Agoura Roads	Agoura Hills	Office	Under Review	67 units	122	17	139	22	109	131
8	BBA Properties LLC for Michael Browsers [a]	28371 Agoura Road	Agoura Hills	Office	Approved	9 ksf	26	4	30	5	23	28
9	HBF Holdings [a]	West of Clariton, North of Canwood	Agoura Hills	Hotel/Homewood Suites	Approved	125 rooms	40	20	60	29	40	69
10	Hillel Car Wash [f]	Southeast Corner of Chesebro and Driver Avenue	Agoura Hills	Auto Wash and Detailing	Proposed	7 ksf	-	-	-	46	46	92
11	Stockton [a]	5310 Colony Drive	Agoura Hills	Apartments	Approved	4 DU	0	2	2	2	1	3
12	Riopharm [a]	27754 Agoura Road	Agoura Hills	Single Family	Under Review	28 DU	5	16	21	18	10	28
13	Condominiums [b]	24141 & 24121 Ventura Boulevard	Calabasas	Condominiums	Under Review	66 DU	5	24	29	23	11	34
14	Single-Family Homes [c]	West of Liberty Canyon Road, North of Park Vista Road	Los Angeles County	Single Family Homes	Approved	8 DU	2	4	6	5	3	8
Total							694	426	1,120	426	625	1,051

Notes:

- [a] Project description and trip generation information were obtained from *Agoura Village Specific Plan Final EIR*, City of Agoura Hills, March 2006.
- [b] Project information obtained from County of Los Angeles Department of Regional Planning staff. Daily trips and total peak hour trips were estimated based on average rates from Land Use Code 220 (Residential Condominiums) in *Trip Generation, 7th Edition* (ITE, 2003).
- [c] Project information obtained from County of Los Angeles Department of Regional Planning staff. Daily trips and total peak hour trips were estimated based on average rates from Land Use Code 210 (Single Family Housing) in *Trip Generation, 7th Edition*.
- [d] A.M. and P.M. peak hour rate for the proposed school use were obtained from ITE's *Trip Generation, 7th Edition*. Daily rate for Land use 534 Private School (K-8) was adjusted from the daily rate of Land Use 536 in *Trip Generation, 7th Edition* (Private School (K-12), 2.48 trips per day) by 14% increase, based on relationship of ITE's A.M. peak hour trip generation rates for both uses.
- [e] Project information obtained from City of Agoura Hills Department of Planning and Community Development staff. Daily trips and total peak hour trips were estimated based on average rates from Land Use Code 110 (Light Industrial Use) in *Trip Generation, 7th Edition*.
- [f] Project information obtained from City of Agoura Hills Department of Planning and Community Development staff. P.M. peak hour rate for the proposed school use were obtained from *Trip Generation, 7th Edition* for Land Use Code 948 (Automated Car Wash). A.M. peak hour trip generation for operations of the proposed use is considered to be negligible.

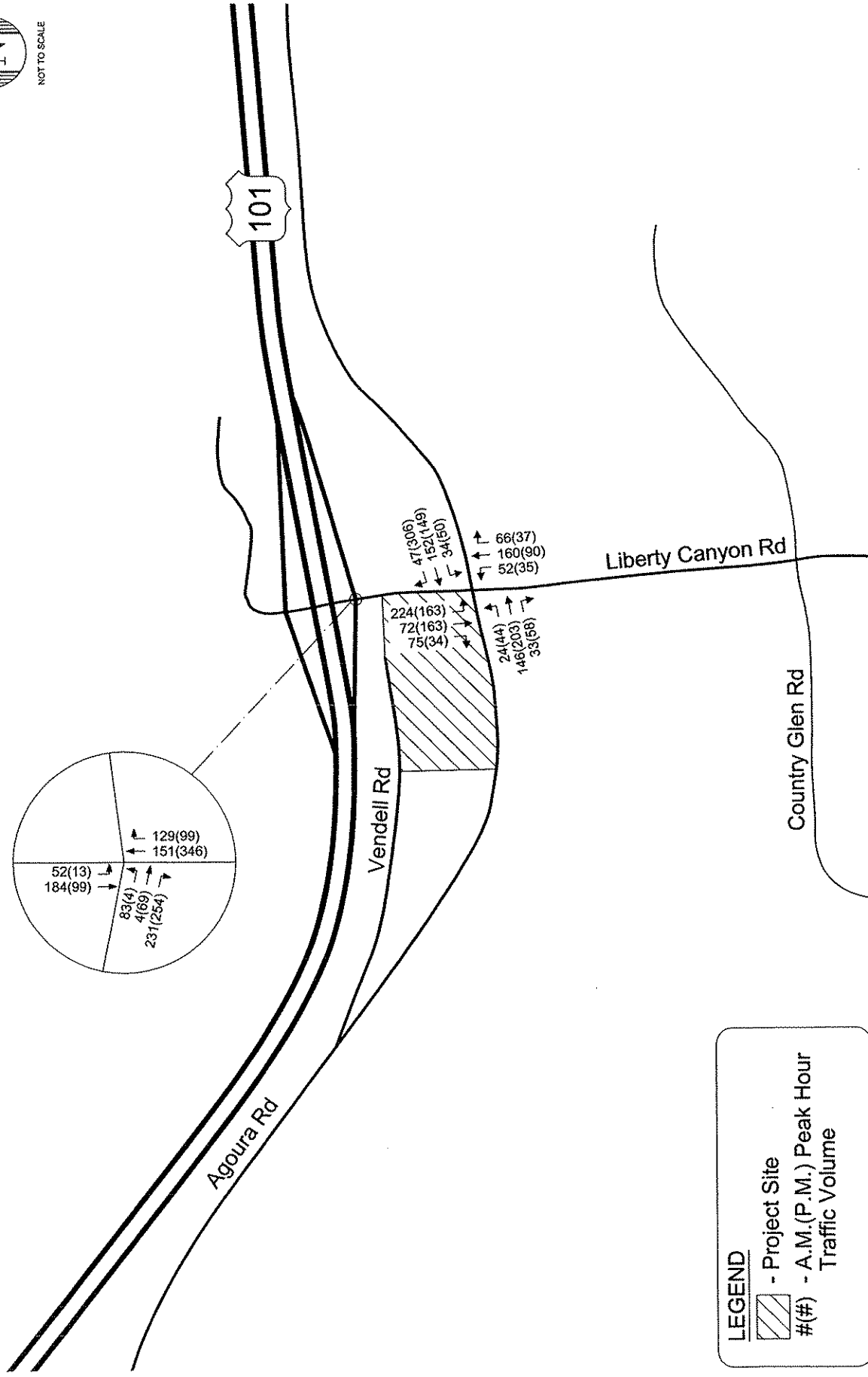
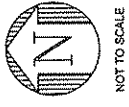


LEGEND

- Project Site
- Related Project

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KAKU ASSOCIATES

FIGURE 4
LOCATIONS OF RELATED PROJECTS



LEGEND

- Project Site
- #(#)** - A.M.(P.M.) Peak Hour Traffic Volume

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 K&K ASSOCIATES

FIGURE 5
 CUMULATIVE BASE PEAK HOUR TRAFFIC VOLUMES

resulting weekday peak hour traffic volumes at the two analyzed intersections. These volumes represent cumulative base conditions for 2008.

PROJECT TRAFFIC VOLUMES

The process used to develop traffic forecasts for the projects involved the use of a three-step process similar to that described above for the cumulative projects. This process included trip generation, trip distribution, and traffic assignment.

Project Traffic Generation

Table 6 presents the trip generation rates and resulting trip generation estimates for the proposed project, with the application of the trip generations rates from *Trip Generation, 7th Edition*. As indicated in Table 6, the proposed addition of Buildings B and C would result in an increase of approximately 847 vehicular trips to the site on a typical weekday, including 67 morning peak hour trips (54 inbound, 13 outbound) and 91 weekday afternoon peak hour trips (24 inbound, 67 outbound).

Project Traffic Distribution/Assignment

Like the cumulative projects, the geographic distribution of trips generated by the proposed project would be dependent on the locations of employment and commercial centers from which patrons and employees of the project uses would be drawn, characteristics of the street system serving the site, and the level of accessibility of the routes to and from the proposed project site.

The general distribution pattern for the proposed project was developed from observed travel patterns and from the location of the project site relative to the surrounding regional development, as illustrated in Figure 6.

As previously mentioned, two driveways are currently provided for the existing office building, with one limited to right-in and right-out operations at Liberty Canyon Road and another having two-

**TABLE 6
PROJECT TRIP GENERATION ESTIMATES**

Land Use	Size	Unit	ITE Code	Weekday Daily Trips	A.M. Peak Hour		P.M. Peak Hour	
					In	Out	In	Out
Existing Condition								
General Office (Building A only)	24,540	ksf	710	<u>270</u>	<u>5</u>	<u>6</u>	<u>31</u>	<u>37</u>
			Subtotal	<u>270</u>	<u>5</u>	<u>6</u>	<u>31</u>	<u>37</u>
Future Condition								
General Office (Existing Building A)	24,540	ksf	710	270	5	6	31	37
General Office (New Building B)	10,000	ksf	710	110	2	3	12	15
Medical Office (New Building C)	20,400	ksf	720	<u>737</u>	<u>11</u>	<u>21</u>	<u>55</u>	<u>76</u>
			Subtotal	<u>1117</u>	<u>18</u>	<u>30</u>	<u>98</u>	<u>128</u>
			Net Incremental Trips	847	13	24	67	91

Notes:

KSF = 1,000 square feet.

