

INITIAL STUDY

CVS PHARMACY AND
COMMERCIAL DEVELOPMENT
15600 & 15650 LOS GATOS BOULEVARD
LOS GATOS, CALIFORNIA

PLANNED DEVELOPMENT APPLICATION PD-11-005
NEGATIVE DECLARATION ND-11-007

PREPARED FOR
TOWN OF LOS GATOS
COMMUNITY DEVELOPMENT DEPARTMENT
110 E. MAIN STREET
LOS GATOS, CA 95030

AUGUST 2013



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PREPARED BY
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510/644-2535

**TOWN OF LOS GATOS
COMMUNITY DEVELOPMENT DEPARTMENT**

ENVIRONMENTAL CHECKLIST FORM

INTRODUCTION AND PROJECT INFORMATION

Project Title: CVS Pharmacy and Commercial Development
Planned Development Application PD-11-005
Negative Declaration ND-11-007

Lead Agency Name and Address: Town of Los Gatos
Community Development Department
110 East Main Street
Los Gatos, CA 95030

Contact Person and Phone Number: Jennifer Savage, 408/399-5702

Project Location: 15600 and 15650 Los Gatos Boulevard (**Figure 1**)
Assessor's Parcel Numbers 424-14-028 and 424-14-036

Property Owner: Longs Drug Stores California, LLC
1 CVS Drive
Woonsocket, RI 02895

**Project Applicant's
Name and Address:** Landmark Retail Group
5850 Canoga Avenue
Woodland Hills, CA 91367

General Plan Designation: Mixed Use Commercial

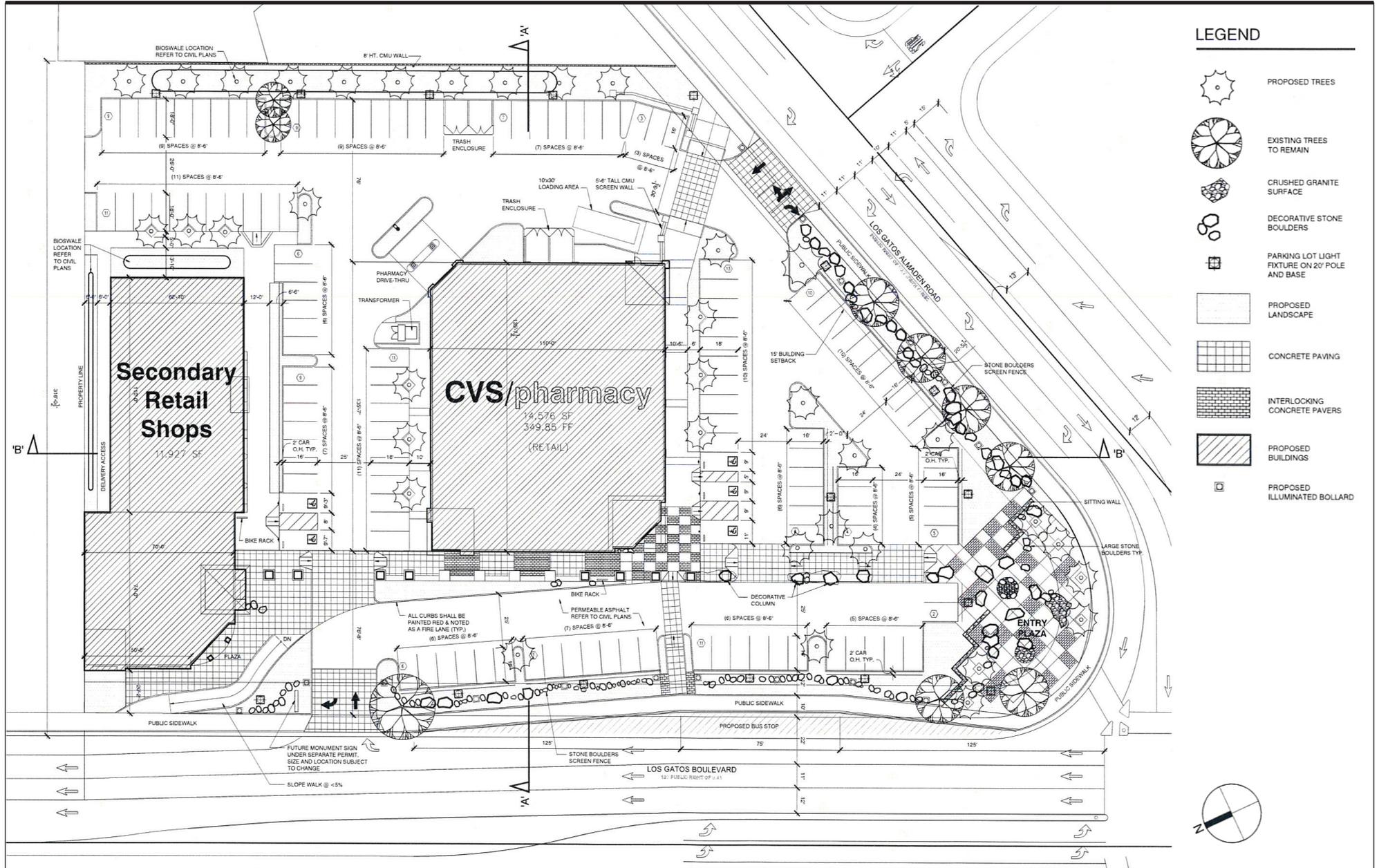
Zoning: CH, Restricted Highway Commercial

Description of Project: The project applicant is requesting Planned Development approval to construct two commercial buildings at the northeast corner of the Los Gatos Boulevard and Los Gatos Almaden Road intersection. The 2.79-acre (121,717 s.f.) site is currently vacant but contains various structures associated with the former auto dealership use. Los Gatos Boulevard and Los Gatos Almaden Road bound the project site on the west and south, respectively.

Project implementation would involve development of 26,503 square feet of commercial space in two buildings, and a breakdown of this space would be as follows (**Figure 2**):

CVS Pharmacy:	14,576 square feet (s.f.) +1,980 s.f. mezzanine (overstock only)
Secondary Commercial Shops:	<u>11,927 s.f.</u>
Total Building Area:	26,503 s.f. (28,483 s.f. with mezzanine storage area)





The proposed lot coverage would be 22% and the proposed heights of the buildings would be a maximum of 33 feet. The building setbacks are proposed to be 20 feet along Los Gatos Boulevard and 62 feet along Los Gatos Almaden Road, with no setback along the side (northern) property boundary. The proposed CVS pharmacy building would be located in the center of the site (visible and accessible from both Los Gatos Boulevard and Los Gatos Almaden Road). The secondary commercial building would be located behind the CVS pharmacy building along the northern project boundary. The project applicant expects that this secondary commercial building would likely accommodate a mix of tenants, such as a bank, medical services, or other basic needs services that would be complementary to the primary CVS pharmacy retail use.

The CVS pharmacy building would also include a pharmacy drive-thru window. It would be located at the northeast corner of the building, toward the rear of the building away from both Los Gatos Boulevard and Los Gatos Almaden Road. This drive-thru window is proposed to operate during standard hours (daily, 7:00 a.m. to 10:00 p.m.) with the option to operate 24 hours a day in the future.

Access to the proposed buildings would be provided by two driveways: one full access driveway on Los Gatos Almaden Road and one restricted access driveway on Los Gatos Boulevard (right-turn in and right-turn out only). The driveway on Los Gatos Almaden Road would be located at the Los Gatos Almaden Road and Peach Blossom Drive intersection, forming the fourth (northern) leg of this intersection.

The project would provide 129 surface parking spaces, comprised of 124 regular spaces, 4 disabled vehicle spaces, and 1 disabled van space. Parking spaces would be provided on all sides of the CVS pharmacy building, with most spaces located in front of the building as well as along Los Gatos Boulevard and Los Gatos Almaden Road. Parking spaces would also be located in front of and behind (east of) the secondary building, as well as along the rear (eastern) project boundary. A driveway at the northwest corner of the project site would provide access from Los Gatos Boulevard to the parking lot.

Project plans also include the installation of landscaping throughout the site as well as a pedestrian plaza at the corner of the Los Gatos Boulevard and Los Gatos Almaden Road intersection. Seven of the 14 existing landscape trees located along the site's frontage on Los Gatos Boulevard and Los Gatos Almaden Road would be retained. Landscape trees would be planted throughout the parking lot as well as along the eastern project boundary, which abuts office and residential uses.

Surrounding Land Uses and Setting: The project site is comprised of approximately 2.79 acres located on the east side of Los Gatos Boulevard at its intersection with Los Gatos Almaden Road. The site forms the northeast corner of the Los Gatos Boulevard and Los Gatos Almaden Road intersection. The project parcel is currently vacant, but contains buildings and asphalt paving associated with the previous use of the site as an auto dealership. Landscape trees occur along the site's perimeter on Los Gatos Boulevard, and Los Gatos Almaden Road.

Land uses adjoining the project site include commercial and residential development. An auto dealership is located immediately north of the project site. Across Los Gatos Boulevard to the west, commercial uses include SpeeDee oil change and tune-up, and three one-story office and retail commercial buildings. Development immediately to the east of the project site includes a one-story office building located adjacent to Los Gatos Almaden Road and a two-story multi-family residential building located on Carlton Avenue. Wood fencing of variable heights extend along most of the project's eastern boundary. Landscaping, including mature trees and shrubs, provide some screening between the project site and adjacent office and residential development.

Other agencies whose approval is required (e.g., permits, financing approval, or participation agreements): None.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

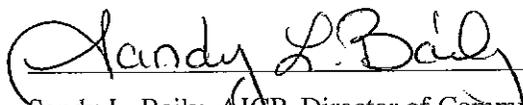
The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages:

- | | | |
|---|---|---|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Agriculture Resources | <input checked="" type="checkbox"/> Air Quality |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Cultural Resources | <input checked="" type="checkbox"/> Geology/Soils |
| <input type="checkbox"/> Greenhouse Gases | <input checked="" 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 | <input type="checkbox"/> Mandatory Findings of Significance |

DETERMINATION: (TO BE COMPLETED BY THE LEAD AGENCY)

On the basis of this initial evaluation:

	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
X	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.


 Sandy L. Baily, AICP, Director of Community Development

8/30/13
 Date

EVALUATION OF ENVIRONMENTAL IMPACTS

The following checklist and discussion of environmental effects presents conclusions regarding the potential levels of impacts on natural resources and the man-made environment, and mitigation measures required to alleviate or minimize these impacts. In the first column (Potentially Significant Impact), the checklist identifies potentially significant impacts that require further evaluation in an EIR because identified mitigation measures may not reduce the impact to a less-than-significant level. The second column (Less than Significant With Mitigation Incorporated) identifies impacts that are potentially significant or significant but implementation of specified mitigation measures would reduce these impacts to a less-than-significant level. The third column (Less than Significant) identifies impacts that are either less than significant and do not require implementation mitigation measures, while the fourth column (No Impact) indicates that this impact would not apply to the project. Implementation of all mitigation measures presented in this Initial Study will be performed and verified through the preparation and application of a Mitigation Monitoring and Reporting Program as required by California Public Resources Code (PRC) §21081.6.

Issues:

Issues (and Supporting Information Sources)	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
1. Aesthetics - 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 which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The project site is currently developed with one and two-story structures associated with the former car dealership. These structures would be replaced with two proposed buildings that are one to two stories high. The proposed CVS pharmacy building would be 27 feet high, but would have tower elements that are 33 feet high. It would also have a mezzanine level that would be used for storage. The proposed one-story secondary commercial building would be located north of the pharmacy building and would be approximately 18 to 20 feet high, with architectural elements that are almost 25 feet high.

The proposed CVS pharmacy building would be taller than the existing commercial buildings to the east, which are 25 to 27 feet high, and similar in height to the 31-foot high residential building to the northeast. Los Gatos Almaden Road and intervening street trees visually separate the proposed CVS pharmacy building from the existing El Gato Village shopping center to the south. The one-story buildings in this shopping center would not appear to be as tall as the proposed CVS pharmacy building, but since they are set back from Los Gatos Boulevard and Los Gatos Almaden Road, they are visually separated from the proposed CVS pharmacy building. Existing commercial buildings located across Los Gatos Boulevard (west of the site) are also one-story buildings. They too are separated visually from project buildings because of the intervening Los Gatos Boulevard and street/median trees. The proposed eight-foot high masonry wall, the retention and planting of landscape trees off- and on-site along the eastern project boundary, and proposed setbacks and intervening street trees along Los Gatos Almaden Road and Los

Gatos Boulevard would help interrupt views, such that the differences in building heights would be less than significant.

1a. Scenic Vistas

The principal views of scenic resources available in the project vicinity are those of the Santa Cruz Mountain hillsides and ridgeline to the south of the property. Views of the hillsides and ridgeline primarily constitute scenic views for pedestrians and motorists traveling southbound on Los Gatos Boulevard. Currently, the height of the auto dealership buildings on the site does not interfere with views of Santa Cruz Mountains ridgeline or upper hillsides. For southbound travelers on Los Gatos Boulevard, these views are partially screened by street trees along the roadway median and project site frontage. The proposed project would entail the removal of five street trees along the east side of Los Gatos Boulevard in order to accommodate a bus stop turnout, pedestrian path onto the site, and extension of water utilities to the property. The removal of the two northernmost street trees would reduce the screening effects of these landscape features and permit new views of the project site and its commercial structures. The street trees in the Los Gatos Boulevard median would continue to provide minor filtering of views towards the site and Santa Cruz Mountains.

The two proposed commercial buildings proposed for the project site would be slightly taller than surrounding building heights, but within the 35-foot height limit in the CH zone (Los Gatos Municipal Code Section 29.60.440). The planned location of these buildings on the property along with the removal of street trees would result in the minor obstruction of hillside and ridgeline views from southbound Los Gatos Boulevard, depending upon the location and position of the observer. The screening of the hillside views would be limited in duration and extent for southbound travelers on Los Gatos Boulevard; the proposed heights for the commercial buildings conforms with the height requirements of the Town's Zoning Ordinance for Restricted Highway Commercial uses (CH). The project would not adversely affect viewsheds or significantly deplete, damage, or alter an existing landscape vista. As a result, the proposed project would not have a significant impact on a scenic vista in the community.

1b. Scenic Resources Within a State Scenic Highway

The project site is located adjacent to Los Gatos Boulevard and Los Gatos Almaden Road in central Los Gatos, and is not visible from the State Route 17 and State Route 85 freeways. These two highways are not State-designated scenic highways and, consequently, the proposed project would not have a significant effect on scenic resources within a State-designated scenic highway.

1c. Visual Character

The development of the proposed commercial buildings would replace existing views of vacant, one-story and two-story commercial structures, and the large parking lot associated with the former car dealership use. The subject property is situated along Los Gatos Boulevard between Los Gatos Almaden Road and Lark Avenue, and is within the plan area for the Los Gatos Boulevard Plan (LGBP). The Plan provides direction and guidelines for overall development and improvements along Los Gatos Boulevard. There are no specific goals or policies in the LGBP concerning existing or future development on the project site. However, Land Use Policies IV.D.2 and D.3 of the LGBP indicate:

- *2. New and relocating auto-related businesses shall be located (a) north of Los Gatos Almaden Road, (b) adjacent to existing auto dealerships, or (c) on a vacant site previously used for permitted auto sales.*
- *3. Neighborhood commercial, multi-family residential and office uses shall be concentrated south of Los Gatos Almaden Road.*

The LGBP also addresses public/private improvements that would contribute to the overall goals for the Los Gatos Boulevard corridor. Section III of the Plan discusses the concept of a node, which is defined as

an activity center within neighborhoods and districts, and identifies the intersection of Los Gatos Boulevard and Los Gatos Almaden Road as a node location. The Plan states that the development at these points should “create anticipation and be distinctive.” This can be achieved with a strong sense of architecture, a coherent spatial form, and amenities such as public pedestrian enclaves, plazas, water features, pedestrian connections, public art and pocket parks. The LGBP provides a conceptual design for such improvements at the Los Gatos Boulevard and Los Gatos Almaden Road intersection, but the Plan does not specify particular improvements, private or public, for the project site. In order to conform with the principles of the LGBP, the project proposes to develop a pedestrian plaza at the intersection; the plaza would include: landscaping, porous concrete pavement, brick infill pavers, large stone boulders, a sitting wall, and illuminated bollards.

In addition to the Plan, the Town has adopted the Los Gatos Commercial Design Guidelines, which include specific recommendations for the architectural treatment, organization, and mix of buildings and open space in the Los Gatos Boulevard Plan area. The Commercial Design Guidelines Site Development principles emphasize the following:

- *5.A.2.1: Los Gatos Boulevard setbacks should be substantially landscaped.*
- *5.A.2.2: Automobile entries to projects and individual buildings shall be given special treatment with paving and landscaping.*
- *5.A.2.3: All projects shall have a clear and direct walkway between fronting streets and one or more of the primary building entries.*
- *5.A.2.4: Parking lots should be located behind or to the side of buildings facing Los Gatos Boulevard, whenever possible.*
- *5.A.2.5: Parking lots shall be heavily landscaped.*
- *5.A.2.6: Projects located on corner parcels at signalized intersections should incorporate major design features on the intersection corner.*
- *5.A.2.7: Projects backing up to residential neighborhoods should be sensitive to their potential impacts on the residents.*

In concept, the proposed project would be consistent with the above design principles, by including the following: landscaping along the site perimeter, special pavement treatment in the parking lot located adjacent to Los Gatos Boulevard; connecting the pedestrian walkway to Los Gatos Boulevard (but not on other streets); providing pedestrian amenities (e.g., sitting wall, planters, special pavement on walkways) in the plaza area on the site; providing landscape elements in the parking lot, in front of the building and at the intersection corner; and replacing the existing fencing along the eastern perimeter of the site with a wall and extensive tree plantings (adjacent to residential uses). In addition to visual screening for nearby residences to the east, the proposed wall would minimize potential noise effects from the loading area at the northeastern corner of the proposed CVS pharmacy building. The project also specifies the location of 80 of the proposed 129 (62%) parking spaces behind or to the side of the buildings facing Los Gatos Boulevard. Project consistency with the Commercial Design Guidelines will be reviewed in more detail during the Architecture and Site review process.

The visual character of the project site would also be affected by the removal of five street trees along Los Gatos Boulevard. The loss of two street trees at the northern perimeter of the project site would eliminate the screening effects of this landscaping and allow a direct view of project buildings as described above. Such tree removals are not considered to be a significant impact on the site’s visual character. However, in order to ensure that the visual character of the project area is retained as envisioned by the Town’s land use planning instruments (e.g. General Plan, Los Gatos Boulevard Plan, etc.), it is recommended that

project plans incorporate landscape tree plantings on the northern portion of the Los Gatos Boulevard median strip in the project area, subject to review and approval by the Town.

The proposed project would be subject to the Architecture and Site (A&S) review process to ensure consistency with the Town’s guidelines for commercial development along Los Gatos Boulevard. Certain recommendations provided by the Town’s consulting architect will be incorporated into the project design as conditions of project approval. Compliance with these recommendations would ameliorate the visual effects associated with the proposed project and, consequently, the project’s impacts on the visual character of the site and its surroundings would be less than significant.

1d. Light or Glare

The former auto dealership had outdoor lighting and the proposed project would also include outdoor lighting. To reduce the potential for disturbance due to nighttime lighting, the project will need to comply with Town Code Section 29.10.09035, which prohibits the production of direct or reflected glare (such as that produced by floodlight onto any area outside the project boundary). While Town Code will ensure that adjacent areas would not be illuminated, outside lighting on the site could be visible. However, existing and proposed landscaped trees along the eastern site boundary will help reduce the potential for visibility of the project’s outdoor lighting.

Issues (and Supporting Information Sources)	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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2. Agriculture and Forestry 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. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Dept. of Forestry and Fire Protection regarding the state’s inventory of forest land, and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<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"/>
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined in Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Result in the loss of forest land or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Issues (and Supporting Information Sources)	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

2a, 2b, 2c, 2d, 2e. Farmland, Agricultural, and Forestry Uses

The 2.79-acre (121,717 s.f.) site is currently vacant and contains various structures associated with the former auto dealership use. Project implementation would replace these structures with new commercial development. Since the site is not in agricultural use and has no agricultural potential due to its small size, location, and previous use, the project would not adversely affect any existing agricultural resources or operations. Since the properties surrounding the project site are developed with commercial and residential uses, the proposed project would not adversely affect other agricultural properties or result in the conversion of farmland to non-agricultural use.

Issues (and Supporting Information Sources)	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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3. Air Quality - Would the project:

a) Conflict with or obstruct implementation of the applicable air quality plan?	<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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

3a. Air Quality Planning

The San Francisco Bay Area Air Basin is classified by the Bay Area Air Quality Management District (BAAQMD) as non-attainment for ozone and inhalable particulates (PM₁₀). To address these exceedances, the BAAQMD, in cooperation with the MTC and ABAG, prepared the *Bay Area 2005 Ozone Strategy (BAOS)* in September 2005 and *Particulate Matter Implementation Schedule (PMIS)* in November 2005. The *PMIS* discusses how the BAAQMD implements the California Air Resources Board’s 103 particulate matter control measures. The most recently adopted air quality plan in the Basin is the *2010 Bay Area Clean Air Plan (CAP)*, which updates the *BAOS* and was adopted by the BAAQMD in September 2010. This *CAP* outlines how the San Francisco Bay Area will attain air quality standards, reduce population exposure and protect public health, and reduce greenhouse gas (GHG) emissions.

The consistency of the proposed project with the most recently adopted regional air quality plan, the *CAP*, is determined by comparing the project's consistency with pertinent land use and transportation control measures contained in the *CAP*. The project site is located adjacent to the VTA bus route 49 and the proposed commercial development would be consistent with *CAP* Policy TCM D-3, which promotes provision of employment development near transit to promote walking, bicycling, and transit use. The project's construction-related and operational emissions were determined to not exceed the BAAQMD's CEQA significance thresholds for criteria pollutants and PM_{2.5}. Therefore, the proposed project's emissions would be consistent with the BAAQMD's *CAP* (the most recently adopted regional air quality plan). Also, the *CAP* is based on the Town's General Plan in effect at the time the *CAP* was approved, and therefore, consistency of the project with the General Plan would indicate consistency with the *CAP*. Since the proposed project would be consistent with the uses allowed on the project site by the Los Gatos General Plan, the project would not conflict with or obstruct implementation of the applicable air quality plan, a less-than-significant impact.

3b. Air Quality Standards

Regulatory and Planning Framework. The BAAQMD is responsible for attaining and/or maintaining air quality in the San Francisco Bay Area Air Basin (SFBAAB) within Federal and State air quality standards. Specifically, the BAAQMD has the responsibility to monitor ambient air pollutant levels throughout the Basin and to develop and implement strategies to attain the applicable Federal and State standards. In June 2010, the BAAQMD adopted CEQA thresholds of significance and updated its CEQA Air Quality Guidelines, which provides guidance for assessing air quality impacts under CEQA. However, on March 5, 2012, the Alameda County Superior Court issued a judgment finding that the BAAQMD had failed to comply with CEQA when it adopted the Thresholds. The court issued a writ of mandate ordering the BAAQMD to set aside the Thresholds and cease dissemination of them until the BAAQMD had complied with CEQA. On August 13, 2013, the California Court of Appeal reversed the Alameda County Superior Court judgment that invalidated the BAAQMD's CEQA thresholds of significance. In a published ruling, the Court directed that the Superior Court vacate the writ of mandate issued in March 2012, ordering the BAAQMD to set aside its June 2010 resolution (Res. #2010-06) "Adopting Thresholds for Use in Determining the Significance of Projects' Environmental Effects Under the California Environmental Quality Act." Therefore, the 2010/2011 BAAQMD CEQA Air Quality Guidelines and significance thresholds will be back in effect as soon as the Superior Court complies with the appellate court ruling.

Significance Thresholds. Exercising its own discretion as Lead Agency and similar to many other San Francisco Bay Area jurisdictions, the Town has decided to rely on the thresholds within the *Options and Justification Report* (dated October 2009)¹ prepared by the BAAQMD, which serve as the basis for the 2010/2011 BAAQMD CEQA Air Quality Guidelines and significance thresholds. The BAAQMD *Options and Justification Report* establishes the following thresholds based on substantial evidence and are consistent with the thresholds outlined within the 2010/2011 BAAQMD CEQA Air Quality Guidelines:

- NO_x and ROG: 54 pounds/day
- PM₁₀: 82 pounds/day
- PM_{2.5}: 54 pounds/day

In addition to establishing the above significance thresholds for criteria pollutant emissions, the BAAQMD, in its *Options and Justification Report* and 2010/2011 CEQA Air Quality Guidelines, also

¹ Bay Area Air Quality Management District, 2009. *Revised Draft Options and Justification Report*. October. Available online at: <http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES/Updated-CEQA-Guidelines.aspx>.

recommended the following quantitative thresholds to determine the significance of construction-related and operational emissions of toxic air contaminants from individual project and cumulative sources on cancer and non-cancer health risks:

- Increased cancer risk of >10.0 in a million for individual projects and >100 in a million (from all local sources) for cumulative sources;
- Increased non-cancer risk of >1.0 Hazard Index (Chronic or Acute) for individual projects and >10.0 Hazard Index (from all local sources) for cumulative sources; and
- Ambient PM_{2.5} increase: >0.3 µg/m³ annual average for individual projects and >0.8 µg/m³ annual average (from all local sources) for cumulative sources.

Project Emissions. The project’s construction-related and operational emissions are estimated and compared to the above significance thresholds in **Table 1**. As shown in this table, the project’s construction-related and operational air pollutant emissions would not exceed the BAAQMD significance thresholds for criteria pollutants, a less-than-significant impact. However, the BAAQMD recommends that all Basic Construction Mitigation Measures be implemented for all construction projects, whether or not construction-related emissions exceed these significance thresholds. Therefore, the project’s construction-related and operational increases in criteria pollutant emissions would be less than significant with implementation of Mitigation Measure AQ-1.

The project includes a pharmacy drive-thru window. Historically, such facilities have been considered a potentially significant source of air pollution from idling vehicles queuing in line and inching forward to the pick-up window. However, with improved emissions technology, it would now take thousands of idling cars to cause Clean Air standards to be exceeded.

The EMFAC2011 California emissions model shows that an idling passenger car in Northern California generates 0.4 pounds of CO per hour. The NO_x emission rate is 0.03 pounds per hour. Based on the estimated peak volume of 23 vehicles per hour in the drive through and assuming 10 minutes of idling per car, a peak hour would generate approximately 4 idle hours (23 vehicles x 10 minutes per vehicle ÷ 60 minutes per hour). The idling exhaust emissions would be 1.5 pounds of CO and 0.11 pounds of NO_x. Based on BAAQMD-recommended guidelines,² the fence line concentration from idling emissions is estimated as follows:

Criteria Pollutant	Concentration (µg/m³)	Ambient Standard (µg/m³)³	% of Standard
CO	695	23,000	3.0%
NO _x	52	339	15.3%

Idling exhaust emissions associated with the proposed drive-thru facility would not exceed ambient standards, and therefore, would be a less-than-significant impact.

² BAAQMD, *Recommended Methods for Screening and Modeling Local Risks and Hazards*, May, 2011. The BAAQMD suggests use of a cavity equation for conservative screening of air pollution exposure. The one-hour concentration [Conc. (1-hour)] at the property line of a facility is expressed by:

$$\text{Conc. (1-hour)} = Q / (1.5 \times A \times U)$$

Where: Q is the emission rate in grams/second
 A is the building cross-section (use 100 m²)
 U is the wind speed (use 2 m/sec)

³ The ambient standards for NO₂ (0.18 parts per million, ppm) and CO (20 ppm) are expressed in micrograms per cubic meter (µg/m³) in order to compare them to estimated project emissions.

TABLE 1

PROJECT-RELATED CONSTRUCTION AND OPERATIONAL CRITERIA POLLUTANT EMISSIONS

Project Activity	Average Daily Emissions (pounds/day)					
	ROG	NO _x	CO	SO ₂	PM ₁₀ (Total)	PM _{2.5} (Total)
<i>Project Construction</i> ^a						
– Off-Road Equipment Emissions – Unmitigated	31.2	14.2	10.2	0.0	5.4	1.2
Significance Thresholds	54	54	-	-	82	54
Exceeds Significance Thresholds?	No	No	-	-	No	No
<i>Project Operation</i>						
– Area Source Emissions	0.7	0.0	0.0	0.0	0.0	0.0
– Energy Emissions	0.0	0.1	0.1	0.0	0.0	0.0
– Mobile Source Emissions	6.0	8.3	38.6	0.1	6.0	0.3
Total	6.7	8.4	38.7	0.1	6.0	0.3
Significance Thresholds	54	54	-	-	82	54
Exceeds Significance Thresholds?	No	No	^b	^c	No	No
Project Activity	Average Annual Emissions (tons/year)					
	ROG	NO _x	CO	SO ₂	PM ₁₀ (Total)	PM _{2.5} (Total)
<i>Project Construction</i>						
– Off-Road Equipment Emissions – Unmitigated	0.41	0.72	0.55	0.00	0.08	0.05
Significance Thresholds	10	10	-	-	15	10
<i>Project Operation</i>						
– Area Source Emissions	0.13	0.00	0.00	0.00	0.00	0.00
– Energy Emissions	0.00	0.00	0.00	0.00	0.00	0.00
– Mobile Source Emissions	0.88	1.41	7.20	0.01	0.08	0.06
Total	1.01	1.42	7.21	0.01	0.80	0.06
Significance Thresholds	10	10	-	-	15	10
Exceeds Significance Thresholds?	No	No	-	-	No	No

NOTES: ROG = reactive organic gases; NO_x = nitrogen oxides; CO = carbon monoxide; SO₂ = sulfur dioxide; exhaust PM₁₀ = particulate matter less than 10 microns; exhaust PM_{2.5} = particulate matter less than 2.5 microns.

^a Construction assumptions: Demolition of 25,000 s.f. building over 15 days and grading over 5 days using 1 dozer, 1 concrete saw, and 2 loaders/backhoes; construction over 100 days using 1 crane, 2 forklifts, and 2 loaders/backhoes; and paving over 5 days: 1 mixer, 1 paver, 1 roller, and 1 loader/backhoe.

^b CO: If localized carbon monoxide estimated emissions exceed 550 pounds/day, more detailed analysis is required. Therefore, emissions below this threshold indicate that CO emissions would be less than significant.

^c SO₂: The SO₂ state and federal standards are currently being met throughout the Bay Area and have been met in recent decades. Therefore, the project's estimated emissions would be less than significant.

SOURCE: CalEEMod Output (see **Attachment 1**)

3c. Cumulative Air Quality Impacts

To address cumulative impacts on regional air quality, the Town utilizes the thresholds of significance established by the BAAQMD for construction-related and operational criteria pollutants and precursor emissions (specified above). These thresholds represent the levels at which a project's individual emissions of criteria pollutants and precursors would result in a cumulatively considerable contribution to the SFBAAB's existing air quality conditions. If daily average or annual emissions exceed these thresholds, the project would result in a cumulatively significant impact. Since the project's construction-related and operational criteria pollutant emissions would not exceed the significance thresholds specified above, the project's contribution would be less than cumulatively considerable and, therefore, less than significant.

3d. Exposure of Sensitive Receptors

The California Air Resources Board (CARB) regulates vehicle fuels with the intent to reduce emissions. Diesel exhaust is a serious concern throughout California. The CARB identified diesel engine particulate matter as a toxic air contaminant and human carcinogen. The exhaust from diesel engines includes hundreds of different gaseous and particulate components, many of which are toxic. Many of these toxic compounds adhere to the diesel particles, which are very small and can penetrate deeply into the lungs. Diesel engine particulate matter has been identified as a human carcinogen. Mobile sources such as trucks, buses, and automobiles are some of the primary sources of diesel emissions. Studies show that diesel particulate matter concentrations are much higher near heavily traveled highways and intersections. The cancer risk from exposure to diesel exhaust is much higher than the risk associated with any other toxic air pollutant routinely measured in the region. Diesel exhaust contains both pulmonary irritants and hazardous compounds that can affect sensitive receptors such as young children, senior citizens, or those susceptible to chronic respiratory disease such as asthma, bronchitis, and emphysema.

In 2005, the CARB approved a regulatory measure to reduce emissions of toxic and criteria pollutants by limiting the idling of new heavy-duty diesel vehicles, which altered five sections of Title 13 of the California Code of Regulations. The changes relevant to the proposed project are in Section 2485, Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling, which limit idling of a vehicle's primary diesel engine for greater than five minutes in any location (with some exceptions) or operation of a diesel-fueled auxiliary power system within 100 feet of residential areas.

Sensitive receptors are defined as facilities or land uses that include members of the population that are particularly sensitive to the effects of air pollutants, such as children, the elderly, and people with illnesses. Examples of these sensitive receptors are residences, schools, hospitals, and daycare centers. The CARB has identified the following groups of individuals as the most likely to be affected by air pollution: the elderly over 65, children under 14, athletes, and persons with cardiovascular and chronic respiratory diseases such as asthma, emphysema, and bronchitis. Sensitive receptors in the project vicinity include a multi-family residence (105 Carlton Avenue) located adjacent the site's eastern boundary. This adjacent residence is considered to be the closest sensitive receptor to project construction and the maximally-exposed individual (MEI, see Attachment 1 for location). The closest schools, Green Hills Pre-School and Raymond J. Fisher Middle School, are located approximately 0.6 mile to the south.

Operation of the proposed commercial buildings would not generate toxic air contaminants (TACs) that would pose a health risks to adjacent or nearby uses. However, during project construction, combustion emissions from operation of off-road construction equipment on the project site would be generated and could expose adjacent and nearby receptors to diesel particulate matter (DPM) and other toxic air contaminants (TACs) that are associated with various health risk factors. Due to the proximity of sensitive receptors to the project site, a screening-level construction-related health risk analysis was completed for the project at the maximally-exposed individual (MEI), which is the multi-family residence at 105 Carlton Avenue (see Attachment 1 for location).⁴ DPM exhaust emissions for on-site project construction from off-road heavy equipment were calculated using the CalEEMod computer model.⁵ The

⁴ The BAAQMD's *Recommended Methods for Screening and Modeling Local Risks and Hazards* (May, 2012; available online at <http://www.baaqmd.gov/Home/Divisions/Planning%20and%20Research/CEQA%20GUIDELINES/Tools%20and%20Methodology.aspx>) was used to complete this refined screening-level health risk assessment. The BAAQMD recommends a two-tiered approach for screening-level health risk assessments: a screening-level dispersion model is initially applied to project emissions using generally over-predictive assumptions and if the predicted health risk is not within acceptable levels, then a more sophisticated dispersion modeling is necessary.

⁵ CalEEMod output is available for review at the Los Gatos Community Development Department (located at 110 East Main Street during counter hours from 8:00 a.m. to 1:00 p.m., Monday through Friday).

project’s construction duration is estimated at approximately 125 works days (weekdays only with downtime for holidays, etc.), which would occur during a single calendar year.

The results of the health risk screening are summarized in **Table 2**. As indicated in this table, the project’s construction-related DPM emissions would not exceed BAAQMD significance thresholds for cancer and non-cancer health risks for infants (up to 2 years in age), which have the highest age sensitivity factor (ASF). Therefore, the project’s construction-related DPM emissions would result in temporary health risks that would be less than significant to infants, children, and adults.

TABLE 2

CANCER RISK AND CHRONIC NON-CANCER HEALTH RISKS AT THE CLOSEST SENSITIVE RECEPTORS DUE TO DPM EXPOSURE DURING PROJECT CONSTRUCTION

Parameter	PM2.5 Exposure,^a Excess Cancer Risk,^b and Non-Cancer Chronic Hazard Index from Project Construction Activities at Closest Receptors
Maximum One-Hour PM2.5	0.579 µg/m ³
Annual Average PM2.5 (one-hour x 0.1)	0.058 µg/m ³
Annual Average PM2.5 Significance Threshold	0.3 µg/m ³
Exceeds Significance Threshold?	No
Age-Weighted Excess Risk for Infants	2.48 in a million
Children	0.74 in a million
Adults	0.25 in a million
Cancer Risk Significance Threshold	Excess Cancer Risk >10 x 10 ⁻⁶
Exceeds Threshold?	No
Chronic Non-Cancer Hazard Index	0.012
Chronic Non-Cancer Significance Threshold	Hazard Index >1.0
Exceeds Significance Threshold?	No

NOTES:

^a The predicted maximum one-hour DPM concentration is 0.579 µg/m³ resulting from on-site total project DPM emissions of 0.04 tons. The hourly to annual scaling factor is 0.1. AERSCREEN output thus indicates that project construction will produce a maximum annual DPM concentration of 0.058 µg/m³.

^b The excess individual cancer risk factor for DPM exposure is approximately 300 in a million per 1 µg/m³ of lifetime exposure (DPM (µg/m³) x ASF x 300 x 10⁻⁶) ÷ 70 years. More recent research has determined that young children are substantially more sensitive to DPM exposure risk. If exposure occurs in the first several years of life, an age sensitivity factor (ASF) of 10 should be applied. For toddlers though mid-teens, the ASF is 3.

SOURCES: A screening-level individual cancer analysis was conducted to determine the maximum PM2.5 concentration from diesel exhaust. This concentration was combined with the DPM exposure unit risk factor to calculate the inhalation cancer risk from project-related construction activities at the closest sensitive receptor. The EPA AERSCREEN air dispersion model was used to evaluate concentrations of DPM and PM2.5 from diesel exhaust. The AERSCREEN model was developed to provide an easy to use method of obtaining pollutant concentration estimates and is a single source Gaussian plume model which provides a maximum one-hour ground-level concentration. The model output for this analysis is available for review at the Los Gatos Community Development Department (located at 110 East Main Street during counter hours from 8:00 a.m. to 1:00 p.m., Monday through Friday).

In addition to the above construction-related risk and hazard impacts, sensitive receptors in the project vicinity would be exposed to cumulative risk and hazard impacts from the project’s construction-related emissions in combination with existing stationary and mobile sources within approximately 1,000 feet of the project area. Therefore, in addition to project construction, possible local stationary or vehicular source emissions must be added to this concentration to determine the cumulative total. Specifically, the

BAAQMD requires that existing stationary and mobile emissions (i.e. freeways or roadways with more than 10,000 vehicles per day) sources within 1,000 feet of the project area also be considered. Any potential cumulative health risk would, therefore, derive from project activities plus any existing identified risk sources within the project vicinity. When emissions from existing permitted stationary and mobile sources located within approximately 1,000 feet of the project are considered, cumulative health risks at the maximally-exposed individual (MEI) would be as indicated in **Tables 3 and 4**.

**TABLE 3
CUMULATIVE RISK AND HAZARD IMPACTS AT MEI FROM EXISTING PERMITTED STATIONARY SOURCES**

Site #	Facility Name	Street Address	City	Distance	Excess Cancer Risk	Chronic Hazard Index	Acute Hazard Index	PM2.5 (µg/m ³)
3896	Moore Buick Corporation	15500 Los Gatos Blvd.	Los Gatos	400 feet	0.000	0.000	0.000	0.004
4913	Orchid Cleaners	15310 Los Gatos Blvd.	Los Gatos	800 feet	25.500	0.068	0.394	0.00
G11160	Los Gatos Union 76	15380 Los Gatos Blvd.	Los Gatos	950 feet	0.370*	0.001*	0.006*	n/a
Total – Stationary Sources					25.870	0.069	0.400	0.004

NOTES:

* Adjusted for distance per BAAQMD Distance Multiplier Tool for Gasoline Dispensing Facilities.

SOURCE: BAAQMD Stationary Source Screening Analysis Tool and Distance Multiplier Tool for Gasoline Dispensing Facilities, May 30, 2012 and June 13, 2012. Available online at

<http://www.baaqmd.gov/Home/Divisions/Planning%20and%20Research/CEQA%20GUIDELINES/Tools%20and%20Methodology.aspx>.

**TABLE 4
CUMULATIVE RISK AND HAZARD IMPACTS AT MEI FROM EXISTING MOBILE SOURCES**

Direction	Roadways with ADT of >10,000	Distance	ADT	Excess Cancer Risk (cases in a million)*	PM2.5 Concentration (µg/m ³)
N-S	Los Gatos Boulevard	300 feet	31,400	2.982	0.120
E-W	Los Gatos Almaden Road	170 feet	10,300	1.520	0.052
Total Roadways				4.502	0.172

NOTES: There were no freeways located within 1,000 feet of the project site.

* Interpolated for site-specific distances and ADTs based on peak hour volumes presented in the TJKM Traffic Impact Study (December 15, 2011).

SOURCE: BAAQMD County Surface Street Screening Tables, April 29, 2011. Available online at

<http://www.baaqmd.gov/Home/Divisions/Planning%20and%20Research/CEQA%20GUIDELINES/Tools%20and%20Methodology.aspx>.

Table 5 presents total cumulative emissions at the MEI from stationary and mobile sources (Tables 3 and 4) and the proposed project. As indicated in this table, cumulative emissions would not exceed the cumulative significance thresholds for risk and hazard impacts at new sensitive receptors. Therefore, the project’s contribution to cumulative construction-related risk and hazard impacts would be less than cumulatively considerable, a less-than-significant impact.

TABLE 5
CUMULATIVE RISK AND HAZARD IMPACTS AT MEI FROM PROPOSED PROJECT AS WELL AS
EXISTING STATIONARY AND MOBILE SOURCES

Type	Excess Cancer Risk (cases in a million)	PM _{2.5} Concentration (µg/m ³)	Chronic Hazard	Acute* Hazard
Stationary Source	25.870	0.004	0.069	0.400
Roadways	4.502	0.172	-	-
Proposed Project (worst-case)	<u>2.481</u>	<u>0.058</u>	<u>0.012</u>	<u>0.067</u>
Maximum Cumulative	32.853	0.234	0.081	0.467
Significance Threshold	100	0.8	1	1

NOTES:
* Based upon the ratio of speciated organic gases to DPM in diesel exhaust relative to peak 1-hour concentrations.
SOURCES: Tables 2, 3, and 4.

3e. Odors

Project construction would generate nuisance diesel odors associated with operation of diesel construction equipment on-site (primarily during initial grading phases), but this effect would be localized, sporadic, and short-term in nature. Therefore, temporary impacts from nuisance diesel odors on adjacent residential receptors, which are located as close as 10 feet from the project boundary, are considered to be less than significant. According to the BAAQMD *CEQA Air Quality Guidelines*, land uses associated with odor complaints typically include wastewater treatment plants, landfills, confined animal facilities, composting stations, food manufacturing plants, refineries, and chemical plants. The project would not include any uses identified by the BAAQMD as being associated with odors. No new or unusual sources of nuisance odors would be associated with the proposed commercial use. Therefore, the project's potential for nuisance odor problems would be less than significant.

Mitigation Measures – Air Quality (AQ)

Although the project's construction-related air pollutant emissions would not exceed the BAAQMD's applicable significance thresholds, the BAAQMD recommends that the following measure be implemented on all construction projects to reduce the project-related construction emissions:

AQ-1: Basic Construction Measures. *To limit the project's construction-related dust and criteria pollutant emissions, the following BAAQMD-recommended Basic Construction Mitigation Measures shall be included in the project's grading plan, building plans, and contract specifications:*

- a. *All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.*
- b. *All haul trucks transporting soil, sand, or other loose material off-site shall be covered.*
- c. *All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited.*
- d. *All vehicle speeds on unpaved roads shall be limited to 15 mph.*
- e. *All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible.*
- f. *Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California airborne*

toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.

- g. All construction equipment shall be maintained and properly tuned in accordance with manufacturer’s specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation.*
- h. Post a publicly visible sign with the telephone number and person to contact at the Town regarding dust complaints. This person shall respond and take corrective action within 48 hours. The BAAQMD’s phone number shall also be visible to ensure compliance with applicable regulations.*

Issues (and Supporting Information Sources)	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
4. Biological Resources - Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 Wildlife or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" 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"/>

4a, 4b, 4c, 4d. Special-Status Species, Sensitive Communities and Wetlands, Fish and Wildlife Movement, Corridors, Nursery Sites

The project site is developed with a parking lot and auto dealership buildings from previous commercial use of the property. Vegetation on the site consists of landscape trees, shrubs, and groundcover along the site perimeter. Trees along the eastern boundary of the site serve as an effective screening element for adjacent residential and commercial properties to the east on Carlton Avenue. The habitat value of site vegetation is limited to urban-adapted species.

The project site is located in urban setting in central Los Gatos. Due to the nature of the project site’s location and history, the subject property is unlikely to provide suitable habitat for special-status species. The site does not contain wetlands or riparian habitat, nor does the site contribute to the movement of

migratory species. No federally listed, State-listed, or other special-status plant or animal species are recorded occurring on the project site, nor are they expected to occur on the subject property.

4e. Tree and Biological Protection Ordinances

The Town of Los Gatos' Tree Protection Ordinance (Section 29.10.0950 – 29.10.1045 of the Zoning Ordinance) prohibits the removal of any protected tree without first obtaining a permit. The intent of the Tree Ordinance is to "preserve the scenic beauty" of the Town of Los Gatos by maintaining existing trees and to replace trees when they are removed. Under the Tree Ordinance, trees are evaluated based on their physical characteristics, but not on their biological function or eligibility for protected status under state or federal regulations.

The Los Gatos Tree Protection Ordinance states that the preferred tree replacement is two or more trees of a species and size designated by the Director of the Parks and Public Works Department. Tree replacement requirements are based on canopy size, which is defined in Table 3-1 of the Ordinance, *Tree Canopy – Replacement Standard*. Tree canopy replacement requirements range from two to six 24-inch box size trees or two 36-inch and/or 48-inch box size trees, depending on the canopy size of the tree to be removed.

A tree survey was prepared for the applicant by the Town's consulting arborist, Deborah Ellis, MS, in December 2011 and April 2013 (updated in August 2013); copies of these reports are available for review at the Los Gatos Community Development Department (located at 110 East Main Street and available for review during counter hours from 8:00 a.m. to 1:00 p.m., Monday through Friday). The April 2013 (updated August 2013) report has been included as **Attachment 2**. The arborist's assessment and revised project plans serve as the basis for the following evaluation of the project's potential effects on trees at the property.

The tree survey identified a total of 20 ordinance-sized (protected) trees (trees with a trunk diameter of four inches or greater). Fourteen are southern magnolias, and they are located along the site's frontages on Los Gatos Boulevard and Los Gatos Almaden Road. Of the remaining six trees, there are three coast live oaks, one green wattle, one evergreen flowering pear, and one Mexican fan palm.

Project plans indicate removal of eight protected trees. Ellis indicates that six more trees may need to be removed unless the hardscape and landscape design is significantly modified. Two trees (#5 and 22) were not included on the landscape plan and would need to be removed because they are located in the proposed parking lot in the northeastern corner of the site. Specifically, Ellis indicates that the proposed bioswale and landscape improvements threaten most of the magnolias located along the site's southern and western boundaries. Construction of this bioswale as well as installation of new landscaping (and associated irrigation pipes) could cause excessive damage to the roots of many of these trees and they may not survive. Ellis recommends relocation of the drainage swale away from these trees and modifications to the landscape plan to incorporate protective zones around existing magnolia trees designated to be retained to ensure their survival. As a condition of project approval, the applicant will be required to comply with requirements of the Tree Protection Ordinance (including Ellis' recommendations). Therefore, with this project condition, the project would not conflict with any local ordinances or policies protecting trees.

4f. Habitat Conservation Plans

The proposed project would not be in conflict with any approved local, regional, or state habitat conservation plan.

Issues (and Supporting Information Sources)	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
5. Cultural Resources - Would the project:				
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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

5a. Historical Resources

Project implementation would result in demolition of the existing buildings, foundations, and parking lot pavement on the project site. The structures are of recent construction and associated with the former auto dealership use. Therefore, no significant impacts on historic resources would result from proposed demolition of these structures.

5b, 5d. Archaeological Resources and Human Remains

An archaeological literature review was undertaken by Holman & Associates at the Northwest Information Center (NWIC) located at Sonoma State University (file no. 08-0862) to obtain information about recorded historic and prehistoric archaeological sites in and around the project area, and information about previous archaeological field studies of the project area and its surroundings.⁶ A review of NWIC records revealed that the property did not contain any previously recorded archaeological sites, and that there were none within ¼ mile of it. The nearest prehistoric site is located on Blossom Hill Road at Fisher School. Based on available background information, Holman concluded that proposed development on the project site would not affect either historic or prehistoric archaeological resources, a less-than-significant impact.