Trip generation from *Trip Generation, 7th Edition*.

Office rates vary according to the size of the development. Trip generation for general office was calculated using the following formula:

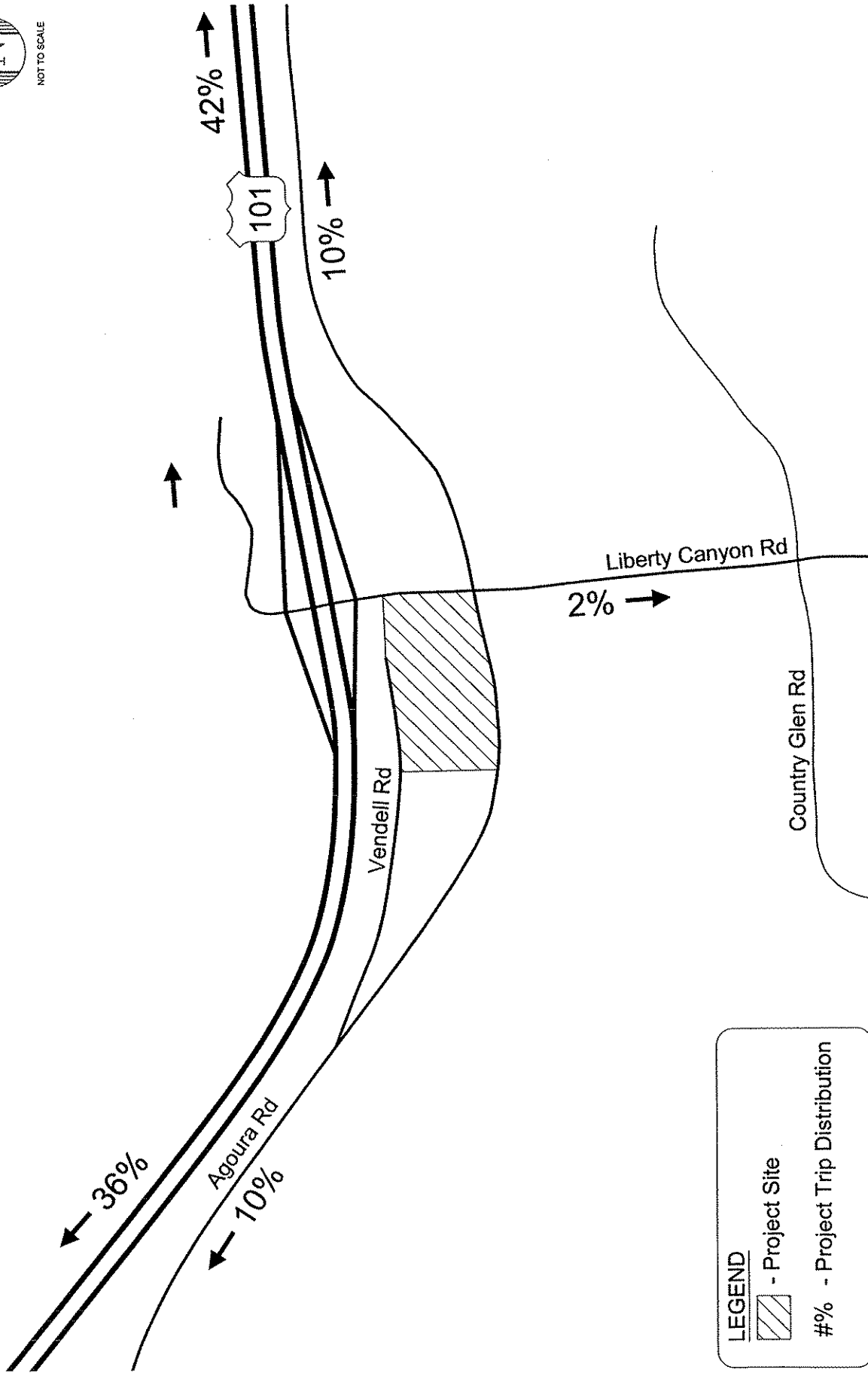
- Daily Rate: 11.01
- A.M. Rate: 1.55
- P.M. Rate: 1.49

Medical-Dental


- Daily Rate: 36.13
- A.M. Rate: 2.48
- P.M. Rate: 3.72



NOT TO SCALE



LEGEND

-  - Project Site
- #%** - Project Trip Distribution

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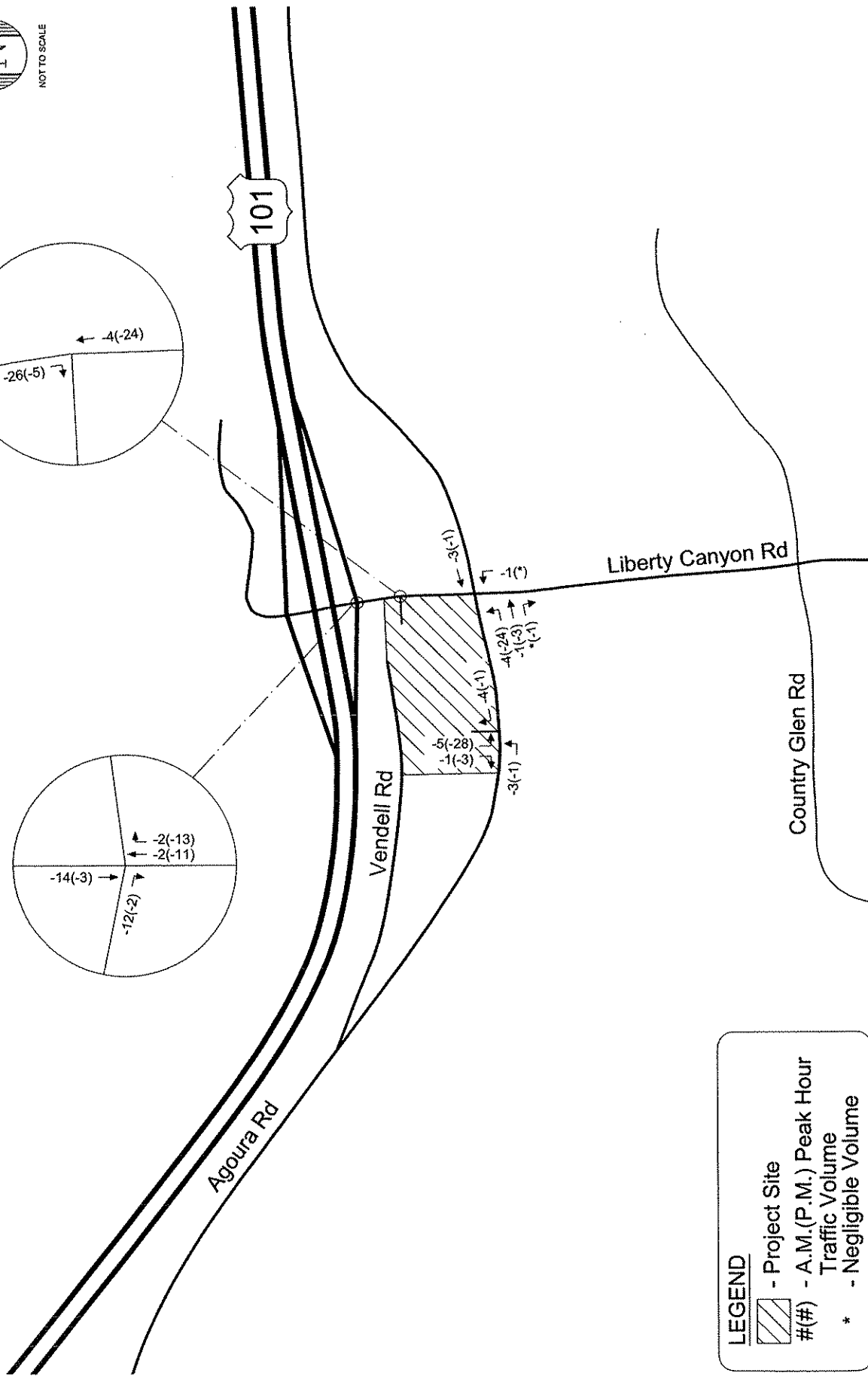
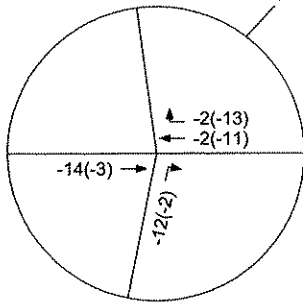
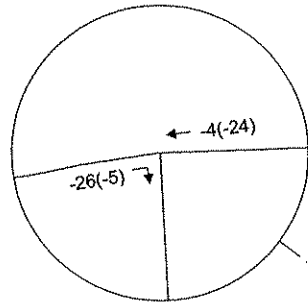
FIGURE 6
PROJECT TRIP DISTRIBUTION

way operations at Agoura Road. Under the proposed site plan, the driveway on Liberty Canyon would only provide access to the new office Building B and would be configured to prevent project vehicles from making an eastbound left turn onto Liberty Canyon Road. Employee and visitor traffic flow to the existing office building would be altered to use the driveway at Agoura Road for access. Figure 7A illustrates the negative assignment of the existing office building vehicle traffic affected by the reassignment of driveway access.

The driveway at Agoura Road would also be used for access to the proposed Building C. Due to the restriction of eastbound left turns at the driveway on Liberty Canyon Road, employees and visitors exiting the site and intending to use US-101 might make U-turns at the intersection of Liberty Canyon Road and Agoura Road. Based on the project traffic pattern described above, the trips generated by the proposed project and were assigned to the street system. Figure 7B illustrates the resulting future project only volumes at the driveways and the study intersections for weekday analysis, representing the combined effect of traffic shifts for the existing office building and traffic increases due to the proposed expansion program.

CUMULATIVE PLUS PROJECT TRAFFIC PROJECTIONS

The project-generated traffic volumes from Figures 7A and 7B were added to the 2008 cumulative base traffic volumes illustrated in Figure 5 to develop the cumulative plus project peak hour traffic volumes shown in Figure 8. The traffic volumes generated by the project were added to the cumulative base traffic projections to develop the cumulative plus project traffic forecasts. Figure 8 illustrates the resultant traffic volumes that represent future conditions in the year 2008 with the addition of project traffic for the weekday morning and afternoon peak hours.

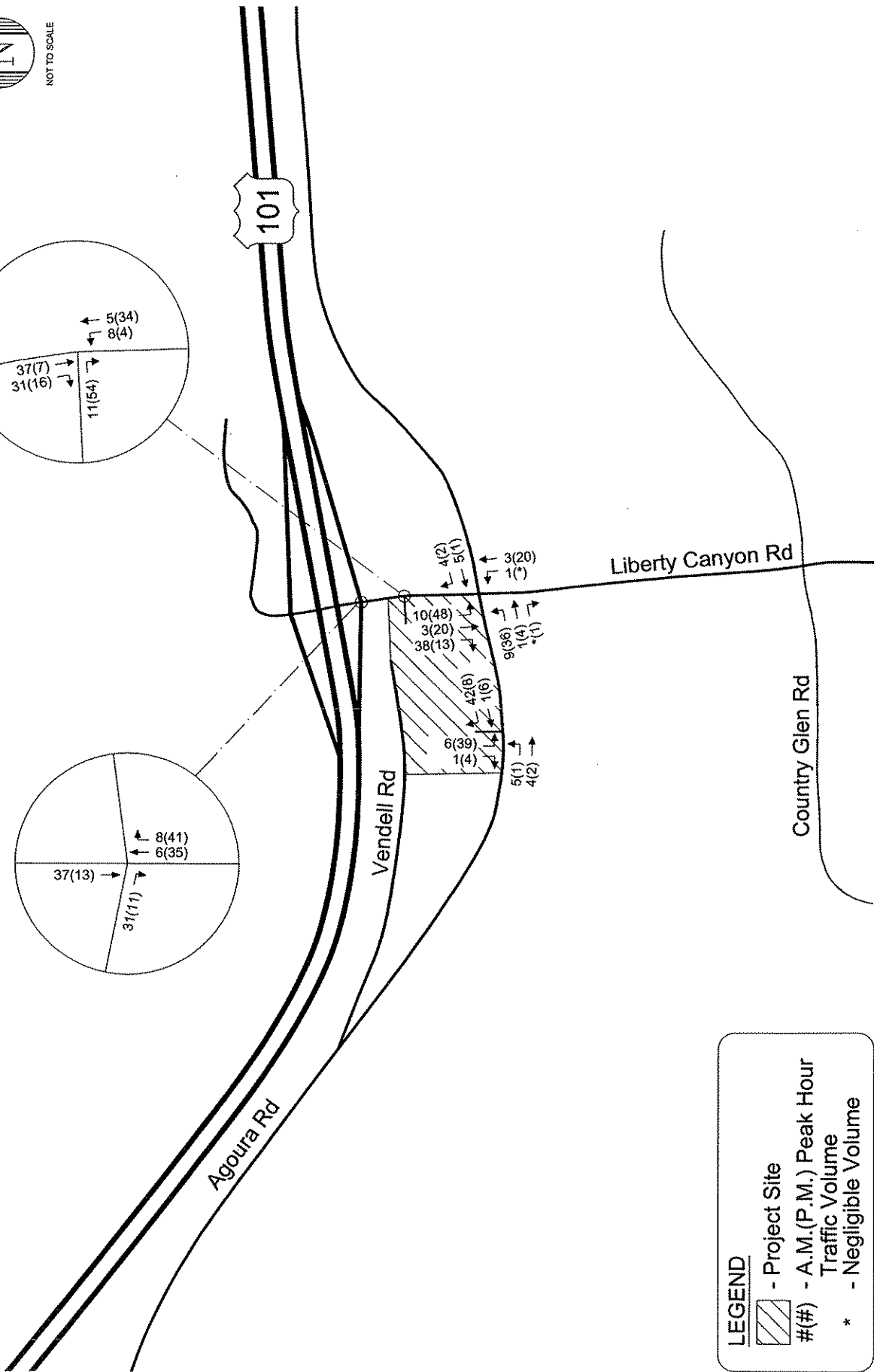
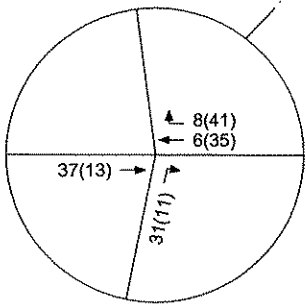
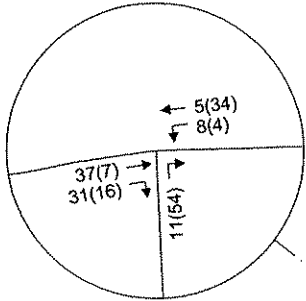
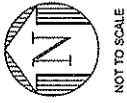


LEGEND

- Project Site
- #(#)** - A.M.(P.M.) Peak Hour Traffic Volume
- *
- Negligible Volume

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FIGURE 7A
SHIFTED PEAK HOUR TRAFFIC VOLUMES OF EXISTING OFFICE BUILDING

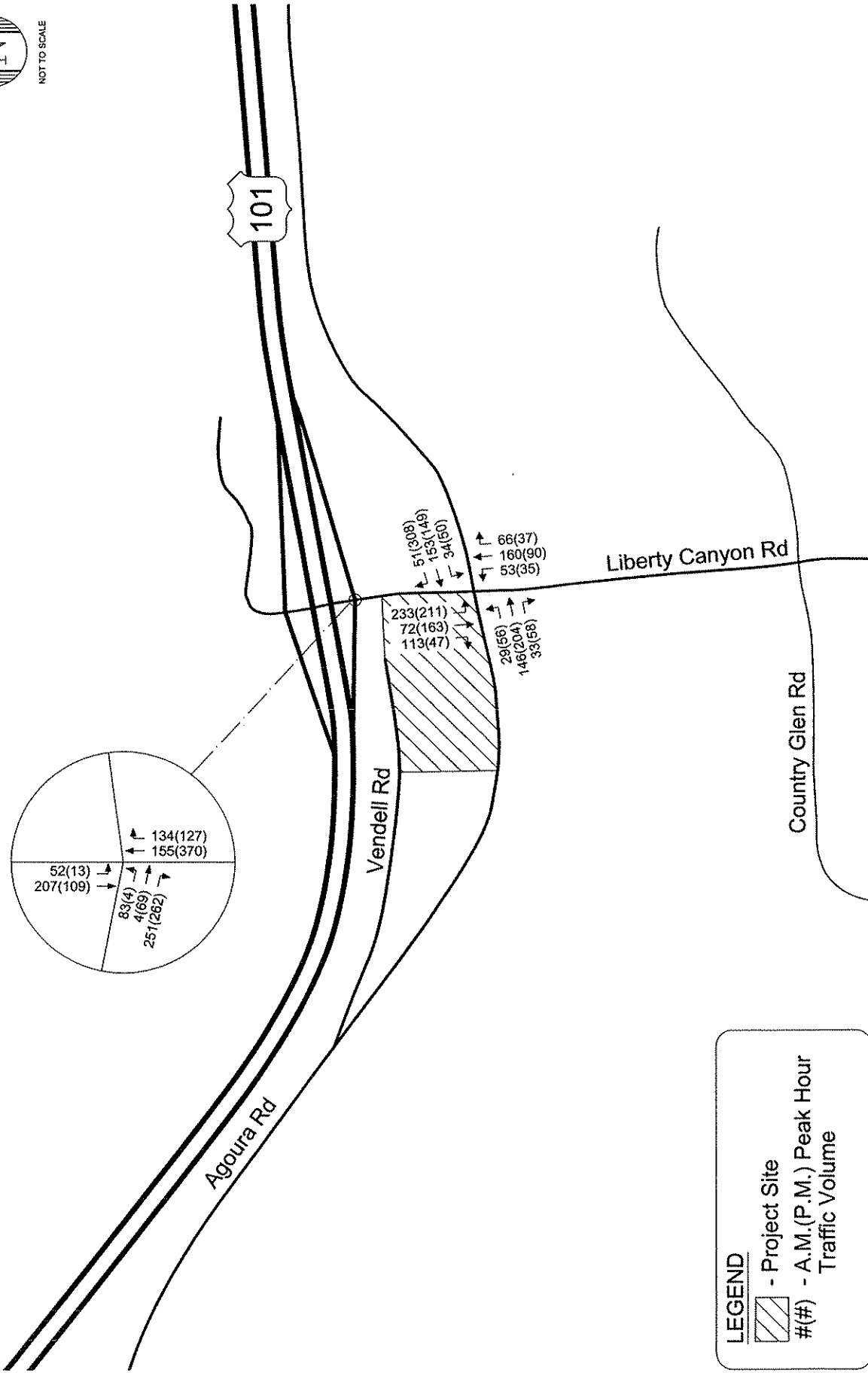
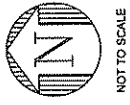


LEGEND

- Project Site
- #(#) - A.M.(P.M.) Peak Hour Traffic Volume
- * - Negligible Volume

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FIGURE 7B
FUTURE PROJECT ONLY PEAK HOUR TRAFFIC VOLUMES



LEGEND

- Project Site
- #(#) - A.M.(P.M.) Peak Hour Traffic Volume

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FIGURE 8
CUMULATIVE PLUS PROJECT PEAK HOUR TRAFFIC VOLUMES

IV. TRAFFIC IMPACT ANALYSIS

The results of the analysis of potential impacts of project traffic on the local street system are summarized in this chapter. The analysis compared the projected operating conditions at each study intersection under the cumulative base and cumulative plus project conditions for 2008. The potential impacts were identified using significance criteria established by the City of Agoura Hills.