5c. Paleontological Resources

Paleontological resources are the fossilized remains of plants and animals, including vertebrates (animals with backbones), invertebrates (e.g., starfish, clams, ammonites, and marine coral), and fossils of microscopic plants and animals (microfossils). The age and abundance of fossils depend on the location, topographic setting, and particular geologic formation in which they are found. Fossil discoveries not only provide a historic record of past plant and animal life, but may assist geologists in dating rock formations. A review of records maintained by the University of California Museum of Paleontology in Berkeley indicates that the closest paleontological resources recorded in Santa Clara County occur approximately 15.5 miles west of Los Gatos. These resources were discovered in geologic strata dating from the Late Pliocene and Miocene epochs of the Tertiary Period (65 to 1.8 million years ago).

⁶ The Holman report is available for review at the Los Gatos Community Development Department (located at 110 East Main Street) during counter hours from 8:00 a.m. to 1:00 p.m., Monday through Friday.

Geologic mapping⁷ for the proposed project indicates the site is underlain by Pleistocene alluvial fan deposits. These deposits are more recent and differ in age from those containing the recorded paleontological resources. Consequently, the potential for encountering paleontological resources at the project site is considered to be low.

Issues (and Supporting Information Sources)	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
6. Geology and Soils - Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater 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 investigation was conducted by Ninyo & Moore in June 2010 to evaluate the subsurface conditions at the proposed project site and provide geotechnical recommendations for construction of site improvements.⁸ This investigation was reviewed by Shaw Environmental⁹ and peer reviewed by the Town’s consulting geotechnical engineer, AMEC Environment & Infrastructure.¹⁰ Because the

⁷ Ninyo & Moore, 2010. *Geotechnical Evaluation, CVS Pharmacy, Los Gatos Boulevard and Los Gatos Almaden Road, Los Gatos, California*, June 7, 2010. The Ninyo & Moore report is available for review at the Los Gatos Community Development Department (located at 110 East Main Street) during counter hours from 8:00 a.m. to 1:00 p.m., Monday through Friday.

⁸ Ninyo & Moore, 2010. *Geotechnical Evaluation, CVS Pharmacy, Los Gatos Boulevard and Los Gatos Almaden Road, Los Gatos, California*. June 7.

⁹ Shaw Environmental, 2010. *Geotechnical Evaluation for proposed CVS/pharmacy Store No. 9982 located at the Northeast Corner of Los Gatos Road and Los Gatos Almaden Road (15600 and 15650 Los Gatos Road), Los Gatos, California*. June 8.

¹⁰ AMEC Environment & Infrastructure, 2013. *Geotechnical Evaluation for proposed CVS/pharmacy Store No. 9982 located at the Northeast Corner of Los Gatos Road and Los Gatos Almaden Road (15600 and 15650 Los Gatos Road), Los Gatos, California*. May 21.

geotechnical investigation was conducted when the 2007 California Building Code (CBC) was in effect and the 2010 CBC is now in effect, Ninyo & Moore conducted a supplemental review and determined that the findings of the 2010 geotechnical report are in general accordance with the 2010 CBC.¹¹ The geotechnical report concluded that there are no substantial geotechnical hazards that would preclude the construction of the proposed improvements provided that the recommendations of the geotechnical report are implemented, and the peer review concurred with this conclusion. This section presents the results of the geotechnical investigation, AMEC's peer review, and published geologic information, which serve as the basis for the evaluation of geologic and seismic impacts associated with implementation of the proposed project.¹²

The proposed project site is located within the central region of the Coast Ranges Geomorphic Province, which extends from the Oregon border south to the Transverse Ranges in Southern California. The topography is generally characterized by sub-parallel, northwest trending mountain ranges and intervening valleys. The region has undergone a complex geologic history of volcanic activity, folding, faulting, uplift, erosion and sedimentation.

At an elevation of approximately 347 feet above mean sea level, the project site and immediate vicinity are relatively flat. The geotechnical evaluation for the project¹³ included the installation of 11 soil borings to depths of approximately 10 to 49 ½ feet below ground surface. Based on this evaluation, the site is immediately underlain by 1 ¼ to 2 ½ inches of asphalt over approximately 6 to 10 ½ inches of aggregate base. Beneath the asphalt, the borings encountered approximately 2 to 7 feet of fill overlying alluvium in some areas while the fill was absent in other areas. The fill generally consists of brown, reddish brown, and olive gray, moist, very soft to very stiff clay with variable amounts of sand and gravel. The alluvium generally consists of brown, reddish brown, yellowish brown, and olive brown, damp to saturated, stiff to hard sandy clay as well as loose to very dense silty sand, clayey sand, and clayey gravel.

Groundwater was encountered at a depth of approximately 43 feet in one boring. However, groundwater levels can fluctuate in response to rainfall, landscape irrigation, surface and subsurface drainage patterns and other factors. The State of California Seismic Hazard Evaluation Report for Los Gatos indicates that the historical high groundwater level in the project area is approximately 20 feet below ground surface.¹⁴

6a. Seismic Hazards

The San Andreas, San Gregorio, Hayward, Rodgers Creek, Calaveras, and Greenville faults are major active strike-slip faults¹⁵ in the San Francisco Bay Region. The USGS estimates that there is a 63% probability of a strong earthquake (magnitude [Mw] 6.7 or higher) occurring on one of these regional faults in the 30-year period between 2003 and 2032. These faults and other known active faults which could potentially affect the project site are listed in **Table 6** along with the maximum moment magnitude expected for each fault. Potential seismic hazards resulting from earthquake activity on one of these faults

¹¹ Ninyo & Moore, 2013. *Update of Geotechnical Evaluation per the 2010 Building Code, CVS Pharmacy, 15600 and 15650 Los Gatos Boulevard, Los Gatos, California, 95031*. April 26.

¹² A copy of the geotechnical report and associated documents are available for review at the Los Gatos Community Development Department (located at 110 East Main Street during counter hours from 8:00 a.m. to 1:00 p.m., Monday through Friday).

¹³ Ninyo & Moore, 2010. *Geotechnical Evaluation, CVS Pharmacy, Los Gatos Boulevard and Los Gatos Almaden Road, Los Gatos, California*, June 7, 2010.

¹⁴ California Geological Survey, 2002. *Seismic Hazard Zone Report for the Lost Gatos 7.5-Minute Quadrangle, Santa Clara County, California*. Accessed at http://gmw.consrv.ca.gov/shmp/download/evalrpt/lgat_eval.pdf.

¹⁵ Strike-slip faults involve the two blocks moving parallel to each other without a vertical component of movement.

TABLE 6

PRINCIPAL ACTIVE FAULTS

Fault	Approximate Fault-to-Site Distance miles (kilometers)	Maximum Moment Magnitude (Mmax)
Monte Vista - Shannon	<0.1 (<0.1)	6.7
San Andreas	4.8 (7.8)	7.4
Sargent	8.2 (5.1)	6.8
Zayante-Vergeles	10.6 (17)	7.0
Calaveras	15.1 (24.3)	6.8
Hayward	15.9 (25.6)	6.4
San Gregorio	20.6 (33.1)	7.2
Monterey Bay - Tularcitos	23.9 (38.4)	7.3
Greenville	29.1 (46.9)	6.6
Mount Diablo	34.6 (55.7)	6.6
Ortogonalita	37.4 (60.2)	7.1
Quien Sabe	39.3 (63.3)	6.4

SOURCE: Ninyo & Moore, 2010.

includes ground rupture (also called surface faulting); ground shaking; liquefaction and the related effects of settlement and lateral spreading; and landsliding. These hazards are discussed below.

Ground Rupture. The geotechnical report concludes that while the project site is mapped within 0.1 mile of the surface projection of the rupture area for the Monte Vista-Shannon fault (a thrust fault), the potential for ground rupture is low because the likelihood of deviation from the surface projection is low. However, lurching or ground cracking of the ground surface could result from nearby seismic events. The proposed project site is more than 4 miles from any of the other active faults listed in Table 6.

Ground Shaking. Ground shaking is the cause of most damage during earthquakes. The degree of shaking that would be expected at a particular site is dependent on the distance from the earthquake source, the magnitude of the earthquake, and the type, thickness, and condition of the geologic materials (bedrock, sediment, soil, fill). In accordance with the CBC, applicants for a building permit are required to determine the appropriate seismic design criteria for the proposed structures on the basis of soil type, the magnitude of the controlling seismic event, slip rate of the nearest fault, and distance to the nearest active fault. The structural design for the proposed structures would be based on Chapter 16 of the 2010 CBC, which provides criteria for the seismic design of buildings. The factors used to determine the seismic coefficients and other parameters that would be used to design the proposed buildings are listed in **Table 7**. They are established based on a series of tables and figures provided in Chapter 16 of the CBC that address different site factors, including the soil profile in the upper 100 feet below grade and mapped spectral acceleration parameters based on distance to the controlling seismic source/fault system. Using the US Geological Survey ground motion calculator, the geotechnical report for the project determined that the peak ground acceleration for the site is 0.91g,¹⁶ and the design peak ground acceleration is 0.61g.

¹⁶ Peak ground acceleration is expressed relative to the acceleration due to gravity (g). One g is equal to 980 centimeters per second squared, or a rate of increase in speed that is equivalent to a car traveling 328 feet from rest in 4.5 seconds.

TABLE 7
CBC SITE CATEGORIZATION AND SITE COEFFICIENTS

Classification/Coefficient	Design Value
Site Class	D
Short-Period Site Coefficient – Fa	1.0
Long-Period Site Coefficient – Fv	1.5
0.2-second Period Mapped Spectral Acceleration, SS	2.274g
1-second Period Mapped Spectral Acceleration, S1	0.833g
0.2-second Period, Maximum Considered Earthquake Spectral Response Acceleration Adjusted for Site Effects – SMS	2.274g
1-second Period, Maximum Considered Earthquake Spectral Response Acceleration Adjusted for Site Effects – SM1	1.249g
0.2-second Period, Design Earthquake Spectral Response Acceleration – SDS	1.516g
1-second Period, Design Earthquake Spectral Response Acceleration – SD1	0.833g

SOURCE: Ninyo & Moore, 2010.

Seismic design provisions of current building codes generally prescribe minimum lateral forces, applied statically to the structure, combined with the gravity forces of dead-and-live loads. Therefore, structures designed in accordance with the CBC should be able to: (1) resist minor earthquakes without damage, (2) resist moderate earthquakes without structural damage but with some nonstructural damage, and (3) resist major earthquakes without collapse but with some structural as well as nonstructural damage. While conformance to the current building code recommendations does not constitute any kind of guarantee that significant structural damage would not occur in the event of a maximum magnitude earthquake, it is reasonable to expect that a well-designed and well-constructed structure would not collapse or cause loss of life in a major earthquake.

As part of its review, the Town of Los Gatos Building Division would review the planned design to confirm compliance with the CBC. Because compliance with the CBC should ensure that the buildings constructed under the proposed project do not collapse or cause loss of life in a major earthquake, impacts related to groundshaking would be less than significant.

Liquefaction. Liquefaction is a phenomenon in which saturated cohesionless soils are subject to a temporary, but essentially total loss of shear strength because of pore pressure build-up under the reversing cyclic shear stresses associated with earthquakes. The project site is not located within a Santa Clara County Liquefaction Hazard Zone¹⁷ or a State of California Seismic Hazard Zone for liquefaction potential.¹⁸ The geotechnical report for the project also concludes that the soils below the groundwater table are relatively dense sandy clay and clayey sand alluvium that are not susceptible to liquefaction. Therefore, impacts related to liquefaction would be less than significant.

Seismic Landsliding. The proposed project site is relatively level, and is not located within State of California Seismic Hazard Zone for earthquake-induced landslide potential.¹⁹ Therefore, the potential for seismically-induced landslides is low and this impact would be less than significant.

¹⁷ The County of Santa Clara, 2012. Santa Clara County Geologic Hazard Zones. October 26. Accessed at <http://www.seccgov.org/sites/planning/GIS/GeoHazardZones/Documents/GeohazardMapsATLAS2.pdf>

¹⁸ California Geological Survey, 2002. State of California Seismic Hazard Zones, Los Gatos Quadrangle, September 23. Accessed at http://gmw.consrv.ca.gov/shmp/download/quad/LOS_GATOS/maps/ozn_lgat.pdf

¹⁹ California Geological Survey, 2002. State of California Seismic Hazard Zones, Los Gatos Quadrangle, September 23. Accessed at http://gmw.consrv.ca.gov/shmp/download/quad/LOS_GATOS/maps/ozn_lgat.pdf

6b. Soil Erosion and Loss of Topsoil

Without proper soil stabilization controls, construction activities such as building demolition, excavation, backfilling, and grading can increase the potential for soil loss and erosion by wind and stormwater runoff through the removal of pavement, stabilizing vegetation, and exposure of areas of loose soil. During construction of the proposed project, soil disturbance would occur over much of the 2.79-acre site for excavation, grading, and other earth moving activities and these construction-related activities would increase the potential for soil erosion. However, the site would be completely covered with buildings or pavement once the project is constructed and the proposed project would not involve construction on an existing slope or result in newly created slopes that would substantially increase the potential for long-term erosion. Therefore, potential erosion-related impacts would be restricted to the construction period.

During construction, the project applicant would be required to comply with the requirements of Chapter 12 of the Town Code (Grading, Erosion and Sediment Control) as a condition of project approval as well as the General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities, Order No. 2009-0009-DWQ (Construction General Stormwater Permit) as discussed in Section 9, Hydrology and Water Quality. Compliance with the Grading, Erosion, and Sediment Control provisions of the Town Code includes obtaining a grading permit and implementing an approved erosion and sediment control plan. Compliance with the Construction General Stormwater Permit includes implementing a Stormwater Pollution and Prevention Plan. These plans would specify the use of best management practices to restrict soil erosion during construction. With implementation of the legally required actions of the Grading, Erosion and Sediment Control requirements of the Town Code as a condition of approval, and the requirements of the Construction General Stormwater Permit, geologic impacts related to erosion during construction would be less than significant.

The project site is currently developed and paved and excavation associated with previous development has removed any topsoil historically present. Therefore, there is not a well-developed topsoil horizon at the project site, and there would be no impact related to loss of topsoil.

6c. Instability

Potential landslide and soils hazards within Santa Clara County have been mapped as part of the County's comprehensive evaluation of geologic hazards. The County map²⁰ identifying compressible soil, landslide, and dike failure hazards indicates that none of these potential hazards would affect the project site. Therefore, impacts related to these phenomena are less than significant.

However, the geotechnical report for the project states that the fill materials and loose alluvial materials underlying the subject site are potentially compressible and could be subject to total and differential settlement. Undocumented fill materials used to backfill an underground storage tank excavation (discussed in Section 8, Hazards and Hazardous Materials) could also be subject to excessive settlement. Therefore, impacts related to location on a geologic unit or soil that could become unstable as a result of the project are considered significant. However, this impact would be reduced to a less than significant level with implementation of Mitigation Measure GEO-1, which requires implementation of the recommendations of the geotechnical investigation addressing removal of compressible materials and replacement with compacted fill.

6d. Expansive Soils

Expansive soils can undergo significant volume changes with variations in moisture content and are known to shrink and harden when dried and expand and soften when wetted. The geotechnical report for

²⁰ The County of Santa Clara, 2012. Santa Clara County Geologic Hazard Zones. October 26. Accessed at <http://www.sccgov.org/sites/planning/GIS/GeoHazardZones/Documents/GeohazardMapsATLAS2.pdf>

the project concluded that the Expansion Index of the site soils is 37, corresponding to a low expansion potential. Therefore, impacts related to risks to life and property as a result of construction on expansive soils would be less than significant.

6e. Wastewater Treatment

The proposed project would be served by the West Valley Sanitation District for sanitary sewer, and would not require the use of septic tanks or alternative waste disposal systems. Therefore, there would be no impact related to this topic.

Mitigation Measures – Geology and Soils (GEO)

The following measure shall be implemented by the applicant to reduce the project’s seismic, geologic, and soil impacts to less-than-significant levels:

GEO-1: *Geotechnical Investigation Recommendations.* *The recommendations of the Ninyo & Moore geotechnical investigation (June 7, 2010) and any subsequent geotechnical investigations shall be incorporated in the final construction plans for the proposed project (Attachment 3). These recommendations address replacement of loose fill materials and undocumented fill with compacted fill.*

Issues (and Supporting Information Sources)	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
7. Greenhouse Gases - Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, based on any applicable threshold of significance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

“Greenhouse gases” (so called because of their role in trapping heat near the surface of the earth) emitted by human activity are implicated in global climate change, commonly referred to as “global warming.” These greenhouse gases contribute to an increase in the temperature of the earth’s atmosphere by transparency to short wavelength visible sunlight, but near opacity to outgoing terrestrial long wavelength heat radiation. The principal greenhouse gases (GHGs) are carbon dioxide, methane, nitrous oxide, ozone, and water vapor. Fossil fuel consumption in the transportation sector (on-road motor vehicles, off-highway mobile sources, and aircraft) is the single largest source of GHG emissions, accounting for approximately half of GHG emissions globally. Industrial and commercial sources are the second largest contributors of GHG emissions with about one-fourth of total emissions. GHGs are typically reported in the “carbon dioxide equivalent” measure (CO₂e).²¹

Significance Thresholds and Criteria. Exercising its own discretion as lead agency and similar to other San Francisco Bay Area jurisdictions, the Town of Los Gatos has decided to rely on the thresholds within the *Options and Justification Report* (dated October 2009) prepared by the BAAQMD. The BAAQMD *Options and Justification Report* establishes thresholds based on substantial evidence and are consistent

²¹ Because of the differential heat absorption potential of various GHGs, GHG emissions are frequently measured in “carbon-dioxide-equivalents,” which represent a weighted average based on the heat absorption (or “climate change”) potential of each gas. This allows the total GHG emissions resulting from a project or activity to be expressed as a single number that represents the total carbon footprint resulting from that project or activity.

with the thresholds outlined within the BAAQMD’s 2011 CEQA Air Quality Guidelines. Although BAAQMD failed to comply with CEQA before completing its 2010 recommendations, the Town believes that these recommendations still represent the best available science on the subject of what constitutes significant GHG effects on climate change and they are as follows:

- Compliance with a Qualified Climate Action Plan (or similar adopted policies, ordinances, and programs) that includes enforceable measures to reduce GHG emissions consistent with AB 32 goals or Executive Order S-03-05 targets; OR
- 1,100 MT CO₂e per year OR
- 6.7 MT CO₂e per capita per year (residential) / 4.6 MT CO₂e per service population per year (mixed use)

For purposes of this report, project compliance with the 1,100 MT CO₂e/year threshold is used as the primary basis to determine significance. The project’s consistency with operative goals and policies of the Sustainability Plan that are designed to avoid environmental impacts also is analyzed as a secondary basis for assessing significance. To fully implement the Sustainability Plan, though, the Town Council must take a number of future steps, such as adopting a Green Building Ordinance and developing GreenPoint Rated Building Guidelines. Consistency of any proposed project or program with the Sustainability Plan is one of the criteria used to determine the significance of a project’s GHG emissions under CEQA. Because many of the Plan’s most stringent aspects will only become fully operational when such future measures are in place, however, compliance with existing Sustainability Plan requirements, by itself, is not sufficient at this time to support a determination that a project’s greenhouse gas emissions are less than significant by definition.

Although the Plan contains a comprehensive long-range strategy to achieve sustainability in transportation, land use, energy conservation, water use, solid waste reduction and open space preservation, the Plan will not be fully implemented until the Town Council takes a number of future steps, such as adopting a Green Building Ordinance and developing GreenPoint Rated Building Guidelines. When these steps have been taken, the Town intends that compliance with the Plan and its implementing actions (e.g., the Green Building Ordinance) should be sufficient by itself to reduce projects’ greenhouse gas emissions to less than significant levels. (See CEQA Section 15183.5 [compliance with the requirements of a plan to reduce greenhouse gas emissions may be sufficient to mitigate greenhouse gas emissions from individual projects to less-than-significant levels].)

7a. Greenhouse Gas (GHG) Emissions

Short-term GHG emissions would be generated by project-related construction activities. In addition, project implementation would also contribute to long-term increases in greenhouse gases (GHGs) from direct sources (traffic increases). The proposed project would also result in other indirect operational increases in GHG emissions as a result of electricity generation to meet project-related increases in energy demand. Electricity generation in California is mainly from natural gas-fired power plants. However, since California imports about 20 to 25 percent of its total electricity (mainly from the northwestern and southwestern states), GHG emissions associated with electricity generation could also occur outside of California. Space or water heating, water delivery, wastewater processing and solid waste disposal also generate GHG emissions.

The CalEEMod 2011.1.1 computer model was used to calculate GHG emissions that would be generated by the construction and operation of the proposed commercial buildings, and results are presented in **Table 8**.

TABLE 8
PROJECT-RELATED OPERATIONAL GHG EMISSIONS

GHG Source	Project MT CO ₂ e/year
<i>2013 Construction Emissions</i>	
	90.2
<i>Operational Emissions</i>	
- Area	0.00
- Energy	121.84
- Mobile	740.64
- Waste	60.95
- Water	<u>6.35</u>
Total	929.78
CEQA Significance Threshold	<1,100 MT CO ₂ e
SOURCE: CalEEMod Output (see Attachment 1)	

As indicated in Table 8 project construction would generate up to approximately 930 metric tons of CO₂-equivalents (MT CO₂e) per year.²² The BAAQMD does not have a quantitative significance threshold for construction-related GHG emissions, but the project’s estimated construction-related GHG emissions are expected to have a less-than-significant impact on global climate change. For comparison purposes, this emissions rate is well below this report’s operational threshold of 1,100 metric tons (MT) of CO₂e per year, which would be an indication that the project’s construction-related GHG emissions would be less than significant. The proposed project would also be subject to the existing CARB regulation (Title 13 of the California Code of Regulations, Section 2485), which limits idling of diesel-fueled commercial motor vehicles, and compliance with this regulation would further reduce GHG emissions associated with project construction vehicles (compliance with idling limits is required under Mitigation Measure AQ-1 in Section 3, Air Quality). The BAAQMD also encourages implementation of construction-related GHG reduction strategies where feasible, such as: using alternative-fueled (e.g., biodiesel, electric) construction vehicles/equipment such that these vehicles/equipment comprise at least 15 percent of the fleet; using local building materials such that these materials comprise at least 10 percent of all construction materials; and recycling or reusing at least 50% of construction waste or demolition materials. None of these measures is specifically proposed as part of the project, but the project would be required to divert at least 50% of construction waste or demolition materials as required by the Town Building Code.

Project operation is estimated to generate approximately 930 MT CO₂e per year. Such an increase would not exceed this report’s significance threshold of 1,100 MT CO₂e per year. Therefore, the project’s operational GHG emissions would be less than significant.

7b. Greenhouse Gas Reduction Plans, Policies, and Regulations

California has passed several bills and the Governor has signed at least three executive orders regarding greenhouse gases. The Governor’s Office of Planning and Research is in the process of developing CEQA significance thresholds for GHG emissions but thresholds have yet to be established. GHG statutes and executive orders (EO) include EO S-1-07, EO S-3-05, EO S-13-08, EO S-14-08, EO S-20-04,

²² Because of the differential heat absorption potential of various GHGs, GHG emissions are frequently measured in “carbon dioxide-equivalents” or CO₂e, which present a weighted average based on each gas’s heat absorption (or “global warming”) potential. When CO₂ and non-CO₂ GHG emissions are considered together, they are referenced as CO₂e, which add approximately 0.9 percent to CO₂ emissions from diesel equipment exhaust (California Climate Action Registry, *General Reporting Protocol, Version 3.1*, January 2009. Available online at: <http://www.climateregistry.org/tools/protocols/general-reporting-protocol.html>. Accessed on June 14, 2011). See Attachment 3 for other construction assumptions.

EO S-21-09, AB 32, AB 1493, AB 3018, SB 97, SB375, SB 1078/107, and SB 1368. AB 32 establishes regulatory, reporting, and market mechanisms to reduced statewide GHG emissions to 1990 levels by 2020. Pursuant to this requirement, the California Air Resources Board (CARB) adopted its Scoping Plan, which contains the main strategies to achieve required reductions by 2020. As indicated above, the project’s construction-related and operational GHG emissions would not exceed this report’s significance threshold of 1,100 MT CO₂e. This threshold is based on the BAAQMD’s 2011 CEQA Air Quality Guidelines, which in turn, relates to AB 32 GHG reduction goals. Therefore, the project’s GHG emissions would not conflict with plans and policies adopted for the purpose of reducing GHG emissions, a less-than-significant impact.

In October 2012, the Town of Los Gatos adopted a Sustainability Plan, which outlines communitywide GHG emission reduction measures necessary to reduce GHG emissions in Los Gatos. By 2020, the Sustainability Plan documents that GHG emissions will be reduced by approximately 15% from the business-as-usual (BAU) assumption. The emissions reductions vary by sector. The Sustainability Plan contains GHG reduction measures and implements goals and policies of the Environment and Sustainability Element of the General Plan. In general, the proposed project would be consistent with currently applicable Sustainability Plan GHG reduction measures and associated General Plan policies. Project consistency with these policies is discussed in the following project consistency analysis table.

Sustainability Plan GHG Reduction Measures	Project Consistency Analysis
<p><i>Transportation and Land Use</i></p> <p><i>TR-1: Support for Pedestrians, Bicyclists, and Transit. Promote walking, bicycling, and transit through the following:</i></p> <ul style="list-style-type: none"> <i>a. Require all new buildings, excluding single-family homes, to include a principal functional entry that faces a public space such as a street, square, park, paseo, or plaza, in addition to any entrance from a parking lot, to encourage pedestrian foot traffic.</i> <i>b. Require new projects, excluding single-family homes, to include pedestrian or bicycle through-connections to existing sidewalks and existing or future bicycle facilities, unless prohibited by topographical conditions.</i> <i>e. Implement transit access improvements through sidewalk/crosswalk safety enhancements and bus shelter improvements.</i> 	<p>The principal entry to the CVS pharmacy building would face the intersection of Los Gatos Boulevard and Los Gatos Almaden Road. A plaza is also proposed at the site’s corner of this intersection.</p> <p>There is an existing bus stop (Bus Line 49) on Los Gatos Boulevard along the site frontage and a bus pullout would be developed as part of the project. However, there is an existing bench at the bus stop and a bench is not shown in project plans. VTA has requested re-installation of a bench at this bus stop.</p> <p>There are currently sidewalks along Los Gatos Boulevard and Los Gatos Almaden Road. Project plans show pedestrian connections between the sidewalks and the proposed CVS pharmacy building and secondary building.</p> <p>Project plans indicate that a bicycle rack would be located between the CVS Pharmacy building and Los Gatos Boulevard. A second bicycle rack is proposed adjacent to the secondary commercial building (south side). Final locations and design of bicycle parking facilities will be determined during A&S review.</p>
<p><i>GB-1: Green Building Ordinance. Develop a Green Building Ordinance that requires energy-efficient design, in excess of Title 24 standards, for all new residential and non-residential buildings. When developing the Ordinance, consider development-level thresholds for when certain requirements are triggered.</i></p> <ul style="list-style-type: none"> <i>▪ Require 30 percent above the 2008 Building and Energy Efficiency standards in Title 24 to coincide with the Voluntary Tier 2 standards of the California Green Building Code (CALGreen).</i> 	<p>Because the Town has not yet adopted a Green Building Ordinance that would require projects to achieve energy efficiency 30% greater than required by the 2008 version of Title 24, the project would not be subject to the anticipated future contents of such an ordinance. However, the project will be required to meet the CALGreen building standards, which includes recycling demolition materials, using recycled materials in construction, and using recycled content in building materials. Building design information is not currently</p>

Sustainability Plan GHG Reduction Measures	Project Consistency Analysis
<ul style="list-style-type: none"> ▪ <i>Encourage the use of cement substitutes and recycled building materials for new construction.</i> 	<p>available, but the consistency of the project’s design with this policy will be reviewed by the Town during Architecture and Site (A&S) review.</p>
<p><i>GB-3 Incentives for Green Building Certification. Allow greater flexibility and other incentives (e.g., permitting-related) for LEED Silver certification or equivalent GreenPoint rating, for example, by giving green projects priority in plan review and processing.</i></p>	<p>Because the Town has not yet developed incentives for Green Building Certification, no such incentives are currently available to the project. Building design information is not currently available, but the consistency of the project’s design with this policy will be reviewed by the Town during A&S review.</p>
<p><i>GB-4: Solar Orientation. Require measures that reduce energy use through solar orientation by taking advantage of shade, prevailing winds, landscaping, and sun screens.</i></p>	<p>Windows are limited on the CVS pharmacy building, but would be located on the south to allow natural light into the buildings. Window glazing for the proposed secondary building would be located on the south side of the building. Metal awnings are proposed on the south and west sides of both buildings (over glazing). Shade structures/sun screens will be specified in more detail by the applicant and reviewed by the Town during A&S review.</p>
<p><i>RE-3: Renewable Energy Generation in Projects. Require that new or major rehabilitations of commercial, office, or industrial development greater than or equal to 20,000 square feet in size incorporate solar or other renewable energy generation to provide 15 percent or more of the project’s energy needs. Major rehabilitations are defined as remodeling/additions of 20,000 square feet of office/retail commercial or 100,000 square feet of industrial floor area. Remove regulatory barriers to incorporating renewable energy generation.</i></p>	<p>No renewable energy structures such as solar panels are proposed, but the buildings’ flat roof design could presumably accommodate solar panels. The project will be required to comply with this policy by either incorporating renewable energy generation on-site, purchasing energy from renewable sources generated off-site, or a combination of the two.</p>
<p><i>RE-5 Solar Ready Features. Where feasible, require that all new buildings be constructed to allow for the easy, cost effective installation of future solar energy systems. “Solar Ready” features should include: proper solar orientation (i.e., south facing roof area sloped at 20° to 55° from the horizontal); clear access on the south sloped roof (i.e., no chimneys, heating vents, or plumbing vents); electrical conduit installed for solar electric system wiring; plumbing installed for hot water system; and space provided for a solar hot water storage tank.</i></p>	<p>The roofs of both buildings would have solar exposure to the south and west and with the buildings’ flat roof design, they could presumably accommodate solar panels. Design details on whether buildings will be “solar ready” will be determined during A&S review.</p>
<p><i>EC-1: Energy-Efficient Appliances and Lighting. Require new development to use energy-efficient appliances that meet ENERGY STAR standards and energy-efficient lighting technologies that exceed Title 24 standards by 30%.</i></p> <p><i>EC-2: Promotion of Energy Conservation. Partner with Pacific Gas & Electric and other appropriate energy providers to promote energy conservation, including the following, which would be primarily funded by the</i></p>	<p>Because the Town has not yet coordinated with PG&E to promote energy conservation as contemplated by Policy EC-2, the project would not be subject to the anticipated future requirements that may come out of such a coordinated effort. The project will be required to meet CALGreen building standards for insulation, which would reduce the amount of heating and cooling necessary for the building. Design details, such as smart meters, programmable interior lights, motion sensors on lighting, programmable thermostats by zone, will be</p>

Sustainability Plan GHG Reduction Measures	Project Consistency Analysis
<p><i>energy providers:</i></p> <ul style="list-style-type: none"> ▪ <i>Promote the purchase of ENERGY STAR appliances.</i> ▪ <i>Promote individualized energy management planning and related services for large energy users.</i> ▪ <i>Fund and schedule energy efficiency retrofits or “tune-ups” of existing buildings.</i> ▪ <i>Pursue incentives and grants for energy conservation.</i> 	<p>specified by the applicant and reviewed by the Town during A&S review.</p>
<p><i>EC-3: Energy-Efficient Outdoor Lighting. Require outdoor lighting fixtures to be energy-efficient. Require parking lot light fixtures and light fixtures on buildings to be on full cut-off fixtures, except emergency exit or safety lighting, and all permanently installed exterior lighting shall be controlled by either a photocell or an astronomical time switch. Prohibit continuous all night outdoor lighting in construction sites unless required for security reasons.</i></p>	<p>Exterior lighting design features, such as those suggested in this policy, will be specified by the applicant and reviewed by the Town during A&S review.</p>
<p><i>EC-9: Heat Island Mitigation Plan. Develop a “heat island” mitigation plan that requires cool roofs, cool pavements, and strategically placed shade trees. Amend the applicable Design Guidelines to integrate this requirement. Evaluate and balance tradeoffs between solar access and landscape tree shading in Design Guidelines.</i></p> <p><i>EC-10: Heat Gain Reduction. Require all new development and major rehabilitation (i.e. additions or remodels of 20,000 square feet of office/retail commercial or 100,000 square feet of industrial floor area) projects to incorporate any combination of the following strategies to reduce heat gain for 50 percent of the non-roof impervious site landscape, which includes roads, sidewalks, courtyards, parking lots, and driveways: shaded within five years of occupancy; paving materials with a Solar Reflectance Index (SRI) of at least 29; open grid pavement system; and parking spaces underground, under deck, under roof, or under a building. Any roof used to shade or cover parking must have an SRI of at least 29.</i></p>	<p>Because the Town has not yet developed a Heat Island Mitigation Plan, the project is not subject to the anticipated future contents of such a plan. While design details regarding the roof reflective characteristics (i.e. color and material) have not yet been specified, project plans indicate that trees would be planted/retained along the southern and western boundaries, planted in landscaped islands within parking lots, which could promote shading to reduce the heat island effect of the impervious parking lot areas. During A&S review, the Town will review project plans for heat island mitigation features and consistency with this policy.</p>
<p><i>WW-1: Water Use and Efficiency Requirements. For new development, require all water use and efficiency measures identified as voluntary in the California Green Building Standards Code, and consider more stringent targets. California Green Building Standards Code requirements include: 1) reduce indoor potable water use by 20 percent after meeting the Energy Policy Act of 1992 fixture performance requirements, and 2) reduce outdoor potable water use by 50 percent from a calibrated mid-summer baseline case, for example, through irrigation efficiency, plant species,</i></p>	<p>Plumbing fixtures, landscape design, and irrigation design, such as those suggested in this policy, will be specified by the applicant and reviewed by the Town during A&S review.</p> <p>The California Department of Water Resources Model Water Efficient Landscape Ordinance provides guidelines and requirements regarding landscape irrigation, including watering timing, water-efficient irrigation equipment, water-efficient fixtures, and offsetting demand so that there is no net increase in imported water use.</p>

Sustainability Plan GHG Reduction Measures Project Consistency Analysis

recycled wastewater, and captured rainwater. Establish Town requirements for discretionary projects regarding watering timing, water-efficient irrigation equipment, water-efficient fixtures, and offsetting demand so that there is no net increase in imported water use. Include clear parameters for integrating water conservation infrastructure and technologies, including low-flush toilets and low-flow showerheads. As appropriate, partner with local water conservation companies on the development and implementation of this measure.

WW-3: Bay Friendly Landscaping. Require new development to use native plants or other appropriate non-invasive plants that are drought-tolerant, as described in the Bay Friendly Landscaping Guidelines, available at StopWaste.org and BayFriendlyCoalition.org.

During A&S review, the proposed landscape plan will be reviewed by the Town for consistency with this policy.

SW-1: Construction Waste Diversion. Revise the existing construction and demolition ordinance to require at least 50 percent diversion (i.e. reuse or recycling) of non-hazardous construction waste from disposal.

Diversion of 50 percent of construction waste is already required as part of the Town Building Code. Proposed demolition of existing on-site structures will be subject to this requirement.

Consistency of the project with most of the above GHG reduction measures will be determined by the Town during A&S review and the Town will presumably require incorporation of design measures to ensure consistency with the Sustainability Plan. This review combined with the project’s less-than-significant GHG emissions indicate that the proposed project would not hinder the state's GHG reduction goals established by AB 32, a less-than-significant impact.

Issues (and Supporting Information Sources)	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
8. Hazards and Hazardous Materials - Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>

Issues (and Supporting Information Sources)	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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 checked="" type="checkbox"/>	<input 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"/>

8a. Transport, Use, or Disposal of Hazardous Materials

Hazardous materials uses under the proposed project would be limited to the use of common cleaning materials such as cleaners, disinfectants, and chemical agents required to clean the commercial space and bathrooms. Limited amounts of lubricants and solvents may also be used to maintain on-site refrigeration; the building’s heating, ventilation, and air conditioning system; and other mechanical systems. These commercial products would be used in limited quantities, and are labeled to inform users of potential risks and to instruct them in appropriate handling procedures. The proposed project would also involve the retail sale of common household chemicals, some of which are considered hazardous materials. However, these products would be retained in their original packaging and would not be used at the project site, but would be sold to the general public. Therefore, the storage and use of hazardous materials under the proposed project would not result in a threat to public health or the environment and this would be less than significant.

8b, 8d. Release of or Exposure to Hazardous Materials

A Phase I Environmental Site Assessment (Phase I ESA) was prepared for the project site in 2011 to identify existing uses of hazardous materials as well as conditions that could affect soil or groundwater quality at the site, the assessment also presented the results of previous Phase I ESAs conducted in 2009 and 2010.²³ These Phase I ESAs included a review of historical sources (Sanborn Maps, historic topographic maps, historic aerial photographs, City Directories, building department records, and zoning and land use records) to identify historic land uses that could have involved the use of hazardous materials; site observations, review of government records, and an interview with site personnel to identify current land uses; and a review of environmental databases and previous site sampling reports to determine existing hazardous materials uses at the site and whether there is documented contamination that could affect soil and groundwater quality at the proposed project site. The information provided in the Phase I ESA indicates that proposed project could potentially result in exposure to hazardous materials or a release of hazardous materials as a result of building demolition and ground disturbing activities such as excavation and grading during project construction as discussed below.

²³ Shaw Environmental, Inc., 2011. Phase I Environmental Site Assessment Report, Proposed CVS Store No. 9982, Northeast Corner of Los Gatos Boulevard & Los Gatos Almaden Road, 15600 and 15650 Los Gatos Boulevard, Los Gatos, California. November 11.

Site History. Historical sources reviewed for the Phase I ESA indicate that the site was used for orchards between approximately 1939 and 1959. This use was replaced by a gasoline station in the southwestern portion of the property from approximately 1959 through 1981. By 1965, the site was also used as a car dealership by various dealers until the last car dealership vacated the property in 2008. Buildings associated with the dealership are the Main Service Building constructed in approximately 1965 that included a show room, offices, two auto parts rooms, and service shops; the Rear Service Building constructed in the mid 1970s that was used as a service shop and for storage; the Annex Building constructed in the late 1970s which as used as a small office; and a two-car garage. These vacant buildings remain on the property.

The former automobile dealerships stored new oil in individual 120-gallon above ground tanks in the shops. Coolant and automatic transmission fluid were also stored in smaller retail containers. One dealership used a 2,000 gallon gasoline UST and a 500 gallon waste oil UST near the Main Service Building. There were at least 20 hydraulically operated car hoists in the service areas of the Main Service Building and Rear Service Building, and several solvent parts washers were also used in the shops. Two clarifiers were used in the Main Service Building for the collection of wastewater from car washing. These dealerships also manifested wastes related to automobile service for off-site disposal, including waste oil, waste coolant, waste automatic transmission fluid, waste filters, solvents, oil/water sludge, and oil wastes.

When the dealership was vacated in 2008, the 20 service bays were power washed. The contents of one waste oil aboveground storage tank and two gasoline aboveground storage tanks were removed and these tanks were also washed out prior to being removed from the site. Approximately 1,200 gallons of waste waste/oil sludge and 1,000 pounds of solid materials produced as a result of this effort were disposed of off-site. Approximately 17 of the hydraulic hoists have been partially removed and filled with concrete, while three hoists remain, including one in the Main Service Building and one in the rear service building.

The two USTs were removed from the automobile dealership portion of the property in 1990 under the oversight of the Santa Clara County Fire Department. However, only limited information was available about the UST removals. A geophysical survey conducted in 2009 to confirm the presence or absence of USTs at the former automobile dealership and gasoline service station did not identify any USTs remaining at the site, although linear anomalies indicated the potential presence of product lines from previous the USTs. When the site was inspected as part of the 2011 Phase I ESA, no above ground tanks or indications of underground storage tanks were observed. Limited amounts of paint, paint thinner, janitorial supplies, and oil were stored in two locations on the property at the time of the inspection.

Potential Exposure to Hazardous Building Materials. An asbestos, lead, and PCB pre-demolition building survey was conducted for the proposed project site in 2009²⁴ and the results are summarized as follows:

- Asbestos-containing materials. The survey determined that the roofs of the buildings are constructed with rolled-on asphalt roofing layers that include an asbestos-containing penetration mastic membrane. Asbestos was also identified in the mastic of the roofing on a parapet. The mastic contained up to 20 percent asbestos and a total of 1,000 square feet of asbestos-containing materials were identified. In accordance with Bay Area Air Quality Management District (BAAQMD) regulations, friable asbestos-containing materials with over 1 percent asbestos are considered Regulated Asbestos Containing Materials that must be removed before a building is renovated or demolished. However, the U.S. Environmental Protection Agency (U.S. EPA) ruled in 1994 that asphalt encapsulated roofing materials are not classified as a Regulated Asbestos

²⁴ Acumen, 2009. Asbestos, Lead, and PCB Pre-Demolition Survey Report, Former Anderson Chevrolet, 15600 Los Gatos Boulevard, Los Gatos, CA, 95032. July.

Containing Material, regardless of asbestos content. The survey report recommended that regardless of the U.S. EPA ruling, the roof penetration mastics should be removed to maintain an asbestos-free demolition waste stream. Further, demolition activities would have to comply with California Division of Occupational Safety and Health (Cal-OSHA) requirements for worker protection (8 CCR Section 1529 and Sections 341.6 through 341.14).

Only trace amounts of asbestos were detected in the texture coat of the drywall, and asbestos was not detected in any of the other suspect materials sampled. Therefore, these materials would not be considered a Regulated Asbestos Containing Materials.

- Lead-containing materials. The survey determined that with a lead concentration of 1,048 milligrams per kilogram (mg/kg), the 8 by 8-inch brown floor tiles on the first floor of the Main Service Building would be considered a hazardous waste when disposed of. The deteriorating paint on the upper joist of the Main Service Building and exterior porch floor of the Annex Building also contained lead at concentrations of 625 and 139 mg/kg, respectively, indicating that it is lead-containing paint which could be considered a hazardous waste. None of the other deteriorating paint that was sampled contained detectable levels of lead.

The lead-containing paint would need to be handled in accordance with Cal-OSHA's Lead in Construction Standard (8 CCR Section 1532.1) which requires development and implementation of a lead compliance plan when lead-based paint would be disturbed during construction. The plan must describe activities that could emit lead, methods that will be used to comply with the standard, safe work practices, and a plan to protect workers from exposure to lead during construction activities (e.g. use of dust control, cleaning debris daily with a HEPA vacuum, and use of good personal hygiene procedures). Cal-OSHA would require 24-hour notification if more than 100 square feet of lead-based paint would be disturbed.

- Light ballasts. fluorescent light ballasts manufactured prior to 1979 commonly include polychlorinated biphenyl (PCB)-containing oil. Ballasts manufactured after this date are identified with a label stating that the ballast does not contain PCBs. The hazardous building materials survey conducted for the project included inspection of six representative ballasts, and all six had a "no PCBs" label affixed. However, the survey notes that it would be necessary to inspect all of the existing ballasts before the buildings demolished to confirm whether or not they are PCB-containing. Further, between 1979 and the early 1990s, di(2-ethylhexyl)phthalate (DEHP) was used in place of PCB as a dielectric fluid in some fluorescent light ballasts and other electrical equipment.²⁵ DEHP is classified as a probable human carcinogen by the U.S. Department of Health and Human Services and as a hazardous substance by the U.S. EPA. Because of this, the DEHP must be drained from a ballast before it can be recycled, and the DEHP must be managed as a hazardous waste.²⁶ Disposal of ballasts is governed by 22 CCR Section 66261.24 for PCBs and 22 CCR Division 4.5, Chapter 11 for DEHP.
- Mercury-containing and electronic equipment. Spent fluorescent lamps and tubes such as those in the existing buildings commonly contain mercury vapors and are considered a hazardous waste in California (22 CCR Section 66261.50). In 2004, new regulations classified all fluorescent lamps and tubes in California as a hazardous waste. The survey report also notes that the wall thermostats in the buildings contain mercury and that there were electronic wastes remaining in the buildings. The light tubes, thermostats, and electronic wastes must be recycled or taken to a "universal waste" handler in accordance with 22 CCR Chapter 23 prior to demolition.

²⁵ Green Lights Recycling, Inc., Ballasts. Available online at <http://glrnow.com/ballasts/>.

²⁶ California Department of Toxic Substances Control (DTSC), 2012. Email from Regulatory Assistance Office to Mary McDonald of Orion Environmental Associates. Re: Disposal of ballasts containing DEHP. November 30.

Impacts related to exposure to hazardous building materials would be significant because without removal and disposal of hazardous building materials prior to demolition, workers and the public could be exposed to asbestos in the penetration mastic membrane of the roofing materials; lead in the floor tiles of the Main Service Building; lead in the deteriorated paint on the Main Service Building and Annex Building; PCBs or DEPH in fluorescent light bulbs; and mercury in the fluorescent light tubes and wall thermostats. Any electronic equipment remaining in the vacant buildings would also require proper disposal. This impact would be mitigated to a less than significant level with implementation of Mitigation Measure HAZ-1, Hazardous Building Materials Removal, which requires removal and appropriate disposal of all hazardous building materials prior to demolition of the existing buildings.

Potential Exposure to Hazardous Materials in Soil. Based on the Phase I ESA, historic on-site and off-site uses could have affected soil or groundwater quality at the project site as described as follows:

- Site use for Orchards. The site was used for orchards between approximately 1939 and 1959. Because the site was used for orchards after 1944, organochlorine pesticides, including DDT, may have been used for pest control.²⁷ Pesticides that contain arsenic may have also been used. However, the site soils have not been assessed for the potential presence of organochlorine pesticides or arsenic.
- Former Automobile Dealerships. Potential sources of hazardous materials associated with the former auto dealerships include the former gasoline and waste oil USTs; former aboveground storage tanks; former hydraulically operated car hoists; two wastewater clarifiers used in the Main Service Building; and hazardous materials and waste storage areas. A soil investigation conducted in 2009 included the installation of borings to assess soil and groundwater quality in the vicinity of these potential sources, as well as soil quality in the vicinity of the USTs associated with the former gasoline service station along the perimeter of the site to evaluate potential contributions from off-site sources. Groundwater was encountered at depths of 42 to 43 feet below ground surface, and eight grab groundwater samples were collected.

The results of the investigation are described below. In this discussion, the analytical results for soil, groundwater, and soil vapor samples are compared to residential environmental screening levels (ESLs) established by the RWQCB.²⁸ These are conservative estimates of safe levels of a chemical that a person could be exposed to in soil, groundwater, and soil vapors. If the concentration of a chemical is below the ESL, then it can be assumed that the chemical would not pose a health risk to a person. Because workers and residents would experience different exposures to soil and groundwater, there are different environmental screening levels for residential and industrial land uses. In general, residents would be expected to have the longest exposure to soil and therefore residential environmental screening levels are generally lower than industrial screening levels, and are the more stringent of the two criteria. For this reason, the analysis below conservatively compares the chemical concentrations to residential ESLs:

- 17 soil borings were installed near the former hydraulic hoists, hazardous materials storage areas, and wastewater clarifiers, and a soil sample from a depth of four feet was analyzed from each boring. Total petroleum hydrocarbons as diesel were detected in 11 of the soil samples, but at a maximum concentration of 37 mg/kg, none of the concentrations exceeded the residential ESL of 110 mg/kg. Total petroleum hydrocarbons as motor oil were detected in one soil sample, but the concentration of 160 mg/kg was below the residential ESL of 370

²⁷ California Department of Toxic Substances Control, 2008. *Interim Guidance for Sampling Agricultural Properties (Third Revision)*. August 7.

²⁸ California Regional Water Quality Control Board (RWQCB), San Francisco Bay Region, 2008. Screening for Environmental Concerns at Sites with Contaminated Soil and Groundwater. Interim Final. November 2007, revised May 2008. Available online at http://www.swrcb.ca.gov/sanfranciscobay/water_issues/available_documents/ESL_May_2008.pdf.

mg/kg. Of eight metals analyzed,²⁹ only arsenic exceeded the ESL. The maximum concentration was 5.4 mg/kg which exceeds the ESL of 0.39 mg/kg, but is less than naturally-occurring levels in the San Francisco Bay area. Volatile organic compounds were not detected in any of the soil samples and PCBs were not detected in any of the four samples analyzed for this parameter.

- Total petroleum hydrocarbons were not detected in a soil sample from a depth of one foot beneath a room in the Main Service Building that formerly contained an air compressor. At a concentration of 6.4 mg/kg, only arsenic exceeded the ESL of 0.39 mg/kg. However, this concentration is less than naturally-occurring levels in the San Francisco Bay area.
- Grab groundwater samples from three borings installed in the vicinity of the former gasoline station in the southwestern portion of the site contained total petroleum hydrocarbons as gasoline at a maximum concentration of 2,500 µg/L and total petroleum hydrocarbons as diesel at a concentration of 810 µg/L. These concentrations exceeded the ESL of 100 µg/L for groundwater that is a current or potential drinking water source. These groundwater samples and additional samples from the general vicinity contained several volatile organic chemicals at concentrations exceeding the ESL, including the petroleum related compounds benzene at a maximum concentration of 540 µg/L; ethylbenzene at a maximum concentration of 210 µg/L; xylenes at a maximum concentration of 400 µg/L; and naphthalene at a maximum concentration of 39 µg/L. Barium was detected at a maximum concentration of 2,800 µg/L.
- Several chlorinated solvents were also identified at concentrations above ESLs including 1,2-dichloroethane (DCA) at maximum concentration of 1.1 µg/L, tetrachloroethene (PCE) at a maximum concentration of 85 µg/L, trichloroethene (TCE) at a maximum concentration of 8.5 µg/L, cis-1,2 dichloroethene (cis 1,2-DCE) at a maximum concentration of 18 µg/L, and vinyl chloride at a maximum concentration of 14 µg/L. However, these chlorinated solvents likely result from an off-site source as discussed below.
- Soil vapor samples from the depth of 5 feet below ground surface at 22 locations, and from a depth of 10 feet below ground surface at 5 of these locations, contained several petroleum and chlorinated hydrocarbons including TPHg at a maximum concentration of 1.87 µg/L, benzene and toluene at a maximum concentration of 0.22 µg/L, xylenes at a maximum concentration of 0.43 µg/L, and PCE at a maximum concentration of 0.28 µg/L. Subsequently, soil vapor samples were collected from a depth of 15 feet below ground surface at three locations near the Main Service Building in 2011, and volatile organic compounds were not detected in any of the samples.
- Former gasoline station. The gasoline station located in the southwestern portion of the property from approximately 1959 through 1981 is identified as a closed leaking underground storage tank site, although documentation of the UST removal is not available. Petroleum hydrocarbons were detected in groundwater samples from three monitoring wells at the site, but the fuel leak case was closed by the County of Santa Clara Department of Environmental Health in 2011.³⁰ At that time, groundwater beneath the site contained several compounds related to petroleum hydrocarbons including total petroleum hydrocarbons as gasoline at 3,200 µg/L, benzene at 65 µg/L, toluene at 1.7 µg/L, ethylbenzene at 23 µg/L, xylenes at 10.61 µg/L, naphthalene at 3.1 µg/L, and lead at 14 µg/L.

The closure letter stated that the residual groundwater contamination could pose a risk under certain site development activities such as grading and excavation. In addition, the Phase I ESA

²⁹ The soil samples from each boring were analyzed for arsenic, barium, cadmium, lead, and mercury.

³⁰ County of Santa Clara Department of Environmental Health, 2011. Fuel Leak Site Case Closure Former Chevron, 15650 Los Gatos Boulevard, Los Gatos, CA; Case No. 14-804, SCVWDID No. 08S1W15C0f. October 17.

for the project concludes that there is the potential for petroleum products to remain in the soil in the vicinity of the former underground storage tanks. Accordingly, the closure letter notes that the Los Gatos planning and building departments should be notified of any changes in land use, grading, or excavation along with any planned site management mitigation requirements. Subsequent to closure of this case, the three groundwater monitoring wells were legally destroyed in accordance with the requirements of Department of Water Resources Bulletin Nos. 74-81 and 74-90 and the Santa Clara Valley Water Districts' (SCVWD) Well Ordinance.³¹

- Chlorinated solvents. As described above, chlorinated solvents originating from an off-site source were also detected in on-site groundwater and soil vapors. The closure letter issued by the Department of Environmental Health, described above, addressed the leaking underground storage tank case only, and referred the matter of the chlorinated hydrocarbons in soil and groundwater to the RWQCB. Subsequently, the RWQCB issued a comfort letter in 2012,³² agreeing with the conclusion that the plume of chlorinated hydrocarbons originates from an off-site source and stating “In general, the Regional Water Board does not pursue enforcement action against a property owner whose land overlies contaminated groundwater if that contamination is solely the result of the migration of groundwater contaminants from an off-site source or sources. Accordingly, the Regional Water Board will not name current and future owners of the subject property as dischargers with respect to groundwater pollution from offsite sources. However, the Regional Water Board may hold such a property owner responsible for investigation or cleanup tasks is if he or she refuses to provide reasonable access to an upgradient discharger attempting to investigate and cleanup off-site groundwater pollution.”
- Potential off-site sources. Other than a dry cleaning facility that may be responsible for the chlorinated hydrocarbon groundwater plume beneath the southwest corner of the proposed project site, the Phase I ESA did not identify any off-site environmental cases with the potential to affect soil or groundwater quality at the proposed project site.

As summarized above, potential sources of soil contamination at the project site include previous use of the site for orchards between approximately 1939 and 1959; the former gasoline service station located in the southwest corner of the project site; and the previous use of the site for automobile dealerships, including the former gasoline and waste oil USTs, former aboveground storage tanks, former hydraulically operated car hoists, two wastewater clarifiers used in the Main Service Building, and hazardous materials and waste storage areas. Previous soil investigations have identified relatively low levels of petroleum products in the soil based on soil sampling in the vicinity of the potential sources related to the former service station and dealerships. However, the potential presence of pesticides from use as orchards has not been evaluated, and it is possible that there could have been a release from one of the potential sources related to the dealerships (such as the hoists and clarifiers) that would not be identified until these features are removed. Further, the environmental database review was conducted prior to 2011 and additional sites could have been added to the databases reviewed since that time. Therefore, workers and the public could be exposed to hazardous materials potentially in the soil during removal of the hoists and clarifiers as well as other excavation and grading activities and impacts related to exposure to hazardous materials in the soil would be potentially significant.

This impact would be reduced to a less than significant level with implementation of Mitigation Measures HAZ-2 and HAZ-3. Measure HAZ-2 requires the project applicant to retain a qualified environmental consultant to update the database review within 90 days of the start of construction and implement the

³¹ Weber, Hayes & Associates, 2011. Monitoring Well Destruction Report, Former Chevron/Standard Property – 15650 Los Gatos Boulevard, Los Gatos, CA. October 10.

³² California Regional Water Quality Control Board, San Francisco Bay Region, 2012. Letter to CVS Caremark Corporation re Status of Property at 15650 Los Gatos Boulevard, Los Gatos, Santa Clara County. January 27.

recommended actions. Measure HAZ-3 requires the project applicant to sample the site soils for pesticides and metals and also implement a soil management plan and notify the County of Santa Clara Department of Environmental Health of planned construction activities. This measure also specifies that the project applicant shall require the construction contractor to have a site safety plan as well as a contingency plan for sampling and analysis of previously unidentified hazardous materials that may be encountered during construction.

Impacts related to exposure to petroleum-related chemicals and chlorinated solvents in the groundwater would be less than significant because the depth to groundwater is over 40 feet below ground surface, and the project would not include excavation to this depth such that excavation dewatering would be required. Further, the project would not include any groundwater withdrawals and would not use groundwater for any purpose.

Impacts related to exposure to petroleum-related chemicals and chlorinated solvents in the soil vapors would also be less than significant because the project site would be almost entirely covered either by the at-grade commercial-space and pharmacy, or a paved parking lot or plaza area. Therefore, site occupants and visitors would not be exposed to any chemicals present in the soil vapors.

8c. Hazardous Emissions or Use of Extremely Hazardous Materials

Hazardous air emissions are toxic air contaminants identified by the California Air Resources Board and the Bay Area Air Quality Management District. Extremely hazardous materials are defined by the State of California in Section 25532 (2)(g) of the Health and Safety Code. The proposed project is not located within ¼-mile of a school. Further, only common hazardous materials such as paints, solvents, cements, adhesives, and petroleum products (such as asphalt, oil, and fuel) would be used during construction, none of which are considered extremely hazardous materials. Once constructed, the project would not use extremely hazardous materials nor emit toxic air contaminants. The only toxic air contaminant that would be emitted during construction or operation is diesel particulate matter (DPM) (see Section 3, Air Quality, 3d, Exposure of Sensitive Receptors). The project's construction-related DPM emissions were determined to have a less-than-significant temporary health risk to infants, children, and adults. In addition, there would be no impact related to hazardous emissions or the use of extremely hazardous substances within ¼-mile of a school.

8e, 8f. Airports/Airstrips

The nearest airports or air strips to the project site are the Norman Y. Mineta San Jose International Airport and Reid Hillview Airport, located more than 10 miles to the northeast. Therefore, there is no impact associated with safety hazards due to location of the project within 2 miles of a public airport or in the vicinity of a private airstrip.

8g. Emergency Plans

The project would not impair or physically interfere with an adopted emergency response or emergency evacuation plan because the project would be required to comply with Fire Department Standard Details and Specifications to ensure adequate emergency access to project buildings by fire engines and ladder trucks. Therefore, the project's impact related to interference with an adopted emergency response plan or emergency evacuation plan would be less than significant.

8h. Wildland Fire Hazards

The proposed project site is not located in a fire hazard severity zone within a local responsibility area³³ or state responsibility area.³⁴ In addition, fire protection would be provided by the Santa Clara County Fire Department. To ensure adequate fire protection service can be provided during project construction and operation, the project will be required to meet Department requirements for minimum fire flow, automatic fire sprinklers, hydrant spacing/location (including one private on-site hydrant), building access requirements, etc. as discussed in Section 14, Public Services. Therefore, impacts related to wildland fire hazards would be less than significant.

Mitigation Measures – Hazards and Hazardous Materials (HAZ)

The following measures shall be implemented by the project applicant to reduce the project's hazards and hazardous materials impacts to less-than-significant levels:

HAZ-1: Hazardous Building Materials Removal. *Prior to demolition of the existing buildings, the project applicant shall retain a contractor(s) to remove existing hazardous building materials in accordance with the recommendations of the asbestos, lead, and PCB pre-demolition building survey completed in 2009 and applicable laws and regulations. Specifically, asbestos abatement shall be conducted in accordance with 8 CCR Section 1529 and Sections 341.6 through 341.14, as implemented by Cal/OSHA. Lead-based paint abatement shall be conducted in accordance with Cal/OSHA's Lead in Construction Standard (8 CCR Section 1532.1). Any PCB- or DEHP containing ballasts shall also be removed and legally disposed of in accordance with applicable laws including 22 CCR Section 66261.24 for PCBs and 22 CCR Division 4.5, Chapter 11 for DEHP. Fluorescent light tubes, wall thermostats containing mercury vapors, and electronic equipment shall be appropriately disposed of in accordance with 22 CCR Chapter 23.*

HAZ-2: Update Environmental Database Review. *The project applicant shall retain a qualified professional to update the environmental database review performed as part of the Phase 1 Environmental Site Assessment no more than three months prior to the start of construction but prior to issuance of building permits. The qualified professional shall prepare a report summarizing the results of the environmental database review that assesses the potential for any identified chemical release sites to affect soil quality at the proposed project site and identifies appropriate soil analysis to evaluate the potential for soil contamination at the proposed project site, if needed. In response, the project applicant shall implement the recommended soil analyses, if any, prior to the issuance of building permits.*

HAZ-3: Soil Sampling and Management. *The following measures shall be required to reduce public health risks related to removal and disposal of hazardous materials to a less-than-significant level. Oversight agency review may amend these measures as applicable to the SMP approval process.*

- a. *The project applicant shall retain a qualified professional to conduct appropriate sampling to assess the presence and extent of pesticides and related metals in the soil. Sample analysis shall include dioxins and furans, chlorinated herbicides, chlorinated pesticides, and arsenic at a minimum. Should the concentration of any constituent identified exceed*

³³ California Department of Forestry and Fire Protection, 2007. Santa Clara County Draft Fire Hazard Severity Zones in LRA. October 4. Available online at http://www.fire.ca.gov/fire_prevention/fhsz_maps_santaclara.php.

³⁴ California Department of Forestry and Fire Protection, 2007. Santa Clara County Fire Hazard Severity Zones in SRA. November 7. Available online at http://www.fire.ca.gov/fire_prevention/fhsz_maps_santaclara.php.

the ESL and background levels, the project applicant shall notify the County of Santa Clara Department of Environmental Health, and implement any necessary corrective actions in coordination with the Department of Environmental Health.

- b. The project applicant shall require the construction contractor(s) to prepare a Soil Management Plan (SMP), including required confirmation soil sampling during removal of remaining hydraulic hoists, the wastewater clarifiers, and any product lines remaining at the former gasoline service station. The SMP shall also provide a plan for disposal of identified hazardous soils and excess soil produced during construction activities, including the disposal methods for soil, potential disposal sites, and requirements for written documentation that the disposal site will accept the excess soil. If appropriate, excess soil may be disposed of on-site, under foundations or in other locations in accordance with applicable hazardous waste classifications and disposal regulations. The contractor shall be required to submit the SMP to the project applicant for acceptance prior to implementation. Prior to or during construction, excess soil from construction activities shall be sampled to determine the appropriate disposal requirements in accordance with applicable hazardous waste classification and disposal regulations. The project applicant shall also submit the SMP to the County of Santa Clara Department of Environmental Health a minimum of 30 days prior to the planned start of construction.*
- c. The project applicant shall require the construction contractor to prepare and implement a site safety plan identifying the chemicals present, potential health and safety hazards, monitoring to be performed during site activities, soils-handling methods required to minimize the potential for exposure to harmful levels of the chemicals identified in the soil, appropriate personnel protective equipment, and emergency response procedures.*
- d. The project applicant shall require the construction contractor(s) to have a contingency plan for sampling and analysis of potential hazardous materials and for coordination with the appropriate regulatory agencies, in the event that previously unidentified hazardous materials are encountered during construction. If any hazardous materials are identified, the contractor(s) shall be required to modify their health and safety plan to include the new data, conduct sampling to assess the chemicals present, and identify appropriate disposal methods. Evidence of potential contamination includes soil discoloration, suspicious odors, the presence of USTs, or the presence of buried building materials.*
- d. In the event that any chemicals are detected at unacceptable concentrations, as determined in the County-approved SMP as part of sampling conducted under Mitigation Measures 3a or 3c, the project applicant shall notify and consult with the regulatory agencies to develop the appropriate plan of action. If additional investigation or remediation is needed, the project applicant shall implement such action.*
- f. The project applicant shall participate in the Voluntary Cleanup Program (VCP) administered by the County for technical oversight of the SMP and hazardous soils mitigation, unless referred to an alternate agency. Oversight includes all aspects of the site investigation and remedial action, and determination of the adequacy of the site investigation and remediation activities at the site.*
- g. The applicant shall submit a “no further action” letter from the oversight agency or comparable closure document that demonstrates the site has been released as clean or a mitigation plan has been approved and implemented. Each phase of building permit issuance shall be contingent upon approval of the SMP and remediation documentation.*

Issues (and Supporting Information Sources)	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
9. Hydrology and Water Quality - Would the project:				
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"/>
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) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) 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"/>
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

The project site is located in the urbanized, storm-sewered Los Gatos Boulevard area of Los Gatos, in the Los Gatos Creek watershed. Storm drains in the area discharge into Los Gatos Creek, and this creek flows through Campbell and San Jose, joining Guadalupe River approximately seven miles downstream of the project site. Stream flows ultimately discharge into San Francisco Bay via Alviso Slough. Los Gatos Creek is a Santa Clara Valley Water District (SCVWD) water management facility, and flows into Vasona Reservoir and then several percolation basins in San Jose prior to joining the Guadalupe River.

9a, 9f. Water Quality

The Federal National Pollutant Discharge Elimination System (NPDES) Program regulates water quality degradation. This program was established by the Clean Water Act to control and reduce pollutants carried to water bodies from point and non-point discharges. In California, the State Water Resources Control Board (SWRCB) administers the NPDES permitting program through nine Regional Water Quality Control Boards (RWQCB). The NPDES permit (MRP) for the Town of Los Gatos is a permit that is issued to the Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP), an association of thirteen cities/towns in the Santa Clara Valley (including Los Gatos), Santa Clara County, and the Santa Clara Valley Water District. SCVURPPP participants share a common NPDES permit to discharge stormwater to South San Francisco Bay. To reduce pollution in urban runoff to the "maximum" extent practicable, the SCVURPP incorporates regulatory, monitoring, and outreach measures aimed at improving the water quality of South San Francisco Bay and the streams of Santa Clara Valley.

The development plans for the project would replace an existing, vacant auto dealership site with new commercial uses, i.e. CVS pharmacy and secondary commercial shops. The current site use includes 107,156 s.f. (2.46 ac.) of impervious surface on the 121,717 s.f. (2.79 ac.) property, constituting approximately 88 percent of the site surface. The proposed project would replace 68,689 s.f. of impervious surface area with an equivalent amount (68,689 s.f.) of new impervious surface. This would represent approximately 64.1 percent of the impervious site area, resulting in no changes to the extent of impervious surface area on the site. Because 50 percent or more of the existing impervious surface will be replaced, stormwater runoff from all post-project impervious surfaces will need to receive stormwater treatment.

In addition, while the proposed project would create and replace more than one acre of impervious surface on the site, the project would not increase the amount of impervious surface over existing conditions. Consequently, the hydromodification requirement of the MRP would not apply to this project.

The construction proposed by the project plans would be a potential source for erosion and downstream sedimentation if soil materials exposed during project construction were accidentally released. Consequently, the project's construction activities would have the potential to degrade local water quality in Los Gatos Creek. As stipulated for Regulated Projects under the NPDES permit provisions, the proposed development would remove and replace more than 10,000 s.f. of impervious area and must implement MRP C.3. design, control, and engineered water treatment measures. For the purposes of stormwater management and water quality control, project plans include a conceptual stormwater management plan that indicates the use of site design, pollutant source control, and stormwater treatment measures to address stormwater management requirements for the project.

As part of the application submittal, the project information included a C.3. Data Form that indicates the project would include four pollutant source control measures: "beneficial landscaping" (i.e., drought tolerant and/or native plants to minimize over-irrigation and the use of pesticides on the landscaping); covered dumpster area with drain to sanitary sewer; maintenance (pavement sweeping, catch basin cleaning, good housekeeping); and storm drain labeling. These source control measures are appropriate for this project; however, project plans would need to indicate the sanitary sewer connection for dumpster areas and the storm drain labeling.

Five site design measures that would assist in the management of stormwater conditions on the site are listed in the Town's C.3 Data Form for the project. These measures include: minimized impervious surfaces, minimum-impact parking lot design, permeable pavement, roof downspouts drain to landscaping, and microdetention in landscape. Although the C.3 Data Form submitted to the Town specifies the site design measure indicating "roof downspouts drain to landscaping," this site design measure is not shown on the project plans.

The C.3. Data Form for the project also proposes specific runoff treatment methods for storm flows generated on the project site. These control measures include: infiltrating vegetated swale, underground detention and infiltration system (e.g., pervious pavement drain rock, large diameter conduit), and media filter (sand, compost, or manufactured media). Project plans (Sheet DR-5) present specific information for the use of bioretention areas and pervious pavement to be used for runoff treatment.

New stormwater treatment regulations became effective December 1, 2011. The new regulations require that each Regulated Project treat 100 percent of the design storm runoff from a project's drainage area with low impact development (LID) treatment measures onsite or at a joint stormwater treatment facility. LID measures include Rainwater Harvesting, Infiltration, Evapotranspiration, and Biotreatment (if prior LID measures are determined to be infeasible). Beginning December 1, 2011, projects submitted for Planning approval that create or replace 10,000 square feet of impervious surface ("Regulated Projects") are subject to the new LID treatment requirements. The low impact development (LID) treatment requirements apply to this project because it is a private C.3 Regulated Project with a development permit application that was deemed complete after December 1, 2009, and it did not receive final discretionary approval before December 1, 2011.

Projects which disturb one or more acres of soil, or projects which disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Discharges of Storm Water Associated with Construction Activity. The project would be required to obtain coverage under the State's General Permit for Storm Water Discharges Associated with Construction Activity. A Notice of Intent must be filed with the RWQCB and the Construction General Permit requires that a Storm Water Pollution Prevention Plan (SWPPP) be prepared. The SWPPP must be consistent with the terms of the Santa Clara Valley Urban Runoff Pollution Prevention Program's recommended best management practices (BMPs) for construction activities.

To ensure compliance with stormwater treatment and disposal requirements, the Town's contract engineering consultant, Eisenberg, Olivieri & Associates (EOA), reviewed drainage and stormwater management plans submitted to the Town. EOA's review was conducted on June 21, 2013 (included as **Attachment 4**). The EOA review of the project submittals for compliance with the Town of Los Gatos' NPDES Permit indicated that the conceptual stormwater treatment plan proposed for the project requires further definition and details in order for an assessment of adequacy and compliance with Town requirements. Implementation of EOA recommendations, along with the Town-approved SWPPP and additional monitoring and reporting requirements specified in the General Construction Permit during project construction, would ensure that potential construction-related water quality impacts would be less than significant.

9b. Groundwater Resources

A geotechnical investigation of the project site by Ninyo & Moore, geotechnical consultants, included 11 soil borings for soil and groundwater sampling. Groundwater was encountered in one exploratory boring (B-5) at a depth of approximately 43 feet. Based on a review of the State of California Seismic Hazard Evaluation report (CDMG, 2002), the historical high groundwater level is at a depth of approximately 20 feet below the ground surface. Fluctuations in ground water levels occur due to many factors including seasonal fluctuation, underground drainage patterns, seasonal recharge, regional and tidal fluctuations, and other factors.

9c, 9d, 9e. Drainage

Elevations on the site range from approximately 350 feet above mean sea level (MSL) at the southwest corner of the property to a low of about 347 feet at the northeast corner of the property. The site generally

consists of an extensive, level area that slopes gently to the northeast. The project site is developed with several structures associated with the former auto dealership and service operations on the project site. Extensive paving for driveway and parking along with these buildings cover approximately 88 percent of the 2.79-acre site. Storm drainage from the site’s impervious surfaces is collected in the on-site storm drain system and conveyed to the municipal storm drain system in Los Gatos Boulevard and Los Gatos Almaden Road, adjoining the western and southern perimeters of the project site. Presently, runoff flows from the project site are not treated for the removal of urban pollutants and water contaminants.

9g, 9h, 9i, 9j. Flood Hazards

According to the Federal Emergency Management Agency’s (FEMA) Flood Insurance Rate Map (FIRM) (May 18, 2009) for Los Gatos, the project site is located in Zone X, consisting of areas with 0.2% annual chance of flood, areas of one percent annual chance flood with average depths of less than one foot or with drainage areas less than one square mile, and areas protected by levees from one percent chance flood. The FEMA Flood Zones map (Figure SAF-4) of the 2020 General Plan Safety Element also indicates that the project site is located outside mapped 100-year flood hazard areas.

Mapping of dams and dam inundation areas provided by the Safety Element (Figure SAF-5) of the recent updated 2020 General Plan for the Town provides information on areas within the community that may be potentially affected by inundation from dam failure. Based on the review of this and supporting maps, the project site is not in an area designated as a dam failure inundation area. The potential for flooding hazards on the site from storm events and dam failure would be less-than-significant.

Issues (and Supporting Information Sources)	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
10. Land Use and Planning - Would the project:				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" 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"/>

10a. Divide an Established Community

The proposed commercial development constitutes a redevelopment project that attempts to fulfill the land use planning objectives for the project site. The new commercial buildings would be an integral part of and complement the commercial uses already occurring along Los Gatos Boulevard in the vicinity of the project site. The proposed project would not alter the existing street pattern. For these reasons, the proposed project would not divide an established community.

10b. Project Consistency with Land Use Plans and Policies

The site is currently developed with structures serving the former auto dealership use, a paved parking lot, and landscaping. Project structures are currently vacant. The project parcel is currently designated by the existing General Plan as “Mixed Use Commercial,” while the site is zoned “CH, Restricted Highway Commercial.” The Mixed Use Commercial General Plan designation allows for “a mixture of retail, office, and residential in a mixed use setting, along with lodging, service, auto related businesses, non-

manufacturing industrial uses, recreational uses and restaurants.” The CH zone allows retail, office, service business, and limited manufacturing uses. The proposed project would be consistent with these General Plan and Zoning Ordinance land use designations for the site. The project applicant proposes to add a Planned Development (PD) zone (CH:PD) because the General Plan encourages sites larger than 40,000 square feet to be processed as a PD. Additionally, the Town Council has directed staff to process a proposed change in land use from auto dealer to other uses as a PD.

The project’s proposed lot coverage would be 22%, consistent with the maximum lot coverage of 50% permitted in the CH zone. The proposed buildings would be 33 feet high, two feet lower than the 35-foot building height limit in the CH zone. Towers, spires, elevator and mechanical penthouses may be higher than the maximum height noted. Building setbacks are proposed to be 20 feet along Los Gatos Boulevard and 62 feet Los Gatos Almaden Road, with no setbacks along the side (northern property line) and at least 82 feet along the rear (eastern property line) property boundaries. Under the CH zone, minimum setback requirements are 15 feet for front and street side, and no setbacks for rear and side.

The project vicinity is comprised of a mix of commercial, office, and residential uses. Adjacent parcels to the north, west, and south of the project site (also fronting on Los Gatos Boulevard) are currently in commercial use; residential and office development adjoins the project site to the east. The proposed commercial building would be consistent with this mix of uses, particularly with the adjacent commercial buildings to the north and south. In addition, since the project site and its vicinity (the area bounded by Highway 17, Los Gatos Boulevard, Lark Avenue, and Highway 85) are designated by the General Plan to redevelop with a mix of commercial uses, the proposed commercial uses would be consistent with the anticipated use of this area.

In 1997, the Town completed the Los Gatos Boulevard Plan, which presents the Town’s vision for the development of the Los Gatos Boulevard corridor. The Plan provides land use goals and guidelines for the Los Gatos Boulevard Plan area, which includes the project site. While the Plan does not include specific direction for land use at the project site, the project proposes to support the Plan’s identified land use goals through: 1) the promotion of commercial activity that complements the whole Town, 2) the provision of a dependable source of income, employment, goods, and services, and 3) the development of commercial use that is compatible with surrounding uses. The proposed commercial development would be consistent with existing commercial uses adjoining the site to the north, south, and west. The project attempts to minimize adverse impacts on the adjacent residential uses to the east through a design that retains an existing wall and mature tree landscape screening to separate the proposed structure from the adjoining residential properties; implementation of architectural recommendations from the Town’s contract architectural consultant would further reduce potentially intrusive elements of the proposed building.

Issues (and Supporting Information Sources)	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
11. Mineral Resources - Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>

11a, 11b. Mineral Resources

The Los Gatos General Plan does not identify any regionally or locally-important mineral resources on the project site or in its vicinity.

Issues (and Supporting Information Sources)	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
12. Noise - Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity 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"/>

A detailed noise assessment study was completed by Edward L. Pack Associates, Inc. in July 2013³⁵ and is included in **Attachment 5**. Noise measurement and modeling data are included in Appendix C of the Pack study.

Noise-Sensitive Receptors

Certain land uses are particularly sensitive to noise, including schools, hospitals, rest homes, long-term medical and mental care facilities, places of worship, and parks and recreation areas. Residential areas are also considered noise sensitive, especially during the nighttime hours. While the project site itself is considered to be a sensitive receptor with commercial development located on the site, existing sensitive receptors located in the project vicinity include residential uses located immediately adjacent to the project site on Carlton Avenue.

Significance Thresholds

The Noise Element of the Los Gatos 2020 General Plan establishes goals and policies for reducing noise levels in the Town. Policies aimed at reducing noise levels must address specific sources of unwanted noise, as well as noise-sensitive receptors. The Noise Element contains guidelines for use in land use planning to reduce future noise and land use incompatibilities (Figure NOI-1 of the Noise Element). The acceptable limit for residential use is 55 decibels (dB) day-night average sound level (DNL). The Town’s Noise Element (Policy NOI-1.3) states that these noise limits represent the "long range community

³⁵ Edward L. Pack Associates, Inc., *Noise Assessment Study for CVS Pharmacy and Shopping Center, Los Gatos Boulevard, Los Gatos*. July 1, 2013.

aspirations" and acknowledges that such goals may not be attainable at this time. The acceptable limit for commercial use is 70 dBA $L_{eq(24)}$. The $L_{eq(24)}$ is the 24-hour average L_{eq} which is not time-weighted like the DNL.

The Town of Los Gatos Noise Ordinance also contains noise limits that are based on local ambient baseline noise levels that are shown on maps published by the Town and provided within the Ordinance. Noise zones were created throughout the Town with varying ambient sound level based on three periods over the 24-hour day. The Noise Ordinance maps are provided to simplify the ambient determination process, as ambient conditions can be difficult to quantify under given circumstances. However, when the ambient can be measured, the measured value is used to supersede the map value. The ordinance limits increases in noise for residential areas to 6 dB above the ambient. The Noise Ordinance limits applied to the residences closest to the project are:

Weekday

59 dBA: 10:00 pm – 6:00 a.m.
63 dBA: 6:00 a.m. – 1:00 p.m.
70 dBA: 1:00 p.m. – 10:00 p.m.

Weekend

54 dBA: 10:00 p.m. – 6:00 a.m.
58 dBA: 6:00 a.m. – 1:00 p.m.
65 dBA: 1:00 p.m. – 10:00 p.m.

The noise limits applied to the specific noise sources associated with the project are as follows:

Drive-Thru Limit = 54 dBA
Loading Dock Limit = 63 dBA
Mechanical Equipment Limit = 54 dBA

The project-generated noise exposures were evaluated against the guidelines of the California Environmental Quality Act (CEQA). CEQA does not limit noise levels or noise exposures nor does it quantify noise exposure or noise level increases over the ambient to define noise impacts. CEQA evaluates a project as a significant noise impact if it "...causes a substantial increases in the ambient noise levels...". The quantification of the threshold of significance is left up to the local jurisdiction. The Los Gatos General Plan Noise Element does not provide thresholds of significance in the General Plan. Therefore, the following thresholds of significance, based on CEQA case law, shall be applied at the existing residential areas to the east and southeast of the site where there is a potential for noise impacts. These thresholds have been applied in other Town CEQA documents for projects located in quiet residential neighborhoods. These thresholds are:

- causing the DNL in existing residential areas to increase by 5 dB or more and remain below 55 dB DNL;
- causing the DNL in existing residential areas to increase by 3 dB or more and, thereby, exceed 55 dB DNL;
- causing the DNL in existing residential areas to increase by 1 dB or more if the current noise exposure exceeds 55 dB DNL.

If the project causes any of the above three criteria to occur, the project's noise increase will be considered a significant noise impact to the areas where it occurs and mitigation measures will be required.

Existing Noise Levels

The primary sources of noise in the project vicinity are traffic on Los Gatos Boulevard and Los Gatos Almaden Road. The closest sensitive receptors to the project site are residences located at 105 Carlton Avenue and 16522 Los Gatos Almaden Road.

To determine the existing noise environments at the most impacted residential properties near the site, continuous recordings of the sound levels were made at two locations (see Figure 2 of Attachment 5 for measurement locations). Location 1 was on the roof of one of the existing auto dealership buildings adjacent to the second floor of the residence at 105 Carlton Avenue. This residence is the closest receptor to the CVS drive-thru and this measurement location represents the noise environment at the residential property boundary at the second floor elevation. Location 2 was at the front property line of the home at 16522 Los Gatos Almaden Road at the corner of Peach Blossom Lane. This residence is a single-story home. The measurements were made on October 26-29, 2012 for a continuous period of 72 hours, from a Friday to a Monday, to capture the noise environment over weekday and weekend periods.

Hourly noise measurements were collected at each location for the daytime and nighttime periods over the course of the three-day measurement period and results are summarized in **Table 9**.

TABLE 9
EXISTING NOISE LEVELS (dBA, L_{eq})

Measurement Location/ Closest Residential Receptor	Weekday		Saturday		Sunday	
	Daytime	Nighttime	Daytime	Nighttime	Daytime	Nighttime
Location 1 – Residence at 105 Carlton Avenue	54.5 – 57.3	43.9 – 54.3	53.2 – 58.0	47.8 – 54.2	50.9 – 55.5	46.2 – 51.6
Location 2 – Residence at 16522 Los Gatos Almaden Road	60.4 – 70.9	46.5 – 60.5	60.0 – 69.7	50.2 – 62.7	59.5 – 64.8	48.1 – 63.0

SOURCE: Table II of Pack Study (Attachment 5)

To evaluate the existing and future noise exposures without the project at the most noise impacted residences, noise measurement data was used to calculate DNL noise levels at these residence (see Appendices B and C of the Pack Study). Using traffic volumes under the Background Conditions and Background Plus Pending Conditions, future noise exposure at these residences was also calculated and results are presented in **Table 10**.

TABLE 10
EXISTING AND FUTURE NOISE EXPOSURES AT THE MEASUREMENT LOCATIONS (dB DNL)

Measurement Location/Closest Residential Receptor	Scenario		
	Existing	Existing Plus Approved Projects (Background)	Background Plus Pending Projects
Location 1 – 105 Carlton Avenue	57 – 59	57 – 59	58 – 60
Location 2 – 16522 Los Gatos Almaden Road	65 – 66	65 – 66	66 – 67

SOURCE: Table IV of Pack Study (Attachment 5)

As shown in Table 10, the noise levels at the residential property boundaries are expected to remain similar to current levels under the “Background” traffic scenario, but are expected to increase by 1 decibel under the “Background Plus Pending” traffic scenario.

12a. Noise Compatibility of Proposed Uses

Noise measurements collected along the site’s eastern boundary as well as on Los Gatos Almaden Road indicate that noise levels in the eastern and southeastern margins of the site currently range between 57 and 66 dB DNL, while the $L_{eq(24)}$ at 105 Carlton Avenue is 53 to 55 dBA and 62 to 64 dBA at 16522 Los Gatos Almaden Road (see noise measurement data presented in Appendix C of the Pack study, which is included in Attachment 5). Although noise levels are expected to be higher on portions of the site located closer to the Los Gatos Boulevard/Los Gatos Almaden Road, project buildings are set back from this

intersection, and noise levels at proposed buildings are also expected to not exceed 70 dBA $L_{eq}(24)$. Therefore, noise levels on the site are considered to be compatible with the proposed commercial use.

12b. Groundborne Noise and Vibration

Since construction of project facilities would not involve construction of subsurface facilities (i.e. tunnels or basements), generation of construction-related groundborne noise levels that could result in noise disturbance at the closest residential receptors would be less than significant. In addition, since project construction would not involve use of impact equipment (i.e. pile drivers), generation of construction-related groundborne vibration that could result in cosmetic damage to adjacent structures would be less than significant. In general, cosmetic or threshold damage to adjacent buildings could occur if vibrations exceeded 0.5 inches per second (in/sec) peak particle velocity (PPV).³⁶ Vibration velocities from typical heavy construction equipment (used for projects similar to the proposed project) range from 0.012 to 0.352 in/sec PPV at 10 feet from the source of activity. Since heavy equipment operated on the site are expected to be located more than 10 feet from adjacent structures, the effects of construction-related vibration would be less than significant.

12c. Long-term Noise Increases

Project-related noise impacts on areas adjacent to or near the proposed project would primarily involve noise increases from activities associated with the pharmacy drive-thru window, operation of the building’s mechanical equipment, activities at the project’s loading dock, trash collection activities, parking lot noise, and project-related traffic increases on local roadways. Noise increases from these sources at the closest residential receptors (105 Carlton Avenue and 16522 Los Gatos Almaden Road) are estimated and summarized in **Table 11**. More detailed descriptions of the listed noise sources and range of noise levels associated them are presented in Tables VI through VIII of Attachment 5.

**TABLE 11
PROJECT-GENERATED NOISE LEVELS AND NOISE EXPOSURES**

Source	Comparison of Project Noise Levels to Noise Ordinance (dBA) and Noise Element (DNL) Noise Limits			
	105 Carlton Ave.		16522 Los Gatos Almaden Rd.	
	54 dBA Limit	54 DNL Limit	54 dBA Limit	55 DNL Limit
<i>Applicable Ordinance Limit</i>				
Drive-Thru	44	36	40	32
Mechanical Equipment	34	40	32	38
<i>Applicable Ordinance Limit</i>	63 dBA Limit	54 DNL Limit	63 dBA Limit	55 DNL Limit
Loading Dock	65	47	67	49
<i>Applicable Ordinance Limit</i>		54 DNL Limit		55 DNL Limit
Traffic on Local Streets		41		37
<i>Applicable Ordinance Limit</i>	58 dBA Limit	54 DNL Limit	58 dBA Limit	54 DNL Limit
Parking Lot	54	44	42	37
TOTAL – ALL SOURCES	66	51	67	51

NOTE: The Noise Element noise limit at 105 Carlton Avenue is 54 dBA DNL because the ambient noise level is lower and any project noise level higher than 54 dB DNL, when added to existing ambient noise levels, would exceed the 55 dB DNL limit. Since ambient noise levels are higher at 16522 Los Gatos Almaden Road, project-generated noise would not increase the ambient.

SOURCE: Table V of Pack Study (Attachment 5)

³⁶ California Department of Transportation, 2004. *Transportation- and Construction-Induced Vibration Guidance Manual*. Contract No. 43A0049, Task Order No. 18. June.

Pharmacy Drive-Thru. Noise level estimates for the proposed pharmacy drive-thru use are based on sound level measurements taken at an existing CVS Pharmacy on Foxworthy Avenue in San Jose. Unlike a fast-food restaurant drive-thru, a pharmacy drive-thru does not have a menu board and speaker. The customer talks directly to the pharmacist at the window. Intercom systems are used but are kept to the lowest volume possible for privacy. Typical pharmacy drop-offs and pick-ups are approximately 2 minutes in duration. Vehicles are typically left idling. At distances greater than 15 feet, the speech is difficult to discern although the voices are audible. The vehicles entered the drive-thru, were left idling, drop-off and pick-up transactions took place, and the vehicles drove off. The noise level over the 2-minute transaction was measured to be 58 dBA L_{eq} .

The highest sound level was also 58 dBA and occurred from vehicles accelerating out of the drive-thru. As indicated in Table 11, noise levels associated with operation of the proposed drive-thru window are estimated at 44 and 40 dBA at the closest residences, which would not exceed ordinance noise limits, a less-than-significant noise increase.

According to CVS, the planned project drive-thru is estimated to serve 87 customers during the daytime hours of 7:00 a.m. to 10:00 p.m. and 4 customers between 10:00 p.m. and 7:00 a.m. A total of 87 daytime transactions and 4 nighttime transactions at 58 dBA L_{eq} over 2-minute durations per transaction would generate noise exposure of 36 dB DNL at 160 feet (105 Carlton Avenue) and 32 dB DNL at 250 feet (16522 Los Gatos Almaden Road). Thus, the DNL noise exposures would not exceed Noise Element noise limits, a less-than-significant noise increase.

Loading Dock. Noise level estimates for the proposed loading dock use are based on sound level measurements taken at an existing CVS Pharmacy on Foxworthy Avenue in San Jose. Hourly average sound levels during loading dock operations ranged from 61.4 to 73.1 dBA L_{eq} . Of the range of noise sources associated with loading dock activities (see Table VI of the Attachment 5), the beverage truck roll up door operations would generate the highest noise levels (65 to 67 dBA), exceeding the 63 dBA ordinance noise limit during the 6:00 a.m. to 1:00 p.m. period, a potentially significant impact. However, noise generated by such activities would stay within the 70-dBA limit during the 1:00 p.m. to 10:00 p.m. period. With implementation of Mitigation Measure NOI-1, loading dock restrictions, this noise impact would be reduced to a less-than-significant level.

As indicated in Table 11, the noise exposure at 105 Carlton Avenue due to loading dock operations was calculated to be 47 dB DNL, while the noise exposure at 16522 Los Gatos Almaden Road was calculated to be 49 dB DNL. Thus, the noise exposures will be within the 54- and 55-dB DNL outdoor noise limits specified in the Los Gatos Noise Element for the closest residential receptors. Since the existing noise exposures range from 57 to 59 dB DNL at 105 Carlton Avenue and the future noise exposures (without the project) are expected to increase to 58 to 60 dB DNL, the 47 dB DNL noise level generated by the proposed loading dock would not increase existing or future noise levels, a less-than-significant noise increase.

The existing noise exposures at 16522 Los Gatos Almaden Road range from 65 to 66 dB DNL and the future noise exposures (without the project) at this residence are expected to increase to 67 to 68 dB DNL. The addition of 49 dB DNL generated by the proposed loading dock would not increase existing or future noise levels at this residence, a less-than-significant noise increase.

Outdoor Mechanical Equipment. Although roof-top mechanical equipment has not yet been specified in project plans, noise levels associated with such equipment has been estimated based on noise measurements taken at a similar project with roof-top mechanical equipment (design/operation assumptions and setback distances are detailed in Attachment 5). Simultaneous operation of all roof-top equipment on the CVS pharmacy building is estimated to generate noise levels of 53 dBA at 105 Carlton Avenue and 51 dBA at 16522 Los Gatos Almaden Road, which would not exceed the most restrictive 54-dBA weekend nighttime ordinance noise limit, a less-than-significant impact.

The noise exposures from operation of roof-top mechanical equipment on the CVS pharmacy building were calculated to be 57 dB DNL at 105 Carlton Avenue and 55 dB DNL at 16522 Los Gatos Almaden Road, which would likely exceed the 55-dB DNL Noise Element noise limit by up to 2 dB. With implementation of Mitigation Measure NOI-2, mechanical equipment screening or design changes, this noise impact would be reduced to a less-than-significant level.

The total noise level of the roof-top mechanical equipment on the proposed Secondary Building is expected to be 52.0 dBA at 105 Carlton Avenue and 44.6 dBA at 16522 Los Gatos Almaden Road. Thus, the noise levels would not exceed the most restrictive weekend morning noise limit of 58 dBA at both residences, a less-than-significant noise impact.

Project-related Traffic Noise Increases on Local Roadways. Project-related increases in traffic noise levels on local roadways were estimated by comparing existing and future traffic volumes without the project to the project traffic volumes on roadways in the vicinity of the project (see the Traffic Impact Study in **Attachment 6** for peak hour traffic volume increases). As indicated in Table 11, the project-related traffic noise increases would not significantly alter the existing and future noise environments along local roadways. Project traffic would therefore have a less-than-significant noise impact.

Parking Lot Noise. Noise from vehicles in the parking lot was estimated based on noise data collected from past studies of parking lot noise sources. The highest noise levels are generated by the closing and car doors, engines starting and vehicles backing out of parking spaces. The average sound level of such an “exiting” (un-parking) operation is 60 dBA at a distance of 15 feet from the front of the parking stall. The operational duration is typically 30 seconds.

At 105 Carlton Avenue, the maximum noise level was calculated to be 54 dBA in the rear yard and 49 dBA at the second floor the home. At 16522 Los Gatos Almaden Road, the noise level was calculated to be 42 dBA at 120 feet, the distance to the nearest parking space. The noise exposure from 700 vehicles (half of the TIS trips) driving along the rear of the CVS store at 10 miles per hour (mph) was calculated to be 44 dB DNL at the 105 Carlton Avenue residence. As indicated in Table 11, noise from vehicles in the parking lot would be within Noise Element noise limits, a less-than-significant noise impact.

The noise exposure from 1,400 vehicles entering and exiting the driveway at Los Gatos Almaden Road at 10 mph was calculated to be 37 dB DNL at 120 feet from the residence at 16522 Los Gatos Almaden Road. Thus, noise from vehicles in the parking lot would be within the Noise Element noise limits, a less-than-significant noise impact.

Trash Collection. Trash dumpsters are proposed to be located approximately 100 feet from 105 Carlton Avenue and 200 feet from 16522 Los Gatos Almaden Road. If trash collection occurs prior to 7 a.m., noise from trash collection trucks would exceed ambient noise levels at these residences, and would have the potential to cause sleep disturbance. Section 16.20.055 of the Noise Ordinance prohibits refuse collection with a refuse collection vehicle between the hours of 6:00 p.m. and 6:00 a.m. in a residential zone. Since the project site is located adjacent to a residential zone, these time restrictions on refuse collection have been included as a condition of project approval and will be imposed by the Town if neighbor complaints are received about refuse collection activities. Required compliance with these ordinance restrictions and condition of approval will reduce noise impacts from this source to less than significant. In addition, Mitigation Measure NOI-3 will also require use of plastic tops on dumpsters to reduce noise from trash collection activities.

12d. Short-Term Noise Increases

Short-term noise increases would occur during demolition of the existing structures on the site and construction of new project buildings. Demolition and construction equipment are typically similar, with

the exception of paving equipment. Thus, the noise levels generated by these two phases would be similar over the course of the entire process.

Demolition/construction equipment noise levels would range from 78 to 95 dBA at 50 feet from the source, and would have the potential to disturb residences along Carlton Avenue. The residence at 105 Carlton Avenue is located approximately 20 feet from the eastern project boundary. It is unlikely, however, that demolition and construction noise would disturb residents along Los Gatos Almaden Road due to existing traffic noise and +100-foot setbacks from the southeast corner of the project site.

Table X of the Pack Study (Attachment 5) provides a list of the demolition and construction equipment expected to be used on the project, their reference noise levels at 50 feet and 25 feet, the distance the equipment needs to operate from the residential property line so as not to exceed the 85-dBA ordinance noise limit (at 25 feet or property plane or boundary), and the equipment noise levels calculated for each of the most impacted residential properties. As shown in this table, operation of most equipment (including paving machines, compactive rollers, scrapers, track loaders, bulldozers, excavators, generators, air compressors without enclosures) could generate sound levels that exceed the 85-dBA ordinance limit at 25 feet. Some equipment could operate in close proximity to adjacent residences.

Although there is a potential that the 85-dBA ordinance limit could be periodically exceeded during project demolition/construction activities, such exceedances would not necessarily result in a significant noise impact because these exceedances may only occur occasionally. The estimated noise levels in Table X are typical noise levels produced by the various pieces of equipment identified. Equipment used in the field can vary slightly, depending on the sizes of engines, how equipment is operated, age of equipment, and many other factors that are unknown at this time and therefore, cannot be predicted with any level of accuracy. In addition, the sound levels at the property boundaries at any given time will change dramatically such that maximum noise levels may occur for very short periods of time or may occur for longer periods of time. Given these conditions and the temporary nature of construction noise, short-term construction-related noise increases are considered to be a temporary significant impact. However, with implementation of noise controls specified in Mitigation Measure NOI-4, construction-related noise impacts would be reduced to a less-than-significant level.

12e. Airport-Related Issues

The project site is not located within an airport land use plan. There is no public airport, public use airport, or private airstrip located within the Town's boundaries or within two miles of the project site. For air travel, the closest international airports are San Jose International Airport (SJC), San Francisco International Airport (SFO), and Oakland International Airport. The proposed project would not expose people residing or working in the area to excessive airport-related noise levels. Therefore, there would be no impact.

Mitigation Measures – Noise (NOI)

The following measures are either required to reduce project-related noise impacts to a less-than-significant level or recommended for consideration:

NOI-1: Loading Dock Restrictions. For unloading/loading activities that occur before 1:00 p.m., all beverage truck drivers shall be required to orient the sides of their trucks with the roll up doors toward the rear of the store during operation of the roll up door (away from the property boundary). This measure could require the driver to turn the truck around if both sides of the truck are to be unloaded.