SIGNIFICANT TRAFFIC IMPACT CRITERIA

According to City of Agoura Hills criteria, a project would be considered to have a significant traffic impact if the following conditions are met:

<u>Intersection Conditions with Project Traffic</u>		<u>Project-related Increase in V/C Ratio</u>
<u>LOS</u>	<u>V/C Ratio</u>	
D, E, or F	>0.800	equal to or greater than 0.020

Using these criteria, a project would not have a significant impact at an intersection if it were projected to operate at LOS A, B or C after the addition of project traffic, regardless of the magnitude of the increase in the V/C ratio. If the intersection, however, were operating at a LOS D, E, or F after the addition of project traffic and if the incremental change in the V/C ratio were 0.020 or greater, the project would be considered to have a significant impact.

CUMULATIVE BASE TRAFFIC CONDITIONS

The first step in the impact analysis was to analyze the projected operating conditions at each of the intersections under future conditions without the project, i.e., the cumulative base scenario. The cumulative base traffic volumes for weekday peak hours provided in Figure 5

were analyzed to determine the V/C ratio and corresponding LOS for each location under these conditions. Table 7 summarizes the results of the analysis for the weekday peak hours under cumulative base conditions and shows that both analyzed intersections are projected to continue operating at LOS B or better during both the morning and afternoon peak hours.

PROJECT TRAFFIC IMPACT ANALYSIS

The cumulative plus project peak hour traffic volumes illustrated in Figure 8 were analyzed to determine the projected year 2008 future operating conditions with the completion of the proposed project. These results are presented in Table 7. The cumulative plus project conditions follow the trend set by the cumulative base conditions. As shown in Table 7, both analyzed intersections would continue to operate at equivalent peak hour levels of service under future plus project conditions (i.e., LOS A or B during the morning peak hour and LOS A or B during the afternoon peak hour).

Using the traffic impact significance criteria described above, the proposed project would not have a significant impact at either of the two study intersections during the morning and afternoon peak hours. Therefore, no project mitigation measures would be required for the proposed office expansion project.

**TABLE 7
FUTURE (2008) WEEKDAY INTERSECTION PEAK HOUR LEVELS OF SERVICE**

Intersection	Peak Hour	Cumulative Base		Cumulative plus Project				Significant Project Impact
		Delay or V/C	LOS	Delay or V/C	LOS	Project Increase in V/C	LOS	
1. Liberty Canyon Road & US-101 EB Off-Ramp [a]	A.M.	12	B	12	B			
	P.M.	11	B	12	B			
	A.M.	0.371		0.387		0.016		NO
	P.M.	0.483		0.503		0.020		NO
2. Liberty Canyon Road & Agoura Road	A.M.	0.402	A	0.410	A	0.008		NO
	P.M.	0.388	A	0.419	A	0.031		NO

[a] Intersections are controlled by stop signs on the minor approach, the US-101 southbound off-ramp. For the purpose of evaluating the operating condition of the intersection, the top row shows analysis using HCM stop-controlled methodology and average vehicular delay in seconds on the most constrained approach is reported. For the purpose of application of City of Agoura Hills criteria, the V/C ratios also shown, assuming the presence of a two-phase signal.

V. PARKING AND SITE CIRCULATION ANALYSIS

This chapter presents an analysis of the parking supply and access system proposed for the project. The required parking supply was estimated based on the applicable code requirements specified by the City of Agoura Hills. Issues relating to the project's proposed site access and internal circulation scheme were also evaluated.

PARKING ANALYSIS

The parking analysis for the proposed project compared the proposed parking supply to the requirements of *City of Agoura Hills Municipal Code* (City of Agoura Hills, March 1983). According to the Code, a proposed development project is required to provide an adequate supply of parking spaces based on the proposed land use for the site. The proposed project is considered to have a significant parking impact if the proposed parking supply does not meet the parking demand specified by the Code.

The City of Agoura Hills requires one space be provided for each 300 sf of general office uses and one space be provided for each 200 sf of medical office uses. Table 8 summarizes the parking code analysis. The proposed future parking supply of 219 spaces would provide a surplus of two spaces over the required 217 spaces, thereby meeting the Code requirement. The proposed project would provide sufficient parking for the existing office building as well as the two new buildings.

SITE ACCESS AND CIRCULATION

Traffic circulation within the surface parking lot for proposed Building B and the common parking area for existing Building A and proposed Building C were evaluated. Drive aisles ranging from approximately 25 to 30 feet would be set up for two-way operation to directly access the

**TABLE 8
SUMMARY OF PARKING REQUIREMENTS AND PROPOSED SUPPLY**

LAND USE	SIZE [a]	PARKING RATIO [b]	REQUIRED PARKING SPACES
Existing Office Building A	24,540 sf	1 spaces per 300 sf	82
New Office Building B	10,000 sf	1 spaces per 300 sf	33
New Medical Office C	20,400 sf	1 spaces per 200 sf	102
		Total Spaces Required By Code	217
Spaces Provided [a]			
Parking supply for Building A			82
Parking supply for Building B			34
Parking supply for Building A			103
		Total Spaces Supplied	219
Surplus		Surplus	2

Notes

- a. Source: Behr Browers Architects, Inc (per 10/24/2006 email)
- b. Source: *City of Agoura Hills Municipal Code* (City of Agoura Hills, March 1983).

90-degree surface parking spaces. The drive aisle to the angled parking behind existing Building A would be approximately 12 feet wide and set up for one-way circulation. Given the design of the proposed parking lot and the estimated volumes that would access the proposed project site, it was determined that the proposed site plan provides adequate traffic access and internal circulation.

In addition, as part of the project improvement, the existing raised median on Liberty Canyon Road would also be extended closer to the US-101 ramps. A median opening accompanied by a left-turn pocket at the project driveway would facilitate the inbound project traffic from Liberty Canyon Road northbound. The driveway off Liberty Canyon Road would be reconfigured to prevent project traffic from making left-turn maneuvers to northbound Liberty Canyon Road. Project traffic leaving proposed Building B and intending to use US-101 (approximately two cars in the morning peak hour and nine in the afternoon peak hour) could utilize the existing southbound left-turn pocket at Liberty Canyon Road/Agoura Road for U-turns. These project-related U-turning vehicles would yield to northbound through traffic on Liberty Canyon Road and the westbound right-turn traffic on Agoura Road until a suitable gap occurs and then proceed with the U-turn maneuvers. The southbound left-turn pocket at Liberty Canyon Road/Agoura Road is approximately 112 feet long and is adequate to accommodate the total projected volume of left-turning and U-turning vehicles (233 in the a.m. peak hour and 211 in the p.m. peak hour under cumulative plus project conditions) with projected queue lengths of approximately 108 feet or less during the peak hour 95% of the time.

Finally, due to the vertical curve on Liberty Canyon Road in the project vicinity, the City has recommended that on-site grading be considered to maintain the northward visibility for the project traffic exiting the driveway to the US-101 eastbound off-ramp.

VI. CONGESTION MANAGEMENT ANALYSIS

Additional analyses were conducted to comply with the requirements of the *Congestion Management Program for Los Angeles County* (Los Angeles County Metropolitan Transportation Authority, 2004). In accordance with CMP Transportation Impact Analysis (TIA) requirements, it is necessary to conduct a regional analysis to quantify potential impacts of the proposed project on the CMP freeway monitoring locations and CMP arterial intersection monitoring stations, and to prepare cost estimates and estimated fair share contributions for any suggested improvements at CMP arterial intersections.

CMP SIGNIFICANT TRAFFIC IMPACT CRITERIA

The CMP TIA guidelines indicate that if a proposed development project would add 150 or more trips in either direction during either the morning or evening peak hour to the mainline freeway monitoring location, then a CMP freeway analysis must be conducted. If a proposed project would add 50 or more peak hour trips (of adjacent street traffic) to a CMP arterial intersection, then a CMP arterial intersection analysis must be conducted.

For the purposes of a CMP TIA, a project impact is considered to be significant if the proposed project increases traffic demand on a CMP facility by 2% of capacity ($V/C \geq 0.02$), causing or worsening LOS F ($V/C > 1.00$). Under this criterion, a project would not be considered to have a regionally-significant impact if the analyzed facility is operating at LOS E or better after the addition of project traffic regardless of the increase in V/C ratio caused by the project. If the facility is operating at LOS F with project traffic and the incremental change in the V/C ratio caused by the project is 0.02 or greater, then the project would be considered to have a significant impact.