NOI-2: Mechanical Equipment Design. The Town shall require implementation of the first measure or implement the second measure:

- *Provide acoustically-effective screens at the east and north sides of all roof-top mechanical equipment located within 120 feet from the east parapet of the CVS building. The screens shall be constructed air-tight and shall extend to a minimum of 1 feet above top of the mechanical unit. A gap of 1 inch may be maintained at the bottom of the screen to allow for drainage.*
- *The project applicant shall provide to the Town evidence that the mechanical equipment associated with the project will (preconstruction) and does (post-construction) comply with the standards of the Town of Los Gatos Noise Ordinance.*

NOI-3: *Trash Dumpster Design.* *Trash dumpsters shall have plastic tops to reduce the potential for noise disturbance from trash collection activities.*

NOI-4: *Construction Noise.* *To comply with the Town of Los Gatos Noise Ordinance time and noise limits during project construction, the Town shall require implementation of the following measures:*

- a. *Project contractors shall be required to comply with the Town of Los Gatos Noise Ordinance time and noise limits, including limiting construction activities to the hours between 8:00 a.m. and 8:00 p.m. on weekdays and 9:00 a.m. and 7:00 p.m. on weekends and holidays.*
- b. *Either the use of heavy equipment shall be restricted within 50 feet of the property boundary (80 feet for paving equipment and air compressors without enclosures) or the following quiet or "new technology" equipment shall be utilized as necessary to ensure compliance with the 85-dBA ordinance noise limit (85 dBA at 25 feet or 85 dBA outside the property plane):*
 - *All internal combustion engines used at the project site shall be equipped with a type of muffler recommended by the vehicle manufacturer.*
 - *All equipment shall be in good mechanical condition so as to minimize noise created by faulty or poorly maintained engine, drive-train and other components.*
 - *Temporary berms or noise barriers, such as lumber or other material stockpiles, shall be utilized wherever possible.*
 - *To minimize the potential for noise disturbance at adjacent or nearby residences, appropriate selection of equipment utilized for specific operations shall be done whenever feasible, such as the following:*
 - *Earth Movement: Wheeled equipment should be used rather than track equipment, whenever possible.*
 - *Ground Preparation: A motor grader should be used instead of a bulldozer for final grading.*
 - *Building Construction: Power saws should be shielded or enclosed where practical to decrease noise emissions.*
 - *Compressors and generators should be housed in manufacturer's acoustical enclosure where feasible.*
 - *Stationary equipment shall be located as far from noise sensitive uses as possible in order to meet the 85-dBA ordinance noise limit.*

Issues (and Supporting Information Sources)	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
13. Population and Housing - Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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"/>

13a, 13b, 13c. Growth-Inducement, Displacement of Housing or Residents

The proposed project would not result in a significant increase in local population given its small size (26,503 s.f. of commercial space plus 1,980 square feet of storage/office) and the fact that it would replace a former commercial use. The project would not be considered growth-inducing, since the project would involve redevelopment of an existing developed parcel and the project would not extend roads or infrastructure to any adjacent properties. The General Plan encourages redevelopment of the project area since it designates the project site and surrounding properties as “mixed use commercial.” The project helps to fulfill the Town’s desire for redevelopment of this area as indicated by the General Plan.

Issues (and Supporting Information Sources)	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
14. Public Services -				
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:				
Fire protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Police protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other public facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

14a. Public Services

Services are currently provided to the project site as well as to adjacent commercial and residential uses. No significant increase in demand on public safety services is expected to be required for the proposed project since services were previously provided to the former auto dealership use on the site.

The Santa Clara County Fire Department has reviewed the project plans for site access and water supply, and the project will be required to meet Department requirements for minimum fire flow [1,500 gallons per minute (gpm) at 20 psi], automatic fire sprinklers, hydrant spacing/location (including one private on-

site hydrant), etc.³⁷ The project will be required to install an automatic fire sprinkler system, appropriate fire lane marking, and provide fire hydrants as required. Adequate fire apparatus (engine) access will need to be provided on any access roads, which includes 20-foot pavement width, a minimum turning radius of 36 feet outside and 23 feet inside, and a maximum slope of 15 percent. The Fire Department also requires potable water supplies to be protected from contamination caused by fire protection water supplies. The proposed plan will be subject to formal plan review by the Santa Clara County Fire Department to determine compliance with adopted model codes.

The proposed development plan would encompass commercial uses increasing community commercial space by 26,503 s.f. The Los Gatos/Monte Sereno Police Department currently patrols existing commercial and residential development on and around the project site. Project development would not generate additional population requiring law enforcement services. The potential increases in employment for the proposed project would not necessitate the construction of new police facilities, resulting in a less-than-significant impact.

Project development plans would involve commercial uses, similar to the previous use of the site as an auto dealership. The development of the proposed pharmacy and ancillary commercial uses would not generate additional students requiring services from community educational facilities. Consequently, the project would have less-than-significant effects on the community’s school services.

The project would not increase Town population and, therefore, would not induce additional demand for recreational facilities. The project’s potential impact on the demand for recreational facilities is discussed in Section 15, *Recreation*, below.

Issues (and Supporting Information Sources)	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
15. Recreation -				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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 type="checkbox"/>	<input checked="" type="checkbox"/>

15a. Demand for Recreational Facilities

The project proposes to develop a 26,503 s.f. of commercial space at the intersection of Los Gatos Boulevard and Los Gatos Almaden Road. The development of the commercial uses would not generate an increase in the population of Los Gatos and would not result in increased demand for amenities associated with residential uses, such as neighborhood and regional parks.

15b. Impacts Related to Construction of Recreational Facilities

The proposed project would not add new population to the area, and therefore would not increase the demand for recreational services.

³⁷ Santa Clara County Fire Department, *Development Review Comments, 15600 Los Gatos Boulevard, Los Gatos*, November 18, 2011.

Issues (and Supporting Information Sources)	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
16. Transportation/Traffic - Would the project:				
a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards 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"/>
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) 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"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

The Town’s Traffic Impact Policy (Resolution 1991-174) requires preparation of a detailed traffic study for any project with the potential to generate 20 or more additional AM or PM peak hour trips. The proposed project would add 82 trips during the AM peak hour and 227 trips during the PM peak hour. Based on the Town’s Traffic Impact Policy, a detailed traffic impact study was required and the Town’s contract transportation engineering firm, TJKM Transportation Consultants, completed the study.³⁸ The TJKM traffic study is included as Attachment 6.

16a, 16b. Impacts on the Circulation System and Conflicts with Congestion Management Program

Significance Criteria. The significance thresholds established for the Town of Los Gatos have been applied in this analysis and these are outlined in the Transportation Element of the 2020 General Plan. Policy TRA-3.5 states that new projects shall not cause the level of service for intersections to drop more than one level if it is at Level of Service (LOS) A, B, or C and not drop at all if it is at LOS D or below. The Los Gatos Boulevard/Lark Avenue intersection is in the Santa Clara Valley’s Congestion Management Program, and the CMP standard for acceptable level of service at a CMP intersection is LOS E or better. Since the Town’s threshold is more restrictive, a project that meets the Town criteria would also meet this CMP standard.

³⁸ TJKM Transportation Consultants, *Traffic Impact Study for the Proposed CVS Pharmacy and Commercial Development at 15600 Los Gatos Boulevard*, December 15, 2011.

CMP standards were applied to the analysis of freeway segments. The CMP defines an acceptable level of service for freeway segments as LOS E or better. A project is said to create a significant adverse impact on traffic conditions on a CMP freeway segment if for either peak hour:

- The level of service on the freeway segment degrades from an acceptable LOS E or better under Existing Conditions to an unacceptable LOS F under Project Conditions, or
- The level of service on the freeway segment is an unacceptable LOS F under Existing Conditions and the number of project trips on that segment constitutes at least one percent of capacity on that segment.

A significant impact by CMP standards is said to be satisfactorily mitigated when measures are implemented that would restore freeway conditions to Existing Conditions.³⁹

Project Trip Generation. The proposed project would generate 2,174 daily trips with 82 trips during the AM peak hour (49 inbound and 33 outbound) and 227 trips during the PM peak hour (104 inbound and 123 outbound). The project's estimated trip generation rates are based on development of a 14,576 s.f. drug store with drive-through and a 1,980 square foot mezzanine, a 4,000 s.f. walk-in bank, and 8,000 s.f. of medical offices. Although the types of commercial uses that could ultimately occupy the proposed secondary building could vary, banks and medical offices typically have some of the highest trip generation rates for commercial uses. Therefore, these rates were applied in order to assess the project's maximum (worst-case) impact.

Intersection Level of Service Operation. The TJKM traffic study evaluated the project's impact at eight intersections:

1. Los Gatos Boulevard/Lark Avenue (Signalized)
2. Los Gatos Boulevard/Garden Lane/Gateway Drive (Signalized)
3. Los Gatos Boulevard/Village Square (Signalized)
4. Los Gatos Boulevard/Los Gatos Almaden Road/Chirco Drive (Signalized)
5. Los Gatos Almaden Road/Peach Blossom Lane/Project Access (Two-way Stop Control)
6. Los Gatos Almaden Road/Carlton Avenue (One-way Stop Control)
7. Los Gatos Almaden Road/National Drive (Signalized)
8. Los Gatos Boulevard/Blossom Hill Road (Signalized)

The level of service analysis results are summarized in **Table 12** for the following five scenarios:

1. Existing Conditions: Current (Year 2011) traffic volumes and roadway conditions.
2. Existing plus Approved (Background) Conditions: Current (Year 2011) traffic volumes and roadway conditions with the addition of traffic from approved developments within the Town of Los Gatos.
3. Existing plus Project Conditions: Current (Year 2011) traffic volumes and roadway conditions with traffic added only from the proposed project development.
4. Background plus Project Conditions: Identical to Background Conditions, plus the traffic added from the proposed project.

³⁹ Santa Clara Valley Transportation Authority (VTA), 2009. *Transportation Impact Analysis Guidelines, Congestion Management Program*. Adopted May 1998. Updated March 2009.

5. Background plus Project plus Pending Conditions (Cumulative Conditions): Identical to Background plus Project Conditions and with traffic added from future pending project within the Town of Los Gatos.

Existing Conditions. Los Gatos Boulevard is an arterial roadway with a posted speed limit of 35 miles per hour. Based on the weekday average daily traffic (ADT) data collected during October 2011 for Los Gatos Boulevard (north of Los Gatos Almaden Road), the ADT is approximately 31,300 vehicles per day.

The project site is currently vacant, but the site was previously used by an auto dealership and generated traffic in the project vicinity. Currently, the project site access (a right-in/right-out driveway) along Los Gatos Boulevard is located approximately 330 feet to the north of Los Gatos Almaden Road. There are also two access driveways along Los Gatos Almaden Road. There is an existing sidewalk (approximately six feet wide) on both sides of Los Gatos Boulevard and along the project frontage.

Under Existing Conditions, all study intersections operate at an acceptable service level (LOS C or better).⁴⁰

Existing Plus Approved Projects (Background) Conditions. The following approved, but unconstructed or not fully occupied projects would add a total of 1,196 trips during the AM peak hour and 1,394 trips during the PM peak hour on the Los Gatos street network:

1. 15940 Blossom Hill Road (residential)
2. 15881 Linda Avenue (residential)
3. 371 Los Gatos Boulevard (residential)
4. 55 Los Gatos Saratoga (retail/office)
5. 15720 Winchester Boulevard (office development replaces a single-family home)
6. 14881 National Avenue (medical office development replaces a single-family home)
7. 15400 Los Gatos Boulevard (office/retail)
8. 16005 Los Gatos Boulevard (mixed-use)
9. 950 University Avenue (self-storage)
10. 15928 Union Avenue (residential)
11. Samaritan Way (medical office)
12. Town Library (new library replaces the existing library)
13. 55 Placer Oaks (single-family housing)
14. 16213 Los Gatos Boulevard (residential replaces auto dealership)
15. 800 Blossom Hill Road (senior adult residential)
16. Albright Way Development (office and residential)
17. 930 University Avenue (soccer complex)
18. 106 Town Terrace (single family residential)

Under Existing Plus Approved Projects (Background) Conditions, all eight study intersections would continue to operate at acceptable conditions (LOS D or better).

⁴⁰ Peak hour turning movement counts at the study intersections were conducted during the month of October 2011. CEQA Section 15125 requires that existing conditions be described at the time the NOP is published or if one is not published at the time the environmental analysis commences. At the time technical studies associated with this environmental review commenced and traffic counts were taken, the auto dealership was no longer in operation. Therefore, the existing or baseline condition is considered to be the condition occurring after the dealership closed and impact significance determinations are based on a comparison of project impacts to this baseline condition. TJKM also analyzed changes in peak hour traffic volumes between 2011 and 2013 for intersections along Los Gatos Boulevard between Lark Avenue and Blossom Hill Road, and determined that volume changes were minimal and would not alter conclusions in this traffic impact analysis.

TABLE 12
INTERSECTION LEVEL OF SERVICE OPERATION

Traffic Condition and Intersection	Control	AM Peak Hour		PM Peak Hour	
		Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS
Existing Condition (2011)					
1. Los Gatos Blvd./Lark Ave.	Signal	32.1	C	34.1	C
2. Los Gatos Blvd./Garden Lane/Gateway Dr.	Signal	21.3	C	18.5	B
3. Los Gatos Blvd./Village Square	Signal	9.0	A	12.0	B
4. Los Gatos Blvd./Los Gatos Almaden Rd./Chirco Dr.	Signal	27.0	C	26.5	C
5. Los Gatos Almaden Rd./Peach Blossom Ln./Project Access	Two-way Stop	13.1	B	19.4	C
6. Los Gatos Almaden Rd./Carlton Ave.	One-way Stop	14.2	B	16.6	C
7. Los Gatos Almaden Rd./National Dr.	Signal	9.6	A	20.2	C
8. Los Gatos Blvd./Blossom Hill Rd.	Signal	34.3	C	36.2	C
Existing Plus Approved (Background) Condition					
1. Los Gatos Blvd./Lark Ave.	Signal	35.2	D	36.4	D
2. Los Gatos Blvd./Garden Lane/Gateway Dr.	Signal	20.7	C	18.0	B
3. Los Gatos Blvd./Village Square	Signal	11.8	B	15.4	B
4. Los Gatos Blvd./Los Gatos Almaden Rd./Chirco Dr.	Signal	27.5	C	26.7	C
5. Los Gatos Almaden Rd./Peach Blossom Ln./Project Access	Two-way Stop	13.8	B	21.4	C
6. Los Gatos Almaden Rd./Carlton Ave.	One-way Stop	15.1	C	17.6	C
7. Los Gatos Almaden Rd./National Dr.	Signal	9.6	A	20.5	C
8. Los Gatos Blvd./Blossom Hill Rd.	Signal	36.7	D	37.7	D
Existing Plus Project Condition					
1. Los Gatos Blvd./Lark Ave.	Signal	32.2	C	34.2	C
2. Los Gatos Blvd./Garden Lane/Gateway Dr.	Signal	21.2	C	18.3	B
3. Los Gatos Blvd./Village Square	Signal	9.0	A	11.8	B
4. Los Gatos Blvd./Los Gatos Almaden Rd./Chirco Dr.	Signal	26.4	C	26.5	C
5. Los Gatos Almaden Rd./Peach Blossom Ln./Project Access	Two-way Stop	14.9	B	21.7	C
6. Los Gatos Almaden Rd./Carlton Ave.	One-way Stop	14.3	B	16.8	C
7. Los Gatos Almaden Rd./National Dr.	Signal	10.1	B	20.3	C
8. Los Gatos Blvd./Blossom Hill Rd.	Signal	34.6	C	36.5	D

TABLE 12 (CONT'D)
INTERSECTION LEVEL OF SERVICE OPERATION

Traffic Condition and Intersection	Control	AM Peak Hour		PM Peak Hour	
		Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS
Background Plus Project Condition					
1. Los Gatos Blvd./Lark Ave.	Signal	35.5	D	36.8	D
2. Los Gatos Blvd./Garden Lane/Gateway Dr.	Signal	20.6	C	17.9	B
3. Los Gatos Blvd./Village Square	Signal	11.7	B	15.2	B
4. Los Gatos Blvd./Los Gatos Almaden Rd./Chirco Dr.	Signal	26.8	C	27.3	C
5. Los Gatos Almaden Rd./Peach Blossom Ln./Project Access	Two-way Stop	15.9	C	24.0	C
6. Los Gatos Almaden Rd./Carlton Ave.	One-way Stop	15.2	C	17.9	C
7. Los Gatos Almaden Rd./National Dr.	Signal	9.5	A	20.7	C
8. Los Gatos Blvd./Blossom Hill Rd.	Signal	37.0	D	38.2	D
Background Plus Project Plus Pending Condition					
1. Los Gatos Blvd./Lark Ave.	Signal	50.2	D	61.2	E
With Additional Eastbound Left-turn Lane		41.4	D	46.7	D
2. Los Gatos Blvd./Garden Lane/Gateway Dr.	Signal	20.9	C	19.8	B
3. Los Gatos Blvd./Village Square	Signal	10.9	B	12.9	B
4. Los Gatos Blvd./Los Gatos Almaden Rd./Chirco Dr.	Signal	28.0	C	32.1	C
5. Los Gatos Almaden Rd./Peach Blossom Ln./Project Access	Two-way Stop	18.2	C	35.3	E
With Mitigation: Restripe Northbound approach to provide separate left- & right-turn lanes		16.9	C	32.3	D
6. Los Gatos Almaden Rd./Carlton Ave.	One-way Stop	16.9	C	23.1	C
7. Los Gatos Almaden Rd./National Dr.	Signal	8.6	A	23.8	C
8. Los Gatos Blvd./Blossom Hill Rd.	Signal	45.2	D	42.3	D

Note: Delay = Overall average intersection delay in seconds for signalized or minor street (worst approach) delay for one-way or two-way stop control intersections; LOS = Level of Service.

SOURCE: TJKM Transportation Consultants (see Attachment 6)

Existing Plus Project Conditions. When project-related traffic increases are added to existing volumes (Existing Plus Project Conditions), all eight study intersections would operate acceptably during the AM and PM peak hours (LOS D or better). When project-related traffic increases are added to Background Conditions (Background Plus Project Conditions), there would be a slight increase in average delay, but all eight study intersections would operate acceptably during the AM and PM peak hours (LOS D or better). Therefore, the project's impact on intersection operations in the project vicinity would be less than significant.

TJKM noted that the southbound left-turn lane on Los Gatos Boulevard at Los Gatos Almaden Road is currently operating at capacity. This is apparent from its current signal operation in which the southbound left-turn signal phase is programmed to serve twice per cycle to minimize the queuing situation during the PM peak period. Operating a left-turn signal phase twice per cycle is typically not desired because it reduces green time for through traffic and disrupts traffic progression, in this case, on Los Gatos Boulevard. With addition of the project trips, the queue at the southbound left-turn movement at this intersection will increase by 50 feet (or two vehicles) per cycle. In order to optimize the signal operation, the Town will require, as a condition of project approval, that an additional southbound left-turn lane at Los Gatos Boulevard/Los Gatos Almaden intersection be provided to accommodate the potential queue build-up from project-related trips.

Background Plus Project Plus Pending Projects (Cumulative) Conditions. Pending projects listed above are expected to contribute a total of 1,529 vehicular trips during the AM peak hour and 2,343 vehicular trips during the PM peak hour on the Los Gatos street network. As indicated in Table 12, with the addition of the estimated pending project trips, six study intersections would operate acceptably and at the same level of service as under Background Plus Project Conditions. However, cumulative traffic increases at two study intersections (Los Gatos Boulevard/Lark Avenue and Los Gatos Almaden Road/Peach Blossom Lane) would cause level of service operation to deteriorate to LOS E during the PM peak hour, which would be a significant cumulative impact and project-related traffic contributions would be cumulatively considerable at these two intersections. Cumulative traffic impacts at these two intersections would be as follows:

- Under Cumulative Conditions, the intersection of Los Gatos Boulevard/Lark Avenue would carry significant additional traffic from the proposed North 40 Specific Plan project. Town staff has indicated that this intersection will require road widening and signal modifications to accommodate future traffic increases from cumulative development. The necessary improvements to mitigate cumulative impacts at this intersection consist of the addition of a third eastbound left-turn lane and dedicated receiving lane for the southbound right-turn (or equivalent improvement to be determined by the North 40 project). With these improvements, intersection level of service would improve to LOS D during both peak hours. It should be noted that this intersection was also projected to operate at unacceptable levels without mitigation under Town of Los Gatos 2020 General Plan Conditions, and these improvements were identified as necessary to mitigate future development impacts to a less-than-significant level under the 2020 General Plan. The Town of Los Gatos is pursuing these improvements as part of its Traffic Impact Fee (TIF) Program. This project is in the Town's CIP. The North 40 project is the main driver for the need for these improvements. The need for this improvement to mitigate cumulative impacts would not occur until buildout of the North 40 Specific Plan area (Table 12 demonstrates that the project's impact at this intersection under Background Plus Project Conditions would be less than significant). It is not until the North 40 project is implemented that cumulative traffic increases result in LOS E, and these improvements are needed. Therefore, mitigation consisting of payment of traffic impact fees in accordance with the TIF Ordinance would reduce the project's contribution to this cumulatively significant impact to a less than cumulatively considerable level.
- Under Cumulative Conditions, the approaches of Peach Blossom Lane and the proposed project driveway to Los Gatos Almaden Road are expected to operate at LOS E during the PM peak hour. However, the Town will require, as a condition of project approval, that the applicant be responsible for completing the following improvements to this intersection:
 - Re-stripe the Peach Blossom Lane approach to this intersection to provide separate northbound left- and right-turn lanes.
 - Design the project driveway approach to this intersection to provide two exit lanes to minimize backups into the parking lot.

- Provide a left-turn pocket on the Los Gatos Almaden Road approach to this intersection with a minimum storage capacity of two cars so that cars entering the project driveway do not block through traffic on Los Gatos Almaden Road.

Required completion of these improvements by the project applicant would reduce the project's contribution to this cumulatively significant impact to a less than cumulatively considerable level.

Freeway Impacts. The project's impact on two SR 17 freeway segments (both directions) were evaluated: (1) Lark Avenue to SR 85; and (2) Saratoga Avenue to Lark Avenue. Similarly, the project's impacts on two SR 85 freeway segments (both directions) were assessed: (1) Union Avenue to S. Bascom Avenue; and (2) S. Bascom Avenue to SR 17. These segments currently operate at levels ranging from LOS B to LOS F (see Table VI of Attachment 6 for details). With project implementation, they would continue to operate at LOS B and LOS F (those currently operating at LOS F would continue to operate at LOS F with the proposed project). Since project-related traffic increases would be less than one percent of the study freeway segment traffic during both the AM and PM peak hours, the project's impact on nearby freeways would be less than significant.

16c. Air Traffic Patterns

The project site is not located within an airport land use plan, nor is there a public airport, public use airport, or private airstrip located in the project vicinity. Therefore, the project would have no impact on air traffic patterns, would not directly increase air traffic levels, nor would there be any change in location resulting in substantial safety risks.

16d. Traffic Safety Hazards

Based on collision reports obtained from the Town staff (August 1, 2008 – August 1, 2010), there were four collisions each at the Los Gatos Boulevard/Lark Avenue and Los Gatos Boulevard/Blossom Hill Road intersections. Using the existing peak hour turning movement counts, the number of vehicles entering the Los Gatos Boulevard/Lark Avenue intersection is estimated to be 28.53 million vehicles during the aforementioned two-year period. The estimated average daily traffic (ADT) entering the intersection is 39,075 vehicles per day (vpd). The collision rate for an intersection is defined as the number of collisions per million vehicles entering the intersection. Thus, the collision rate at this intersection is calculated to be 0.14 ($=4 \div 28.53$) collisions per million vehicles. This is lower than the statewide average rate, 0.55 based on the 2009 California state highways collision data for a four-way approach suburban signalized intersection. Similarly, the estimated ADT entering the Los Gatos Boulevard/Blossom Hill Road intersection is 25.56 million vehicles and the collision rate for this intersection is calculated to be 0.16 ($=4 \div 25.56$). The estimated ADT entering the Los Gatos Boulevard/Garden Lane/Gateway Drive intersection is 22.26 million vehicles and the collision rate for this intersection is 0.08 ($=2 \div 22.66$).

No traffic collisions were recorded for the same duration at the Los Gatos Boulevard/Village Square, Los Gatos Boulevard/Los Gatos Almaden Road, Los Gatos Almaden Road/Carlton Avenue and Los Gatos Almaden Road/National Avenue intersections. The calculated collision rates for the Los Gatos Boulevard/Lark Avenue, Los Gatos Boulevard/Garden Lane/Gateway Drive and Los Gatos Boulevard/Blossom Hill Road intersections (August 1, 2008 to August 1, 2010) are well below the statewide collision rate of 0.55. No traffic collision was recorded for the same duration at the other study intersections. The proposed project is expected to have little or no impact on the collision rate (or safety) at the study intersections or on the study road segments.

Vehicular Access. The proposed vehicular access to the proposed project site is via a right-in/right-out (RI/RO) only access on Los Gatos Boulevard and a full access driveway on Los Gatos Almaden Road at

Peach Blossom Lane. Project-related trips from areas to the north on Los Gatos Boulevard are expected to make a left-turn or U-turn at the Los Gatos Boulevard/Los Gatos Almaden Road intersection to access the project site. Entering and exiting both driveways would appear to have good visibility based on a field review by TJKM. The signal operation at Los Gatos Boulevard/Los Gatos Almaden Road intersection appears to create sufficient gaps for entering/exiting cars to access the driveways. No significant traffic safety problems would be posed by the proposed site access configuration.

Construction Traffic. Since the finished floor elevation of the proposed building would be close to the elevation of the existing building, site grading would be close to balanced with only limited export proposed. The Town will require, as a condition of project approval, limited haul truck operations during peak periods.

16e. Emergency Access

The project site has frontage on two public streets: Los Gatos Boulevard and Los Gatos Almaden Road. Direct emergency access to project site facilities would be available from these streets. Therefore, public safety impacts associated with emergency access would be less than significant.

16f. Conflicts with Alternative Transportation (Pedestrian, Bicycle, and Transit Access)

Pedestrian, Bicycle, and Transit Access. At present, there are sidewalks along Los Gatos Boulevard and Los Gatos Almaden Road in the project vicinity. The project site is expected to generate moderate pedestrian traffic along Los Gatos Boulevard and Los Gatos Almaden Road from the adjacent neighborhood. The Los Gatos Boulevard/Los Gatos Almaden Road intersection has pedestrian signals and crosswalks on all four legs of the intersection, providing adequate controlled pedestrian access to the project site. The VTA reviewed project plans and suggested that the Town consider requiring reconfiguration of site frontages on Los Gatos Boulevard and Los Gatos Almaden Road to provide greater buffer between pedestrians and automobile traffic, either through the addition of a planting strip or additional sidewalk width.⁴¹ As indicated by VTA, such measures would help encourage walking to/from the project site and incrementally reduce trip generation and project-related GHG emissions.

Currently, there are bike lanes along Los Gatos Boulevard and Los Gatos Almaden Road near the project site. VTA reviewed project plans and suggested that the Town consider requiring the applicant to provide bicycle parking within the project site, as a condition of project approval. Bicycle parking could include bicycle lockers for long-term parking and two bicycle racks for short-term parking. VTA's Bicycle Technical Guidelines provide guidance for estimating supply, siting, and design for bicycle parking facilities.

Based on field observations, Bus Line 49 runs along Los Gatos Boulevard in the vicinity of the project site. The nearest bus stop for Line 49 is located at the project site's frontage on Los Gatos Boulevard. The Town will require, as a condition of project approval, that the bus stop be maintained at its current location and that the bus duckout meet VTA specifications. A bus duckout was incorporated into current project plans and the proposed design was reviewed by the VTA and the VTA indicated are generally consistent with VTA design standards. VTA requests that this bus stop be maintained with sidewalk that is a minimum 8 feet by 40 feet adjacent to the bus stop to ensure ADA accessibility.

There is an existing bench at this bus stop. Project plans indicate that a bus duckout will be provided on Los Gatos Boulevard, but there is no bench indicated on project plans at the bus stop. The project is not

⁴¹ Email from Robert Swierk, AICP, Senior Transportation Planner, CMA Planning to Jessy Pu, dated January 20, 2012, regarding VTA Comments on TIA Report of CVS Pharmacy – 15600 Los Gatos Boulevard.

expected to have a significant impact on transit ridership levels. However, the VTA has requested re-installation of a bench to encourage transit use.⁴²

Issues (and Supporting Information Sources)	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
17. Utilities and Service Systems – Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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"/>
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 projects projected demand in addition to the providers existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the projects solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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"/>

17a, 17e. Wastewater Facilities and Service

The West Valley Sanitation District (WVSD) provides wastewater collection and disposal services for the town of Los Gatos, as well as Monte Sereno, much of Saratoga and some unincorporated areas of the county within the district boundary. The WVSD’s system within the Town of Los Gatos consists of gravity mains ranging from 6 inches to 27 inches in diameter. The collection system flows north, exiting the Town limits through multiple trunk sewers. These systems continue to the north through the City of San Jose trunk sewers and ultimately to the San Jose/Santa Clara Water Pollution Control Plant in Alviso.

There is an 8-inch lateral sanitary sewer line on the site that served the previous auto dealership use on the property. This existing sewer line connects to a municipal 10-inch sewer main in Los Gatos Almaden Road. For the proposed project, a new 6-inch sewer line would extend eastward from western side of the site between the pharmacy building and the secondary commercial shops. On the eastern side of the property, the sewer line would run southward and connect to the existing 8-inch lateral sewer line in Los Gatos Almaden Road. The new on-site sewer facilities would replace the existing pipelines to accommodate the proposed commercial uses. The new on-site wastewater collection facilities would connect with existing municipal sewer facilities and not require the construction of new, expanded

⁴² Personal communication between Jennifer L. Savage, AICP, Associate Planner, Los Gatos Community Development Department, and Steve Newgren, VTA, on August 20, 2013.

wastewater collection or treatment facilities. Consequently, the project would have a less than significant effect on existing municipal wastewater facilities.

17b, 17d. Water Facilities and Service

Water service to the project area is provided by the San Jose Water Company (SJWC). The SJWC supplies domestic water to Los Gatos, Monte Sereno, San Jose, Campbell, Saratoga, and Cupertino. Water supply sources include ground water, mountain surface water, imported surface water, and the Cupertino Water System. Groundwater is pumped from over 100 wells that draw water from the Santa Clara Groundwater Basin. Surface water imported from the Sacramento-San Joaquin Delta and purchased from the SCVWD comprises 51 percent of SJWC's supply. A smaller portion is impounded in local reservoirs in Santa Clara County. Local surface water from the watershed in the Santa Cruz Mountains is 10 percent of SJWC's supply.

The San Jose Water Company (SJWC) provides water service to existing commercial buildings on the project site via a 12-inch water distribution line in Los Gatos Almaden Road. The proposed utility plan indicates that 2-inch and 6-inch on-site water lines would connect to a water main in Los Gatos Boulevard to serve domestic and fire water to the secondary commercial building. Similarly, the water distribution line in Los Gatos Almaden Road would provide fire and domestic water service to the proposed pharmacy on the site.

The replacement of existing water facilities with new facilities would involve the installation of water-saving fixtures that would comply with Town requirements for water conservation and contribute to achieving community sustainability objectives, a beneficial effect of the proposed project. As a result, impacts on water facilities and service would be less than significant.

17c. Stormwater Drainage Facilities

There are storm drain facilities on the site. Proposed storm drainage facilities are discussed above in more detail under Section 9, Hydrology and Water Quality.

17f, 17g. Solid Waste

The West Valley Collection & Recycling, LLC (WVCR) is the exclusive recycling, green waste, and garbage hauler for the Town of Los Gatos, the cities of Campbell, Monte Sereno, and Saratoga and unincorporated Santa Clara County. All recycling, green waste, and garbage are picked up by WVCR and transported directly to the Guadalupe Landfill, located in the City of San Jose.

The Guadalupe Landfill is a Class III solid waste landfill. The total permitted capacity of the landfill is 16.5 million cubic yards. As of the end of 2008, the landfill has used approximately 4.8 million cubic yards or 29 percent of its capacity. The projected capacity remaining as of the end of 2008 is 11.7 million cubic yards. Currently, the landfill is expected to reach its capacity in 2031.

WVCR provides single stream recycling to single-family and multi-family residents as well as commercial customers. Single stream recycling means all recyclables are placed in a single bin and do not need to be sorted based on the material type (i.e. paper, plastic, metal, etc.). All recyclable materials are sorted at WVCR's Materials Recovery Facility (MRF) in the City of San Jose. WVCR also collects green waste, or yard trimmings, from residential customers. The green waste is taken to the Guadalupe Landfill.

The implementation of the General Plan policies for solid waste handling would promote waste reduction and compliance with recycling regulations. Consequently, the project's impact on solid waste services would be less than significant.

Issues (and Supporting Information Sources)	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
18. Mandatory Findings of Significance -				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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"/>

18a, 18c. Significant Impacts on the Natural and Man-Made Environments

This Initial Study indicates the project has the potential to degrade the quality of the environment and adversely affect human beings in the following manner:

- **Geology and Soils:** Fill materials and loose alluvial materials underlying the subject site are potentially compressible and could be subject to total and differential settlement.
- **Hazards and Hazardous Materials:** Public health risks from worker/public exposure to hazardous building materials present on the project site and potential contaminants in site soils.
- **Noise and Vibration:** Exposure of adjacent residents to significant noise increases from beverage truck roll up door operations at the proposed loading dock, if they occur between 6:00 a.m. and 1:00 p.m. Operation of roof-top mechanical equipment could exceed the 55-dB DNL Noise Element noise limit by 2 dBA.

Mitigation measures outlined in this Initial Study will be required to reduce these impacts to less-than-significant levels.

18b. Cumulative Impacts

When the proposed project is considered together with other recently constructed, approved, or proposed projects in the vicinity, the proposed project could contribute to cumulative impacts, particularly those related to traffic increases and associated air quality and noise impacts. Projects located within the project area and within the Town of Los Gatos that have been approved but not yet constructed or constructed but not yet fully occupied are listed as follows:

1. 15940 Blossom Hill Road (residential)
2. 15881 Linda Avenue (residential)
3. 371 Los Gatos Boulevard (residential)
4. 55 Los Gatos Saratoga (retail/office)
5. 15720 Winchester Boulevard (office development replaces a single-family home)

6. 14881 National Avenue (medical office development replaces a single-family home)
7. 15400 Los Gatos Boulevard (office/retail)
8. 16005 Los Gatos Boulevard (mixed-use)
9. 950 University Avenue (self-storage)
10. 15928 Union Avenue (residential)
11. Samaritan Way (medical office)
12. Town Library (new library replaces the existing library)
13. 55 Placer Oaks (single-family housing)
14. 16213 Los Gatos Boulevard (residential replaces auto dealership)
15. 800 Blossom Hill Road (senior adult residential)
16. Albright Way Development (office and residential)
17. 930 University Avenue (soccer complex)
18. 106 Town Terrace (single family residential)

These projects are evaluated in the above sections under Background Conditions. The Town has identified the following pending projects (Background Plus Pending, or Cumulative Conditions), which are foreseeable projects that are proposed but not approved, and could add traffic to the study intersections:

1. North Forty Specific Plan (mixed-use)
2. 15500 Los Gatos Boulevard (redevelopment assumptions for Moore Buick GMC)
3. 620 Blossom Hill Road (redevelopment assumptions for Bentley Silicon Valley)
4. 20 Dittos Lane Apartments (residential)
5. Twin Oaks (single family residential subdivision)
6. 300 Marchmont Road (k-8 private school expansion)
7. 16212 Los Gatos Boulevard (residential replaces auto dealership)
8. 339-341 Bella Vista (single family residential)
9. 135 Riviera Drive (residential apartments expansion)

The geographic scope of the cumulative analysis varies by resource area. For the cumulative traffic assessment, the geographic scope of the cumulative analysis includes 8 intersections along Los Gatos Boulevard and Los Gatos Almaden Road. The geographic scope of the cumulative air quality analysis is regional (San Francisco Bay Area Air Basin), while the geographic scope of the greenhouse gas analysis is global. The cumulative noise impact analysis is more localized and limited to the area in the vicinity of the project site. For the evaluation of cumulative impacts on public services and utilities, the geographic scopes vary with each service agency's service boundary, which is the town boundary in some cases.

Of the above-listed projects, none are located in the immediate project vicinity except for 15500 Los Gatos Boulevard, which is located adjacent to the site's northern boundary. There is no specific development proposal for this site at this time and therefore, no cumulative construction-related air quality or noise impacts from overlapping construction at the two sites are expected to occur. This site was identified in the General Plan Update as having redevelopment potential and the cumulative traffic analysis accounts for potential future redevelopment, but there are no site-specific redevelopment plans.

In addition, the North Forty Specific Plan project is located approximately ½ mile north of the project site and due to its proximity, there is a potential for cumulative traffic and related air quality impacts, which are discussed above under these topics. Based on the discussions above, with implementation of mitigation measures specified in this Initial Study, the project's contribution to cumulative air quality, noise, and traffic impacts would be less than cumulatively considerable and therefore, less than significant.

INITIAL STUDY – 15600 & 15650 LOS GATOS BOULEVARD

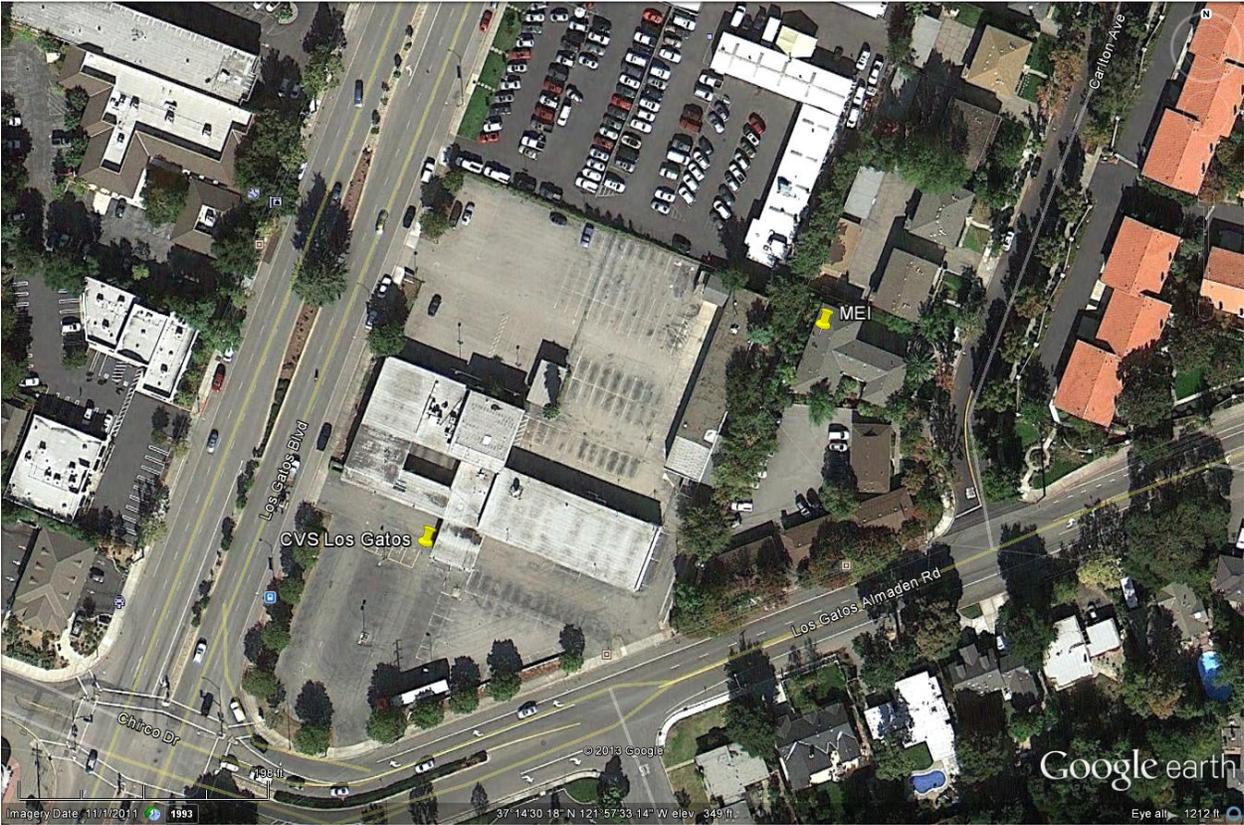
ATTACHMENT 1

LOCATION OF MAXIMALLY EXPOSED INDIVIDUAL (MEI)

IN

HEALTH RISK SCREENING ANALYSIS

Maximally-Exposed Individual (MEI) Location, 15600 Los Gatos Boulevard, Los Gatos, CA



INITIAL STUDY – 15600 & 15650 LOS GATOS BOULEVARD

ATTACHMENT 2

ARBORIST REVIEW OF PLANS

RECENTLY RECEIVED

(PLAN SHEETS DATED 2/6 & 7/2013)

15600 & 15650 LOS GATOS BOULEVARD

LOS GATOS, CALIFORNIA

BY

DEBORAH ELLIS, MS

APRIL 19, 2013

(UPDATED AUGUST 21, 2013)

Deborah Ellis, MS

Consulting Arborist & Horticulturist



Jennifer Savage
Community Development Department, Town of Los Gatos
110 E. Main Street
Los Gatos, CA 95031

April 19, 2013 (Updated August 21, 2013)

15600 & 15650 Los Gatos Boulevard
Arborist Review of Plans Recently Received (plan sheets dated 2/6 & 7/2013)

RECEIVED
AUG 21 2013
TOWN OF LOS GATOS
PLANNING DIVISION

The plans present a very unique, colorful and interesting landscape around the proposed CVS Pharmacy and Secondary Retail Shops that are proposed for this site. Unfortunately the existing trees that are proposed to be saved in the new landscape will probably not survive if the development proceeds as planned.

As background information, I originally evaluated the existing trees on this site during December of 2011. My original arborist report for this project is dated December 22, 2011. Since that original report the plans have been changed, and so this second arborist review is necessary.

Because I had not seen the trees in more than a year I returned to the site last week to briefly recheck their condition and compare their locations with their (unnumbered) locations on the plans. I found that the plans did not match the existing site conditions relative to the location of several of the trees. The Existing Site Plan (topographic map, sheet DR-2) also does not include any existing trees, so perhaps the trees on the plans are approximately located because they were not included in the topographic survey of the site. This is a problem from an existing tree retention standpoint. On page 14 I have included an updated aerial map of the site for reference. On page 13 an annotated Existing Tree & Removal Plan (sheet DR-4) shows some of the tree location issues that are discussed in this report. I have also included an updated Summary Tree Table on page 12.

PO Box 3714, Saratoga, CA 95070. 408-725-1357. decah@pacbell.net. <http://www.decah.com>.

15600-650 Los Gatos Blvd., Arborist Report #2. April 19, 2013. (Updated August 21, 2013)

Page 1 of 14



Many of the trees, particularly the southern magnolia street trees along Los Gatos Boulevard and Los Gatos – Almaden Road were not in good condition in December of 2011. At that time the site had been abandoned for a while and these trees (and the lawn that they were planted in) had not been irrigated and were in poor condition. As far as I can tell irrigation to the site is still turned off. At my recent site visit I found that these trees were in about the same condition as they were in 2011, except that **magnolia #14** had deteriorated further and appears to be dying.

The Northeast corner of the site had been cleared of weedy brush and debris since the last time I was on site. See the photos on pages 3 and 4 which show this area. During my original tree survey in 2011 this portion of the site was an impenetrable thicket. Due to the recent clearing I found two additional protected trees in this area that I was not previously aware of. I have labeled these **trees #21** and **#22** on the enclosed revised Existing Tree & Removal Plan and aerial map of the site on pages 13 and 14. Photos of both of these oaks are on pages 3 and 4.

- **Tree #21** is a 10-inch diameter coast live oak with good vigor, fair structure and fair/good preservation suitability. Tree height is 30 feet and canopy width is 15 feet.
- **Tree #22** is a 4-inch coast live oak with fair/good vigor, fair structure and fair preservation suitability. Tree height is 22 feet with a canopy spread of 8 feet.

Although both of the above trees are shown to remain on the plans, I think that they will both need to be removed. They are located within a proposed parking area or bioswale. Whatever the case, their trunk locations need to be surveyed and accurately plotted on all of the site-based plans.

Since the recent cleanup it is also possible to see the canopy of the **North neighbor's Monterey cypress** and how far and low it overhangs the site. This tree is over the parking area and clearance pruning will be necessary. Please show the dripline of this tree on the plans so that I get an idea of how much pruning is necessary. See page 4 for a photo of this tree.



The photo above shows the Northeast corner of the site which has been cleared of brush and debris, and lower branches removed from several small coast live oak trees. **Acacia #5** is at right next to the building. Arrows point to new protected **trees #21 and 22**. A close-up photo of these two trees is on the next page



This photo of the Northeast corner of the site shows the lower portion of the trunks of coast live oak #21 (right) and #22 (left). A red arrow points to the North neighbor's large Monterey cypress tree on the adjacent property. Much of the canopy of this tree overhangs the project site quite low.



To follow are my comments and recommendations, and also some questions about the plans I have reviewed, relative to the existing trees:

1. **Existing Site Plan, sheet DR-2:** existing trees are not included on this plan. Existing tree trunk locations and preferably driplines should be accurately surveyed and included on the existing site topography map. This is necessary in order for accurate locations of tree trunks and driplines to be included on other construction plan sheets. The property should be resurveyed to include the trunk and driplines of the remaining 22 existing numbered trees. The tree tag number for each tree should be included as well with its trunk location as well. After this is done please send the updated plans back to me for review and comment.
2. **Existing Tree & Removal Plan, sheet DR-4:** Several existing trees are missing or not in the correct location on the plans. Tree trunk locations definitely inaccurate from regarding tree #4/5 and 15-18. Trees #6 and 7 definitely located inaccurately, as tree #7 is far off to the west side of tree #6 and not directly behind it as shown on the plan. In the field I measured the trunk of tree #6 (a 22" diameter coast live oak) at 9 feet from the rear fence. On the Existing Tree Removal plan this tree is shown to be 26 feet from the fence. Tree #8 is shown to be removed on this plan; shown to be saved (?) on other plan sheets. Tree #21 may be located in accurate or approximate location, but #22 is not shown. These same discrepancies carry over to other plans, including the landscape plan.
3. **Preliminary Grading Plan, sheet DR-5:**
 - a. Some existing tree locations on this plan do not match existing tree locations on other plans, such as the vicinity of trees #13-18 on Existing Tree & Removal Plan. Tree trunk locations on all plan sheets must match and be accurate.
 - b. Bus stop grading: looks very close to one of the trees – 15/16? (Not sure which one to previously mentioned discrepancies). Need accurate tree locations to determine if this grading is too close to tree.
 - c. Bioswale/Drain pipe near trees #6, 7: if this trench is installed it will likely cause the removal of these two trees. There is already a 4-foot grade drop behind these trees. The swale is shown to be 10 feet wide. The tree is 9 feet from the rear fence. How can this swale be constructed without eliminating this oak? If this tree is to be saved then there must be a break in the swale around it – at least 10 feet on either side of the trunk. After this tree is accurately surveyed please prepare an elevation detail of how the drainage swale will be constructed behind this tree – I do not think it is possible to construct a continuous linear swale without removing the tree. Please see the photos on pages 6 and 7 which show this area.
 - d. Oak #6 should also have a minimum 9-foot undisturbed zone of soil all around the trunk, including the downslope behind it, if this tree is to remain. The proposed planter around this trunk is shown to be only 6 feet wide, so that will leave less than 2 feet



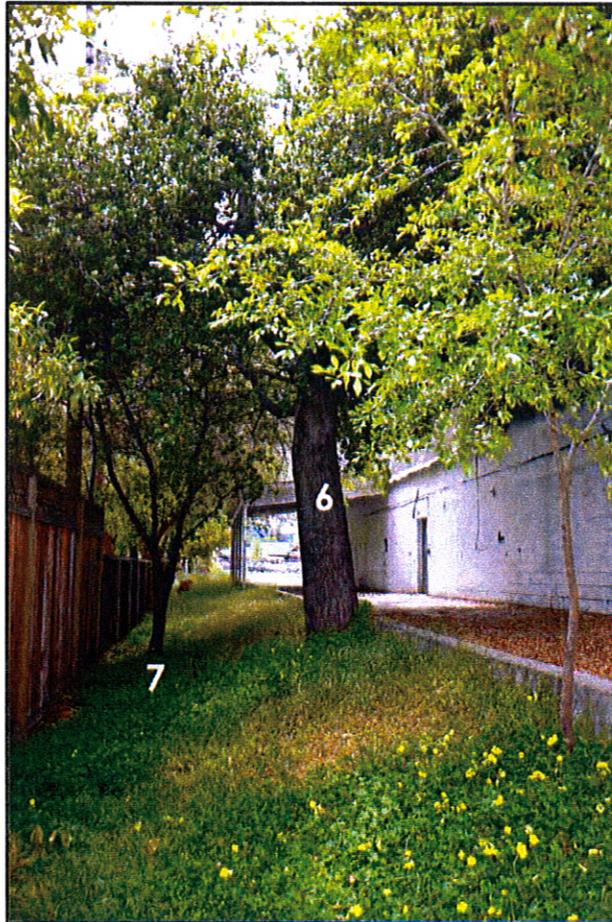
on either side of the trunk. Nine feet plus 9 feet plus 2 feet for the trunk means that the planter needs to be 20 feet wide with the trunk in the center. This can be obtained by eliminating one parking space on either side of the trunk. Keep in mind that the 9-foot zone must include any over-excavation beyond improvements. The slope on the southeast side of the tree must be preserved as well; this is part of the "existing" grade around the tree. The narrow peninsula-type in the parking lot across from this tree could be eliminated to compensate for the larger and more important landscape area around this oak and facilitate traffic flow through this area.

- e. The concrete loading dock which abuts the trunk of oak #6 will have to be removed. It may still be possible to save the tree if this is removed carefully without removing any underlying base rock material within the 9-foot zone as described above for this tree.



Coast live oaks #6 and 7,

In this photo taken directly across from oak #6 you can see that oak #7 is not directly behind oak #6 but is instead offset about 8 feet to the west (right in the photo).



Coast live oaks #6 and 7,

Left photo: trees from the east. The slope on which the two trees are located is most obvious from this angle.

Right photo: trees from the west.



4. **Landscape Planting Plan, sheet DR-7:** the proposed landscape is colorful, interesting and unique. Unfortunately in many areas it is not conducive the survival of the existing trees. The first step of course, is to get these trees accurately located on the plans.
- a. Much of the planting planned around the magnolias is relatively drought-tolerant. This does not match the water requirements of the magnolias, which is high. I understand that the installation of drought tolerant landscaping is encouraged by the Town. I also encourage the use of drought tolerant landscaping, but we need to make some exceptions for the magnolia trees. I recommend separating the magnolias and their irrigation from that of the surrounding drought tolerant landscaping. How much space should there be between the magnolias and any adjacent drought tolerant landscaping? There is no absolute answer, but a 10-foot radius all around the trunk of each tree would be good. If this is too large then get as close to 10 feet as you can. Magnolias can become large trees if they have enough water and a good growing environment. The magnolias on this site can definitely grow much larger than they are now if their environmental conditions are improved. The more water and the more undisturbed and unplanted, mulched space around their trunks the larger they will grow. The magnolias should also be on their own separate irrigation valve so that they can be irrigated independently of the drought tolerant landscaping. For their irrigation I recommend Netafim Technet™ drip tubing on top of the soil and underneath mulch. Use the 0.4 meter emitter spacing and 1.0 gallons per hour/emitters. The tubing should start 2- 3 feet from the trunks of the trees and be arranged in concentric circles approximately the same distance apart as the emitter spacing apart throughout the 10-foot radius around each tree.
 - b. New planting comes too close to the trunks of the existing trees. For the **magnolia trees** there should be no new planting within a minimum of 5 feet from the trunk, but 10 feet is better as explained in the paragraph above. However large the area is around the magnolias it shall be dealt with as described in the above paragraph. Because the magnolia trees are all planted in a lawn area, the mulch should be reduced to 2 inches in depth and the existing lawn grass shall not be removed -- the mulch shall just be spread over it. The grass can be allowed to die on its own or this can be facilitated with careful herbicide application. For **coast live oaks #6 and #7** (if they remain) there should be no planting within a minimum 10-foot radius of the trunks of these trees. In addition there may only be single-emitter drip irrigation beyond the 10-foot distance. There shall be no irrigation spraying into the mulched area these oaks. **For any other trees on site that may remain** there shall be no new planting within at least a radius of 5xDBH for each of the trees (see the Complete Tree Table in my December 22, 2011 arborist report for these distances). This zone shall be filled only with a 3-4 inch depth of wood, bark or tree trimming chippings mulch.
 - c. New trees planned for the rear perimeter of the site. There is a bioswale planned here, and bioswales and trees do not go together very well. Even if there were no bioswale, much of this area is overhung and shaded by large neighboring Chinese elm trees. Please see the photos on the next two pages. Perhaps it is better to take advantage of these neighboring trees,



instead of planting two rows of trees in close proximity. In any case this area needs some more thinking about. The effect of the bioswale on the neighboring trees should also be taken into account. Perhaps we should have a meeting on site and look at this area to determine how it can best be dealt with.



East neighbor's overhanging Chinese elm trees.

Deborah Ellis, MS

Consulting Arborist & Horticulturist



Service since 1984



East neighbor's overhanging Chinese elm trees (background).

PO Box 3714, Saratoga, CA 95070. 408-725-1357. decah@pacbell.net. <http://www.decah.com>.

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Deborah Ellis, MS

Consulting Arborist & Horticulturist



- d. Decorative boulders too close to tree trunks. Please maintain the 5xDBH distance between any boulders and the base of the trunk of the trees. There will likely be some excavation needed to properly anchor them, and even if this were not the case the soil will be very compacted in their vicinity.
 - e. Tree Notes/Tree Protection Notes (also on D4): remove all of these notes. There are several items in these notes that are outdated, incorrect or conflict with the Town tree protection directions, or the recommendations in this report. All notes relative to trees shall refer to Town of Los Gatos Tree Protection Directions and this arborist report. Some of the recommendations in this report will revise the landscape design around certain trees and/or will replace some of the Notes.
5. **I have some additional questions/concerns about the nearness of improvements to some additional trees, but since the trees are not accurately located on the plans I am not going to discuss this yet.** Things may change after I receive the revised plans with tree trunks accurately located.

I certify that the information contained in this report is correct to the best of my knowledge, and that this report was prepared in good faith. Thank you for the opportunity to provide service again. Please call me if you have questions or if I can be of further assistance.

Sincerely,

Deborah Ellis, MS.
Consulting Arborist & Horticulturist
Certified Professional Horticulturist #30022
ASCA Registered Consulting Arborist #305
I.S.A. Board Certified Master Arborist WE-457B

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Updated Summary Tree Table

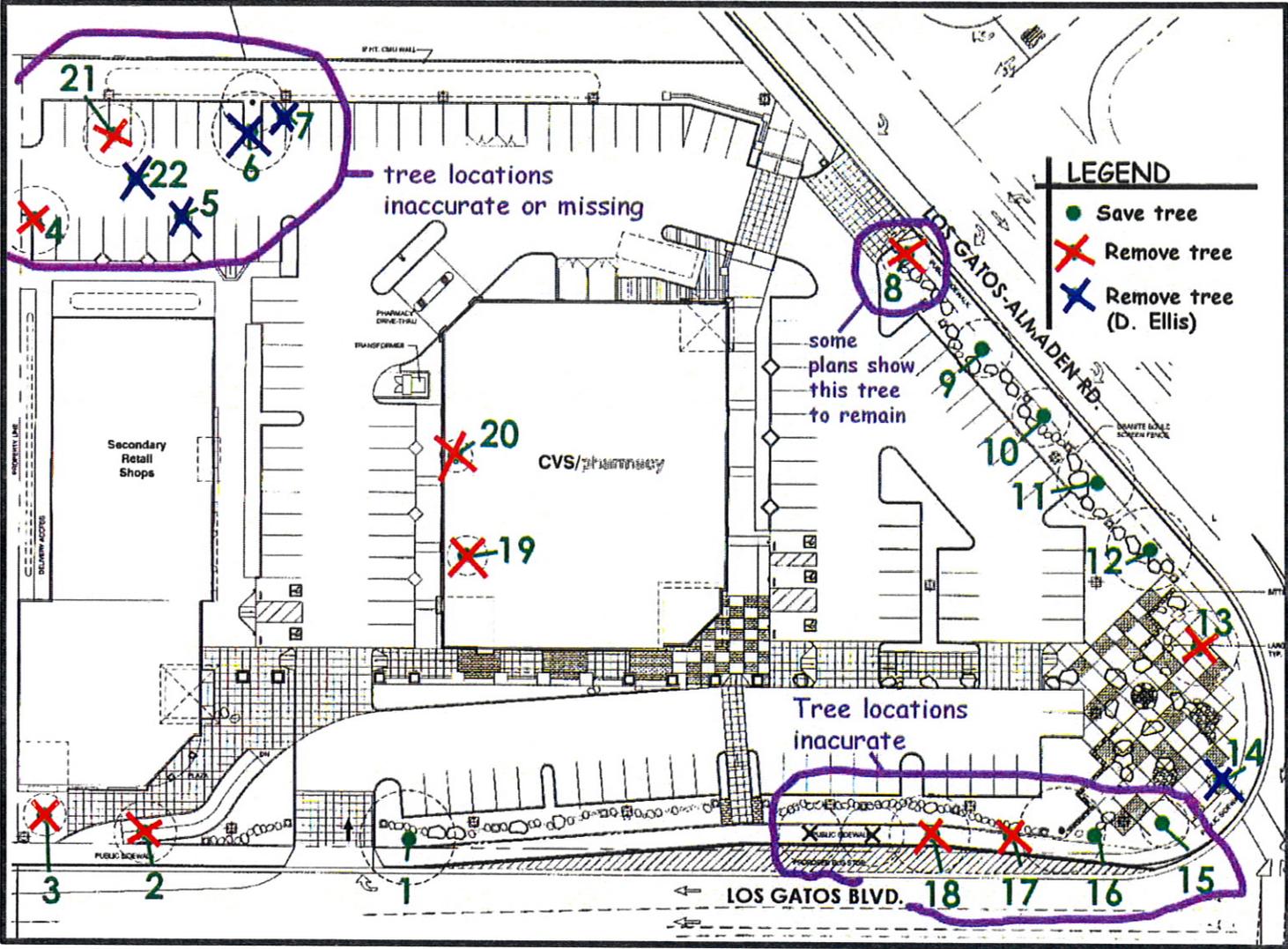
Tree #	Common Name	Trunk Diam. @ 3 ft.	Preservation Suitability	Expected Construction Impact	Action	Reason
01	magnolia	16	Good	Uncertain*	Uncertain	Construction
02	magnolia	10	Fair/Good	Severe	Remove or redesign	Construction
03	magnolia	6	Fair	Severe	Remove or redesign	Construction
04	coast live oak	13	Fair	Severe	Remove	Construction
05	green wattle	10	Fair	Severe	Remove	Construction
06	coast live oak	22	Fair/Good	Severe	Remove or redesign	Construction
07	coast live oak	8	Fair/Poor	Severe	Remove or redesign	Construction
08	magnolia	8	Fair	Severe	Remove	Construction
09	magnolia	10	Fair/Good	Uncertain	Uncertain	Construction
10	magnolia	9	Fair	Uncertain	Uncertain	Construction
11	magnolia	11	Fair/Good	Uncertain	Uncertain	Construction
12	magnolia	15	Fair/Good	Uncertain	Uncertain	Construction
13	magnolia	13	Fair/Good	Uncertain	Uncertain	Construction
14	magnolia	8	Poor	Uncertain	Remove	Overall Condition
15	magnolia	12	Fair	Uncertain	Uncertain	Construction
16	magnolia	11	Fair	Uncertain	Uncertain	Construction
17	magnolia	10	Fair	Severe	Remove	Construction
18	magnolia	10	Fair	Severe	Remove	Construction
19	evergreen flowering pear	7	Fair/Poor	Severe	Remove	Construction
20	Mexican fan palm	21	Fair	Severe	Remove	Construction
21	coast live oak	10	Fair/Good	Severe	Remove or redesign	Construction
22	coast live oak	4	Fair	Severe	Remove or redesign	Construction

***Uncertain Expected Construction Impact and Action is due to potential inaccurate location of tree on plans**

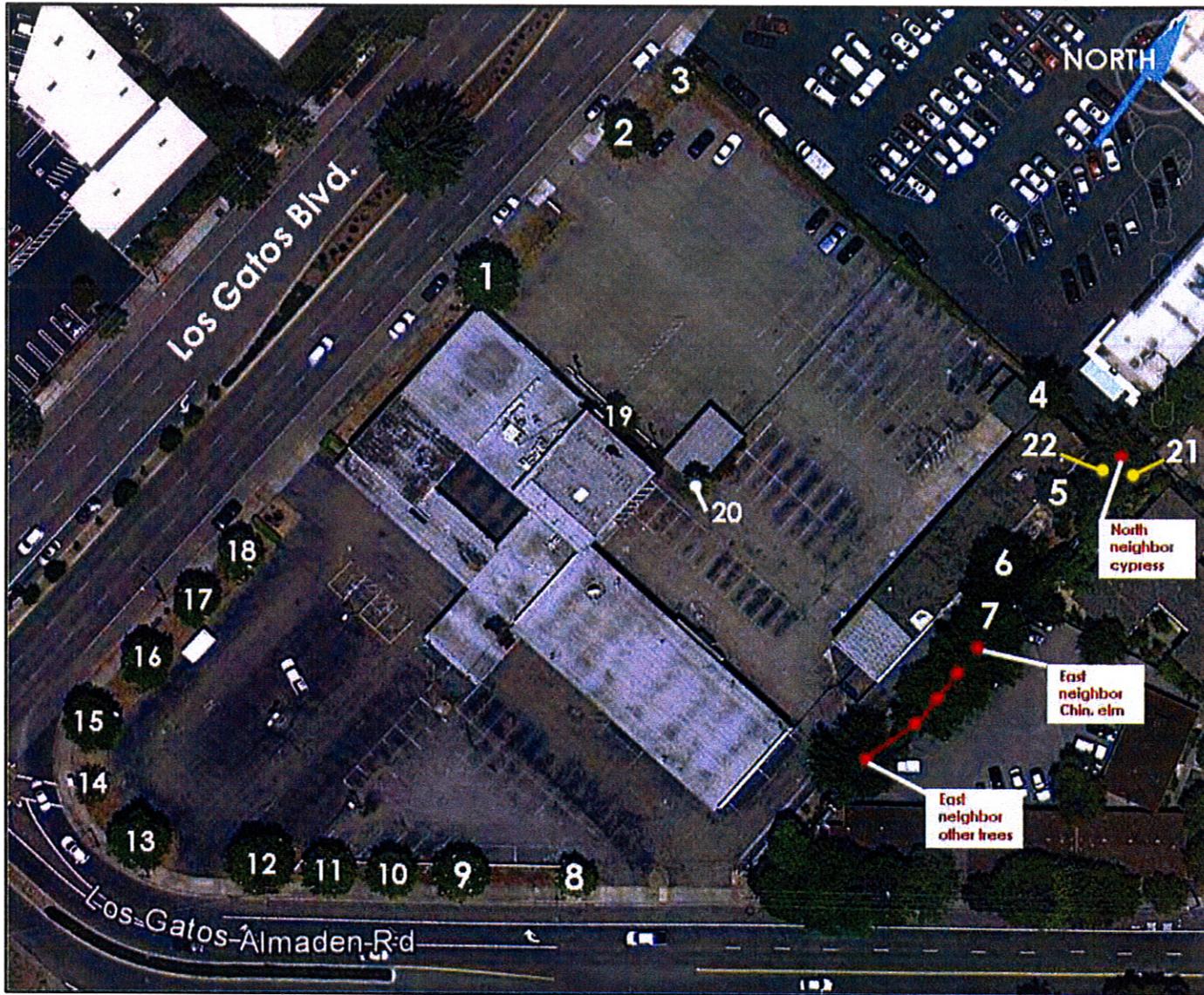
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Service since 1984



Existing Tree Removal Plan annotated as per this report



Aerial Map

With numbered tree locations

INITIAL STUDY – 15600 & 15650 LOS GATOS BOULEVARD

ATTACHMENT 3

RECOMMENDATIONS OF
GEOTECHNICAL EVALUATION

CVS PHARMACY

LOS GATOS BOULEVARD AND LOS GATOS ALMADEN ROAD
LOS GATOS, CALIFORNIA

BY

NINYO & MOORE

JUNE 7, 2010

- Following building pad preparation, we estimate that footings supported on engineered fill materials may undergo a total settlement on the order of 1 inch under the anticipated structural loads. Differential settlement is estimated to be approximately ½ inch over a horizontal distance of approximately 40 feet.
- Groundwater was encountered during drilling at a depth of approximately 43 feet in boring B-5. The depth to groundwater varies due to seasonal precipitation, subsurface conditions, irrigation, groundwater pumping, and other factors.
- The Expansion Index of a selected near surface sample was evaluated and found to be 37, which corresponds to a low expansion potential.
- The subject site is not located within a State of California Earthquake Fault Zone (Alquist-Priolo Special Studies Zone). The probability of surface fault rupture or secondary ground deformation is considered low at the site.
- The design PGA was estimated to be 0.61g based on the USGS (2009) ground motion calculator (web-based).
- Our limited laboratory corrosion testing indicates that the near-surface site soils can be classified as non-corrosive based on California Department of Transportation (Caltrans, 2003) corrosion guidelines.

10. RECOMMENDATIONS

The following sections include our geotechnical recommendations for construction of the proposed CVS Pharmacy building and associated improvements. These recommendations are based on our evaluation of the site geotechnical conditions and our understanding of the planned construction, including anticipated foundation loads. The proposed site improvements should be constructed in accordance with the requirements of applicable governing agencies.

10.1. Earthwork

Earthwork at the site is anticipated to consist of relatively shallow cuts and fills, trenching, and subgrade preparation for pavements and exterior hardscape. Earthwork operations should be performed in accordance with the requirements of applicable governing agencies and the recommendations presented in the following sections of this report.

10.1.1. Pre-Construction Conference

We recommend that a pre-construction conference be held. The owner and/or their representative, the governing agencies' representatives, the civil engineer, Ninyo & Moore, and the contractor should be in attendance to discuss the work plan and project schedule and earthwork requirements.

10.1.2. Site Preparation

Prior to performing excavations or other earthwork, the site should be cleared of any debris still existing from the demolition of previous improvements, foundation remnants, vegetation, and loose or otherwise unsuitable soils. Existing utilities (if any) to remain in place should be located and protected from damage by construction activities. Obstructions that extend below the finished grade, including foundations, underground utilities, vaults, and hydraulic lifts should be removed and the resulting holes/excavations backfilled with compacted soil. The compacted soil should be placed in accordance with our recommendations provided below in Section 10.1.6. Materials generated from the demolition and clearing operations should be removed from the project site and disposed of at a legal dump site.

10.1.3. Excavation Characteristics

Based on our field exploration, we anticipate that excavations within existing fill and alluvial materials at the site may be accomplished with conventional earthmoving equipment in good working condition. Based on our evaluation, we anticipate that the materials encountered will be comprised predominantly of fine-grained clay and clayey sand with variable amounts of gravel. Oversize material, including cobbles, encountered during excavation operations may not be suitable for backfill and should be disposed of off-site. Contractors should make their own independent evaluation of the excavatability of the on-site materials prior to submitting their bids.

10.1.4. Treatment of Near Surface Soils

In order to provide suitable support for the proposed building, we recommend that the building pad be overexcavated and recompacted to a depth of approximately 3 feet beneath the existing grade or to a depth that provides 2 or more feet of compacted fill beneath the building foundations, whichever is deeper. The overexcavation should remove existing fill and loose alluvial deposits and should expose relatively dense alluvial deposits. Additional overexcavation of loose, soft, and/or wet areas, and/or undocumented fill may be appropriate, depending on our observations during construction. The limits of the excavation should extend laterally so that the bottom of the excavation is approximately 5 feet beyond the outside edge of the building's footings or a distance equal to the depth of the overexcavation, whichever is farther. The excavation bottom should be evaluated by our representative during the excavation work. The exposed bottom should be scarified to a depth of approximately 12 inches, moisture conditioned, and compacted prior to the placement of fill. Soils placed to backfill the excavation should be compacted to 90 percent or more relative compaction as evaluated by American Society for Testing and Materials (ASTM) D 1557.

In areas of pavements subject to vehicle traffic, the near-surface soils should be removed and recompacted to a depth of approximately 2 feet or more below the existing ground surface or pavement subgrade, whichever is deeper. Additional excavation of loose, soft, and/or wet areas may be appropriate. The limits of the excavation should extend laterally so that the bottom of the excavation is approximately 2 feet beyond the outside edge of the pavement or a distance equal to the depth of the overexcavation, whichever is farther. The excavation bottom should be evaluated by our representative during the excavation work. The exposed bottom should be scarified to a depth of approximately 12 inches, moisture conditioned, and compacted prior to the placement of fill. Soils placed to backfill the excavation should be compacted to 90 percent or more relative compaction as evaluated by ASTM D 1557.

In lieu of the overexcavation and recompaction of the upper soil/fill, the owner may choose to reduce the depth of overexcavation or to scarify and recompact the upper 12 inches of subgrade beneath the proposed pavement and exterior hardscape per the compaction recommendations in our report. However, if chosen, the owner should acknowledge and accept that there is a higher risk of differential settlement in these areas due to the variability of the density in the upper soils, and there may be a potential need for repair work beyond regular maintenance.

Subgrade for sidewalks and exterior flatwork areas should be prepared by scarifying the upper approximately 12 inches of exposed subgrade, moisture conditioning to slightly over optimum moisture content, and compacting to 90 percent or more of the laboratory maximum dry density as evaluated by the latest addition of ASTM 1557. Overexcavation of loose, soft, and/or wet areas, and/or undocumented fill may be appropriate and should be performed as appropriate.

10.1.5. Fill Material

In general, the on-site soils should be suitable for re-use as fill material, except in the upper 2 feet beneath the building pad. Fill material should be free of trash, debris, roots, vegetation, or other deleterious materials. Fill should generally be free of rocks or lumps of material in excess of 4 inches in diameter.

Import material should consist of clean, non-expansive, granular material which conforms with the latest edition of “Greenbook” Standard Specifications for Public Works Construction for structure backfill. “Non-expansive” can be defined as soil having an Expansion Index of 50 or less in accordance with the Uniform Building Code (UBC) Standard 18-2 (International Conference of Building Officials [ICBO], 1997). Soil should also be tested for corrosive properties prior to importing. We recommend that the imported materials satisfy the Caltrans (2003) criteria for non-corrosive soils (i.e., soils having a chloride concentration of 500 parts per million [ppm] or less, a soluble sulfate content of approximately 0.20 percent [2,000 ppm] or less, and a pH value of 5.5 or

higher). Materials for use as fill should be evaluated by our representative prior to importing. The contractor should be responsible for the uniformity of import material brought to the site.

10.1.6. Fill Placement and Compaction

Fill soils placed should be compacted in horizontal lifts to a relative compaction of 90 percent as evaluated by ASTM D 1557. The lift thickness for fill soils will vary depending on the type of compaction equipment used but should generally be placed in horizontal lifts not exceeding 8 inches in loose thickness. Fill soils should be placed at generally slightly above the optimum moisture content as evaluated by ASTM D 1557. Special care should be taken to avoid damage to wet and dry utility lines when compacting fill and subgrade materials.

10.1.7. Temporary Excavations

We recommend that trenches and excavations be designed and constructed in accordance with Occupational Safety and Health Administration (OSHA) regulations. These regulations provide trench sloping and shoring design parameters for trenches up to 20 feet deep based on the soil types encountered. Trenches over 20 feet deep should be designed by the contractor's engineer based on site-specific geotechnical analyses. For planning purposes, we recommend that fill and alluvium be considered as OSHA soil Type C.

Temporary excavations should be constructed in accordance with OSHA recommendations. For trench or other excavations, OSHA requirements regarding personnel safety should be met by using appropriate shoring (including trench boxes) or by laying back the slopes no steeper than 1½:1 (horizontal to vertical) in fill and alluvium. Temporary excavations that encounter seepage may need shoring or may be mitigated by placing sandbags or gravel along the base of the seepage zone. Excavations encountering seepage should be evaluated on a case-by-case basis. On-site safety of personnel is the

responsibility of the contractor. Recommendations for temporary shoring can be provided, if requested.

10.2. Seismic Design Considerations

Design of the proposed improvements should comply with design for structures located in seismically active areas and should be designed in accordance with the requirements of governing jurisdictions and applicable building codes. Table 2 presents the seismic design parameters for the site in accordance with CBC (2007) guidelines and mapped spectral acceleration parameters (USGS, 2009).

Table 2 – 2007 California Building Code Seismic Design Criteria

Seismic Design Factors	Value
Site Class	D
Site Coefficient, F_a	1.0
Site Coefficient, F_v	1.5
Mapped Spectral Acceleration at 0.2-second Period, S_s	2.274 g
Mapped Spectral Acceleration at 1.0-second Period, S_1	0.833 g
Adjusted MCE Spectral Response Acceleration at 0.2-second Period, S_{MS}	2.274 g
Adjusted MCE Spectral Response Acceleration at 1.0-second Period, S_{M1}	1.249 g
Design Spectral Response Acceleration at 0.2-second Period, S_{DS}	1.516 g
Design Spectral Response Acceleration at 1.0-second Period, S_{D1}	0.833 g

10.3. Foundations

The proposed CVS Pharmacy building may be supported on shallow, spread footings bearing on engineered fill compacted in accordance with the recommendations presented in Section 10.1 of this report. Foundations should be designed in accordance with structural considerations and the following recommendations. In addition, requirements of the appropriate governing jurisdictions and applicable building codes should be considered in the design of the structures.

10.3.1. Footings

Conventional spread footings should be 24 inches deep and bear on compacted fill. Continuous and isolated pad footings should be 18 and 30 inches wide, respectively. Continuous footings should be reinforced with four No. 4 steel reinforcing bars, two placed near the top and two placed near the bottom of the footings, and further detailed in accordance with the recommendations of the structural engineer.

Spread footings, as described above and bearing on compacted fill soils, may be designed using a net allowable bearing capacity of 2,500 psf. The bearing capacity may be increased by 300 psf and 500 psf for every additional foot of width and depth, respectively, up to a value of 3,500 psf. Total and differential settlements for footings designed in accordance with the above recommendations are estimated to be on the order of 1 inch and ½ inch over a horizontal span of 40 feet, respectively.

Footings bearing on compacted fill may be designed using a coefficient of friction of 0.35, where the total frictional resistance equals the coefficient of friction times the dead load. The footings may be designed using a passive resistance of 350 psf per foot of depth up to a value of 3,500 psf. The allowable lateral resistance can be taken as the sum of the frictional resistance and passive resistance, provided the passive resistance does not exceed one-half of the total allowable resistance. The passive resistance may be increased by one-third when considering loads of short duration such as wind or seismic forces.

Trenches should not be excavated adjacent to spread footings. If trenches are to be excavated near a continuous footing, the bottom of the trench should be located above a 1:1 (horizontal to vertical) plane projected downward from the bottom of the footing. Utility lines that cross beneath footings should be encased in concrete below the footing.

10.3.2. Slabs-on-Grade

Building floor slabs should be designed by the project structural engineer based on the anticipated loading conditions. Building floor slabs should be underlain by compacted soil prepared in accordance with the recommendations presented in Section 10.1 of this report. We recommend that slabs be 5 inches thick and reinforced with No. 4 steel reinforcing bars placed 18 inches on-center (each way) placed near the mid-height of the slab. The placement of the reinforcement in the slab is vital for satisfactory performance. The floor slab and foundations should be tied together by extending the slab reinforcement into the footings. The slab should be underlain by a 2-inch-thick layer of clean sand overlying a polyethylene vapor retarder, 10 mil or thicker. The vapor retarder should further be underlain by a 4-inch-thick layer of sand or gravel with a particle size of approximately $\frac{3}{8}$ inch or smaller. The vapor retarder is recommended in areas where moisture-sensitive floor coverings are anticipated. Soils underlying the slabs should be moisture conditioned and compacted in accordance with the recommendations presented in this report prior to concrete placement. Joints should be constructed at intervals designed by the structural engineer to help reduce random cracking of the slab.

Exterior flatwork should have a thickness of 4 inches. The flatwork should be reinforced with No. 4 steel reinforcing bars placed 24 inches on-center (each way) near the mid-height of the slab. Exterior sidewalks and flatwork should be underlain by 4 inches of clean sand. The vapor retarder and 2 inches of sand may be excluded beneath exterior slabs unless tile, paint, or other potentially moisture-sensitive surface treatments are used. To reduce the potential for distress to exterior concrete flatwork due to movement of the underlying soil, we recommend that flatwork be installed with crack-control joints at appropriate spacing as designed by the structural engineer. Positive drainage should be established and maintained adjacent to flatwork.

10.4. Retaining/Screen Walls

Retaining walls and screen walls may be supported by foundations designed in accordance with the recommendations presented in Section 10.3 of this report. Lateral earth pressures

recommended for design of yielding retaining walls are provided on Figure 4. Passive pressures may be increased by one-third when considering loads of short duration, including wind and seismic loads. Further, for sliding resistance, a friction coefficient of 0.35 may be used for the concrete and soil interface. The allowable resistance may be taken as the sum of the frictional and passive resistance, provided that the passive portion does not exceed one-half of the total allowable resistance.

Retaining walls should be backfilled with free-draining, granular, imported soil with a low-expansion potential (UBC Expansion Index 50 or less). Measures should be taken to reduce the potential for build-up of moisture behind the retaining walls. Drainage design should include free-draining backfill materials and subsurface drainage provisions as shown on Figure 5.

10.5. Underground Utilities

We anticipate that utility pipelines will be supported on compacted fill or native alluvium. The depths of the pipelines are not known; however, we anticipate that the pipe invert depths will not exceed 10 feet.

10.5.1. Pipe Bedding

We recommend that bedding material be placed around pipe zones to 1 foot or more above the top of the pipe. The bedding material should be classified as sand, be free of organic material, and have a sand equivalent (SE) of 30 or more. We do not recommend gravel be used for bedding material. It has been our experience that the voids within gravel material are sufficiently large to allow finer materials to migrate into the voids, thereby creating the potential for sinkholes and depressions to develop at the ground surface.

Special care should be taken not to allow voids beneath and around the pipe. Compaction of the bedding material and backfill should proceed up both sides of the pipe.

Trench backfill, including bedding material, should be placed in accordance with the recommendations presented in Section 10.1.6.

10.5.2. Modulus of Soil Reaction

The modulus of soil reaction is used to characterize the stiffness of soil backfill placed at the sides of buried flexible pipelines for the purpose of evaluating deflection caused by the weight of the backfill above the pipe (Hartley and Duncan, 1987). A soil reaction modulus of 1,000 pounds per square inch (psi) may be used for an excavation depth of up to about 5 feet when backfilled with granular soil and compacted to a relative compaction of 90 percent as evaluated by ASTM D 1557. A soil reaction modulus of 1,200 psi may be used for trenches deeper than 5 feet.

10.6. Preliminary Pavement Design

We understand that pavement sections for the project should be designed with a 20-year design life, equivalent single axle loading of 18 kips, and a traffic load of 60,000 or less ESALs. This traffic load is equivalent to a traffic index (TI) of 6.5 (Caltrans, 2004). The near-surface soils encountered in our exploratory borings consisted predominantly of silty sand. Our laboratory test result indicated that the near-surface soils at the location of boring B-4 had an R-value of 11.

General traffic areas, including parking areas and driveways, are anticipated to have relatively light traffic consisting of light passenger vehicles and periodic heavy equipment/truck traffic. We recommend the use of flexible pavements in the parking and driveway areas. Rigid, PCC pavements should be used for areas that will experience regular truck traffic, such as loading dock areas, main ingress and egress areas, and areas where vehicles will be turning or loading (e.g., adjacent to trash dumpsters). Based on the CVS Pharmacy design requirements, a preliminary TI of 6.5 should be used for the design of flexible and rigid pavement. However, we have also provided alternative pavement sections for assumed TI's of 4.5 and 5.5 in case lower TI's are acceptable for the project.

Based on these traffic indices, a design R-value of 11, project requirements, and guidelines of the Caltrans Highway Design Manual (Caltrans, 2004), we have developed the following preliminary pavement sections for the project. We recommend that these pavement sections be re-evaluated once project-specific traffic indices are developed and the as-graded near-surface earth materials are further tested.

Table 3 – Preliminary Pavement Structural Sections

Traffic Index	Recommended Pavement Sections		
	Flexible Pavement		Rigid Pavement
	AC/CAB (inches)	Full Depth AC (inches)	PCC (inches)
4.5	4/6	7	8
5.5	4/8	8	9
6.5	4/12	9	10
Notes: AC – Asphalt Concrete CAB – Crushed Aggregate Base PCC – Portland Cement Concrete			

Soils in areas to be paved should be prepared as recommended in Section 10.1 of this report. Subgrade soil should be compacted to 90 percent or more relative compaction as evaluated by ASTM D 1557 where aggregate base is used. The upper 6 inches of subgrade soil should be compacted to 95 percent or more relative compaction as evaluated by ASTM D 1557 where pavement is placed directly on subgrade soil. Aggregate base material should conform to the specifications in Section 200-2.0 for crushed aggregate base or Section 200-2.4 for crushed miscellaneous base of the Standard Specifications for Public Works (Greenbook) and should be compacted to a relative compaction of 95 percent as evaluated by ASTM D 1557. AC should conform to Section 203-6 of the Greenbook and should be compacted to a relative compaction of 95 percent as evaluated by ASTM D 1557.

We recommend that the paving operations be observed and tested by Ninyo & Moore. We further recommend that mix designs be made for the AC by an engineering company specialized in this type of work.

10.7. Corrosivity

Laboratory testing was performed on a representative sample of near-surface soil to evaluate soil pH, electrical resistivity, water-soluble chloride content, and water-soluble sulfate content. The soil pH and electrical resistivity tests were performed in general accordance with California Test Method (CT) 643. Chloride content tests were performed in general accordance with CT 422. Sulfate testing was performed in general accordance with CT 417. The laboratory test results are presented in Appendix B.

The soil pH and electrical resistivity were measured to be approximately 7.2 and 1,475 ohm-centimeters, respectively. The chloride content of the sample was approximately 90 ppm. The sulfate content of the tested sample was approximately 0.023 percent by weight (i.e., 230 ppm). Based on the laboratory test results and Caltrans (2003) corrosion criteria, the project site can be classified as a non-corrosive site, which is defined as having earth materials with less than 500 ppm chlorides, less than 0.20 percent sulfates (i.e., 2,000 ppm), or a pH of 5.5 or higher.

10.8. Concrete Placement

Concrete in contact with soil or water that contains high concentrations of soluble sulfates can be subject to chemical and/or physical deterioration. According to American Concrete Institute (ACI) 318, Section 4.3, (ACI, 2004), the potential for sulfate attack is considered severe for water-soluble sulfate contents in soil ranging from 0.15 to 1.0 percent by weight (1,500 to 10,000 ppm). As indicated above, the soil sample tested for this evaluation indicates a water-soluble sulfate content of 0.023 percent by weight (i.e., 230 ppm). Accordingly, the on-site soils are considered to have a negligible potential for sulfate attack. However, due to the potential variability in soil conditions across the site and the possible use of reclaimed water, we recommend that Type V cement with a water/cement ratio of 0.45 or less be considered for the project.

In order to reduce the potential for shrinkage cracks in the concrete during curing, we recommend that the concrete be placed with a slump of 4 inches based on ASTM C 143. The

slump should be checked periodically at the site prior to concrete placement. We also recommend that crack control joints be provided in sidewalks and exterior hardscape in accordance with the recommendations of the project structural engineer to reduce the potential for distress due to minor soil movement and concrete shrinkage. The project structural engineer should be consulted for additional concrete specifications.

10.9. Drainage

Proper surface drainage is imperative for satisfactory site performance. Positive drainage should be provided and maintained to direct surface water away from foundations and off-site. Positive drainage is defined as a slope of 2 percent or more over a distance of 5 feet away from the foundations and tops of slopes. Runoff should then be directed by the use of swales or pipes into a collective drainage system. Surface waters should not be allowed to pond adjacent to footings or pavements. We recommend that structures have roof drains and downspouts installed to collect runoff. Area drains for landscaped and paved areas are recommended.

10.10. Landscaping

Project landscaping should consist of drought tolerant plants. Landscape irrigation should be kept to a level just sufficient to maintain plant vigor. Overwatering should not be permitted.

11. CONSTRUCTION OBSERVATION

The recommendations provided in this report are based on our understanding of the proposed project and on our evaluation of the data collected based on subsurface conditions disclosed by widely spaced exploratory borings. It is imperative that the interpolated subsurface conditions be checked by our representative during construction. Observation and testing of compacted fill and backfill should be performed by our representative during construction. In addition, we should review the project plans and specifications prior to construction. It should be noted that, upon review of these documents, some recommendations presented in this report might be revised or modified.

During construction we recommend that the duties of the geotechnical consultant include, but not be limited to:

- Observing clearing, grubbing, and removals.
- Observing excavation bottoms and the placement and compaction of fill, including trench backfill.
- Evaluating imported materials prior to their use as fill.
- Performing field tests to evaluate fill compaction.
- Observing foundation excavations for bearing materials and cleaning prior to placement of reinforcing steel or concrete.

The recommendations provided in this report assume that Ninyo & Moore will be retained as the geotechnical consultant during the construction phase of this project. If another geotechnical consultant is selected, we request that the selected consultant indicate to the owner and to our firm in writing that our recommendations are understood and that they are in full agreement with our recommendations.

12. LIMITATIONS

The field evaluation, laboratory testing, and geotechnical analyses presented in this geotechnical report have been conducted in general accordance with current practice and the standard of care exercised by geotechnical consultants performing similar tasks in the project area. No warranty, expressed or implied, is made regarding the conclusions, recommendations, and opinions presented in this report. There is no evaluation detailed enough to reveal every subsurface condition. Variations may exist and conditions not observed or described in this report may be encountered during construction. Uncertainties relative to subsurface conditions can be reduced through additional subsurface exploration. Additional subsurface evaluation will be performed upon request. Please also note that our evaluation was limited to assessment of the geotechnical aspects of the project, and did not include evaluation of structural issues, environmental concerns, or the presence of hazardous materials.

INITIAL STUDY – 15600 & 15650 LOS GATOS BOULEVARD

ATTACHMENT 4

REVIEW OF DRAINAGE AND STORMWATER MANAGEMENT PLANS

BY

EISENBERG, OLIVIERI & ASSOCIATES

JUNE 21, 2013



TO: Maziar Bozorginia, Town of Los Gatos

FROM: Jill Bicknell, P.E. and Vishakha Atre

DATE: June 21, 2013

**SUBJECT: 15600 and 15650 Los Gatos Blvd.
Review of Project Submittals for Compliance with Stormwater Requirements**

Project Description

The proposed development project at 15600 Los Gatos Blvd will be a commercial project consisting of a CVS pharmacy building, other retail buildings, and parking lots. The total site area of 2.79 acres is also the area of land disturbance. The site is located at the intersection of Los Gatos Blvd and Los Gatos Almaden Road. The property currently contains vacant buildings, parking stalls, drive aisles and limited landscaping. The C.3 Data Form indicates that the site is located within the Los Gatos Creek watershed.

We reviewed the following submittals with regard to this project:

- 15600 and 15650 Los Gatos Blvd Plan Set, dated February 6, 2013
 - DR-2 - Existing Site Plan
 - DR-3 - Existing Buildings to be Demolished
 - DR-5 - Preliminary Grading Plan
 - DR-5.1 – Preliminary Utility Plan
 - DR-7 – Landscape Plan– Site Plan
- Completed C.3 Data Form
- Drainage Study/Water Quality Management Plan, dated February 6, 2013
 - Existing Site Drainage Shed Map
 - Proposed Site Drainage Shed Map

We reviewed the project submittals for compliance with the stormwater requirements in the Town of Los Gatos' NPDES Permit¹ (referenced herein as the Municipal Regional Permit or MRP) and consistency with related ordinances². Our findings are presented below:

¹ California Regional Water Quality Control Board, San Francisco Bay Region, Municipal Regional Stormwater Permit, Order No. R2-2009-0074, adopted October 14, 2009, Provision C.3.

² Town of Los Gatos Municipal Code, Chapter 12, Article II. Grading Permit, Sec. 12.20.050 Erosion control plan, Chapter 12, Article III. Design Standards, Sec. 12.30.080, Erosion and sediment control, and Chapter 22, Article III. Stormwater Pollution Control, Sec.22.30.035. New development/redevelopment.

1. Applicability of NPDES Permit Provision C.3. Requirements

a. Stormwater Treatment Requirements

The C.3. Data Form indicates that there is currently 107,156 square feet of impervious surface on the site. According to the C.3 Data Form, the project proposes to replace 68,689 square feet of the existing impervious area with impervious surface. The project is not proposing to add any new impervious areas. The total post project impervious area is also 68,689 square feet. Therefore, since the total amount of impervious surface to be created and/or replaced is greater than the C.3. threshold of 10,000 square feet³, the C.3. treatment requirements apply to this project. The low impact development (LID) treatment requirements apply to this project because it is a private C.3 Regulated Project with a development permit application that was deemed complete after December 1, 2009, and it did not receive final discretionary approval before December 1, 2011.⁴

Item 2h of the C.3 Data Form indicates that the project will replace 64.1 percent of the existing impervious surface with new impervious surface. Because 50 percent or more of the existing impervious surface will be replaced, stormwater runoff from all of the post-project impervious surface will need to receive stormwater treatment.⁵

b. Hydromodification Control Requirements

The project will create and replace more than 1 acre of impervious surface; however, because the project will not increase the amount of impervious surface over existing conditions, the hydromodification control requirements do not apply to this project⁶.

2. Proposed Stormwater Management Measures and Sizing Calculations

- a. The C.3 Data Form indicates that the project will include five site design measures: minimized impervious surfaces, minimum-impact parking lot design, permeable pavement, roof downspouts drain to landscaping, and micordetention in landscape. The site design measure "roof downspouts drain to landscaping" is not shown on the plans.
- b. The C.3. Data Form indicates that the project will include four pollutant source control measures: "beneficial landscaping" (i.e., drought tolerant and/or native plants, in order to minimize over-irrigation and the use of pesticides on the landscaping); covered dumpster area with drain to sanitary sewer; maintenance (pavement sweeping, catch basin cleaning, good housekeeping); and storm drain labeling. These source control measures are appropriate for this project. However, the plans do not indicate the sanitary sewer connection for dumpster areas or the storm drain labeling.
- c. The applicant did not submit completed Infiltration/Harvesting and Use Feasibility Screening Worksheets.
- d. The C.3 Data Form indicates the following stormwater treatment measures: infiltrating vegetated swale, underground detention and infiltration system (e.g., pervious pavement drain rock, large diameter conduit) and media filter (sand, compost, or manufactured media). However, the project plans and Section 5 of the C.3 Data Form indicate that bioretention

³ California Regional Water Quality Control Board, San Francisco Bay Region, Municipal Regional Stormwater Permit, Order No. R2-2009-0074, adopted October 14, 2009, Provision C.3.b.ii.(3).

⁴ Ibid., Provision C.3.c.ii.(2)

⁵ Ibid., Provision C.3.b.ii.(3)(a)

⁶ Ibid., Provision C.3.g.

areas and pervious pavement (as self-treating and self-retaining areas) are being used to provide treatment. Comments on these treatment measures are below:

- Three drainage management areas, labeled A2, A5 and A6 are draining to biotreatment areas. Biotreatment areas were sized using the “4 percent rule”, which is an application of the Uniform Intensity, or “0.2 Inch-per-Hour Intensity” hydraulic sizing approach, a flow-based hydraulic sizing approach allowed by Provision C.3.d.i.(2)(c) of the MRP. Sheet DR-5 Preliminary Grading Plan provides details on the biotreatment area design.
 - Three drainage management areas, labeled A1, A3, and A4, are designed as self-retaining areas. Pervious paving will be installed in these areas to treat impervious project areas within these drainage management areas. Per the C.3 Data Form and the Water Quality Management Plan, the pervious paving has been sized to store and infiltrate the C.3.d volume of runoff. However, sizing calculations were not provided.
 - One drainage management area, labeled A7, is designed as a self-treating area, and consists entirely of pervious paving. A detail of the pervious paving section was not provided.
- e. Sheet DR-5 Preliminary Grading Plan provides a detail of the proposed biotreatment measures. Comments on the design are as follows:
- i. Sizing calculations. The 4 percent rule assumes that the surface area of a biotreatment facility is 4 percent of the impervious surface that drains to the facility. The 4 percent rule is based on the assumption that runoff flows at a rate of 0.2 inches per hour and infiltrates at a rate of 5 inches per hour (0.2 in/hr divided by 5 in/hr = 0.04). The use of the 4 percent rule for sizing is acceptable. Calculations were checked, and we confirmed that all of the treatment areas shown on the plans each have a surface area that is at least 4 percent of the indicated catchment area.
 - ii. Soil specification. The biotreatment area detail on DR-5 indicates that a mix of 2/3 clean sand and 1/3 compost will be used. The detail needs to specify the use of biotreatment soil per the specifications in Attachment L of the Municipal Regional Stormwater Permit. In addition, the detail indicates that the soil mix will be 6 to 24 inches deep. To be consistent with the requirements in the SCVURPPP C.3 Handbook, biotreatment areas should have a minimum biotreatment soil depth of 18 inches.
 - iii. Drain rock. Consistent with SCVURPPP’s C.3 Handbook, the biotreatment detail specifies the use of 12 inches of permeable drain rock. However, the detail also shows the use of filter fabric around the top and bottom of the drain rock layer. Filter fabric has been associated with biotreatment area clogging, and its use is not recommended.
 - iv. Elevation of underdrain. The biotreatment detail shows an underdrain raised above the base of the drain rock layer. To be consistent with SCVURPPP’s C.3 Handbook, the detail should indicate that the underdrain is 6 inches above the bottom.
 - v. Overflow structure. The biotreatment detail should show a cleanout for the underdrain, consisting of a vertical rigid, non-perforated PVC pipe, with a minimum diameter of 4 inches and a watertight cap fit flush with the biotreatment soil surface.

- vi. Mulch. Consistent with SCVURPPP's C.3 Handbook, a minimum 2-inch layer of mulch should be provided to cover any exposed soil on the surface of the biotreatment area. Within the ponding area, a mulch type that resists floating, such as compost mulch, should be specified. To reduce propagation of weeds, specify that compost mulch shall be free of seeds.
- vii. Drainage entry points. Sheet DR-5 indicates that water will flow into the biotreatment area in drainage area A2 via curb cuts. No detail for the curb cuts is provided. It is not clear how water in drainage areas A5 and A6 will enter the biotreatment areas. The detail also needs to specify rock energy dissipaters at the entry points for erosion protection.
- viii. Plant selection. Information regarding plant selection was included in Sheet DR-7 – Landscape Plan. The plants mentioned in the list are drought tolerant, but not listed in the SCVURPPP C.3 Stormwater Handbook. The City should request the landscape architect to review the choice of plants in the flow-through planters and submit documentation that the selected plants have relevant characteristics equivalent to those listed in the SCVURPPP C.3 Stormwater Handbook, Appendix D, Plant List and Planting Guidance for Landscaped-Based Stormwater Treatment Measures.

3. Consistency of SWPPP with Local Ordinances

- a. Since the disturbed area during construction is more than 1 acre, the applicant is required to obtain coverage under the State Construction General Permit⁷.
- b. No erosion control plan or Stormwater Pollution Prevention Plan (SWPPP) were provided for review and are not required for this review of the project, consistent with direction from the Town.