CMP FREEWAY AND ARTERIAL INTERSECTION ANALYSIS

The CMP freeway monitoring station closest to the project site is on the Ventura Freeway north of Reyes Adobe Road. Based on the project trip generation and distribution described in Chapter III, the proposed project would generate fewer than 150 trips (in either direction) during either the weekday a.m. or p.m. peak hours at the above CMP freeway monitoring station in the project vicinity and, thus, no further traffic analysis would be required.

None of the CMP arterial monitoring stations identified in the CMP are located within a five-mile radius of the proposed project site. According to the project trip generation and distribution described in Chapter III, the proposed project would add fewer than 50 trips to any of the CMP monitoring intersections during either the weekday a.m. or p.m. peak hours and, thus, no further traffic analysis would be required.

VII. SUMMARY AND CONCLUSIONS

This study was undertaken to analyze the potential traffic impacts of the proposed Liberty Canyon Road Office Expansion Project at 27489 Agoura Road, located in the City of Agoura Hills, California. The following summarizes the results of this analysis:

- The proposed 54,940 sf project has an existing 24,540 sf general office building and two new buildings in the expansion program: one 10,000 sf building for general office use and one 20,400 sf building for medical office use.
- Two intersections were analyzed for this project as determined by the City of Agoura Hills, including one stop-controlled intersection at Liberty Canyon Road and the US-101 eastbound off-ramp and one signalized intersection at Liberty Canyon Road and Agoura Road. Both intersections operate at LOS B or better during the weekday morning and afternoon peak hours. Under year 2008 cumulative base conditions, both intersections are projected to operate at LOS B or better during the weekday morning and afternoon peak hours.
- The proposed office expansion program is expected to generate an increase in traffic of approximately 847 weekday daily trips, including 67 morning peak hour trips (54 inbound, 13 outbound) and 91 weekday afternoon peak hour trips (24 inbound, 67 outbound).
- Application of the City of Agoura Hills traffic impact criteria indicates that the proposed project would not create significant impacts at either of the study intersections under cumulative plus project conditions.
- The parking code requirement for the proposed project is 217 spaces. The proposed project will provide 219 surface parking spaces, thereby satisfying the Code requirement. Given the design of the proposed parking lot and the estimated volumes that would access the proposed project site, it was determined that the proposed site plan provides adequate traffic access and internal circulation.
- Additional analysis of potential impacts on the regional transportation system conducted in accordance with CMP requirements determined that the project would not have a significant impact on either the CMP arterial highway network or the mainline freeway system.

REFERENCES

2000 Highway Capacity Manual, Transportation Research Board, 2000.

Agoura Village Specific Plan Final EIR, City of Agoura Hills, March 2006

City of Agoura Hills Municipal Code, City of Agoura Hills, March 2, 1983.

Congestion Management Program for Los Angeles County, Los Angeles County Metropolitan Transportation Authority, July 2004.

Trip Generation, 7th Edition, Institute of Transportation Engineers, 2003.

APPENDIX A

INTERSECTION LANE CONFIGURATIONS

INTERSECTION LANE CONFIGURATIONS

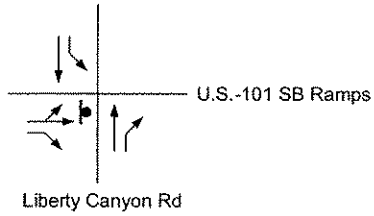


NOT TO SCALE

EXISTING CONDITIONS

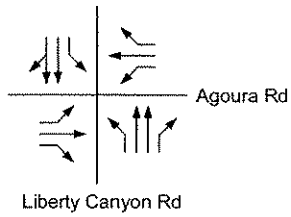
FUTURE CONDITIONS

1. Liberty Canyon Rd & U.S.-101 SB Ramps




Same As Existing

2. Liberty Canyon Rd & Agoura Rd



Same As Existing

LEGEND

 Stop Controlled

APPENDIX B

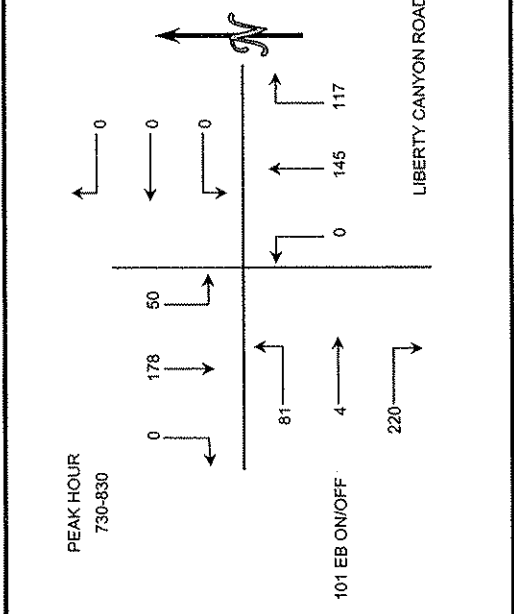
TRAFFIC COUNTS

INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: KAKU ASSOCIATES
 PROJECT: AGOURA HILLS
 DATE: TUESDAY, SEPTEMBER 26, 2006
 PERIODS: 7:00 AM TO 9:00 AM AND 4:00 PM TO 6:00 PM
 INTERSECTION: N/S LIBERTY CANYON ROAD AND E/W 101 EB ON/OFF RAMP

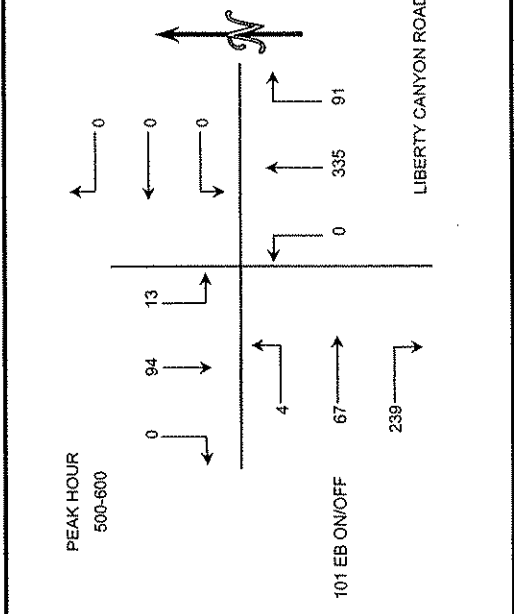
PERIOD	7:00 AM TO 9:00 AM												
	1	2	3	4	5	6	7	8	9	10	11	12	
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
700-745	0	24	1	0	0	0	35	16	0	46	1	0	123
745-730	0	16	1	0	0	0	40	23	0	52	10	8	150
730-745	0	30	17	0	0	0	47	30	0	58	3	31	216
745-800	0	41	17	0	0	0	20	44	0	47	1	33	203
800-815	0	56	14	0	0	0	27	36	0	58	0	14	205
815-830	0	51	2	0	0	0	23	35	0	57	0	3	171
830-845	0	32	3	0	0	0	20	31	0	43	0	3	132
845-900	0	34	3	0	0	0	20	32	0	44	1	4	138
HOUR TOTALS													

TIME	7:00 AM TO 9:00 AM												
	1	2	3	4	5	6	7	8	9	10	11	12	
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
700-800	0	111	36	0	0	0	142	113	0	203	15	72	682
745-815	0	143	49	0	0	0	134	133	0	215	14	86	774
730-830	0	178	50	0	0	0	117	145	0	220	4	81	795
745-845	0	180	36	0	0	0	90	146	0	205	1	53	711
800-900	0	173	22	0	0	0	90	134	0	202	1	24	646