4. Conclusions

- a. Site design measures identified in the C.3 Data Form are acceptable, if shown on the plan sheets.
- b. The pollutant source control measures specified in the C.3 Data Form are appropriate for this type of project and land use and are acceptable, if shown on the plan sheets.
- c. The use of biotreatment is acceptable if rainwater harvesting and infiltration are shown to be infeasible.
- d. The Stormwater Control Plan is conceptually acceptable but more details are needed, as described in the recommendations below.
- e. The proposed treatment measure design should be modified as described in the recommendations below.

5. Recommendations

To complete the review and make a recommendation regarding compliance with stormwater requirements, we request that the applicant address the following issues and submit additional information:

- a. Submit completed Infiltration/Harvesting and Use Feasibility Screening Worksheets.

⁷ NPDES General Permit for Storm Water Discharges Associated with Construction Activity, Water Quality Order 2009-0009-DWQ, September 2009 (effective July 1, 2010).

- b. Provide site specific or local soil information to confirm the infiltration capability of site soils.
- c. Revise the C.3 Data Form to indicate the correct stormwater treatment measures.
- d. Submit revised plan sheets showing:
 - A detail for storm drain “No Dumping” labels.
 - Sanitary sewer connection for trash enclosures.
 - Roof downspouts draining to landscaping.
 - How runoff from impervious surfaces is conveyed to each treatment measure (e.g., curb cuts, bubble-ups, etc).
- e. Submit a revised biotreatment measure detail, consistent with the detail provided in the SCVURPPP C.3 Handbook, that addresses the comments herein.
- f. Submit design details and sizing calculations for the pervious paving areas, and demonstrate that these areas have the capacity to store and infiltrate runoff from adjacent impervious surfaces, where applicable.

INITIAL STUDY – 15600 & 15650 LOS GATOS BOULEVARD

ATTACHMENT 5

NOISE ASSESSMENT STUDY

FOR

CVS PHARMACY AND SHOPPING CENTER
LOS GATOS BOULEVARD, LOS GATOS

BY

EDWARD L. PACK ASSOCIATES, INC.

JULY 31, 2013



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NOISE ASSESSMENT STUDY FOR

CVS PHARMACY AND SHOPPING CENTER

LOS GATOS BOULEVARD, LOS GATOS

Prepared for
Geier & Geier Consulting, Inc.

Prepared by
Jeffrey K. Pack

July 31, 2013
Project No. 44-035

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I. Executive Summary

This report presents the results of a noise assessment study, in compliance with the California Environmental Quality Act, for the proposed CVS Pharmacy and commercial center at Los Gatos Boulevard and Los Gatos-Almaden Road in Los Gatos. This study includes an analysis of project-generated noise impacts to noise sensitive (residential) uses adjacent to and near the site. Project-generated noise sources include CVS Pharmacy drive-thru noise, loading dock noise, outdoor mechanical equipment noise, parking lot noise and project traffic on local streets.

The project is not a noise sensitive use. Therefore, noise impacts to the project will not be an issue and are not included in this study.

The following report includes background information on acoustics, noise standards applicable to the project, existing scenario and project-generated noise impacts to the neighbors, and mitigation measures for noise impacted receptor locations.

The results of this study reveal that the project-generated noise exposures will not add significantly to the existing noise environments at the neighboring properties and will be within the limits of the Town of Los Gatos standards. Thus, the project-generated noise exposure will be within the goals of the Town of Los Gatos Noise Element standards and within CEQA guidelines. Noise from mechanical equipment, although not precisely specified at this time, is expected to be within the goals of the Town of Los Gatos Noise Element but will exceed the Noise Ordinance standards. Loading dock noise is expected to be within the goals of the Noise Element. However, loading dock operations that occur before 1:00 p.m. are predicted to exceed the limits of the Town of Los Gatos Noise Ordinance by up to 6 decibels. Noise mitigation measures to reduce noise excesses will be required.

In terms of the CEQA compliance checklist, the project indicates the following:

- | | |
|---|------------------------------|
| 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? | Significant unless mitigated |
| b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? | No impact |
| c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project? | Significant Unless Mitigated |
| d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? | Less Than Significant |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? | No impact |
| f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels? | No impact |

II. Background Information on Acoustics

Noise is defined as unwanted sound. Airborne sound is a rapid fluctuation of air pressure above and below atmospheric pressure. Sound levels are usually measured and expressed in decibels (dB) with 0 dB corresponding roughly to the threshold of hearing.

Most of the sounds which we hear in our normal environment do not consist of a single frequency, but rather a broad range of frequencies. As humans do not have perfect hearing, environmental sound measuring instruments have an electrical filter built in so that the instrument's detector replicates human hearing. This filter is called the "A-weighting" network and filters out low and very high frequencies. All environmental noise is reported in terms of A-weighted decibels, notated as "dBA". All sound levels used in this report are A-weighted unless otherwise noted. Table I, below, shows the typical human response and noise sources for A-weighted noise levels.

Although the A-weighted noise level may adequately indicate the level of noise at any instant in time, community noise levels vary continuously. Most environmental noise includes a mixture of noise from distant sources that create a relatively steady background noise from which no particular source is identifiable. To describe the time-varying character of environmental noise, the statistical noise descriptors, L_1 , L_{10} , L_{50} and L_{90} are commonly used. They are the A-weighted noise levels exceeded for 1%, 10%, 50% and 90% of a stated time period. The continuous equivalent-energy level (L_{eq}) is that level of a steady state noise which has the same sound energy as a time-varying noise. It is often considered the average noise level and is used to calculate the Day-Night Levels (DNL) and the Community Noise Equivalent Level (CNEL) described below.

TABLE I

**The A-Weighted Decibel Scale, Human Response,
and Common Noise Sources**

<u>Noise Level, dBA</u>	<u>Human Response</u>	<u>Noise Source</u>
120-150+	Painfully Loud	Sonic Boom (140 dBA)
100-120	Physical Discomfort	Motorcycle at 20 ft. (110 dBA) Nightclub Music (105 dBA)
70-100	Annoying	Diesel Pump at 100 ft. (95 dBA) Freight Train at 50 ft. (90 dBA) Food Blender (90 dBA) Jet Plane at 1000 ft. (85 dBA) Freeway at 50 ft. (80 dBA) Alarm Clock (80 dBA)
50-70	Intrusive	Average Traffic at 100 ft. (70 dBA) Pass. Car, 30 mph @ 25 ft. (65 dBA) Vacuum Cleaner (60 dBA) Suburban Background (55 dBA)
0-50	Quiet	Normal Conversation (50 dBA) Light Traffic at 100 ft. (45 dBA) Refrigerator (45 dBA) Desktop Computer (40 dBA) Whispering (35 dBA) Leaves Rustling (20 dBA) Threshold of Hearing (0 dBA)

In determining the daily level of environmental noise, it is important to account for the difference in response of people to daytime and nighttime noises. During the nighttime, exterior background noises are generally lower than the daytime levels. However, most household noise also decreases at night and exterior noise becomes very noticeable. Further, most people sleep at night and are very sensitive to noise intrusion. To account for human sensitivity to nighttime noise levels, the Day-Night Level (DNL) noise descriptor was developed. The DNL is also called the L_{dn} . Either is acceptable, however, DNL is more popular worldwide. The DNL divides the 24-hour day into the daytime period of 7:00 a.m. to 10:00 p.m. and the nighttime period of 10:00 p.m. to 7:00 a.m. The nighttime noise levels are penalized by 10 dB to account for the greater sensitivity to noise at night. The Community Noise Equivalent Level (CNEL) is another 24-hour average which includes a 5 dB evening (7:00 p.m. - 10:00 p.m.) penalty and a 10 dB nighttime penalty. Both the DNL and the CNEL average the daytime, evening and nighttime noise levels over a 24-hour period to attain a single digit *noise exposure*. The proper notations for the Day-Night Level and the Community Noise Equivalent Level are dB DNL and dB CNEL, respectively, as they can only be calculated using A-weighted decibels. It is, therefore, considered redundant to notate dB(A) DNL or dB(A) CNEL.

The effects of noise on people can be listed in three general categories:

- subjective effects of annoyance, nuisance, dissatisfaction;
- interference with activities such as speech, sleep, learning, relaxing;
- physiological effects such as startling, hearing loss.

The levels associated with environmental noise, in almost every case, produce effects only in the first two categories. Workers in industrial plants, airports, etc., can experience noise in the last category. Unfortunately, there is, as yet, no completely satisfactory way to measure the subjective effects of noise, or of the corresponding reactions of annoyance and dissatisfaction. This is primarily due to the wide variation in individual thresholds of annoyance and differing individual past experiences with noise.

An important way to determine a person's subjective reaction to a new noise is to compare it to the existing environment to which one has adapted, i.e., the "ambient". In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will be judged by the receivers.

With regard to increases in A-weighted noise level, the Environmental Protection Agency has determined the following relationships that will be helpful in understanding this report.

- Except in carefully controlled laboratory experiments, a change of 1 dB cannot be perceived.
- Outside of the laboratory, a 3 dB change is considered a just-perceptible difference.
- A change in level of at least 5 dB is required before any noticeable change in community response would be expected.
- A 10 dB change is subjectively heard as approximately a doubling in loudness, and would almost certainly cause an adverse change in community response.

The adding or subtracting of sound levels is not simply arithmetic. The sound levels, in decibels, must be converted to Bels, the anti-log's of which are then calculated. The manipulation is then performed (arithmetic addition or subtraction), the logarithm of the sum or difference is calculated. The final number is then multiplied by 10 to convert Bels to decibels. The formula for adding decibels is as follows:

$$\text{Sum} = 10\log(10^{\text{SL}/10} + 10^{\text{SL}/10}) \quad \text{where, SL is the Sound Level in decibels.}$$

For example, 60 dB + 60 dB = 63 dB, and 60 dB + 50 dB = 60 dB. Two sound sources of the same level are barely noisier than just one of the sources by itself. When one source is 10 dB higher than the other, the less noisy source does not add to the noisier source.

III. Noise Standards, Goals & Policies

A. Town of Los Gatos Noise Element of the General Plan

The noise assessment results presented in the findings were evaluated against the Town of Los Gatos Noise Element of the General Plan standards, Ref. (a), which uses the Day-Night Level (DNL) 24-hour noise descriptor to define acceptable noise exposures for various land-uses. The acceptable goal for single-family residential use is 55 decibels (dB) DNL. The DNL is defined further in Appendix B.

B. Town of Los Gatos Noise Ordinance

The Town of Los Gatos Noise Ordinance, Ref. (b), limits noise over the short-term to mitigate noise annoyance. The Noise Ordinance limits are based on local ambient baseline noise levels that are shown on maps published by the Town and provided within the Ordinance. Noise zones were created throughout the Town with varying ambient sound level based on three periods over the 24-hour day. The Noise Ordinance maps are provided to simplify the ambient determination process, as ambient conditions can be difficult to quantify under given circumstances. The noise limits for commercial uses areas is 8 dB above the ambient.

The Noise Ordinance limits applied to the residences closest to the project are:

Weekday	Weekend
59 dBA 10:00 PM – 6:00 AM	54 dBA 10:00 PM – 6:00 AM
63 dBA 6:00 AM – 1:00 PM	58 dBA 6:00 AM – 1:00 PM
70 dBA 1:00 PM – 10:00 PM	65 dBA 1:00 PM – 10:00 PM

The noise limits applied to the specific noise sources associated with the project are as follows:

Drive-Thru Limit = 54 dBA

Loading Dock Limit = 63 dBA

Mechanical Equipment Limit CVS = 54 dBA (nighttime operations likely)

Mechanical Equip. Limit Commercial = 58 dBA (no nighttime operations likely)

C. California Environmental Quality Act (CEQA)

The project-generated noise exposures were evaluated against the guidelines of the California Environmental Quality Act (CEQA). CEQA does not limit noise levels or noise exposures nor does it quantify noise exposure or noise level increases over the ambient to define noise impacts. CEQA evaluates a project as a significant noise impact if it "...causes a substantial increases in the ambient noise levels...". The quantification of the threshold of significance is left up to the local jurisdiction. The Town of Los Gatos Noise Element does not provide thresholds of significance in the General Plan. Therefore, the following thresholds of significance, based on CEQA case law, shall be applied at the existing residential areas to the east of the site and across Los Gatos-Almaden Road east of Peach Blossom Lane where there is a potential for noise impacts. Other residential areas in the vicinity of the project site are too far to be a concern.

These thresholds are:

- (a) causing the DNL in existing residential areas to increase by 5 dB or more and remain at or below 55 dB DNL;
- (b) causing the DNL in existing residential areas to increase by 3 dB or more and, thereby, exceed 55 dB DNL;
- (c) causing the DNL in existing residential areas to increase by 1 dB or more if the current noise exposure exceeds 55 dB DNL.

If the project causes any of the above three criteria to occur, the project will be considered a significant noise impact to the areas where it occurs and mitigation measures will be required.

IV. Site and Project Descriptions

The planned project site is located at the intersection of Los Gatos Boulevard and Los Gatos-Almaden Road in Los Gatos. The site is relatively flat and at-grade with the surrounding roadways and land uses. Vacant auto dealership buildings are currently on the site. Ingress and egress to the site are via driveways off of both Los Gatos Boulevard and Los Gatos-Almaden Road. Surrounding land-uses are professional office and multi-family residential adjacent to the east, a retail center (Los Gatos Café, Nob Hill Foods) and single-family residential across Los Gatos-Almaden Road to the south, commercial uses and professional offices across Los Gatos Boulevard to the west and the Moore GMC-Buick auto dealership adjacent to the north.

The primary sources of noise in the vicinity are traffic on Los Gatos Boulevard and Los Gatos-Almaden Road. Noise from the Moore GMC-Buick auto dealership service area generates a minor amount of noise at the residences along Carlton Avenue to the east. Noise from this facility is included in the ambient noise measurement data.

The proposed project includes the demolition of the existing auto dealership buildings and the construction of two commercial buildings, one of which will be a CVS Pharmacy, as shown on the Site Plan, Ref. (c). The CVS building will be located near the center of the site, with the drive-thru and loading dock at the east side of the building. The smaller commercial building will be located along the northerly side of the site.

The proposed site plan is shown on Figure 1 on page 10.

V. Existing and Future Noise Environments (Without the Project)

A. Existing Noise Levels

To determine the existing noise environments at the most impacted residential properties near the site, continuous recordings of the sound levels were made at two locations. Location 1 was on the roof of one of the existing auto dealership buildings adjacent to the second floor of the residence at 105 Carlton Avenue. This residence is the closet receptor to the CVS drive-thru and this measurement location represents the noise environment at the residential property boundary at the second floor elevation. Location 2 was at the front property line of the home at 16522 Los Gatos-Almaden Road at the corner of Peach Blossom Lane. This residence is a single-story home. The measurements were made on October 26-29, 2012 for a continuous period of 72 hours, from a Friday to a Monday, to capture the noise environment over weekday and weekend periods.

The noise recordings were made during the daytime and nighttime periods of the DNL index. The on-site sound levels were recorded and analyzed using Larson-Davis Model 812 Precision Integrating Sound Level Meters. The meters yield, by direct readout, a series of descriptors of the sound levels versus time, which include the L_1 , L_{10} , L_{50} , and L_{90} , i.e., those levels that are exceeded 1%, 10%, 50%, and 90% of the time. The meters also yield the maximum and minimum levels, and the continuous equivalent-energy levels (L_{eq}), which are used to calculate the DNL. The L_{eq} is that level of a steady-state noise that has the same sound energy as a time-varying noise. It is often considered the “average” noise level.

The measurement locations are shown on Figure 2 on page 12.

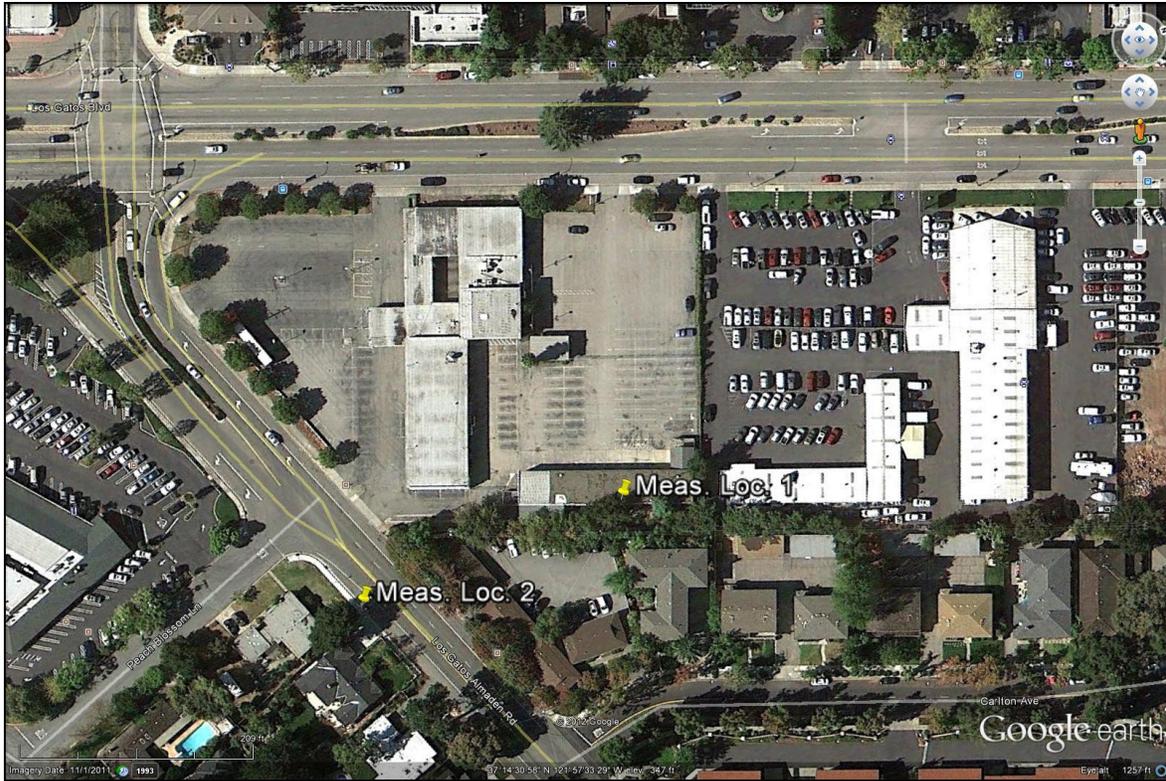


FIGURE 2

Table II provides the range of hourly L_{eq} 's measured at each location for the daytime and nighttime periods over the course of the three day measurement period.

TABLE II						
Existing Noise Levels, dBA L_{eq}						
DAY 1	Weekday		Saturday		Sunday	
Location	Daytime	Nighttime	Daytime	Nighttime	Daytime	Nighttime
Loc. 1 Carlton Ave. Res.	54.5 - 57.3	43.9 - 54.3	53.2 - 58.0	47.8 - 54.2	50.9 - 55.5	46.2 - 51.6
Loc. 2, Los Gatos-Almaden Road Res.	60.4 - 70.9	46.5 - 60.5	60.0 - 69.7	50.2 - 62.7	59.5 - 64.8	48.1 - 63.0

B. Existing and Future Noise Exposures

To evaluate the existing and future noise exposures without the project at the most noise impacted residences, the DNL's for the survey locations were calculated by decibel averaging of the L_{eq} 's as they apply to the daily time periods of the DNL index. A 10 decibel nighttime weighting factor was applied and the DNL was calculated using the formula shown in Appendix B. The measured DNL calculation tables are shown in Appendix C.

The results of the calculations indicate that the existing noise exposures at measurement Location 1, near the rear property plane of the home at 105 Carlton Avenue, are 58 dB DNL on weekdays, 59 dB DNL on Saturdays and 57 dB DNL on Sundays. The noise exposures at the front yard of the home at 16522 Los Gatos-Almaden Road were calculated to be 65 dB DNL on weekdays, 66 dB DNL on Saturday and 65 dB DNL on Sunday.

The future noise exposures were calculated from traffic volume data provided in the Traffic Impact Study (TIS) for the project, Ref. (d). The traffic study provides existing, background (existing + approved projects) and background + pending traffic volume data, shown as turning movements for various intersections in the vicinity of the project. The traffic volume data are in terms of AM and PM peak hour volumes. As noise exposures are in terms of the 24-hour DNL, the traffic volumes were converted to Average Daily Traffic (ADT) traffic volumes by multiplying the higher AM or PM peak hour volume by 10.

Table III, below, provides the ADT traffic volume data for Los Gatos Boulevard and Los Gatos-Almaden Road under each of the no project scenarios.

TABLE III			
Traffic Volume Data, ADT			
Location/Source	Existing	Background	Background + Pending
Los Gatos Boulevard	28,100	31,000	38,100
L.G.-Almaden Road	10,340	10,990	13,340

Table IV, below, provides the existing, background and background + pending noise exposures at the measurement locations for each scenarios.

TABLE IV			
Existing and Future Noise Exposures at the Measurement Locations, dB DNL			
Location/Source	Scenario		
	Existing	Background	Background + Pending
Loc. 1 Carlton Ave. Res.	57-59	57-59	58-60
Loc. 2, Los Gatos-Almaden Road Res.	65-66	65-66	66-67

As shown in the Tables, the noise levels at the residential property boundaries are expected to remain similar to current levels under the “Background” traffic scenario, but are expected to increase by 1 decibel under the “Background + Pending” traffic scenario.

VI. Project-Generated Noise Impacts

The project-generated noise impacts are analyzed for noise levels, noise exposures and increases in the noise environment (noise exposures) due to the project. The project-generated noise levels were evaluated against the standards of the Town of Los Gatos Noise Ordinance, which is applicable to the drive-thru, mechanical equipment and the loading dock. The project-generated noise exposures are a total of all noise source levels and are evaluated against the standards of the Town of Los Gatos Noise Element. The changes in the local noise environments, which uses the noise exposures, are evaluated for CEQA compliance.

Table V provides a summary of the project-generated noise impacts to the residences at 105 Carlton Avenue and at 16522 Los Gatos-Almaden Road. Details of the analyses of each noise source are provided in the sections following the table. Note that the project noise exposure goal at 105 Carlton Avenue is lower so that the cumulative noise exposures does not exceed 55 dB DNL. Noise excesses are shown in **Bold**.

TABLE V				
Project-Generated Noise Levels and Noise Exposures				
	105 Carlton Ave.		16522 L.G.-Almaden Rd.	
Source	dB Limit = 54	DNL Goal = 54	dB Limit = 54	DNL Goal = 55
Drive-Thru	44	36	40	32
Mech. Equip.	34	40	32	38
	dB Limit = 63	DNL Goal = 54	dB Limit = 63	DNL Goal = 55
Loading Dock	65	47	67	49
		DNL Limit = 54		DNL Goal = 55
Traffic on Local Streets	na	41	na	37
	dB Limit = 58	DNL Goal = 54	dB Limit = 58	DNL Goal = 54
Parking Lot	54	44	42	37
TOTAL	66	51	67	51

A. Drive-Thru

To determine the noise levels generated by the proposed pharmacy drive-thru use, sound level measurements of an existing CVS Pharmacy on Foxworthy Avenue in San Jose were made. The measurements were made on December 18, 2012 at a distance of 33 ft. from the drive-thru window and at an angle such that the vehicle at the drive-thru did not shield the noise source. Unlike a fast-food restaurant drive-thru, a pharmacy drive-thru does not have a menu board and speaker. The customer talks directly to the pharmacist at the window. Intercom systems are used but are kept to the lowest volume possible for privacy. Typical pharmacy drop-offs and pick-ups are approximately 2 minutes in duration. Vehicles are typically left idling. At distances greater than 15 ft., the speech is difficult to discern although the voices are audible. The measured noise levels were normal for most of the customers tested. The vehicles entered the drive-thru, were left idling, drop-off and pick-up transactions took place, and the vehicles drove off.

The noise level over the 2 minute transaction was measured to be 58 dBA L_{eq} . The highest sound level was also 58 dBA and occurred from vehicles accelerating out of the drive-thru. The pass-through drawer at the Foxworthy CVS Pharmacy had a loud squeak which was measured at 65 dBA. This noise is a maintenance issue and is not expected at the project pharmacy. At 160 ft. to the Carlton Avenue residence, the noise level reduces to 44 dBA. At 250 ft. to the residence at 16522 Los Gatos-Almaden Road, the noise level reduces to 40 dBA. Thus, the noise levels will be within the limits of the Town of Los Gatos Noise Ordinance standards.

The planned project drive-thru is predicted to serve 87 customers during the daytime hours of 7:00 AM to 10:00 PM and 4 customers between 10:00 PM and 7:00 AM., as reported by CVS, Ref. (e). A total of 87 daytime transactions and 4 nighttime transactions at 58 dBA L_{eq} over 2 minutes each generates noise exposure of 36 dB DNL at 160 ft. (105 Carlton Ave.) and 32 dB DNL at 250 ft. (16522 Los Gatos-Almaden Road). Thus, the noise exposures will be within the goal of the Town of Los Gatos Noise Element standards.

B. Loading Dock

To determine the noise levels from loading dock activity, noise measurements were conducted at the loading dock of the existing CVS Pharmacy on Foxworthy Avenue in San Jose. The measurements were made for 24-hour on December 18-19, 2012 at a distance of 40 ft. from the rear façade of the store. The measurements were made using a Larson Davis LDL 812 Sound Level Meter.

Hourly average sound levels during loading dock operations ranged from 61.4 to 73.1 dBA L_{eq} . There were five hours during which loading dock activity occurred. The loading is open from 8:00 AM to 5:00 PM weekdays. Typical loading operations are 1-2 CVS trucks per week, 7-10 vendor trucks per day and 1-2 FedEx/UPS trucks per day, as reported by the Foxworthy CVS store manager, Ref. (f).

Standard loading dock noise levels, comprised from data of many loading dock noise studies are shown in Table VI, below. The raw data were normalized to distances of 220 ft. (distance to 105 Carlton Avenue) and 180 ft. (distance to 16522 Los Gatos-Almaden Road).

As shown in the Table, the beverage truck roll up door operations are expected to exceed the 63 dBA noise limit of the Town of Los Gatos Noise Ordinance for the 6:00 AM to 1:00 PM period, but are within the 70 dBA limit for the 1:00 PM – 10:00 PM period.

TABLE VI		
Loading Dock Noise Levels, dBA		
Noise Source	105 Carlton Ave (220 ft.)	16522 L.G. - Almaden Road (180 ft.)
Truck pulled up to dock	59	61
Truck idling	39	41
Backed into dock	56	58
Backing beeper	50	51
Brought goods in by hand on dollies	40-47	41-48
Rolled cart by (full to empty)	42-51	43-52
Hand cart	49	50
Truck pulled out	45-51	46-52
Beverage truck enter	57	58
Beverage truck roll up door	65	66
Vendor truck drive off	23	24
Banging cans	33	34
Dumping cans	26	27
Trash compactor operation	31-49	33-51

Based on the data acquired at the CVS Foxworthy pharmacy, the hourly average loading dock operational noise levels at 105 Carlton Avenue and at 16522 Los Gatos-Almaden Road were calculated to be 46.6 to 58.3 dBA L_{eq} and 48.3 to 60.0 dBA L_{eq} , respectively.

The noise exposures generated by the loading dock operations, were calculated using the CVS Foxworthy store data adjusted up by 7 dB during one hour to account for an additional CVS truck because of the larger project store, but adjusted down by 14.8 to account for the increased distance to the residence at 105 Carlton Avenue and by 13.1 dB for the distance to the residence at 16522 Los Gatos-Almaden Road.

The noise exposure at 105 Carlton Avenue due to loading dock operations was calculated to be 47 dB DNL. The noise exposure at 16522 Los Gatos-Almaden Road was calculated to be 49 dB DNL. Thus, the noise exposures will be within the 55 dB DNL goal of the Town of Los Gatos Noise Element standards.

As the existing noise exposures range from 57-59 dB DNL at 105 Carlton Avenue and the future noise exposures (without the project) are expected to be up to 58-60 dB DNL, the 47 dB DNL generated by the loading dock will not add to the background noise environment.

The existing noise exposures range from 65-66 dB DNL at 16522 Los Gatos-Almaden Road and the future noise exposures (without the project) are expected to be up to 67-68 dB DNL, the 49 dB DNL generated by the loading dock will not add to the background noise environment.

C. Outdoor Mechanical Equipment

Roof-top mechanical plans have not been developed at the time of this study. Therefore, reference was made to a similar project roof-top mechanical equipment noise analysis, Ref. (g). We are assuming that the project mechanical equipment will be located approximately 40 ft. from the east parapet, which results in a worst-case scenario. The roof elevation is 27 ft. with a 4 ft. parapet. The building height and parapet provide 6 dB of noise reduction for the second floor of 105 Carlton Avenue and 6 dB of noise reduction for 16522 Los Gatos-Almaden Road.

The total operational noise levels of all roof-top equipment operating simultaneously were calculated to be 53 dBA at 105 Carlton Avenue and 51 dBA at 16522 Los Gatos-Almaden Road. Thus, the noise levels will be within the most restrictive 54 dBA weekend nighttime noise limit of the Town of Los Gatos Noise Ordinance at 105 Carlton Avenue and at 16522 Los Gatos-Almaden Road.

Because operations of the equipment may vary depending upon the demand for heating and cooling, we are assuming that all of the air-conditioning equipment will run continuously and simultaneously during the store operational hours of 7:00 a.m. to 11:00 p.m. The refrigeration equipment is expected to operate over the 24-hour period. During the nighttime period, we are assuming that the refrigeration condensers will run 50% of the time as they cycle down. We are also including four ¼ h.p. exhaust fans that generate a noise level of 75 dBA at 15 ft. each.

Table VII, below, provides the mechanical equipment data used in this analysis.

TABLE VII						
Roof-top Mechanical Equipment						
Item Call Out	Manuf.	Model	Size	Fan Speed	Fan Motor	Sound Power Level (Lwa) ¹
RTU-1	Lennox	KHA060S4BN1Y	5 Ton	2,000 CFM	1.5 hp	82
RTU-2	Lennox	KHA048S4BN1Y	4 Ton	1,600 CFM	1.5 hp	75
RTU-3	Lennox	KHA120S4BN1Y	10 Ton	4,000 CFM	3.0 hp	88
RTU-4	Lennox	KHA048S4BN1Y	4 Ton	1,600 CFM	1.5 hp	75
RTU-5	Lennox	KHA036S4BN1Y	3 Ton	1,200 CFM	1.5 hp	75
Refrig. Condenser	Master-Bilt	WG-3	NA	NA	NA	64.7 dBA @ 30'

¹ Per AHRI 270-2008 (AHRI 275-2009)

The noise exposures were calculated to be 57 dB DNL at 105 Carlton Avenue and 55 dB DNL at 16522 Los Gatos-Almaden Road. Thus, the noise exposures from roof-top mechanical equipment is likely to exceed the 55 dB DNL limit of the Town of Los Gatos Noise Element by up to 2 dB. Noise mitigation measures will be required.

Mechanical plans for the secondary commercial building are not available. The approximate 12,000 sq. ft. building will require approximately 24 tons of cooling. Refrigeration compressors (which generate the highest noise levels and control the roof-top noise) are not likely to be used

Assuming that five 5-ton air-conditioning units and five ¼ h.p. exhaust fans will be used and spread out evenly over the length of the building, each set of an air-conditioner and an exhaust fan will be located at 20 ft., 56 ft., 92 ft., 128 ft. and 164 ft. from the east parapet. The distance from the building to 105 Carlton Avenue is 100 ft. The parapet will provide 7-10 dB of additional noise reduction.

The distance from the commercial building to 16522 Los Gatos-Almaden Road is 320 ft. All of the roof-top equipment will be shielded by the CVS building with the exception of the two most easterly pair of equipment. The parapet will provide an additional 6-9 dB of noise reduction.

We are estimating that the secondary commercial building mechanical equipment will operate from 7:00 AM to 10:00 PM. The total noise level of the roof-top mechanical equipment on the secondary commercial building is expected to be 52.0 dBA at 105 Carlton Avenue and 44.6 dBA at 16522 Los Gatos-Almaden Road. Thus, the noise levels will be within the weekend morning noise limit of 58 dBA.

D. Project Traffic Noise

The impacts due to project traffic are calculated by comparing existing and future traffic volumes without the project to the project traffic volumes on roadways in the vicinity of the project. Traffic volume data were provided in the Traffic Impact Study, Ref. (g). Roads nearest the project are analyzed first and they carry the most project traffic. Table VIII on page 22 provides the Average Daily Traffic (ADT) volumes for existing, project, background, existing + project, background + project, background + pending and background + pending + project scenarios.

Table IX, also on page 22, provides the changes in noise exposures along the roadways closest to the project. As shown, the project will not add to the existing and future noise environments. Project traffic is a less than significant impact.

TABLE VIII									
Traffic Volumes, ADT									
Roadway	Between		Existing	Project	Background	Exist + Proj	Background + Proj.	Background + Pending	Background + Pending+ Proj.
Driveway				1400		1440	1440		1440
L.G.-Alm	Driveway	Carlton	10340	390	10990	10730	11380	13340	13730
Peach Blossom	L.G.-Alm	Cam. Ter.	2830	70	2830	2900	2900	2830	2900
Carlton	L.G.-Alm.	Longridge	1310	110	1310	1350	1350	1310	1350
Los Gatos Blvd	L.G. -Alm		28100	670	31000	28770	31660	38100	38770

TABLE IX										
Noise Exposure Increases, dB DNL										
Roadway	Between		Scenario							
			From Existing To Exist + Proj.	Existing Background	Background Background + Proj.	Exist Background + Pending	Background Background + Pending	Existing Background + Pending+ Proj.	Background Background + Pending+ Proj.	Background + Pending Background + Pending+ Proj.
Driveway			0	0	0	0	0	0	0	0
L.G.-Alm	Driveway	Carlton	0	0	0	1	1	1	1	0
Peach Blossom	L.G.-Alm	Cam. Ter.	0	0	0	0	0	0	0	0
Carlton	L.G.-Alm.	Longridge	0	0	0	0	0	0	0	0
Los Gatos Blvd	L.G.-Alm		0	0	0	1	1	1	1	0

E. Parking Lot Noise

Noise from vehicles in the parking lot was calculated from noise data acquired from past studies of parking lot noise sources. The highest noise levels are generated by the closing and opening of car doors, engines starting and vehicles backing out of parking spaces. The average sound level of an “exiting” operation is 60 dBA at a distance of 15 ft. from the front of the parking stall. The operational duration is typically 30 seconds.

At 105 Carlton Avenue, the maximum noise level was calculated to be 54 dBA in the rear yard and 49 dBA at the second floor the home.

At 16522 Los Gatos-Almaden Road, the noise level was calculated to be 42 dBA at 120 ft. to the nearest parking space.

The noise exposure from 700 vehicles (half of the TIS trips) driving along the rear of the CVS store at 10 mph was calculated to be 44 dB DNL at the 105 Carlton Avenue residence. Thus, noise from vehicles in the parking lot will be within the goals of the Town of Los Gatos Noise Element.

The noise exposure from 1400 vehicles entering and exiting the driveway at Los Gatos-Almaden Road at 10 mph was calculated to be 37 dB DNL at 120 ft. from the residence at 16522 Los Gatos-Almaden Road. Thus, noise from vehicles in the parking lot will be within the goals of the Town of Los Gatos Noise Element.

F. Construction Noise Impacts

Short-term noise impacts may be created during demolition of the existing structures on the site and construction of the project. Demolition and construction equipment are typically similar, with the exception of paving equipment. Thus, the noise levels generated by the two phases will be similar over the course of entire process. Demolition/construction equipment noise levels range from 78 to 95 dBA at a 50 ft. distance from the source, and has a potential to disturb residences along Carlton Avenue. It is unlikely that demolition and construction noise would disturb residents along Los Gatos-Almaden Road due to existing traffic noise.

Table X on Page 25 provides a list of the demolition and construction equipment expected to be used on the project, their reference noise levels at a 50 ft. distance, their reference sound levels at 25 ft., the distance the equipment needs to operate from the residential property line so as not to exceed 85 dBA, and the equipment noise levels calculated for each of the most impacted residential properties.

As shown in Table X, paving machines, compactive rollers, scrapers, track loaders, bulldozers, excavators, generators, air compressors (unhoused) generate sound levels in excess of the 85 dBA at 25 ft. limit of the Town of Los Gatos Noise Ordinance. Some equipment may need to be used at close proximity to the noise sensitive property planes.

The noise levels presented in the table are typical noise levels produced by the pieces of equipment shown. However, equipment used in the field may vary slightly, depending on the sizes of engines, the contractor and their sub-contractors, age of equipment, the way tools, devices and items of equipment are utilized and many other factors that are unknown at this time and cannot be predicted with any level of accuracy. In addition, the sound levels at the property boundaries at any given time will change dramatically such that maximum noise levels may occur for very short periods of time or may occur for longer periods of time.

TABLE X												
Construction Noise Analysis												
					Demolition				Construction			
Reference			Sound Level	Dist. To	105 Carlton		16522 L.G. - Almaden Rd		105 Carlton		16522 L.G. - Almaden Rd	
Equipment	Level	Dist., ft.	@ 25 ft.	85 dBA	Dist.	Sound Level	Dist.	Sound Level	Dist.	Sound Level	Dist.	Sound Level
Paving Machine	89	50	95	79					20	97	120	81
Water Truck	84	50	90	45	30	88	120	76	30	88	120	76
Compactive Rollers	85	50	91	50					30	89	120	77
Scrapers	86	50	92	56	20	94	120	78	20	94	120	78
Graders	83	50	89	40	20	91	120	75	20	91	120	75
Wheel Loader	82	50	88	35	20	90	120	74	20	90	120	74
Track Loader	85	50	91	50	20	93	120	77	20	93	120	77
Backhoe	82	50	88	35	20	90	120	74	20	90	120	74
Bulldozer	85	50	91	50	20	93	120	77	20	93	120	77
Haul Trucks	84	50	90	45	50	84	120	76	50	84	120	76
Crane	82	50	88	35	100	76	120	74	100	76	180	71
Excavator	85	50	91	50	20	93	120	77	20	93	120	77
Air Compressor	90	50	96	89	50	90	120	82	50	90	120	82
Generator	81	50	87	32	50	81	120	73	50	81	120	73
Skid Steer	78	50	84	22					20	86	120	70

VII. Mitigation Measures

A. Drive-Thru Noise

- No noise mitigation required.

B. Loading Dock Noise

- Require all beverage truck drivers to face the side of the truck with the roll up doors toward the rear of the store during operation of the roll up door. This measure may require that the drivers turn the truck around if both sides of the truck is unloaded. This measure applies only to operations before 1:00 PM.

C. Mechanical Equipment Noise

- Provide acoustically-effective screens at the east and north sides of all roof-top mechanical equipment located within 120 ft. from the east parapet of the CVS building. The screens shall be constructed air-tight and shall extend to a minimum of 1 ft. above top of the mechanical unit. A gap of 1" may be maintained at the bottom of the screen to allow for drainage.
- The project applicant shall provide to the Town evidence that the mechanical equipment associated with the project will (pre-construction) OR does (post-construction) comply with the standards of the Town of Los Gatos Noise Ordinance. No noise mitigation required.

D. Parking Lot/Traffic Noise

- No Noise Mitigation Required.

E. Trash Collection

- Use plastic top dumpsters

F. Construction Noise

- Limit construction hours to 8:00 AM to 8:00 PM weekdays and 9:00 AM to 7:00 PM weekends and holidays, to comply with the requirements of the Town of Los Gatos Noise Ordinance.
- Restrict the use of heavy equipment within the distances shown in the shaded column of Table VIII of this report.

Mitigation of the construction phase noise at the site can be accomplished by using quiet or "new technology" equipment. The greatest potential for noise abatement of current equipment should be the quieting of exhaust noises by use of improved mufflers. It is recommended that all internal combustion engines used at the project site be equipped with a type of muffler recommended by the vehicle manufacturer. In addition, all equipment should be in good mechanical condition so as to minimize noise created by faulty or poorly maintained engine, drive-train and other components. Construction noise can also be mitigated by the following:

- Utilizing temporary berms or noise barriers, such as lumber or other material stockpiles.

As noise reduction benefit can also be achieved by appropriate selection of equipment utilized for various operations, subject to equipment availability and cost considerations, the following recommendations for minimizing impacts on the surrounding area are offered:

- Earth Movement: Use wheeled equipment rather than track equipment whenever possible.
- Ground Preparation: Use a motor grader rather than a bulldozer for final grading.
- Building Construction: Power saws should be shielded or enclosed where practical to decrease noise emissions. Compressors and generators shall be housed in manufacturer's acoustical enclosure where feasible. Locate stationary equipment as far from noise sensitive uses as much as possible.

VIII. Conclusions

In conclusion, the noise from beverage trucks, mechanical equipment, trash collection and demolition/construction will exceed the applicable goals and limits of the Town of Los Gatos Noise Element and Noise Ordinance. Overall, the project will not significantly increase the existing and future noise environments in the project vicinity. Measures to reduce excessive noise are provided in Section VII of this report.

The study findings for existing conditions are based on field measurements and other data and are correct to the best of our knowledge. Future noise projections are based on information provided by the consulting traffic engineer and project sponsor. Significant deviations in the predicted traffic volumes, site planning, mechanical equipment, loading dock operations, noise regulations or other future changes beyond our control may produce long-range noise results different from our estimates.

Report Prepared By:



Jeffrey K. Pack
President

APPENDIX A

References

- (a) Town of Los Gatos 2020 General Plan, Chapter 10, “Noise Element”, September, 2010
- (b) Town of Los Gatos Municipal Code, Ordinance 1852, Chapter 11, Section 11.30.030, 1991
- (c) Site Plan, CVS Pharmacy, by Architectural Dimensions, February 6, 2013
- (d) “Traffic Impact Study for the Proposed CVS Pharmacy and Commercial Development at 15600 Los Gatos Boulevard”, by TJKM Transportation Consultants, December 5, 2011
- (e) Information on CVS Pharmacy Drive-Thru Operations Provided by Ms. Jennifer Savage, Town of Los Gatos Planning Department, by email to Edward L. Pack Associates, Inc., June 4, 2013
- (f) Information on CVS Pharmacy Loading Dock Activity Provided by the CVS Foxworthy Store Manager by Personal Communication with Edward L. Pack Associates, Inc., December 18, 2012
- (g) “Noise Assessment Study for the Planned Walgreen’s Pharmacy #15003, Monument Boulevard and Oak Grove Road, Concord”, by Edward L. Pack Associates, Inc., Project No. 43-035, August 9, 2010

APPENDIX B

Noise Standards, Terminology, Instrumentation,

1. Noise Standards

A. Town of Los Gatos Noise Element Standards

The Noise Element of the General Plan of the Town of Los Gatos 2020, adopted September 2010, specifies noise goals for various land uses.

Land Use	dB DNL	dBA L _{eq(24)}
Residential	55	
Commercial		70
Industrial		70
Open Space		
Intensive (developed park)		55
Passive (natural park)		50
Hospital		55
Educational		55

Interior noise exposures for single-family developments are specified to be the same as multi-family developments. This statement asserts coincidence with the standard of the State of California Code of Regulations, Title 24 noise limit of 45 dB DNL for all new housing.

2. Terminology

A. Statistical Noise Levels

Due to the fluctuating character of urban traffic noise, statistical procedures are needed to provide an adequate description of the environment. A series of statistical descriptors have been developed which represent the noise levels exceeded a given percentage of the time. These descriptors are obtained by direct readout of the Sound Level Meters and Noise Analyzers. Some of the statistical levels used to describe community noise are defined as follows:

- L_1 - A noise level exceeded for 1% of the time.
- L_{10} - A noise level exceeded for 10% of the time, considered to be an “intrusive” level.
- L_{50} - The noise level exceeded 50% of the time representing an “average” sound level.
- L_{90} - The noise level exceeded 90 % of the time, designated as a “background” noise level.
- L_{eq} - The continuous equivalent-energy level is that level of a steady-state noise having the same sound energy as a given time-varying noise. The L_{eq} represents the decibel level of the time-averaged value of sound energy or sound pressure squared and is used to calculate the DNL and CNEL.

B. Day-Night Level (DNL)

Noise levels utilized in the standards are described in terms of the Day-Night Level (DNL). The DNL rating is determined by the cumulative noise exposures occurring over a 24-hour day in terms of A-Weighted sound energy. The 24-hour day is divided into two subperiods for the DNL index, i.e., the daytime period from 7:00 a.m. to 10:00 p.m., and the nighttime period from 10:00 p.m. to 7:00 a.m. A 10 dB weighting factor is applied (added) to the noise levels occurring during the nighttime period to account for the greater sensitivity of people to noise during these hours. The DNL is calculated from the measured L_{eq} in accordance with the following mathematical formula:

$$DNL = [(L_d + 10 \log_{10} 15) \& (L_n + 10 + 10 \log_{10} 9)] - 10 \log_{10} 24$$

Where:

L_d = L_{eq} for the daytime (7:00 a.m. to 10:00 p.m.)

L_n = L_{eq} for the nighttime (10:00 p.m. to 7:00 a.m.)

24 - indicates the 24-hour period

& - denotes decibel addition.

C. A-Weighted Sound Level

The decibel measure of the sound level utilizing the "A" weighted network of a sound level meter is referred to as "dBA". The "A" weighting is the accepted standard weighting system used when noise is measured and recorded for the purpose of determining total noise levels and conducting statistical analyses of the environment so that the output correlates well with the response of the human ear.

3. Instrumentation

The on-site field measurement data were acquired by the use of one or more of the precision acoustical instruments shown below. The acoustical instrumentation provides a direct readout of the L exceedance statistical levels including the equivalent-energy level (L_{eq}). Input to the meters was provided by a microphone extended to a height of 5 ft. above the ground. The meter conforms to ANSI S1.4 for Type 1 instruments. The "A" weighting network and the "Fast" response setting of the meter were used in conformance with the applicable ISO and IEC standards. All instrumentation was acoustically calibrated before and after field tests to assure accuracy.

Bruel & Kjaer 2231 Precision Integrating Sound Level Meter
Larson Davis LDL 812 Precision Integrating Sound Level Meter
Larson Davis 2900 Real Time Analyzer

APPENDIX C

Noise Measurement Data and Calculation Tables

DNL CALCULATIONS

CLIENT: GEIER & GEIER
 FILE: 44-035
 PROJECT: CVS PHARMACY
 DATE: 10/26-29/2012
 SOURCE: EXISTING AMBIENT

LOCATION 1 Roof of Existing Bldg Behind 105 Carlton Ave.				
TIME	Weekday			
	Leq	10 [^] Leq/10		
7:00 AM	55.5	354813.4		
8:00 AM	55.3	338844.2		
9:00 AM	55.3	338844.2		
10:00 AM	54.6	288403.2		
11:00 AM	55.7	371535.2		
12:00 PM	56.5	446683.6		
1:00 PM	55.5	354813.4		
2:00 PM	55.9	389045.1		
3:00 PM	56.0	398107.2		
4:00 PM	56.0	398107.2		
5:00 PM	57.3	537031.8		
6:00 PM	55.9	389045.1		
7:00 PM	55.7	371535.2		
8:00 PM	55.2	331131.1		
9:00 PM	54.5	281838.3	SUM=	5589778
10:00 PM	54.3	269153.5	Ld=	55.7
11:00 PM	53.0	199526.2		
12:00 AM	44.8	30199.5		
1:00 AM	44.7	29512.1		
2:00 AM	43.9	24547.1		
3:00 AM	45.0	31622.8		
4:00 AM	49.3	85113.8		
5:00 AM	50.4	109647.8		
6:00 AM	52.8	190546.1	SUM=	969869
			Ln=	50.3
	Daytime Level=	67.5		
	Nighttime Level=	69.8		
	DNL=	58		
	24-Hour Leq=	54.4		

LOCATION 1 Roof of Existing Bldg Behind 105 Carlton Ave.				
TIME	Saturday			
	Leq	10 [^] Leq/10		
7:00 AM	53.2	208929.6		
8:00 AM	58.0	630957.3		
9:00 AM	55.8	380189.4		
10:00 AM	56.6	457088.2		
11:00 AM	56.4	436515.8		
12:00 PM	57.0	501187.2		
1:00 PM	55.2	331131.1		
2:00 PM	56.4	436515.8		
3:00 PM	56.7	467735.1		
4:00 PM	55.5	354813.4		
5:00 PM	57.0	501187.2		
6:00 PM	55.1	323593.7		
7:00 PM	54.3	269153.5		
8:00 PM	55.7	371535.2		
9:00 PM	53.7	234422.9	SUM=	5904956
10:00 PM	54.2	263026.8	Ld=	56.0
11:00 PM	53.3	213796.2		
12:00 AM	52.0	158489.3		
1:00 AM	49.3	85113.8		
2:00 AM	48.3	67608.3		
3:00 AM	48.4	68548.8		
4:00 AM	47.8	60256.0		
5:00 AM	50.4	109647.8		
6:00 AM	53.2	208929.6	SUM=	1235417
			Ln=	51.4
	Daytime Level=	67.8		
	Nighttime Level=	70.9		
	DNL=	59		
	24-Hour Leq=	54.7		

LOCATION 1 Roof of Existing Bldg Behind 105 Carlton Ave.				
TIME	Sunday			
	Leq	10 [^] Leq/10		
7:00 AM	53.9	245470.9		
8:00 AM	54.5	281838.3		
9:00 AM	53.2	208929.6		
10:00 AM	54.2	263026.8		
11:00 AM	54.7	295120.9		
12:00 PM	54.9	309029.5		
1:00 PM	54.8	301995.2		
2:00 PM	55.5	354813.4		
3:00 PM	55.3	338844.2		
4:00 PM	55.3	338844.2		
5:00 PM	54.7	295120.9		
6:00 PM	53.8	239883.3		
7:00 PM	52.0	158489.3		
8:00 PM	50.9	123026.9		
9:00 PM	51.0	125892.5	SUM=	3880326
10:00 PM	49.2	83176.4	Ld=	54.1
11:00 PM	48.8	75857.8		
12:00 AM	51.6	144544.0		
1:00 AM	51.2	131825.7		
2:00 AM	48.9	77624.7		
3:00 AM	46.9	48977.9		
4:00 AM	46.2	41686.9		
5:00 AM	49.0	79432.8		
6:00 AM	51.4	138038.4	SUM=	821165
			1.0 Ln=	49.6
		294199.7		
	Daytime Level=	65.9		
	Nighttime Level=	69.1		
	DNL=	57		
	24-Hour Leq=	52.9		

DNL CALCULATIONS

CLIENT: GEIER & GEIER
 FILE: 44-035
 PROJECT: CVS PHARMACY
 DATE: 10/26-29/2012
 SOURCE: EXISTING AMBIENT

LOCATION 2 16522 Los Gatos - Almaden Rd			
Weekday			
TIME		10 [^] Leq/10	
7:00 AM	60.3	1071519.3	
8:00 AM	61.1	1288249.6	
9:00 AM	61.8	1513561.2	
10:00 AM	60.4	1096478.2	
11:00 AM	64.9	3090295.4	
12:00 PM	70.9	12302687.7	
1:00 PM	64.6	2884031.5	
2:00 PM	65.3	3388441.6	
3:00 PM	65.9	3890451.4	
4:00 PM	66.3	4265795.2	
5:00 PM	66.9	4897788.2	
6:00 PM	66.1	4073802.8	
7:00 PM	63.7	2344228.8	
8:00 PM	62.5	1778279.4	
9:00 PM	60.7	1174897.6	SUM= 49060508
10:00 PM	60.5	1122018.5	Ld= 65.1
11:00 PM	56.7	467735.1	
12:00 AM	49.8	95499.3	
1:00 AM	48.3	67608.3	
2:00 AM	46.8	47863.0	
3:00 AM	46.5	44668.4	
4:00 AM	51.3	134896.3	
5:00 AM	56.2	416869.4	
6:00 AM	58.6	724436.0	SUM= 3121594
			Ln= 55.4
		3681774.6	
	Daytime Level=	76.9	
	Nighttime Level=	74.9	
	DNL=	65	
	24-Hour Leq=	63.4	

LOCATION 2 16522 Los Gatos - Almaden Rd			
Saturday			
TIME		10 [^] Leq/10	
7:00 AM	60.0	1000000.0	
8:00 AM	67.9	6165950.0	
9:00 AM	64.5	2818382.9	
10:00 AM	65.8	3801894.0	
11:00 AM	65.2	3311311.2	
12:00 PM	69.7	9332543.0	
1:00 PM	65.0	3162277.7	
2:00 PM	67.7	5888436.6	
3:00 PM	65.1	3235936.6	
4:00 PM	65.3	3388441.6	
5:00 PM	65.0	3162277.7	
6:00 PM	62.6	1819700.9	
7:00 PM	61.3	1348962.9	
8:00 PM	61.6	1445439.8	
9:00 PM	61.6	1445439.8	SUM= 51326994
10:00 PM	62.7	1862087.1	Ld= 65.3
11:00 PM	58.4	691831.0	
12:00 AM	54.7	295120.9	
1:00 AM	53.0	199526.2	
2:00 AM	50.7	117489.8	
3:00 AM	50.2	104712.9	
4:00 AM	52.8	190546.1	
5:00 AM	52.7	186208.7	
6:00 AM	57.0	501187.2	SUM= 4148710
			Ln= 56.6
		4714591.5	
	Daytime Level=	77.1	
	Nighttime Level=	76.1	
	DNL=	66	
	24-Hour Leq=	63.6	

LOCATION 2 16522 Los Gatos - Almaden Rd			
Sunday			
TIME		10 [^] Leq/10	
7:00 AM	59.5	891250.9	
8:00 AM	61.5	1412537.5	
9:00 AM	62.1	1621810.1	
10:00 AM	64.0	2511886.4	
11:00 AM	63.6	2290867.7	
12:00 PM	64.5	2818382.9	
1:00 PM	64.7	2951209.2	
2:00 PM	63.9	2454708.9	
3:00 PM	64.2	2630268.0	
4:00 PM	64.8	3019951.7	
5:00 PM	63.2	2089296.1	
6:00 PM	62.9	1949844.6	
7:00 PM	61.2	1318256.7	
8:00 PM	59.5	891250.9	
9:00 PM	60.1	1023293.0	SUM= 29874815
10:00 PM	57.2	524807.5	Ld= 63.0
11:00 PM	63.0	1995262.3	
12:00 AM	57.4	549540.9	
1:00 AM	54.8	301995.2	
2:00 AM	52.0	158489.3	
3:00 AM	48.3	67608.3	
4:00 AM	48.1	64565.4	
5:00 AM	52.1	162181.0	
6:00 AM	54.9	309029.5	SUM= 4133479
			Ln= 56.6
		2336458.8	
	Daytime Level=	74.8	
	Nighttime Level=	76.1	
	DNL=	65	
	24-Hour Leq=	61.5	

DNL CALCULATIONS

CLIENT: GEIER & GEIER
 FILE: 44-035
 PROJECT: CVS PHARMACY
 DATE: 6/25/2013
 SOURCE: DRIVE-THRU

CARLTON AVE. RESIDENCE 160 ft.			
TIME	Leq	10 [^] Leq/10	
7:00 AM		1.0	
8:00 AM	42.0	15848.9	
9:00 AM	42.0	15848.9	
10:00 AM	42.0	15848.9	
11:00 AM	42.0	15848.9	
12:00 PM	38.0	6309.6	
1:00 PM		1.0	
2:00 PM		1.0	
3:00 PM		1.0	
4:00 PM		1.0	
5:00 AM		1.0	
6:00 AM		1.0	
7:00 PM		1.0	
8:00 PM		1.0	
9:00 PM		1.0	SUM= 69715
10:00 PM	35.0	3162.3	Ld= 36.7
11:00 PM		1.0	
12:00 AM		1.0	
1:00 AM		1.0	
2:00 AM		1.0	
3:00 AM		1.0	
4:00 AM		1.0	
5:00 AM		1.0	
6:00 AM		1.0	SUM= 3170
			Ld= 25.5
	Daytime Level=	48.5	
	Nighttime Level=	45.0	
	DNL=	36	
	24-Hour Leq=	34.8	

L.G. - ALM RESIDENCE 250 ft.			
TIME	Leq	10 [^] Leq/10	
7:00 AM		1.0	
8:00 AM	38.0	6309.6	
9:00 AM	38.0	6309.6	
10:00 AM	38.0	6309.6	
11:00 AM	38.0	6309.6	
12:00 PM	34.0	2511.9	
1:00 PM		1.0	
2:00 PM		1.0	
3:00 PM		1.0	
4:00 PM		1.0	
5:00 AM		1.0	
6:00 AM		1.0	
7:00 PM		1.0	
8:00 PM		1.0	
9:00 PM		1.0	SUM= 27760
10:00 PM	31.0	1258.9	Ld= 32.7
11:00 PM		1.0	
12:00 AM		1.0	
1:00 AM		1.0	
2:00 AM		1.0	
3:00 AM		1.0	
4:00 AM		1.0	
5:00 AM		1.0	
6:00 AM		1.0	SUM= 1267
			Ld= 21.5
	Daytime Level=	44.5	
	Nighttime Level=	41.0	
	DNL=	32	
	24-Hour Leq=	30.8	

DNL CALCULATIONS

CLIENT: GEIER & GEIER
 FILE: 44-035
 PROJECT: CVS PHARMACY
 DATE: 10/26-29/2012
 SOURCE: CVS FOXWORTHY LOADING DOCK

LOCATION 3		CVS Foxworthy Ave	
Dist to Source		40 ft. from rear of store	
TIME	Leq	10 [^] Leq/10	
7:00 AM	68.8	7585775.8	
8:00 AM	67.2	5248074.6	
9:00 AM	59.6	912010.8	
10:00 AM	61.4	1380384.3	
11:00 AM	66.5	4466835.9	
12:00 PM	55.9	389045.1	
1:00 PM	73.1	20417379.4	
2:00 PM	53.4	218776.2	
3:00 PM	56.2	416869.4	
4:00 PM	54.1	257039.6	
5:00 PM	53.5	223872.1	
6:00 PM	54.0	251188.6	
7:00 PM	51.4	138038.4	
8:00 PM	50.8	120226.4	
9:00 PM	50.6	114815.4	SUM= 42140332
10:00 PM	48.1	64565.4	Ld= 64.5
11:00 PM	45.4	34673.7	
12:00 AM	46.0	39810.7	
1:00 AM	44.2	26302.7	
2:00 AM	43.8	23988.3	
3:00 AM	43.7	23442.3	
4:00 AM	45.5	35481.3	
5:00 AM	51.1	128825.0	
6:00 AM	53.0	199526.2	SUM= 576616
		Ld=	48.1
	Daytime Level=	76.3	
	Nighttime Level=	67.6	
	DNL=	63	
	24-Hour Leq=	62.5	

DNL CALCULATIONS

CLIENT: GEIER & GEIER
 FILE: 44-035
 PROJECT: CVS PHARMACY
 DATE: 10/26-29/2012
 SOURCE: PROJECT-GENERATED LOADING DOCK

CARLTON AVE. RESIDENCE		220 ft.	
TIME	Leq	10 [^] Leq/10	
7:00 AM		1.0	
8:00 AM	52.4	173380.4	
9:00 AM	51.8	151008.0	
10:00 AM	46.6	45603.7	
11:00 AM	51.7	147570.7	
12:00 PM	41.1	12852.9	
1:00 PM	58.3	674528.0	
2:00 PM		1.0	
3:00 PM		1.0	
4:00 PM		1.0	
5:00 AM		1.0	
6:00 AM		1.0	
7:00 PM		1.0	
8:00 PM		1.0	
9:00 PM		1.0	SUM= 1204953
10:00 PM		1.0	Ld= 49.0
11:00 PM		1.0	
12:00 AM		1.0	
1:00 AM		1.0	
2:00 AM		1.0	
3:00 AM		1.0	
4:00 AM		1.0	
5:00 AM		1.0	
6:00 AM		1.0	SUM= 9
		Ld=	0.0
	Daytime Level=	60.8	
	Nighttime Level=	19.5	
	DNL=	47	
	24-Hour Leq=	47.0	

L.G. - ALM RESIDENCE		180 ft.	
TIME	Leq	10 [^] Leq/10	
7:00 AM		1.0	
8:00 AM	54.1	257039.6	
9:00 AM	53.5	223872.1	
10:00 AM	48.3	67608.3	
11:00 AM	53.4	218776.2	
12:00 PM	42.8	19054.6	
1:00 PM	60.0	1000000.0	
2:00 PM		1.0	
3:00 PM		1.0	
4:00 PM		1.0	
5:00 PM		1.0	
6:00 PM		1.0	
7:00 PM		1.0	
8:00 PM		1.0	
9:00 PM		1.0	SUM= 1786360
10:00 PM		1.0	Ld= 50.8
11:00 PM		1.0	
12:00 AM		1.0	
1:00 AM		1.0	
2:00 AM		1.0	
3:00 AM		1.0	
4:00 AM		1.0	
5:00 AM		1.0	
6:00 AM		1.0	SUM= 9
		Ld=	0.0
	Daytime Level=	53.5	223294.1
	Nighttime Level=	62.6	
	DNL=	49	
	24-Hour Leq=	48.7	

DNL CALCULATIONS

CLIENT: GEIER & GEIER
 FILE: 44-035
 PROJECT: CVS PHARMACY
 DATE: 10/26-29/2012
 SOURCE: PROJECT-GENERATED MECHANICAL EQUIPMENT

CARLTON AVE. RESIDENCE			
	200 ft. CVS		
TIME	Leq	10 [^] Leq/10	
7:00 AM	53.2	207108.6	
8:00 AM	53.2	207108.6	
9:00 AM	53.2	207108.6	
10:00 AM	53.2	207108.6	
11:00 AM	53.2	207108.6	
12:00 PM	53.2	207108.6	
1:00 PM	53.2	207108.6	
2:00 PM	53.2	207108.6	
3:00 PM	53.2	207108.6	
4:00 PM	53.2	207108.6	
5:00 PM	53.2	207108.6	
6:00 PM	53.2	207108.6	
7:00 PM	53.2	207108.6	
8:00 PM	53.2	207108.6	
9:00 PM	53.2	207108.6	SUM= 3106629
10:00 PM	53.2	207108.6	Ld= 53.2
11:00 PM	53.2	207108.6	
12:00 AM		1.0	
1:00 AM	53.2	207108.6	
2:00 AM		1.0	
3:00 AM	53.2	207108.6	
4:00 AM		1.0	
5:00 AM	53.2	207108.6	
6:00 AM		1.0	SUM= 1035547
			Ld= 50.6
	Daytime Level=	65.0	
	Nighttime Level=	70.1	
	DNL=	57	
	24-Hour Leq=	52.4	

L.G. - ALM RESIDENCE			
	240 ft. CVS		
TIME	Leq	10 [^] Leq/10	
7:00 AM	51.1	127769.2	
8:00 AM	51.1	127769.2	
9:00 AM	51.1	127769.2	
10:00 AM	51.1	127769.2	
11:00 AM	51.1	127769.2	
12:00 PM	51.1	127769.2	
1:00 PM	51.1	127769.2	
2:00 PM	51.1	127769.2	
3:00 PM	51.1	127769.2	
4:00 PM	51.1	127769.2	
5:00 AM	51.1	127769.2	
6:00 AM	51.1	127769.2	
7:00 PM	51.1	127769.2	
8:00 PM	51.1	127769.2	
9:00 PM	51.1	127769.2	SUM= 1916538
10:00 PM	51.1	127769.2	Ld= 51.1
11:00 PM	51.1	127769.2	
12:00 AM		1.0	
1:00 AM	51.1	127769.2	
2:00 AM		1.0	
3:00 AM	51.1	127769.2	
4:00 AM		1.0	
5:00 AM	51.1	127769.2	
6:00 AM		1.0	SUM= 638850
			Ld= 48.5
	Daytime Level=	62.9	
	Nighttime Level=	68.0	
	DNL=	55	
	24-Hour Leq=	50.3	

DNL CALCULATIONS

CLIENT:	CLIENT:	GEIER & GEIER
FILE:	FILE:	44-035
PROJECT:	PROJECT:	CVS PHARMACY
DATE:	DATE:	10/26-29/2012
SOURCE:	SOURCE:	PROJECT-GENERATED MECHANICAL EQUIPMENT

CARLTON AVE. RESIDENCE			
200 ft.			
2ND RETAIL			
TIME	Leq	10 [^] Leq/10	
7:00 AM	52.0	158489.3	
8:00 AM	52.0	158489.3	
9:00 AM	52.0	158489.3	
10:00 AM	52.0	158489.3	
11:00 AM	52.0	158489.3	
12:00 PM	52.0	158489.3	
1:00 PM	52.0	158489.3	
2:00 PM	52.0	158489.3	
3:00 PM	52.0	158489.3	
4:00 PM	52.0	158489.3	
5:00 AM	52.0	158489.3	
6:00 AM	52.0	158489.3	
7:00 PM	52.0	158489.3	
8:00 PM	52.0	158489.3	
9:00 PM	52.0	158489.3	SUM= 2377340
10:00 PM		1.0	Ld= 52.0
11:00 PM		1.0	
12:00 AM		1.0	
1:00 AM		1.0	
2:00 AM		1.0	
3:00 AM		1.0	
4:00 AM		1.0	
5:00 AM		1.0	
6:00 AM		1.0	SUM= 9
			Ld= 0.0
	Daytime Level=	63.8	
	Nighttime Level=	19.5	
	DNL=	50	
	24-Hour Leq=	50.0	

L.G. - ALM RESIDENCE			
240 ft.			
2ND RETAIL			
TIME	Leq	10 [^] Leq/10	
7:00 AM	44.6	28840.3	
8:00 AM	44.6	28840.3	
9:00 AM	44.6	28840.3	
10:00 AM	44.6	28840.3	
11:00 AM	44.6	28840.3	
12:00 PM	44.6	28840.3	
1:00 PM	44.6	28840.3	
2:00 PM	44.6	28840.3	
3:00 PM	44.6	28840.3	
4:00 PM	44.6	28840.3	
5:00 AM	44.6	28840.3	
6:00 AM	44.6	28840.3	
7:00 PM	44.6	28840.3	
8:00 PM	44.6	28840.3	
9:00 PM	44.6	28840.3	SUM= 432605
10:00 PM		1.0	Ld= 44.6
11:00 PM		1.0	
12:00 AM		1.0	
1:00 AM		1.0	
2:00 AM		1.0	
3:00 AM		1.0	
4:00 AM		1.0	
5:00 AM		1.0	
6:00 AM		1.0	SUM= 9
			Ld= 0.0
	Daytime Level=	56.4	
	Nighttime Level=	19.5	
	DNL=	43	
	24-Hour Leq=	42.6	

INITIAL STUDY – 15600 & 15650 LOS GATOS BOULEVARD

ATTACHMENT 6

TRAFFIC IMPACT STUDY

FOR THE

PROPOSED CVS PHARMACY AND COMMERCIAL DEVELOPMENT

AT

15600 LOS GATOS BOULEVARD

IN THE

TOWN OF LOS GATOS

BY

TJKM TRANSPORTATION CONSULTANTS

DECEMBER 15, 2011

AND

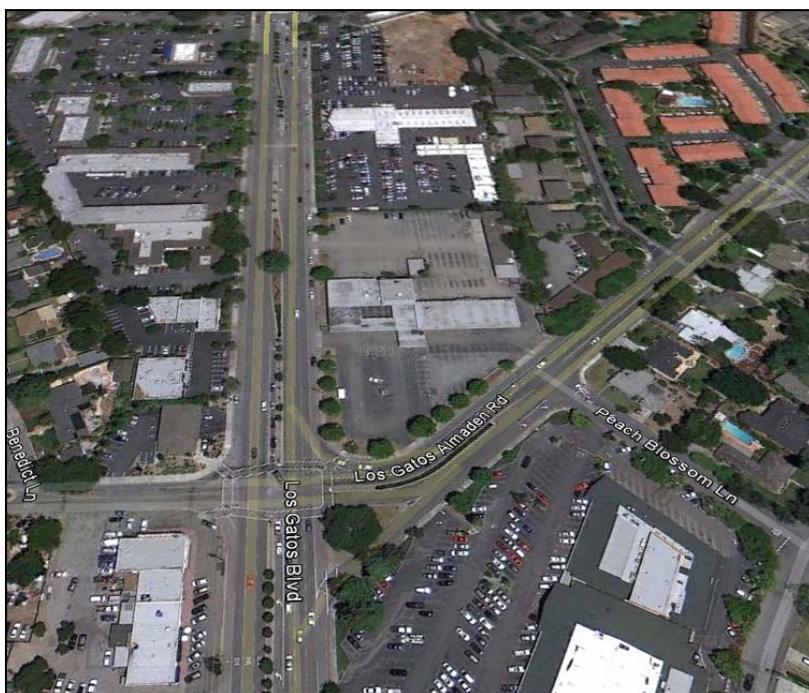
VOLUME COMPARISON OF YEAR 2011 vs. YEAR 2013

ALONG LOS GATOS BOULEVARD

BY

TJKM TRANSPORTATION CONSULTANTS

AUGUST 14, 2013



Final

**Traffic Impact Study
for the Proposed
CVS Pharmacy and
Commercial
Development at 15600
Los Gatos Boulevard**

In The Town of Los Gatos

December 15, 2011



Vision That Moves Your Community

Final

**Traffic Impact Study for the Proposed CVS Pharmacy and
Commercial Development at 15600 Los Gatos Boulevard**

In The Town of Los Gatos

December 15, 2011



www.tjkm.com

Prepared by:
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Introduction and Summary

Introduction

This report presents the results of TJKM's traffic impact analysis for the proposed CVS Pharmacy and commercial development at 15600 Los Gatos Boulevard in the Town of Los Gatos. The project site currently is a vacant auto dealership building. The project sponsor is proposing to demolish the existing building and develop a 14,576 square foot (sq. ft.) CVS Pharmacy, a 4,000 square foot walk-in-bank, and an 8,000 square foot medical office building. Figure 1 illustrates the project location and its vicinity. Figure 2 represents the preliminary site plan.

Summary

The proposed project is expected to generate 2,174 daily trips, including 82 trips (49 inbound and 33 outbound trips) during the a.m. peak hour and 227 trips (104 inbound and 123 outbound) during the p.m. peak hour.

All study intersections operate at acceptable levels of service of LOS D or better under Existing, plus Approved, and plus Project Conditions scenarios. With the addition of project trips, all study intersections are expected to operate acceptably (LOS D or better) during both peak hours.

The southbound left-turn lane on Los Gatos Boulevard at Los Gatos Almaden Road is currently operating at its capacity. The addition of the project trips to the southbound left-turn movement at this intersection will increase the queue by fifty feet or two vehicles per cycle. Thus, an additional southbound left-turn lane at the Los Gatos Boulevard/Los Gatos Almaden Road intersection is recommended to accommodate the potential queue build-up from the project trips.

Under Cumulative Conditions, all study intersections are expected to operate at acceptable levels of service of LOS D or better except for Los Gatos Boulevard/Lark Avenue and Los Gatos Almaden Road/Peach Blossom Lane during the p.m. peak hour.

The intersection of Los Gatos Boulevard/Lark Avenue would carry significant additional traffic from the proposed North-40 project development under Cumulative Conditions. Based on our understanding and the Town staff's input, this intersection would require road widening and signal modifications to accommodate future traffic. TJKM finds that adding a third left-turn lane for the eastbound Lark Avenue to northbound Los Gatos Boulevard turning movement would improve the intersection level of service to "D" under the Cumulative Conditions.

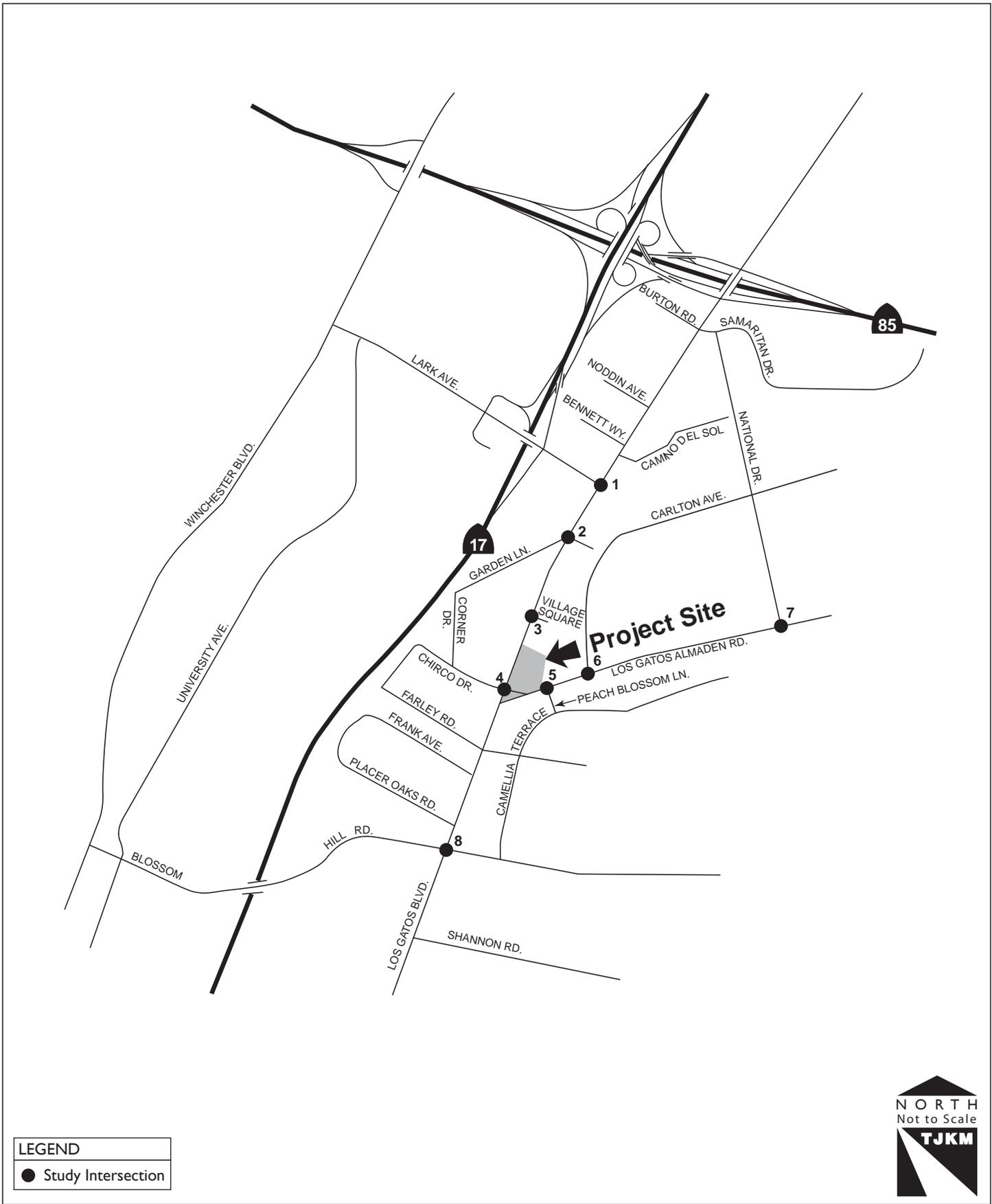
Peach Blossom Lane and the proposed project driveway approaching their intersection with Los Gatos Almaden Road are expected to operate at LOS E during the p.m. peak hour under Cumulative Conditions. The level of service for the minor street approach on Peach Blossom Lane can be mitigated by re-striping the roadway to provide separate northbound left and right turn lanes. It is recommended that the proposed project driveway be provided with two exit lanes to maintain acceptable levels of service and to minimize backup into the parking lot. In addition, it is recommended a left-turn pocket of a minimum of 2-car storage be provided for entering the driveway, preventing blocking of through traffic from the Los Gatos Boulevard/Los Gatos Almaden Road intersection.

The calculated collision rates for the intersections of Los Gatos Boulevard/Lark Avenue, Los Gatos Boulevard/Garden Lane/Gateway Drive and Los Gatos Boulevard/Blossom Hill Road (Between August 1, 2008 and August 1, 2010) are well below the statewide collision rate of 0.55. No traffic collision was recorded for the same duration at the other study intersections. The proposed project is expected to have little or no impact on the collision rate (or safety) at the study intersections or on the study road segments.

Town of Los Gatos - Proposed CVS Pharmacy and Commercial Development at 15600 Los Gatos Blvd.
Vicinity Map

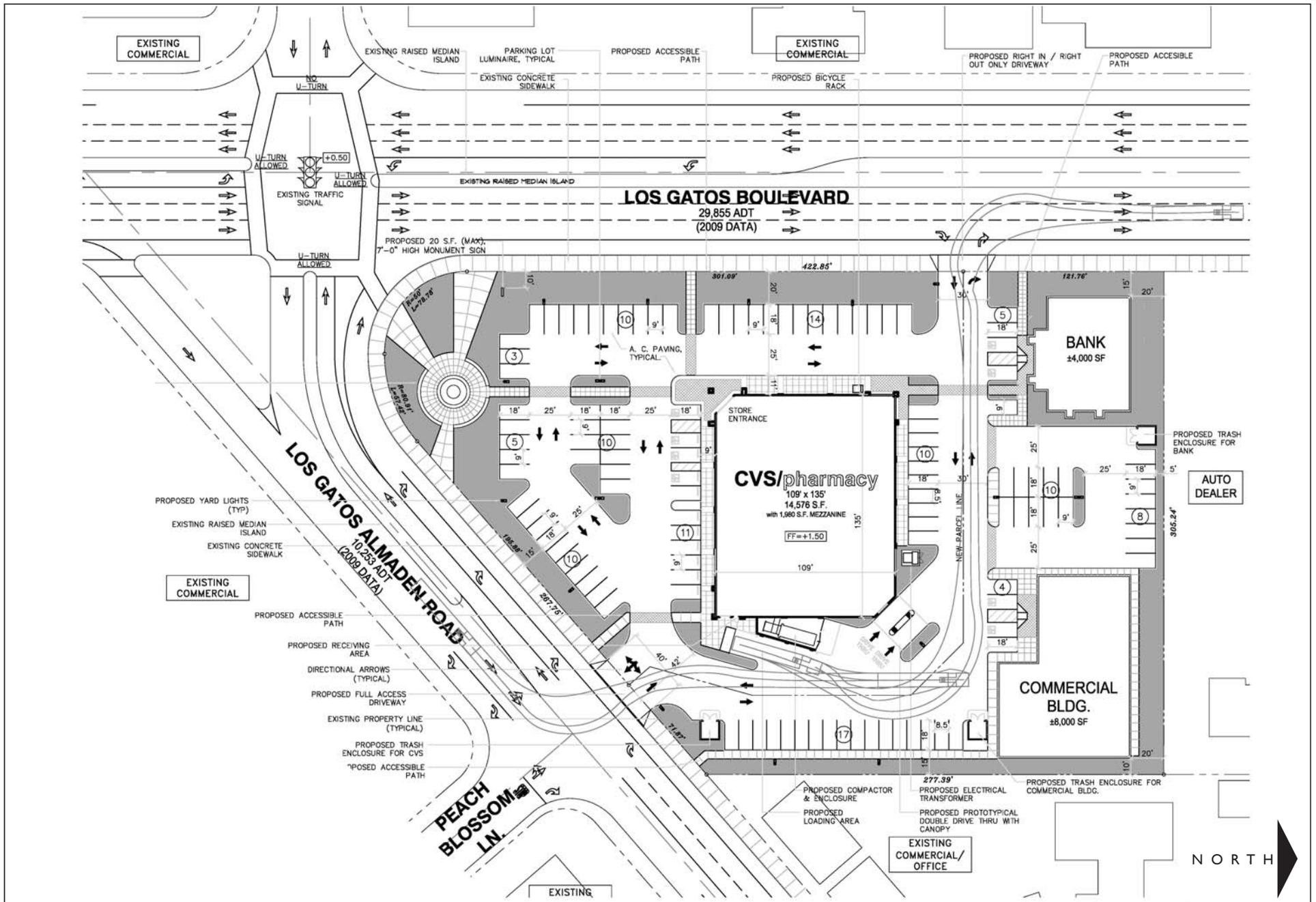
Figure

1



Town of Los Gatos - Proposed CVS Pharmacy and Commercial Development at 15600 Los Gatos Blvd.
 Proposed Site Plan

Figure
 2



Intersection Analysis Methodology

Intersection Analysis Methodology

The following eight intersections were selected by the Town staff for analysis:

1. Los Gatos Boulevard/Lark Avenue (Signalized)
2. Los Gatos Boulevard/Garden Lane/Gateway Drive (Signalized)
3. Los Gatos Boulevard/Village Square (Signalized)
4. Los Gatos Boulevard/Los Gatos Almaden Road/Chirco Drive (Signalized)
5. Los Gatos Almaden Road/Peach Blossom Lane/Project Access (Two-way Stop Control)
6. Los Gatos Almaden Road/Carlton Avenue (One-way Stop Control)
7. Los Gatos Almaden Road/National Drive (Signalized)
8. Los Gatos Boulevard/Blossom Hill Road (Signalized)

The following five scenarios were addressed in this study:

1. Existing Conditions – Current (Year 2011) traffic volumes and roadway conditions.
2. Existing plus Approved (Background) Conditions – Current (Year 2011) traffic volumes and roadway conditions with the addition of traffic from approved developments within the Town of Los Gatos.
3. Existing plus Project Conditions – Current (Year 2011) traffic volumes and roadway conditions with traffic added only from the proposed project development.
4. Background plus Project Conditions – Identical to Background Conditions, plus the traffic added from the proposed project.
5. Background plus Project plus Pending Conditions (Cumulative Conditions) – Identical to Background plus Project Conditions and with traffic added from future pending projects within the Town of Los Gatos.

Level of Service Analysis Methodology

The operating conditions at all of the study intersections were evaluated using the 2000 Highway Capacity Manual (HCM) Operations Method contained in TRAFFIX software. The default saturation flow rates were adjusted to comply with the Congestion Management Program (CMP) methodology adopted by the Santa Clara Valley Transportation Authority (VTA). Peak hour intersection conditions are reported as average delay in seconds per vehicle with corresponding levels of service (LOS). A level of service rating is a qualitative description of intersection operations, which is reported using an A through F letter rating system to describe travel delay and congestion. Level of Service A indicates free flow conditions with little or no delay and LOS F indicates jammed conditions with excessive delays and long back-ups. The methodology is described in detail in Appendix A.

Significant Impact Criteria

Signalized and Unsignalized Intersections

The Town's level of service standard is LOS D. Intersections that fall below LOS D are considered as impacted and should be considered for mitigation. A proposed project is considered to have a significant impact if it causes the levels of service for the study intersections to drop more than one level if it is at LOS A, B, or C, and drop any further if it is at LOS D or worse.

Freeway Segments

Based on VTA's *Transportation Impact Analysis Guidelines*, a project is said to impact a freeway segment determined to be at LOS F under existing or background conditions, if the number of new added project trips is more than one percent of the freeway capacity.

Existing Traffic Conditions

Los Gatos Boulevard is an arterial roadway with a posted speed limit of 35 miles per hour. Based on the weekday average daily traffic (ADT) data collected during October 2011 for Los Gatos Boulevard (north of Los Gatos Almaden Road), the ADT is approximately 31,300 vehicles per day. Currently, the project site access (a right-in/right-out driveway) along Los Gatos Boulevard is located approximately 330 feet to the north of Los Gatos Almaden Road. There are also two access driveways along Los Gatos Almaden Road. Abutting land uses are primarily commercial and retail buildings. There is an existing sidewalk (approximately six feet wide) on both sides of Los Gatos Boulevard and along the project frontage.

Level of Service Analysis

Peak hour turning movement counts at the study intersections were conducted during the month of October 2011. Figure 3 illustrates the existing lane configuration and the peak hour turning movement volumes at the study intersections. The raw traffic counts are provided in Appendix B. Table I summarizes the results of the intersection analysis under Existing Conditions. The detailed LOS calculations (TRAFFIX Output) are contained in Appendix C.

Under Existing Conditions, all study intersections operate at an acceptable service level (LOS C or better).

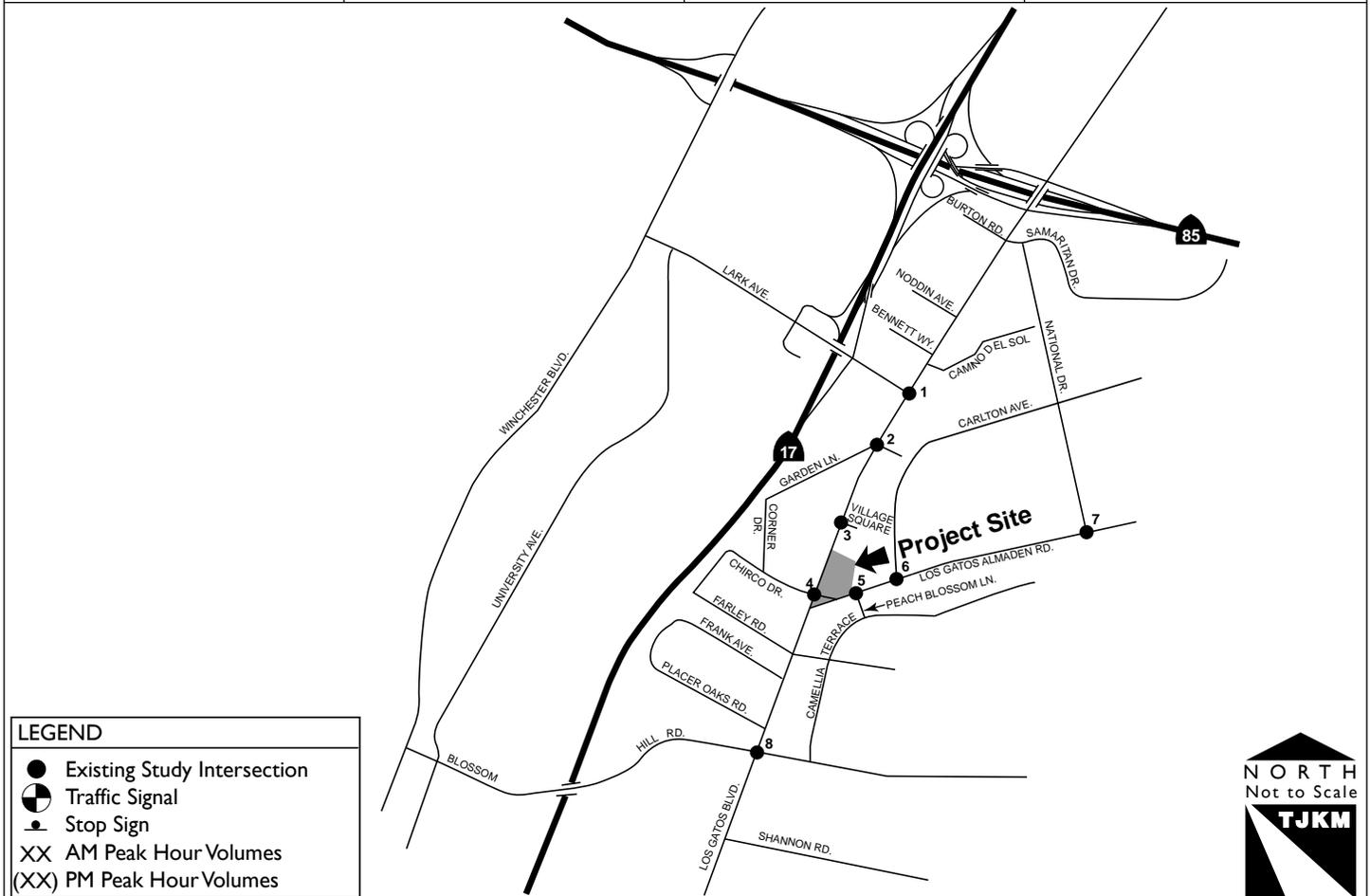
Table I: Intersection LOS – Existing Conditions

ID	Intersection	Control	A.M. Peak Hour		P.M. Peak Hour	
			Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS
1	Los Gatos Boulevard / Lark Avenue	Signal	32.1	C	34.1	C
2	Los Gatos Boulevard / Garden Lane / Gateway Drive	Signal	21.3	C	18.5	B
3	Los Gatos Boulevard / Village Square	Signal	9.0	A	12.0	B
4	Los Gatos Boulevard / Los Gatos Almaden Road / Chirco Drive	Signal	27.0	C	26.5	C
5	Los Gatos Almaden Road / Peach Blossom Lane / Project Access	Two-way Stop	13.1	B	19.4	C
6	Los Gatos Almaden Road / Carlton Avenue	One-way Stop	14.2	B	16.6	C
7	Los Gatos Almaden Road / National Drive	Signal	9.6	A	20.2	C
8	Los Gatos Boulevard / Blossom Hill Road	Signal	34.3	C	36.2	C

Note: Delay = Overall average intersection delay in seconds for Signalized, or minor street (worst approach) delay for One-way or Two-way Stop Control intersections; LOS = Level of Service

Existing Lane Geometry and Turning Movement Volumes

Intersection #1 Los Gatos Blvd./Lark Ave.	Intersection #2 Los Gatos Blvd./Garden Ln./ Gateway Dr.	Intersection #3 Los Gatos Blvd./ Los Gatos Village Square	Intersection #4 Los Gatos Blvd./ Los Gatos Almaden Rd./Chirco Dr.
<p>Turning Movement Volumes (AM/PM): Northbound: 369 (387) / 368 (634) Southbound: 19 (19) / 33 (28) / 10 (25) Eastbound: 485 (533) / 40 (36) / 676 (1,190) Westbound: 964 (693) / 608 (611) / 15 (18)</p>	<p>Turning Movement Volumes (AM/PM): Northbound: 13 (73) / 830 (1,598) / 111 (269) Southbound: 235 (149) / 2 (8) / 50 (83) Eastbound: 56 (46) / 5 (4) / 17 (31) Westbound: 34 (42) / 1,295 (1,073) / 30 (64)</p>	<p>Turning Movement Volumes (AM/PM): Northbound: 909 (1,612) / 50 (150) Southbound: 1 (15) / 14 (100) Eastbound: 55 (92) / 1,352 (1,038) / 33 (89)</p>	<p>Turning Movement Volumes (AM/PM): Northbound: 23 (36) / 755 (1,273) / 141 (442) Southbound: 382 (211) / 8 (9) / 210 (192) Eastbound: 21 (32) / 11 (24) / 32 (19) Westbound: 50 (56) / 998 (816) / 126 (177)</p>
Intersection #5 Peach Blossom Ln./Project Access/ Los Gatos Almaden Rd.	Intersection #6 Carlton Ave./Los Gatos Almaden Rd.	Intersection #7 National Ave./Los Gatos Almaden Rd.	Intersection #8 Los Gatos Blvd./Blossom Hill Rd.
<p>Turning Movement Volumes (AM/PM): Northbound: 0 (0) / 572 (357) / 64 (62) Southbound: 1 (1) / 209 (546) / 40 (99) Eastbound: 35 (67) / 0 (0) / 39 (65)</p>	<p>Turning Movement Volumes (AM/PM): Northbound: 9 (25) / 40 (26) Southbound: 45 (22) / 597 (384) Eastbound: 37 (35) / 209 (588)</p>	<p>Turning Movement Volumes (AM/PM): Northbound: 55 (132) / 54 (99) Southbound: 152 (333) / 478 (649) Eastbound: 73 (45) / 164 (517)</p>	<p>Turning Movement Volumes (AM/PM): Northbound: 247 (242) / 428 (562) / 190 (391) Southbound: 338 (190) / 549 (203) / 381 (243) Eastbound: 228 (295) / 173 (422) / 32 (35) Westbound: 158 (167) / 565 (537) / 142 (285)</p>



Existing plus Approved (Background) Conditions

This Scenario is similar to Existing Conditions, but with the addition of traffic from approved developments within the site vicinity. Approved projects consist of developments that are under construction, are built but not fully occupied, or are not built but have final development approval from the Town.

Based on recent communication with the Town staff, the following eighteen approved projects are expected to generate some traffic through the study intersections:

1. 15940 Blossom Hill Road (residential)
2. 15881 Linda Avenue (residential)
3. 371 Los Gatos Boulevard (residential)
4. 55 Los Gatos Saratoga (retail/office)
5. 15720 Winchester Boulevard (office development replaces a single-family home)
6. 14881 National Avenue (medical office development replaces a single-family home)
7. 15400 Los Gatos Boulevard (office/retail)
8. 16005 Los Gatos Boulevard (mixed-use)
9. 950 University Avenue (self-storage)
10. 15928 Union Avenue (residential)
11. Samaritan Way (medical office)
12. Town Library (new library replaces the existing library)
13. 55 Placer Oaks (single-family housing)
14. 16213 Los Gatos Boulevard (residential replaces auto dealership)
15. 800 Blossom Hill Road (senior adult residential)
16. Albright Way Development (office and residential)
17. 930 University Avenue (soccer complex)
18. 106 Town Terrace (single family residential)

These projects are expected to add a total of 1,196 vehicular trips during the a.m. peak hour and 1,394 vehicular trips during the p.m. peak hour in the Town of Los Gatos street network.

Level of Service Analysis

Figure 4 illustrates the Existing plus Approved turning movement volumes and Table II summarizes the results of the intersection analysis. The detailed LOS calculations are contained in Appendix D.

Town of Los Gatos - Proposed CVS Pharmacy and Commercial Development at 15600 Los Gatos Blvd.

Figure 4

Existing plus Approved Turning Movement Volumes

Intersection #1 Los Gatos Blvd./Lark Ave.	Intersection #2 Los Gatos Blvd./Garden Ln./ Gateway Dr.	Intersection #3 Los Gatos Blvd./ Los Gatos Village Square	Intersection #4 Los Gatos Blvd./ Los Gatos Almaden Rd./Chirco Dr.
Intersection #5 Peach Blossom Ln./Project Access/ Los Gatos Almaden Rd.	Intersection #6 Carlton Ave./Los Gatos Almaden Rd.	Intersection #7 National Ave./Los Gatos Almaden Rd.	Intersection #8 Los Gatos Blvd./Blossom Hill Rd.