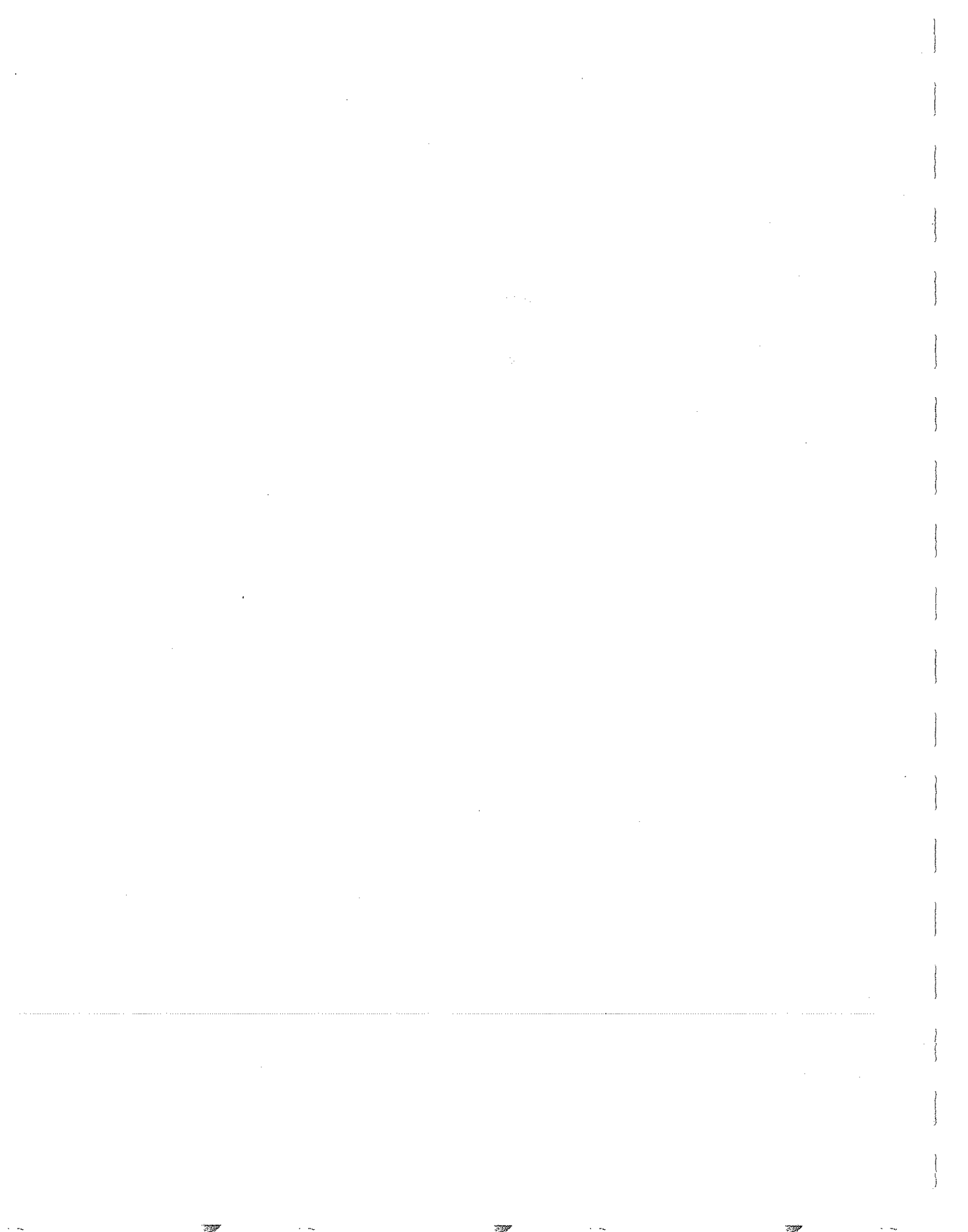
PERIOD	4:00 PM TO 6:00 PM												
	1	2	3	4	5	6	7	8	9	10	11	12	
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-415	0	28	5	0	0	0	20	60	0	19	0	1	133
415-430	0	23	1	0	0	0	22	58	0	27	1	1	133
430-445	0	35	2	0	0	0	31	64	0	18	2	2	154
445-500	0	26	1	0	0	0	28	56	0	18	1	2	132
500-515	0	31	3	0	0	0	36	100	0	29	0	0	199
515-530	0	17	5	0	0	0	19	88	0	92	40	0	261
530-545	0	20	3	0	0	0	21	85	0	80	27	2	238
545-600	0	26	2	0	0	0	15	62	0	38	0	2	145
HOUR TOTALS													

TIME	4:00 PM TO 6:00 PM												
	1	2	3	4	5	6	7	8	9	10	11	12	
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTAL
400-500	0	112	9	0	0	0	101	238	0	82	4	6	552
415-515	0	115	7	0	0	0	117	278	0	92	4	5	618
430-530	0	109	11	0	0	0	114	308	0	157	43	4	746
445-545	0	94	12	0	0	0	104	329	0	219	68	4	830
500-600	0	94	13	0	0	0	91	335	0	239	67	4	843

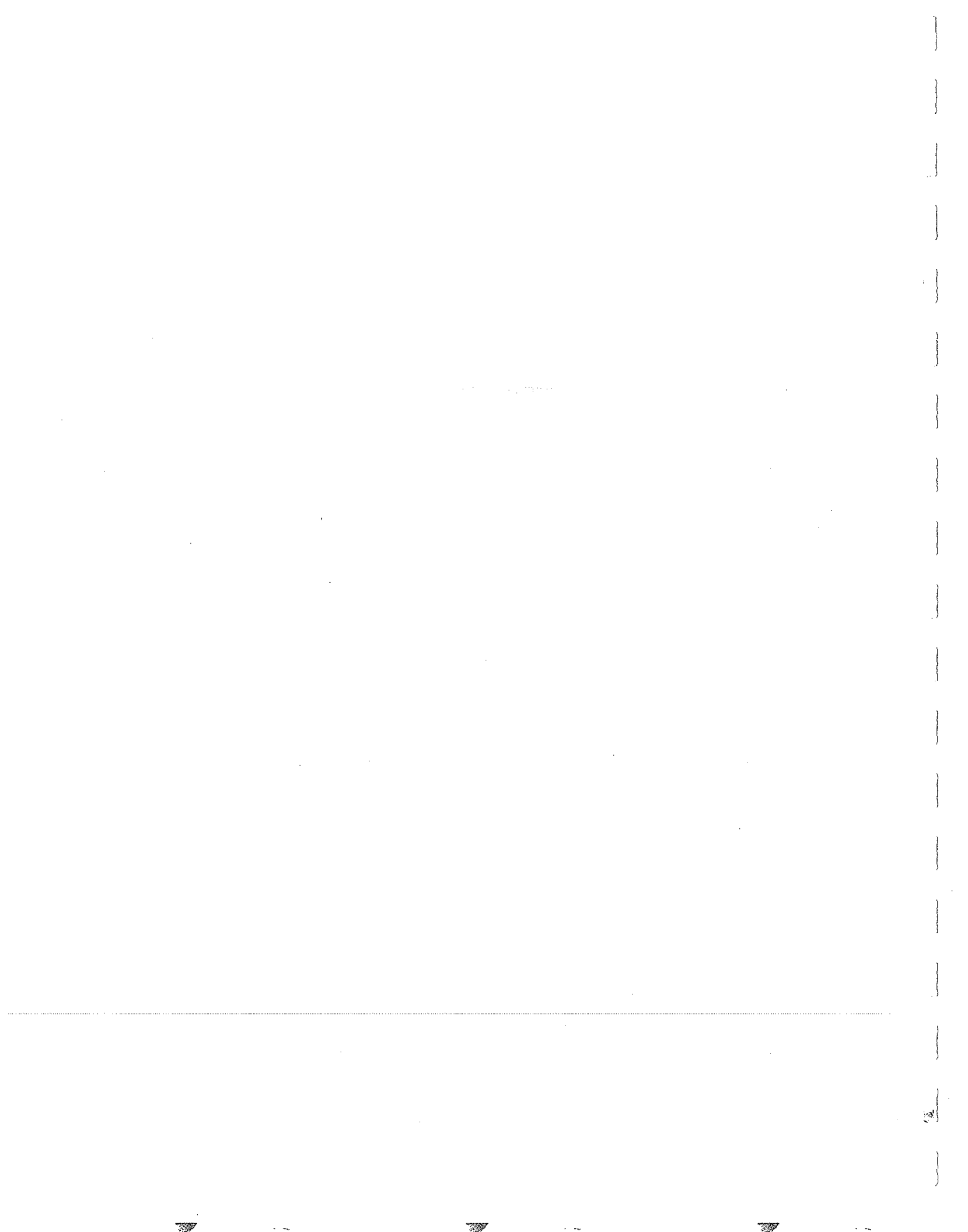


APPENDIX C

LEVEL OF SERVICE WORKSHEETS



EXISTING CONDITIONS



Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #1

Average Delay (sec/veh): 4.8 Worst Case Level Of Service: B[11.3]

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, and Lanes.

Volume Module:

Table with 12 columns representing different volume metrics and 4 columns for North, South, East, and West bounds.

Critical Gap Module:

Table with 12 columns for critical gap and follow-up time metrics across four directions.

Capacity Module:

Table with 12 columns for capacity-related metrics across four directions.

Level Of Service Module:

Table with 12 columns for level of service metrics across four directions.

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #1

Average Delay (sec/veh): 4.2 Worst Case Level Of Service: B[11.0]

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, and Lanes.

Volume Module:

Table with 12 columns representing different volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Critical Gap Module:

Table with 12 columns showing critical gap and follow-up time values for different movements.

Capacity Module:

Table with 12 columns showing capacity-related metrics like Conflict Vol, Potent Cap., Move Cap., etc.

Level Of Service Module:

Table with 12 columns showing level of service metrics like 2Way95thQ, Control Del, LOS by Move, etc.

Note: Queue reported is the number of cars per lane.