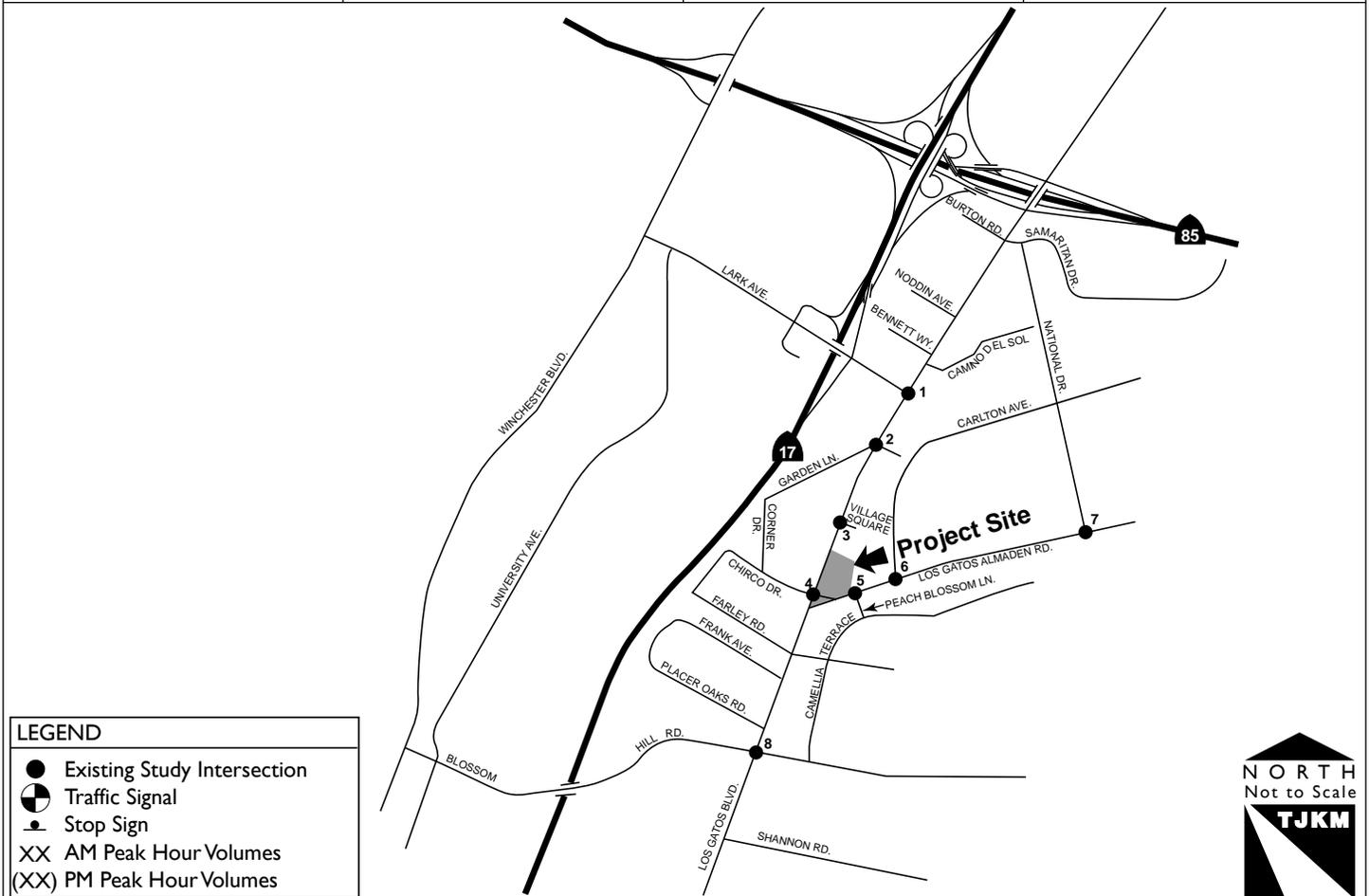


Table II: Intersection LOS – Existing plus Approved (Background) Conditions

ID	Intersection	Control	A.M. Peak Hour		P.M. Peak Hour	
			Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS
1	Los Gatos Boulevard / Lark Avenue	Signal	35.2	D	36.4	D
2	Los Gatos Boulevard / Garden Lane / Gateway Drive	Signal	20.7	C	18.0	B
3	Los Gatos Boulevard / Village Square	Signal	11.8	B	15.4	B
4	Los Gatos Boulevard / Los Gatos Almaden Road / Chirco Drive	Signal	27.5	C	26.7	C
5	Los Gatos Almaden Road / Peach Blossom Lane / Project Access	Two-way Stop	13.8	B	21.4	C
6	Los Gatos Almaden Road / Carlton Avenue	One-way Stop	15.1	C	17.6	C
7	Los Gatos Almaden Road / National Drive	Signal	9.6	A	20.5	C
8	Los Gatos Boulevard / Blossom Hill Road	Signal	36.7	D	37.7	D

Note: Delay = Overall average intersection delay in seconds for Signalized, or minor street (worst approach) delay for One-way or Two-way Stop Control intersections; LOS = Level of Service

All study intersections are expected to continue to operate at acceptable conditions (LOS D or better) under the Existing plus Approved (Background) Project Conditions.

Existing plus Project Conditions

This Scenario is identical to the Existing plus Approved Conditions, but with traffic added to Existing Conditions from the proposed mixed-use project that consists of a new CVS pharmacy, a walk-in-bank with 4,000 square feet, and a medical office building with 8,000 square feet.

Project Trip Generation

The trip generation was estimated based on rates provided in *Trip Generation*, 8th Edition, published by the Institute of Transportation Engineers (ITE), and the San Diego Association of Governments (SANDAG) Trip Generation Manual, May 2008. Table III shows the project trip generation estimates for the proposed mixed-use development. The proposed project is expected to generate 2,174 daily trips, including 82 trips (49 inbound and 33 outbound trips) during the a.m. peak hour and 227 trips (104 inbound and 123 outbound) during the p.m. peak hour.

Table III: Project Trip Generation

Land Use (ITE Code)	Size (KSF)	Daily Rate	Daily Trips	A.M. Peak Hour					P.M. Peak Hour				
				Trip Rate	In:Out Ratio	In	Out	Total	Trip Rate	In:Out Ratio	In	Out	Total
Drug Store with Drive-through (881)	14.576	88.16	1,285	2.66	57:43	22	17	39	10.35	50:50	75	75	151
Walk-in-Bank ¹	4.0	150.0	600	6.00	50:50	12	12	24	12.00	44:56	21	27	48
Medical Office (720)	8.0	36.13	289	2.30	79:21	15	4	19	3.46	27:73	7	20	28
			2,174			49	33	82			104	123	227

Notes: Source - ITE Trip Generation Manual, 8th Edition, 2008

¹Daily, AM and PM Peak hour trip rates used from SANDAG Trip Generation Manual, May 2008;

KSF = 1000 square feet

Project Trip Distribution and Assignment

Trip distribution assumptions for the proposed project were developed based on existing travel patterns, knowledge of the study area and input from Town staff. Traffic from the proposed project is expected to travel to and from the site according to the distribution assumptions shown on Figure 5 and described below:

- 5 percent will travel to/from the east via State Route (SR) 85
- 5 percent will travel to/from the west via SR 85
- 5 percent will travel to/from the south via SR 17
- 15 percent will travel to/from the west via Lark Avenue
- 15 percent will travel to/from the north via Los Gatos Boulevard
- 5 percent will travel to/from the east via Carlton Avenue
- 15 percent will travel to/from the east via Los Gatos Almaden Road
- 10 percent will travel to/from the south via Los Gatos Boulevard
- 15 percent will travel to/from west via Blossom Hill Road
- 10 percent will travel to/from east via Blossom Hill Road

Level of Service Analysis

Figure 6 illustrates the Background plus Project turning movement volumes. The results of the LOS analysis are summarized in Table IV and detailed calculations are provided in Appendix E. With the addition of project trips, all the study intersections are expected to operate at acceptable levels of service (LOS D or better).

Table IV: Intersection LOS – Existing plus Project Conditions

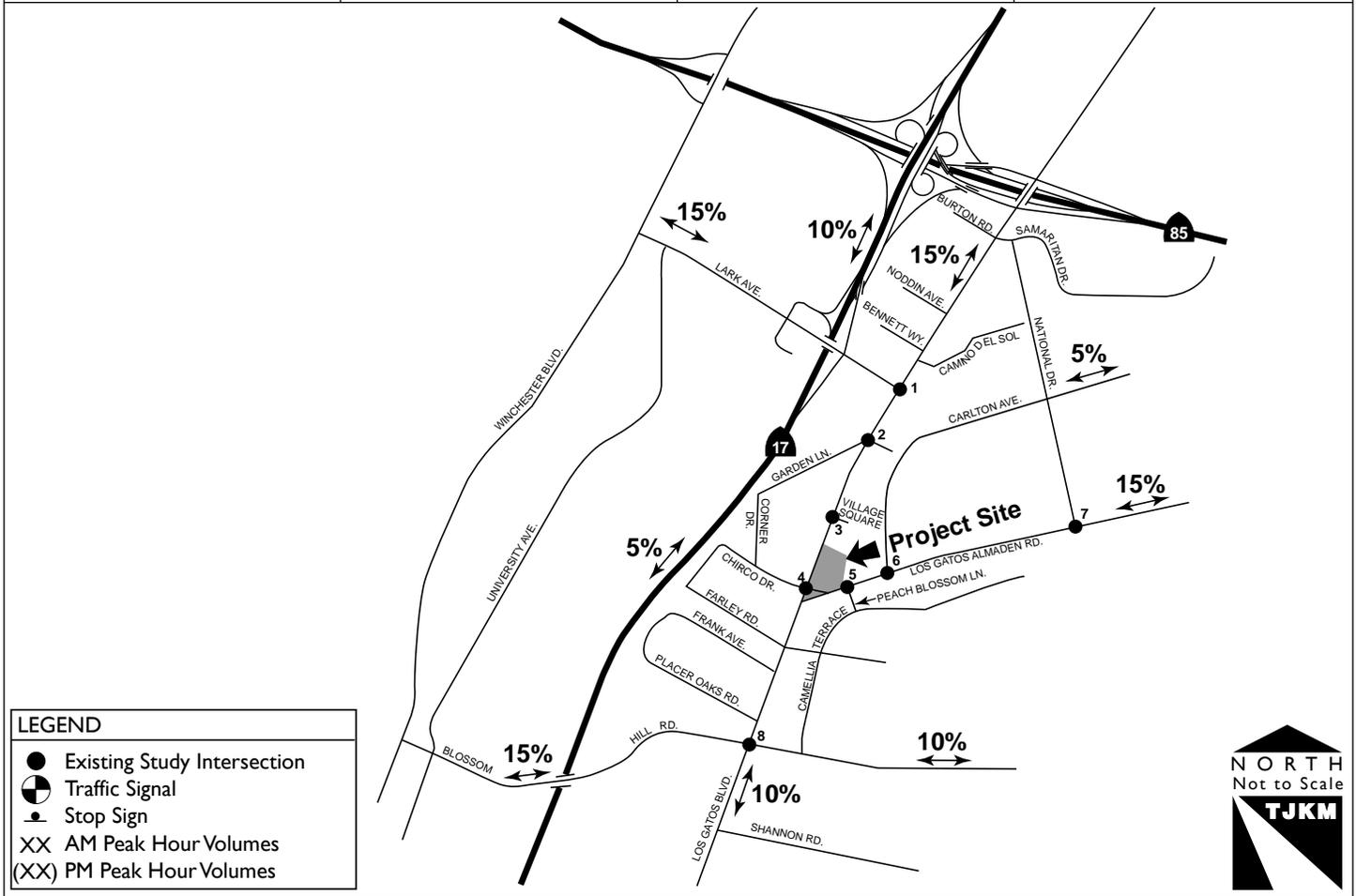
ID	Intersection	Control	A.M. Peak Hour		P.M. Peak Hour	
			Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS
1	Los Gatos Boulevard / Lark Avenue	Signal	32.2	C	34.2	C
2	Los Gatos Boulevard / Garden Lane / Gateway Drive	Signal	21.2	C	18.3	B
3	Los Gatos Boulevard / Village Square	Signal	9.0	A	11.8	B
4	Los Gatos Boulevard / Los Gatos Almaden Road / Chirco Drive	Signal	26.4	C	26.5	C
5	Los Gatos Almaden Road / Peach Blossom Lane / Project Access	Two-way Stop	14.9	B	21.7	C
6	Los Gatos Almaden Road / Carlton Avenue	One-way Stop	14.3	B	16.8	C
7	Los Gatos Almaden Road / National Drive	Signal	10.1	B	20.3	C
8	Los Gatos Boulevard / Blossom Hill Road	Signal	34.6	C	36.5	D

Note: Delay = Overall average intersection delay in seconds for Signalized, or minor street (worst approach) delay for One-way or Two-way Stop Control intersections; LOS = Level of Service

The proposed vehicular access to the proposed project site is via a right-in/right-out (RI/RO) only access on Los Gatos Boulevard and a full access driveway on Los Gatos Almaden Road at Peach Blossom Lane. The project related trips from the northern region are expected to make a left-turn or U-turn at the intersection of Los Gatos Boulevard/Los Gatos Almaden to reach project site. Entering and exiting both driveways appear to have good visibility based on field review. It is expected to have sufficient gaps for entering/exiting the driveways created by the signal operation at Los Gatos Boulevard/Los Gatos Almaden Road.

Proposed Project Trip Distribution and Assignment Assumptions

Intersection #1 Los Gatos Blvd./Lark Ave.	Intersection #2 Los Gatos Blvd./Garden Ln./ Gateway Dr.	Intersection #3 Los Gatos Blvd./ Los Gatos Village Square	Intersection #4 Los Gatos Blvd./ Los Gatos Almaden Rd./Chirco Dr.
Intersection #5 Peach Blossom Ln./Project Access/ Los Gatos Almaden Rd.	Intersection #6 Carlton Ave./Los Gatos Almaden Rd.	Intersection #7 National Ave./Los Gatos Almaden Rd.	Intersection #8 Los Gatos Blvd./Blossom Hill Rd.

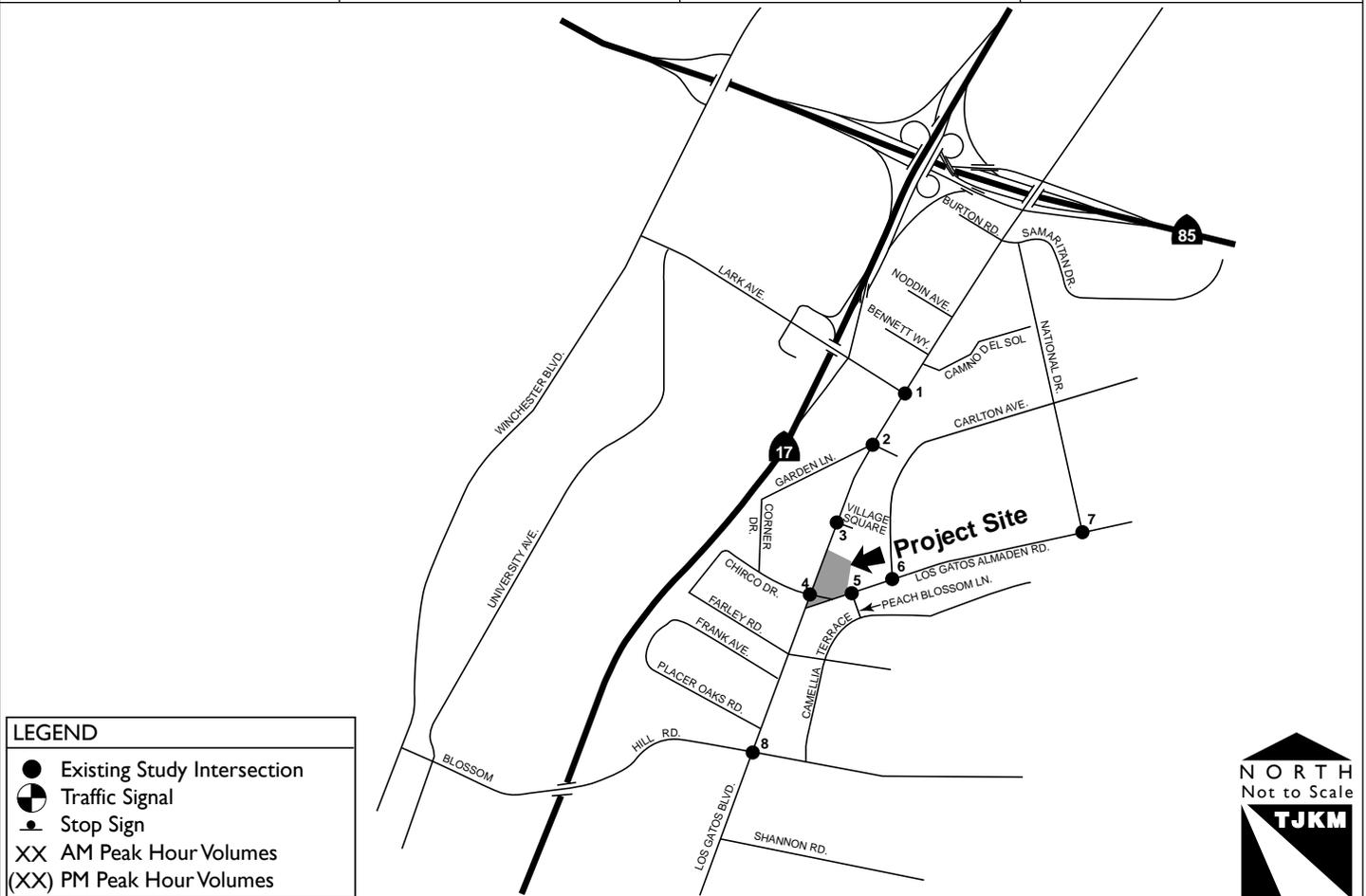


Town of Los Gatos - Proposed CVS Pharmacy and Commercial Development at 15600 Los Gatos Blvd.

Figure 6

Existing plus Project Turning Movement Volumes

Intersection #1 Los Gatos Blvd./Lark Ave.	Intersection #2 Los Gatos Blvd./Garden Ln./ Gateway Dr.	Intersection #3 Los Gatos Blvd./ Los Gatos Village Square	Intersection #4 Los Gatos Blvd./ Los Gatos Almaden Rd./Chirco Dr.
Intersection #5 Peach Blossom Ln./Project Access/ Los Gatos Almaden Rd.	Intersection #6 Carlton Ave./Los Gatos Almaden Rd.	Intersection #7 National Ave./Los Gatos Almaden Rd.	Intersection #8 Los Gatos Blvd./Blossom Hill Rd.



Background (Existing plus Approved) plus Project Conditions

This Scenario is identical to the Existing plus Approved Conditions, but with added traffic from the proposed mixed-use project development.

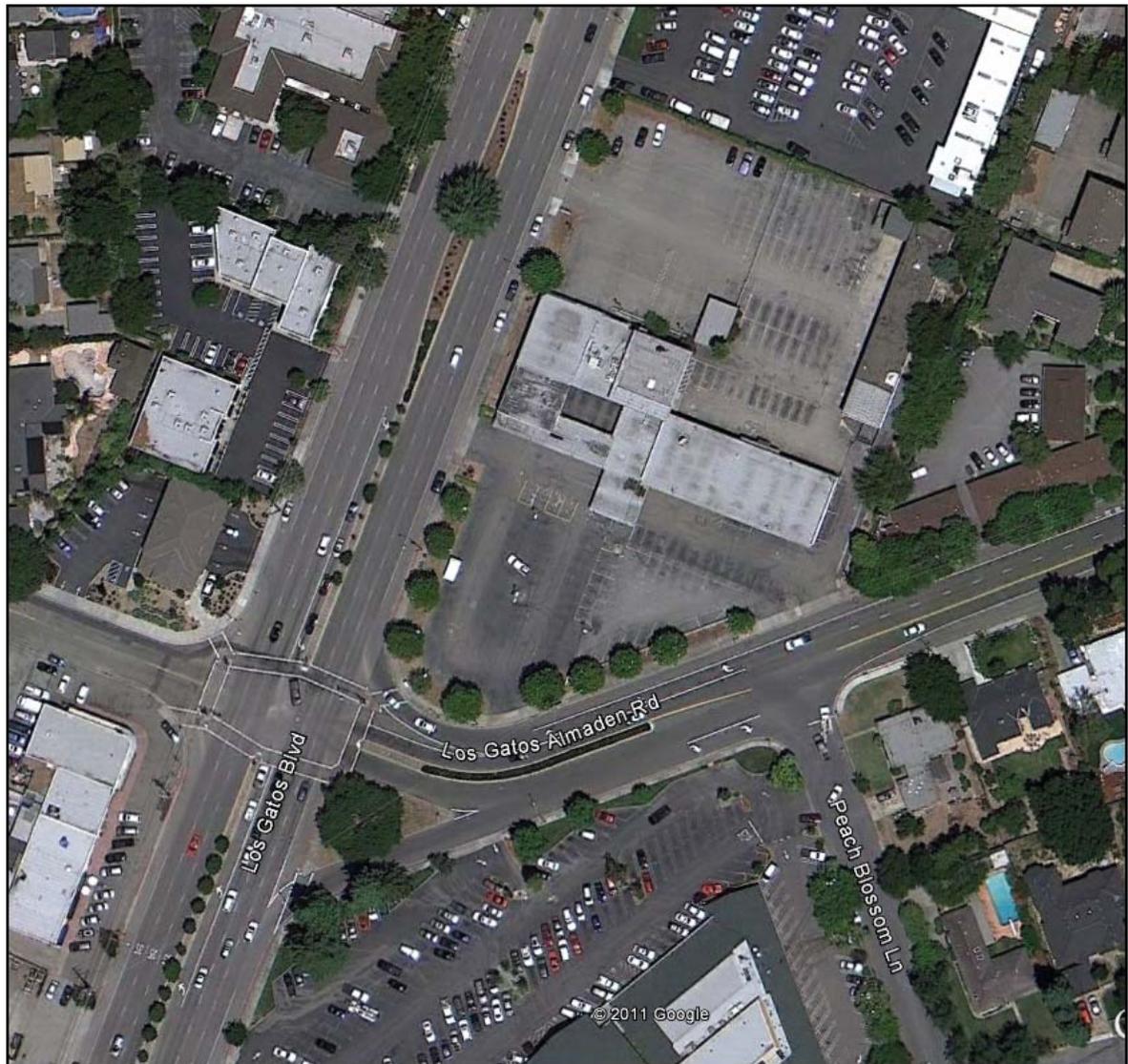
Level of Service Analysis

Figure 7 illustrates the Existing plus Approved plus Project turning movement volumes. The results of the LOS analysis are summarized in Table V and detailed calculations are provided in Appendix F. With the addition of project trips, all of the study intersections are expected to operate at essentially the same level of service as Background Conditions with a slight increase in average delay.

Table V: Intersection LOS – Background plus Project Conditions

ID	Intersection	Control	A.M. Peak Hour		P.M. Peak Hour	
			Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS
1	Los Gatos Boulevard / Lark Avenue	Signal	35.5	D	36.8	D
2	Los Gatos Boulevard / Garden Lane / Gateway Drive	Signal	20.6	C	17.9	B
3	Los Gatos Boulevard / Village Square	Signal	11.7	B	15.2	B
4	Los Gatos Boulevard / Los Gatos Almaden Road / Chirco Drive	Signal	26.8	C	27.3	C
5	Los Gatos Almaden Road / Peach Blossom Lane / Project Access	Two-way Stop	15.9	C	24.0	C
6	Los Gatos Almaden Road / Carlton Avenue	One-way Stop	15.2	C	17.9	C
7	Los Gatos Almaden Road / National Drive	Signal	9.5	A	20.7	C
8	Los Gatos Boulevard / Blossom Hill Road	Signal	37.0	D	38.2	D

Note: Delay = Overall average intersection delay in seconds for Signalized, or minor street (worst approach) delay for One-way or Two-way Stop Control intersections; LOS = Level of Service



Queuing Analysis for Los Gatos Boulevard/Los Gatos Almaden Road

Currently, the southbound left-turn lane on Los Gatos Boulevard at Los Gatos Almaden Road is operating at its capacity. This is apparent from its current signal operation that the southbound left-turn signal phase is programmed to serve twice per cycle to minimize the queuing situation during the p.m. commute hours. Serving a left-turn signal phase twice a cycle is typically not desired because it takes away green time from the through traffic and disrupts traffic progression, in this case Los Gatos Boulevard.

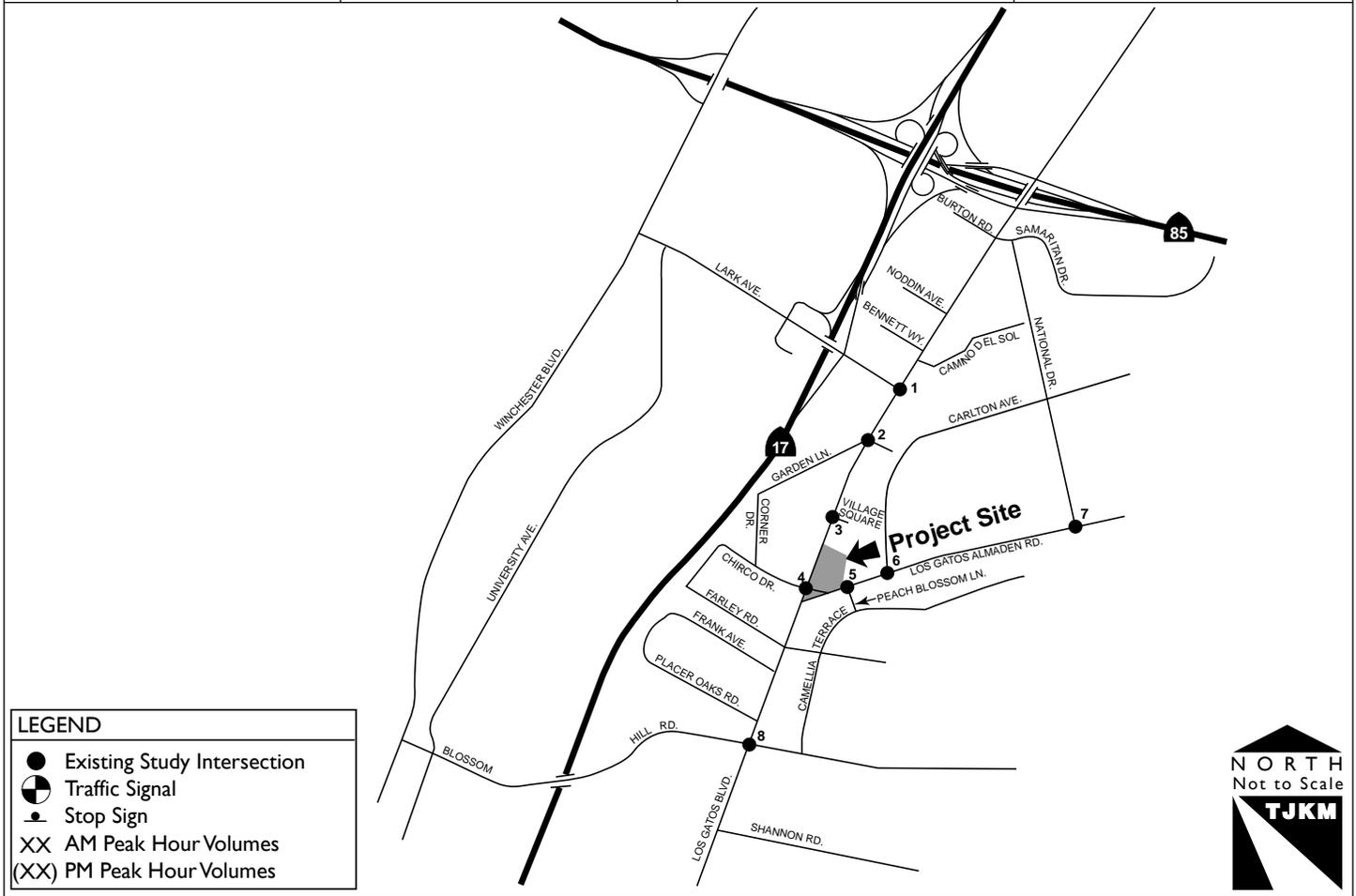
Based on the HCM 2000 methodology using Traffix software analysis for the plus project conditions during the p.m. peak hour, with the addition of the project trips to the southbound left-turn movement at this intersection will increase the queue by fifty feet or two vehicles per cycle. Thus, an additional southbound left-turn lane at Los Gatos Boulevard/Los Gatos Almaden intersection is recommended to accommodate the potential queue build-up from the project trips.

Town of Los Gatos - Proposed CVS Pharmacy and Commercial Development at 15600 Los Gatos Blvd.

Figure 7

Background plus Project Turning Movement Volumes

Intersection #1 Los Gatos Blvd./Lark Ave.	Intersection #2 Los Gatos Blvd./Garden Ln./ Gateway Dr.	Intersection #3 Los Gatos Blvd./ Los Gatos Village Square	Intersection #4 Los Gatos Blvd./ Los Gatos Almaden Rd./Chirco Dr.
Intersection #5 Peach Blossom Ln./Project Access/ Los Gatos Almaden Rd.	Intersection #6 Carlton Ave./Los Gatos Almaden Rd.	Intersection #7 National Ave./Los Gatos Almaden Rd.	Intersection #8 Los Gatos Blvd./Blossom Hill Rd.



Pedestrian, Bicycle and Transit Accessibility

Currently, there are sidewalks along Los Gatos Boulevard and Los Gatos Almaden Road in the project vicinity. The project site is expected to generate moderate pedestrian traffic from the adjacent neighborhood along Los Gatos Boulevard and Los Gatos Almaden Road. The intersection of Los Gatos Boulevard and Los Gatos Almaden has pedestrian signals and crosswalks on all four legs of the intersection, providing controlled pedestrian access to the project site.

Currently, there are bike lanes along Los Gatos Boulevard and Los Gatos Almaden Road near the project site. Based on field observations, Bus Line 49 runs along Los Gatos Boulevard in the vicinity of the project site. The nearest bus stop for Line 49 is located at project frontage on Los Gatos Boulevard.

Statewide Integrated Traffic Records System (SWITRS) Analysis

Based on collision reports obtained from the Town staff for the last two years (August 1, 2008 – August 1, 2010), there were four collisions each at the intersections of Los Gatos Boulevard/Lark Avenue and Los Gatos Boulevard/Blossom Hill Road. Using the existing peak hour turning movement counts, the number of vehicles entering the intersection of Los Gatos Boulevard/Lark Avenue is estimated to be 28.53 million vehicles during the aforementioned two-year period. The estimated average daily traffic (ADT) entering the intersection is 39,075 vehicles per day (vpd).

The collision rate for an intersection is defined as the number of collisions per million vehicles entering the intersection. Thus, the collision rate at this intersection is calculated to be 0.14 ($=4/28.53$) collisions per million vehicles. This is lower than the statewide average rate, 0.55 based on the 2009 California state highways collision data for a four-way approach suburban signalized intersection. Similarly, the estimated ADT entering the intersection of Los Gatos Boulevard/Blossom Hill Road is 25.56 million vehicles and the collision rate for this intersection is calculated to be 0.16 ($=4/25.56$). The estimated ADT entering the intersection of Los Gatos Boulevard/Garden Lane/Gateway Drive is 22.26 million vehicles and the collision rate for this intersection is 0.08 ($=2/22.66$).

No traffic collisions were recorded for the same duration at the intersections of Los Gatos Boulevard/Village Square, Los Gatos Boulevard/Los Gatos Almaden Road, Los Gatos Almaden Road/Carlton Avenue and Los Gatos Almaden Road/National Avenue.

Freeway Segment Analysis

Based on the 2010 Annual Monitoring & Conformance Report for the Santa Clara Congestion Management Program (CMP), May 2011, the freeway segment speed, volume, density and LOS information were analyzed for project impacts. Freeway segment analysis standards were obtained from *Transportation Impact Analysis Guidelines (updated March 29, 2004)* by the Valley Transportation Authority CMP.

For this traffic study, SR 17 freeway study segments are from Lark Avenue to SR 85 and Saratoga Avenue to Lark Avenue in both directions. Similarly, SR 85 study segments in both directions are from Union Avenue to S. Bascom Avenue and from S. Bascom Avenue to SR 17. It is estimated that the project would add traffic volumes amounting to less than one percent of the study freeway segment traffic during both the a.m. and the p.m. peak hours. The freeway segment analysis for the study segments of SR 17 and SR 85 are summarized in Table VI.

Table VI: Summary of Freeway Segment Analysis

Freeway Study Segments	Direction	Peak Hour	Existing (Year 2010)					Proposed Project Impact				
			Lanes	Average Speed (mph)	Volume (veh)	Density (pcpmpl)	LOS	Project Trips (veh)	Density (pcpmpl)	LOS	Percent Impact	
SR 17 from Lark Avenue to SR 85	NB	A.M.	2	63	4290	34.0	D	4	34.1	D	0.09%	
		P.M.	2	66	3540	26.8	D	6	26.9	D	0.17%	
SR 17 from SR 85 to San Tomas Expwy	SB	A.M.	2	66	2640	20.0	C	3	20.0	C	0.11%	
		P.M.	2	65	4030	31.0	D	4	31.0	D	0.10%	
SR 17 from Saratoga Avenue to Lark Avenue	NB	A.M.	2	47	4300	45.7	D	4	45.8	D	0.09%	
		P.M.	2	65	3770	29.0	D	6	29.0	D	0.16%	
SR 17 from Lark Avenue to Saratoga Avenue	SB	A.M.	2	62	4340	35.0	D	3	35.0	D	0.07%	
		P.M.	2	52	4370	42.0	D	4	42.1	D	0.09%	
SR 85 from Union Avenue to S. Bascom Avenue	NB	A.M.	2	57	4450	39.0	D	1	39.0	D	0.02%	
		P.M.	2	62	4340	35.0	D	4	35.0	C	0.09%	
SR 85 from S. Bascom Avenue to Union Avenue	SB	A.M.	2	66	3440	26.0	C	2	26.1	C	0.06%	
		P.M.	2	21	3360	80.0	F	4	80.1	F	0.12%	
SR 85 from S. Bascom Avenue to SR 17	NB	A.M.	2	21	3410	81.0	F	1	81.2	F	0.03%	
		P.M.	2	66	3170	24.0	C	4	24.0	C	0.13%	
SR 85 from SR 17 to S. Bascom Avenue	SB	A.M.	2	67	1600	12.0	B	2	12.0	B	0.13%	
		P.M.	2	26	3640	70.0	F	4	70.1	F	0.11%	

Notes: The existing year 2008 volumes and other related data were obtained from VTA website

Background plus Project plus Pending (Cumulative) Conditions

This Scenario evaluates future conditions with the addition of traffic from pending projects added to Background plus Project traffic. The pending projects are foreseeable developments that are likely to add traffic to the study intersections. According to Town staff, the following developments are pending projects:

1. North Forty Specific Plan (mixed-use)
2. 15500 Los Gatos Boulevard (re-development assumptions for Moore Buick GMC)
3. 620 Blossom Hill Road (re-development assumptions for Benteley Silicon Valley)
4. 20 Dittos Lane Apartments (residential)
5. Twin Oaks (single family residential)
6. 300 Marchmont Road (k-8 private school expansion)
7. 16212 Los Gatos Boulevard (residential replaces auto dealership)
8. 339-341 Bella Vista (single family residential)
9. 135 Riviera Drive (residential apartments expansion)

These pending projects are expected to contribute a total of 1,529 vehicular trips during the a.m. peak hour and 2,343 vehicular trips during the p.m. peak hour on the Los Gatos street network.

Level of Service Analysis

Figure 8 summarizes the Background plus Project plus Pending peak hour turning movement volumes and Table VII summarizes the results of the LOS analysis. The detailed LOS calculations are contained in Appendix G. With the addition of the estimated pending project trips, all of the study intersections are expected to operate the same as Background plus Project Conditions except for Los Gatos Boulevard/Lark Avenue and Los Gatos Almaden Road/Peach Blossom Lane during the p.m. peak hour.

The intersection of Los Gatos Boulevard/Lark Avenue would carry significant additional traffic from the proposed North-40 project development under Cumulative Conditions. Based on our understanding and the Town staff's input, this intersection requires road widening and signal modifications to accommodate future development traffic. TJKM finds adding a third eastbound left-turn lane from Lark Avenue to northbound Los Gatos Boulevard would improve the intersection level of service to "D".

Peach Blossom Lane and the proposed project driveway approaching their intersection with Los Gatos Almaden Road are expected to operate at LOS E during the p.m. peak hour under Cumulative Conditions. The level of service for the minor street approach on Peach Blossom Lane can be mitigated by re-striping the roadway to provide separate northbound left and right turn lanes. It is recommended that the proposed project driveway be provided with two exit lanes to maintain acceptable levels of service and to minimize backup into the parking lot. In addition, it is recommended a left-turn pocket of a minimum of 2-car storage be provided for entering the driveway, preventing blocking of through traffic from the Los Gatos Boulevard/Los Gatos Almaden Road intersection.

Table VII: Intersection LOS – Background + Project + Pending Conditions

ID	Intersection	Control	A.M. Peak Hour		P.M. Peak Hour	
			Average Delay (sec/veh)	LOS	Average Delay (sec/veh)	LOS
1	Los Gatos Boulevard / Lark Avenue	Signal	50.2	D	61.2	E
	<i>Potential Mitigation: Additional EB Left-turn Lane</i>		41.4	D	46.7	D
2	Los Gatos Boulevard / Garden Lane / Gateway Drive	Signal	20.9	C	19.8	B
3	Los Gatos Boulevard / Village Square	Signal	10.9	B	12.9	B
4	Los Gatos Boulevard / Los Gatos Almaden Road / Chirco Drive	Signal	28.0	C	32.1	C
5	Los Gatos Almaden Road / Peach Blossom Lane / Project Access	Two-way Stop	18.2	C	35.3	E
	<i>Mitigation: Re-stripe NB approach to provide separate left & right turn lanes</i>		18.2	C	32.3	D
6	Los Gatos Almaden Road / Carlton Avenue	One-way Stop	16.9	C	23.1	C
7	Los Gatos Almaden Road / National Drive	Signal	8.6	A	23.8	C
8	Los Gatos Boulevard / Blossom Hill Road	Signal	45.2	D	42.3	D

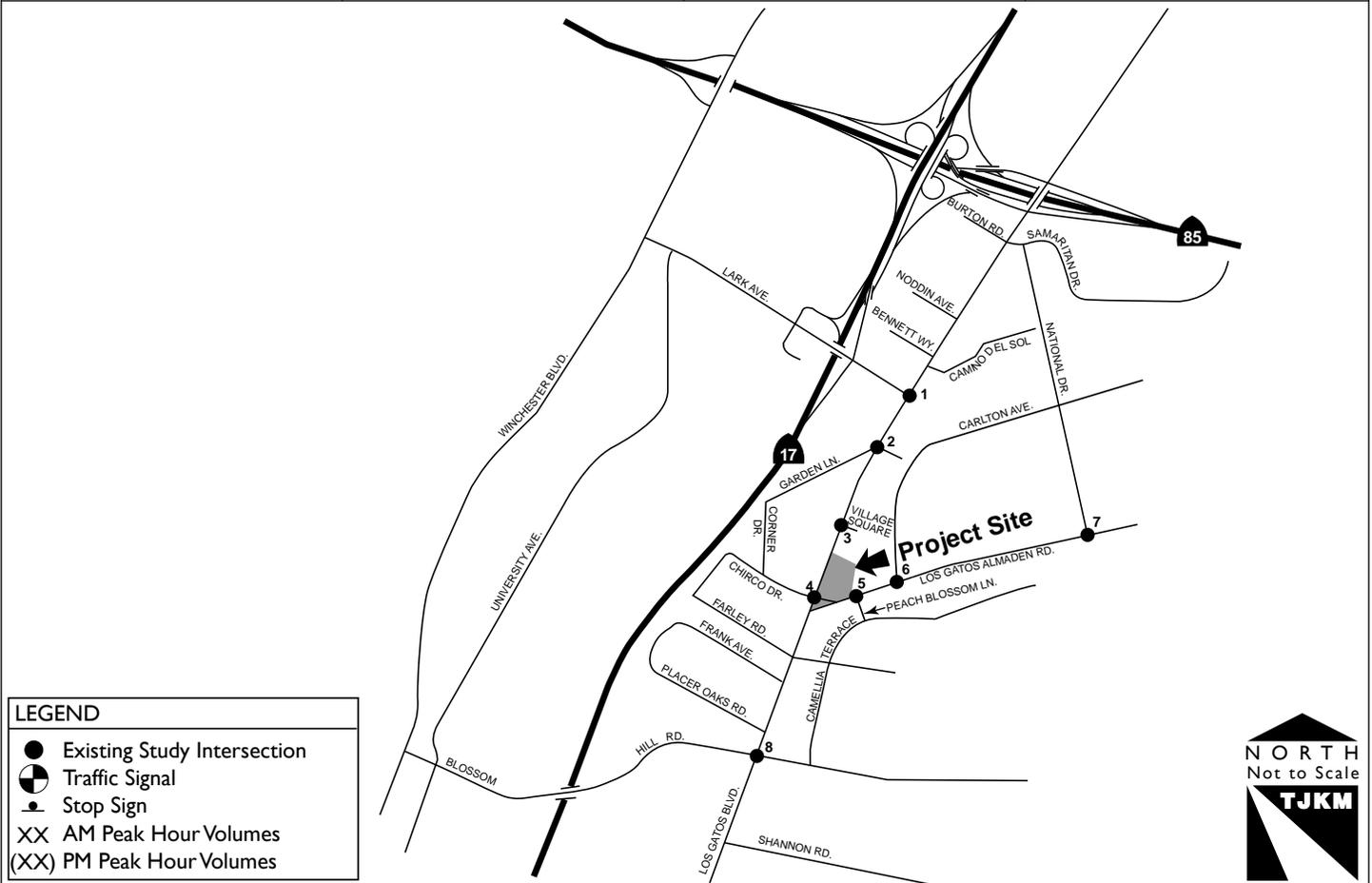
Note: Delay = Overall average intersection delay in seconds for Signalized, or minor street (worst approach) delay for One-way or Two-way Stop Control intersections; LOS = Level of Service

Town of Los Gatos - Proposed CVS Pharmacy and Commercial Development at 15600 Los Gatos Blvd.

Figure 8

Background plus Project plus Pending Turning Movement Volumes

Intersection #1 Los Gatos Blvd./Lark Ave.	Intersection #2 Los Gatos Blvd./Garden Ln./ Gateway Dr.	Intersection #3 Los Gatos Blvd./ Los Gatos Village Square	Intersection #4 Los Gatos Blvd./ Los Gatos Almaden Rd./Chirco Dr.
<p>Los Gatos Blvd / Lark Ave. Traffic Volumes: Northbound: 538 (790), 597 (1,123), 26 (28) Southbound: 19 (19), 33 (28), 10 (25) Eastbound: 737 (896), 40 (36), 881 (1,476) Westbound: 1,292 (900), 947 (938), 15 (18)</p>	<p>Los Gatos Blvd / Garden Ln / Gateway Dr. Traffic Volumes: Northbound: 13 (73), 1,343 (2,310), 132 (922) Southbound: 281 (191), 2 (8), 52 (86) Eastbound: 56 (46), 5 (4), 17 (31) Westbound: 72 (56), 1,916 (1,626), 34 (65)</p>	<p>Los Gatos Blvd / Los Gatos Village Square Traffic Volumes: Northbound: 1,279 (2,219), 133 (272) Southbound: 1 (15), 14 (100) Eastbound: 55 (32), 1,858 (1,573), 33 (89)</p>	<p>Los Gatos Blvd / Los Gatos Almaden Rd / Chirco Dr. Traffic Volumes: Northbound: 23 (36), 1,034 (1,673), 221 (638) Southbound: 492 (322), 8 (9), 246 (253) Eastbound: 21 (32), 11 (24), 32 (19) Westbound: 50 (56), 1,378 (1,176), 160 (204)</p>
Intersection #5 Peach Blossom Ln./Project Access/ Los Gatos Almaden Rd.	Intersection #6 Carlton Ave./Los Gatos Almaden Rd.	Intersection #7 National Ave./Los Gatos Almaden Rd.	Intersection #8 Los Gatos Blvd./Blossom Hill Rd.
<p>Peach Blossom Ln / Project Access / Los Gatos Almaden Rd. Traffic Volumes: Northbound: 13 (9), 6 (2), 9 (2) Southbound: 8 (18), 706 (485), 64 (62) Eastbound: 25 (51), 300 (718), 40 (99) Westbound: 166 (95), 1 (3), 56 (17)</p>	<p>Carlton Ave / Los Gatos Almaden Rd. Traffic Volumes: Northbound: 42 (25), 45 (22), 737 (524) Southbound: 39 (41), 304 (775)</p>	<p>National Ave / Los Gatos Almaden Rd. Traffic Volumes: Northbound: 55 (32), 54 (99), 152 (41), 618 (432) Southbound: 73 (45), 259 (704)</p>	<p>Los Gatos Blvd / Blossom Hill Rd. Traffic Volumes: Northbound: 368 (336), 525 (766), 247 (518) Southbound: 421 (281), 581 (225), 382 (245) Eastbound: 434 (426), 204 (443), 41 (39) Westbound: 174 (176), 697 (709), 145 (286)</p>



LEGEND	
	Existing Study Intersection
	Traffic Signal
	Stop Sign
XX	AM Peak Hour Volumes
(XX)	PM Peak Hour Volumes



Conclusions

TJKM has reached the following conclusions regarding the proposed CVS Pharmacy and commercial development at 15600 Los Gatos Boulevard in the Town of Los Gatos:

- The proposed project is expected to generate 2,174 daily trips, including 82 trips (49 inbound and 33 outbound trips) during the a.m. peak hour and 227 trips (104 inbound and 123 outbound) during the p.m. peak hour.
- All study intersections operate at acceptable levels of service of LOS D or better under Existing, plus Approved, and plus Project Conditions scenarios. With the addition of project trips, all study intersections are expected to operate acceptably (LOS D or better) during both peak hours.
- The southbound left-turn lane on Los Gatos Boulevard at Los Gatos Almaden Road is currently operating at its capacity. The addition of the project trips to the southbound left-turn movement at this intersection will increase the queue by fifty feet or two vehicles per cycle. Thus, an additional southbound left-turn lane at the Los Gatos Boulevard/Los Gatos Almaden Road intersection is recommended to accommodate the potential queue build-up from the project trips.
- Under Cumulative Conditions, all study intersections are expected to operate at acceptable levels of service of LOS D or better except for Los Gatos Boulevard/Lark Avenue and Los Gatos Almaden Road/Peach Blossom Lane during the p.m. peak hour.
- The intersection of Los Gatos Boulevard/Lark Avenue would carry significant additional traffic from the proposed North-40 project development under Cumulative Conditions. Based on our understanding and the Town staff's input, this intersection would require road widening and signal modifications to accommodate the future traffic. TJKM finds that adding a third left-turn lane for the eastbound Lark Avenue to northbound Los Gatos Boulevard turning movement would improve the intersection level of service to "D" under the Cumulative Conditions.
- Peach Blossom Lane and the proposed project driveway approaching their intersection with Los Gatos Almaden Road are expected to operate at LOS E during the p.m. peak hour under Cumulative Conditions. The level of service for the minor street approach on Peach Blossom Lane can be mitigated by re-striping the roadway to provide separate northbound left and right turn lanes. It is recommended that the proposed project driveway be provided with two exit lanes to maintain acceptable levels of service and to minimize backup into the parking lot. In addition, it is recommended a left-turn pocket of a minimum of 2-car storage be provided for entering the driveway, preventing blocking of through traffic from the Los Gatos Boulevard/Los Gatos Almaden Road intersection.
- The calculated collision rates for the intersections of Los Gatos Boulevard/Lark Avenue, Los Gatos Boulevard/Garden Lane/Gateway Drive and Los Gatos Boulevard/Blossom Hill Road (August 1, 2008 to August 1, 2010) are well below the statewide collision rate of 0.55. No traffic collision was recorded for the same duration at the other study intersections. The proposed project is expected to have little or no impact on the collision rate (or safety) at the study intersections or on the study road segments.



Transportation
Consultants

MEMORANDUM

Date: August 14, 2013

To: Jessy Pu, P.E.

Project No.: 021-094

From: Vishnu Gandluru

Jurisdiction: Los Gatos

Subject: Volume Comparison of Year 2011 Vs. Year 2013 along Los Gatos Boulevard

The purpose of this memorandum is to compare Year 2011 with Year 2013 traffic volumes for the intersections along Los Gatos Boulevard between Lark Avenue to the north and Blossom Hill Road to the south.

The table below shows a summary of intersection peak hour total volume for the years 2011 and 2013 and the percent difference between the years.

Table 1: Summary of 2011 and 2013 Traffic Volumes for Los Gatos Boulevard

No.	Intersection Name	2011 Intersection Volume		2013 Intersection Volume		2013 Vs. 2011 % Diff.	
		AM Total	PM Total	AM Total	PM Total	AM Peak	PM Peak
1	Los Gatos Blvd./Lark Ave.	3,613	4,202	3,526	3,996	-2.4%	-4.9%
2	Los Gatos Blvd./Garden Ln.	2,778	3,430	2,940	3,466	5.8%	1.0%
3	Los Gatos Blvd./Los Gatos Square	2,414	3,036	2,512	3,127	4.1%	3.0%
4	Los Gatos Blvd./Los Gatos Almaden	2,757	3,287	2,901	3,243	5.2%	-1.3%
5	Los Gatos Blvd./Blossom Hill Rd.	3,431	3,572	3,292	3,762	-4.1%	5.3%

In general, the volume difference between 2011 and 2013 counts are within 6% of 2011 intersection volumes. For example, the year 2013 a.m. peak hour intersection volume at Los Gatos Boulevard/Garden Lane is 5.8% higher than the year 2011 volume. Similarly, the p.m. peak hour volume is only one percent higher than the 2011 intersection volume.

Based on our past experience, the traffic is expected to vary as much as 10% on day-to-day basis. Thus, TJKM is of the opinion that the volume change is not significant to revise traffic analysis previously conducted (Year 2011) for the study intersections listed in the table above.

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