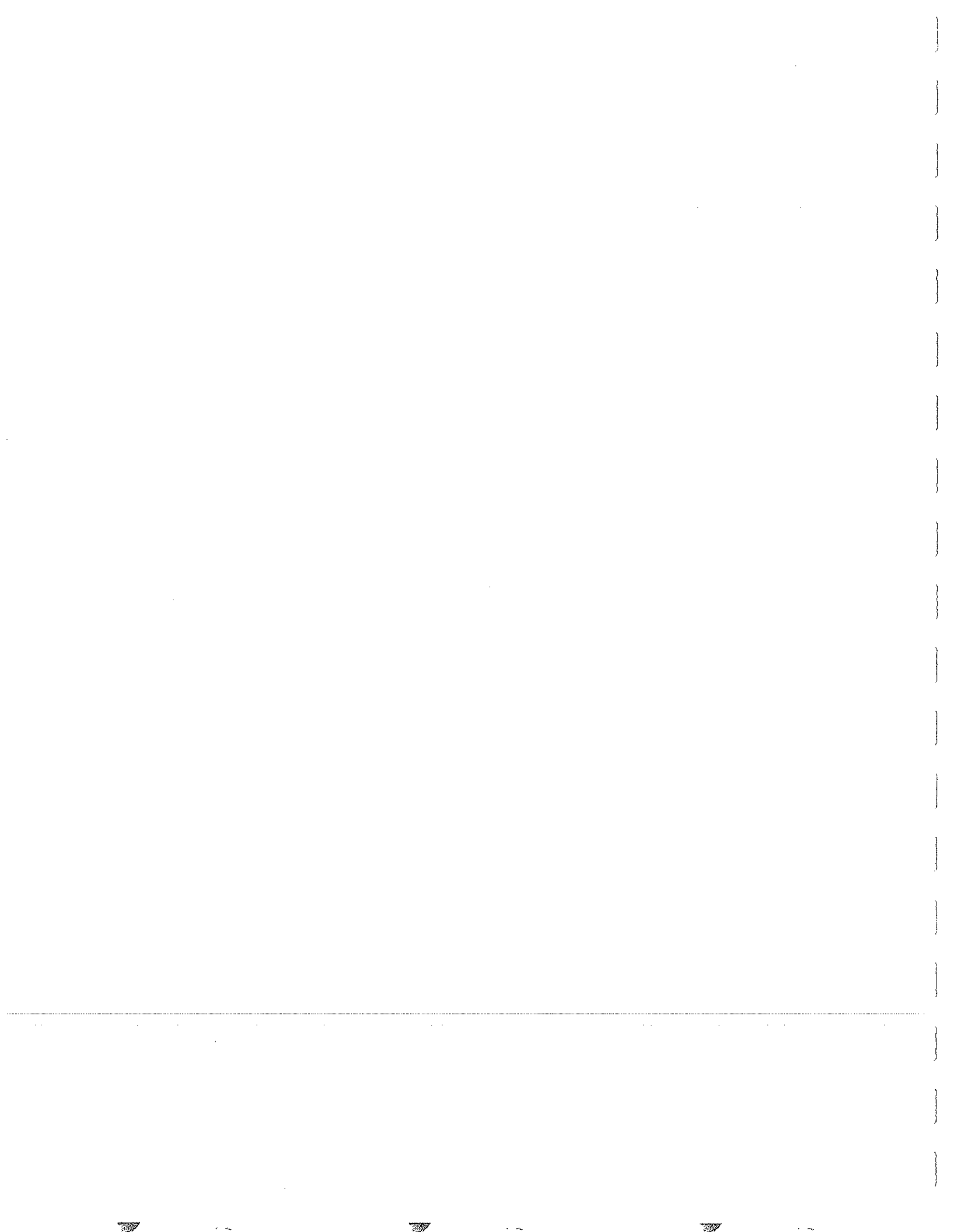
Project Title:	LIBERTY CANYON ROAD OFFICE EXPANSION		
Intersection:	LIBERTY CANYON AND AGOURA ROAD		
Description:	EXISTING CONDITIONS		
Date/Time:	AM PEAK HOUR (7:30-8:30)		
Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.00	73	1,600	0.046	N-S(1): 0.182 *
	TH	2.00	65	1,600	0.041	N-S(2): 0.074
	LT	1.00	217	1,600	0.136 *	E-W(1): 0.105 *
Westbound	RT	1.00	46	1,600	0.000	E-W(2): 0.097
	TH	1.00	133	1,600	0.083	V/C: 0.287
	LT	1.00	33	1,600	0.021 *	Lost Time: 0.100
Northbound	RT	1.00	64	1,600	0.019	
	TH	2.00	146	3,200	0.046 *	
	LT	1.00	44	1,600	0.028	
Eastbound	RT	1.00	28	1,600	0.000	ICU: 0.387
	TH	1.00	134	1,600	0.084 *	
	LT	1.00	23	1,600	0.014	LOS: A

Date/Time: PM PEAK HOUR (7:30-8:30)

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.00	33	0	0.000	N-S(1): 0.124 *
	TH	2.00	149	3,200	0.057	N-S(2): 0.076
	LT	1.00	158	1,600	0.099 *	E-W(1): 0.145 *
Westbound	RT	1.00	297	1,600	0.087	E-W(2): 0.114
	TH	1.00	136	1,600	0.085	V/C: 0.269
	LT	1.00	48	1,600	0.030 *	Lost Time: 0.100
Northbound	RT	1.00	36	1,600	0.000	
	TH	2.00	81	3,200	0.025 *	
	LT	1.00	30	1,600	0.019	
Eastbound	RT	1.00	50	1,600	0.013	ICU: 0.369
	TH	1.00	184	1,600	0.115 *	
	LT	1.00	43	1,600	0.027	LOS: A

* - Denotes critical movement



CUMULATIVE BASE CONDITIONS

CONFIDENTIAL

Level of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #1

Average Delay (sec/veh): 4.9 Worst Case Level Of Service: B[11.5]

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, and Lanes.

Volume Module:

Table with 13 columns for various volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Critical Gap Module:

Table with 13 columns for critical gap and follow-up time values.

Capacity Module:

Table with 13 columns for capacity-related metrics like Conflict Vol, Potent Cap., Move Cap., etc.

Level Of Service Module:

Table with 13 columns for level of service metrics like 2Way95thQ, Control Del, LOS by Move, etc.

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #1

Average Delay (sec/veh): 4.3 Worst Case Level Of Service: B[11.2]

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, and Lanes.

Volume Module:

Table with 12 columns representing different volume and adjustment factors like Base Vol, Growth Adj, Initial Bse, etc.

Critical Gap Module:

Table with 12 columns showing critical gap and follow-up time values for different movements.

Capacity Module:

Table with 12 columns showing capacity-related metrics like Conflict Vol, Potent Cap., Move Cap., etc.

Level Of Service Module:

Table with 12 columns showing level of service metrics like 2Way95thQ, Control Del, LOS by Move, etc.

Note: Queue reported is the number of cars per lane.

Project Title:	LIBERTY CANYON ROAD OFFICE EXPANSION		
Intersection:	LIBERTY CANYON AND US-101 EB RAMPS		
Description:	CUMULATIVE BASE CONDITIONS		
Date/Time:	AM PEAK HOUR (7:30-8:30)		
Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.00	0	0	0.000	N-S(1): 0.127 *
	TH	1.00	184	1,600	0.115	N-S(2): 0.115
	LT	1.00	52	1,600	0.033 *	E-W(1): 0.144 *
Westbound	RT	0.00	0	0	0.000	E-W(2): 0.052
	TH	0.00	0	0	0.000	
	LT	0.00	0	0	0.000 *	V/C: 0.271
Northbound	RT	1.00	129	1,600	0.081	Lost Time: 0.100
	TH	1.00	151	1,600	0.094 *	
	LT	0.00	0	0	0.000	
Eastbound	RT	1.00	231	1,600	0.144 *	ICU: 0.371
	TH	1.00	4	1,600	0.054	
	LT	0.00	83	1,600	0.052	LOS: A

Date/Time: PM PEAK HOUR (7:30-8:30)

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.00	0	0	0.000	N-S(1): 0.224 *
	TH	1.00	99	1,600	0.062	N-S(2): 0.062
	LT	1.00	13	1,600	0.008 *	E-W(1): 0.159 *
Westbound	RT	0.00	0	0	0.000	E-W(2): 0.003
	TH	0.00	0	0	0.000	
	LT	0.00	0	0	0.000 *	V/C: 0.383
Northbound	RT	1.00	99	1,600	0.062	Lost Time: 0.100
	TH	1.00	346	1,600	0.216 *	
	LT	0.00	0	0	0.000	
Eastbound	RT	1.00	254	1,600	0.159 *	ICU: 0.483
	TH	1.00	69	1,600	0.046	
	LT	0.00	4	1,600	0.003	LOS: A

* - Denotes critical movement

Project Title:	LIBERTY CANYON ROAD OFFICE EXPANSION		
Intersection:	LIBERTY CANYON AND AGOURA ROAD		
Description:	CUMULATIVE BASE CONDITIONS		
Date/Time:	AM PEAK HOUR (7:30-8:30)		
Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

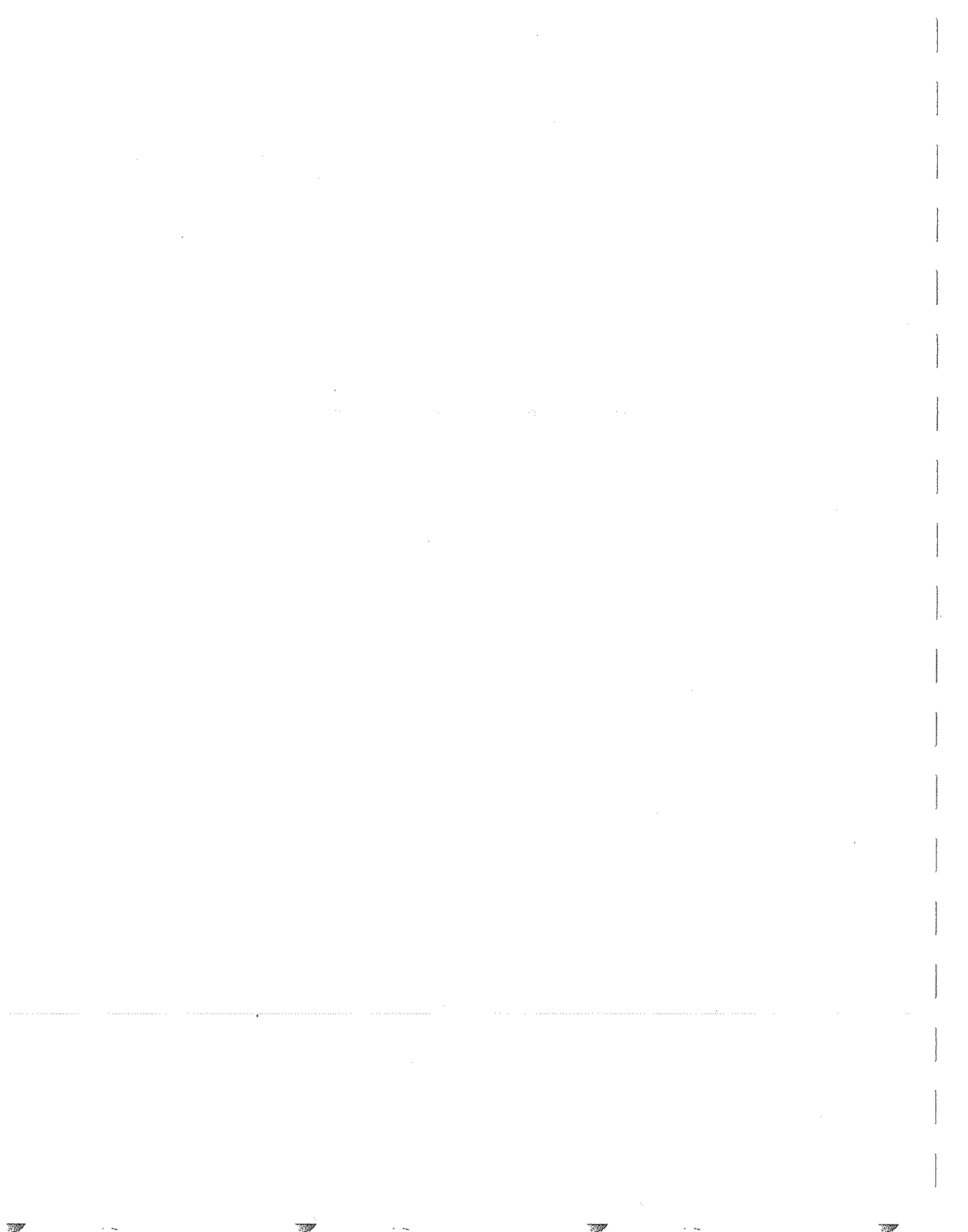
APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.00	75	1,600	0.047	N-S(1): 0.190 *
	TH	2.00	72	1,600	0.045	N-S(2): 0.080
	LT	1.00	224	1,600	0.140 *	E-W(1): 0.112 *
Westbound	RT	1.00	47	1,600	0.000	E-W(2): 0.110
	TH	1.00	152	1,600	0.095	
	LT	1.00	34	1,600	0.021 *	V/C: 0.302
Northbound	RT	1.00	66	1,600	0.020	Lost Time: 0.100
	TH	2.00	160	3,200	0.050 *	
	LT	1.00	52	1,600	0.033	
Eastbound	RT	1.00	33	1,600	0.000	ICU: 0.402
	TH	1.00	146	1,600	0.091 *	
	LT	1.00	24	1,600	0.015	LOS: A

Date/Time:	PM PEAK HOUR (7:30-8:30)		
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APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.00	34	0	0.000	N-S(1): 0.130 *
	TH	2.00	163	3,200	0.062	N-S(2): 0.084
	LT	1.00	163	1,600	0.102 *	E-W(1): 0.158 *
Westbound	RT	1.00	306	1,600	0.089	E-W(2): 0.121
	TH	1.00	149	1,600	0.093	
	LT	1.00	50	1,600	0.031 *	V/C: 0.288
Northbound	RT	1.00	37	1,600	0.000	Lost Time: 0.100
	TH	2.00	90	3,200	0.028 *	
	LT	1.00	35	1,600	0.022	
Eastbound	RT	1.00	58	1,600	0.014	ICU: 0.388
	TH	1.00	203	1,600	0.127 *	
	LT	1.00	44	1,600	0.028	LOS: A

* - Denotes critical movement

CUMULATIVE PLUS PROJECT CONDITIONS



Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #1

Average Delay (sec/veh): 5.0 Worst Case Level Of Service: B[11.8]

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, and Lanes.

Volume Module:

Table with 12 columns representing different volume components like Base Vol, Growth Adj, Initial Bse, etc.

Critical Gap Module:

Table with 12 columns showing critical gap and follow-up time values.

Capacity Module:

Table with 12 columns showing capacity-related metrics like Conflict Vol, Potent Cap., etc.

Level Of Service Module:

Table with 12 columns showing level of service metrics like 2Way95thQ, Control Del, etc.

Note: Queue reported is the number of cars per lane.

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #1

Average Delay (sec/veh): 4.1 Worst Case Level Of Service: B[11.5]

Table with 4 columns: North Bound, South Bound, East Bound, West Bound. Rows include Movement, Control, Rights, and Lanes.

Volume Module:

Table with 12 columns representing different volume metrics like Base Vol, Growth Adj, Initial Bse, etc.

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Critical Gap Module:

Table with 12 columns showing critical gap and follow-up time values.

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Capacity Module:

Table with 12 columns showing capacity metrics like Conflict Vol, Potent Cap., etc.

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Level Of Service Module:

Table with 12 columns showing level of service metrics like 2Way95thQ, Control Del, etc.

Note: Queue reported is the number of cars per lane.

Project Title:	LIBERTY CANYON ROAD OFFICE EXPANSION		
Intersection:	LIBERTY CANYON AND US-101 EB RAMPS		
Description:	CUMULATIVE PLUS PROJECT CONDITIONS		
Date/Time:	AM PEAK HOUR (7:30-8:30)		
Thru Lane:	1600 vph	N-S Split Phase :	N
Left Lane:	1600 vph	E-W Split Phase :	N
Double Lt Penalty:	20 %	Lost Time (% of cycle) :	10
ITS:	0 %	V/C Round Off (decs.) :	3

APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.00	0	0	0.000	N-S(1): 0.130 *
	TH	1.00	207	1,600	0.129	N-S(2): 0.129
	LT	1.00	52	1,600	0.033 *	E-W(1): 0.157 *
Westbound	RT	0.00	0	0	0.000	E-W(2): 0.052
	TH	0.00	0	0	0.000	
	LT	0.00	0	0	0.000 *	V/C: 0.287
Northbound	RT	1.00	134	1,600	0.084	Lost Time: 0.100
	TH	1.00	155	1,600	0.097 *	
	LT	0.00	0	0	0.000	
Eastbound	RT	1.00	251	1,600	0.157 *	ICU: 0.387
	TH	1.00	4	1,600	0.054	
	LT	0.00	83	1,600	0.052	LOS: A

Date/Time:	PM PEAK HOUR (7:30-8:30)		
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APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.00	0	0	0.000	N-S(1): 0.239 *
	TH	1.00	109	1,600	0.068	N-S(2): 0.068
	LT	1.00	13	1,600	0.008 *	E-W(1): 0.164 *
Westbound	RT	0.00	0	0	0.000	E-W(2): 0.003
	TH	0.00	0	0	0.000	
	LT	0.00	0	0	0.000 *	V/C: 0.403
Northbound	RT	1.00	127	1,600	0.079	Lost Time: 0.100
	TH	1.00	370	1,600	0.231 *	
	LT	0.00	0	0	0.000	
Eastbound	RT	1.00	262	1,600	0.164 *	ICU: 0.503
	TH	1.00	69	1,600	0.046	
	LT	0.00	4	1,600	0.003	LOS: A

* - Denotes critical movement

Project Title:		LIBERTY CANYON ROAD OFFICE EXPANSION				
Intersection:		LIBERTY CANYON AND AGOURA ROAD				
Description:		CUMULATIVE PLUS PROJECT CONDITIONS				
Date/Time:		AM PEAK HOUR (7:30-8:30)				
Thru Lane:	1600 vph				N-S Split Phase :	N
Left Lane:	1600 vph				E-W Split Phase :	N
Double Lt Penalty:	20 %				Lost Time (% of cycle) :	10
ITS:	0 %				V/C Round Off (decs.) :	3
APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.00	113	1,600	0.071	N-S(1): 0.196 *
	TH	2.00	72	1,600	0.045	N-S(2): 0.104
	LT	1.00	233	1,600	0.146 *	E-W(1): 0.112
Westbound	RT	1.00	51	1,600	0.000	E-W(2): 0.114 *
	TH	1.00	153	1,600	0.096 *	
	LT	1.00	34	1,600	0.021	V/C: 0.310
Northbound	RT	1.00	66	1,600	0.020	Lost Time: 0.100
	TH	2.00	160	3,200	0.050 *	
	LT	1.00	53	1,600	0.033	
Eastbound	RT	1.00	33	1,600	0.000	ICU: 0.410
	TH	1.00	146	1,600	0.091	
	LT	1.00	29	1,600	0.018 *	LOS: A
Date/Time:		PM PEAK HOUR (7:30-8:30)				
APPROACH	MVMT	LANES	VOLUME	CAPACITY	V/C	ICU ANALYSIS
Southbound	RT	0.00	47	0	0.000	N-S(1): 0.160 *
	TH	2.00	163	3,200	0.066	N-S(2): 0.088
	LT	1.00	211	1,600	0.132 *	E-W(1): 0.159 *
Westbound	RT	1.00	308	1,600	0.061	E-W(2): 0.128
	TH	1.00	149	1,600	0.093	
	LT	1.00	50	1,600	0.031 *	V/C: 0.319
Northbound	RT	1.00	37	1,600	0.000	Lost Time: 0.100
	TH	2.00	90	3,200	0.028 *	
	LT	1.00	35	1,600	0.022	
Eastbound	RT	1.00	58	1,600	0.014	ICU: 0.419
	TH	1.00	204	1,600	0.128 *	
	LT	1.00	56	1,600	0.035	LOS: A

* - Denotes critical movement