

INITIAL STUDY

**CURTNER/UNION RETAIL
PROJECT**

File No. PDC12-001



MARCH 2012

TABLE OF CONTENTS

		<u>PAGE</u>
Initial Study Text		
SECTION 1.0	INTRODUCTION AND PURPOSE.....	4
SECTION 2.0	PROJECT INFORMATION.....	5
2.1	PROJECT TITLE	5
2.2	PROJECT LOCATION.....	5
2.3	LEAD AGENCY CONTACT	5
2.4	PROPERTY OWNER/PROJECT PROPONENT.....	5
2.5	ASSESSOR’S PARCEL NUMBER.....	5
2.6	GENERAL PLAN DESIGNATION AND ZONING DISTRICT	5
SECTION 3.0	PROJECT DESCRIPTION.....	9
SECTION 4.0	ENVIRONMENTAL SETTING, CHECKLIST, AND DISCUSSION OF IMPACTS	12
4.1	AESTHETICS	12
4.2	AGRICULTURAL AND FOREST RESOURCES.....	21
4.3	AIR QUALITY.....	28
4.4	BIOLOGICAL RESOURCES.....	28
4.5	CULTURAL RESOURCES.....	33
4.6	GEOLOGY AND SOILS	36
4.7	GREENHOUSE GAS EMISSIONS.....	44
4.8	HAZARDS AND HAZARDOUS MATERIALS	44
4.9	HYDROLOGY AND WATER QUALITY	49
4.10	LAND USE.....	55
4.11	MINERAL RESOURCES	57
4.12	NOISE.....	58
4.13	POPULATION AND HOUSING.....	67
4.14	PUBLIC SERVICES	69
4.15	RECREATION	71
4.16	TRANSPORTATION.....	72
4.17	UTILITIES AND SERVICE SYSTEMS	78
SECTION 5.0	REFERENCES	83
SECTION 6.0	AUTHOR AND CONSULTANTS	84

TABLE OF CONTENTS, continued

Figures		<u>PAGE</u>
Figure 2.0-1	Regional Map	6
Figure 2.0-2	Vicinity Map	7
Figure 2.0-3	Aerial Photograph with Surrounding Land Uses	8
Figure 3.0-1	Conceptual Site Plan	10
Figure 3.0-2	Conceptual Site Elevation	11
Figure 4.12-1	Noise Measurement Locations	62

Tables		
Table 4.3-1	Proposed Project Criteria Pollutant Emissions Calculations	25
Table 4.4-1	Tree Replacement Ratios	31
Table 4.7-1	Operational Greenhouse Gas Emissions	42
Table 4.9-1	Pervious and Impervious Surfaces On-Site	52
Table 4.12-1	Reactions of People and Damage to Buildings for Continuous Vibration Levels..	59
Table 4.16-1	Project Trip Generation Estimates	75
Table 4.16-2	Intersection Level of Service	76

Photographs		
Photos 1-10	Views of the Project Site.....	14-18

Appendices	
Appendix A	Greenhouse Gas Emissions Analyses, Illingworth and Rodkin, Inc.
Appendix B	Historic Report, Archives and Architecture
Appendix C	Phase I Environmental Site Assessment, Michael Gingrass and Asbestos Survey Report, Abatement Analytics
Appendix D	Noise and Vibration Assessment, Illingworth & Rodkin, Inc.
Appendix E	Traffic Study, Hexagon Transportation Consultants, Inc.

SECTION 1.0 INTRODUCTION AND PURPOSE

This Initial Study of environmental impacts is being prepared to conform to the requirements of the California Environmental Quality Act (CEQA), the CEQA Guidelines (California Code of Regulations 15000 *et. seq.*), and the regulations and policies of the City of San Jose, California.

The City of San Jose is the Lead Agency under CEQA and has prepared this Initial Study to address the impacts of implementing the proposed project. This Initial Study evaluates the potential environmental impacts which might reasonably be anticipated to result from the redevelopment and *Planned Development (PD)* zoning of a 1.23-acre project site to allow for the demolition of up to seven existing structures and surrounding surface parking areas, and the development of approximately 9,400 square feet (s.f.) of new retail/restaurant and commercial uses and 204 surface parking spaces.

In addition to the Planned Development Rezoning, other project related permits to be obtained from the City of San Jose include a planned development permit, grading permit, and building permits.

SECTION 2.0 PROJECT INFORMATION

2.1 PROJECT TITLE

Curtner/Union Retail Project

2.2 PROJECT LOCATION

The project site is located at the northwest quadrant of the Curtner Avenue/Union Avenue intersection in the City of San Jose. The project site is part of a larger, triangular retail area (4.04 acres) bounded by Bascom Avenue to the northwest, Curtner Avenue to the south, and Union Avenue to the east. Regional and vicinity maps of the project area are shown on Figures 2.0-1 and 2.0-2, respectively.

Surrounding land uses include commercial and retail uses to the north, south, east, and west. An aerial photograph with the surrounding land uses is shown on Figure 2.0-3.

2.3 LEAD AGENCY CONTACT

City of San Jose
John Davidson, Project Manager
200 East Santa Clara Street
San Jose, CA 95113
(408) 535-7895

2.4 PROPERTY OWNER/PROJECT PROPONENT

J.P. DiNapoli Companies, Inc.
Peter Larko, AICP
99 Almaden Boulevard, Suite 565
San Jose, CA 95113
(408) 535-2224

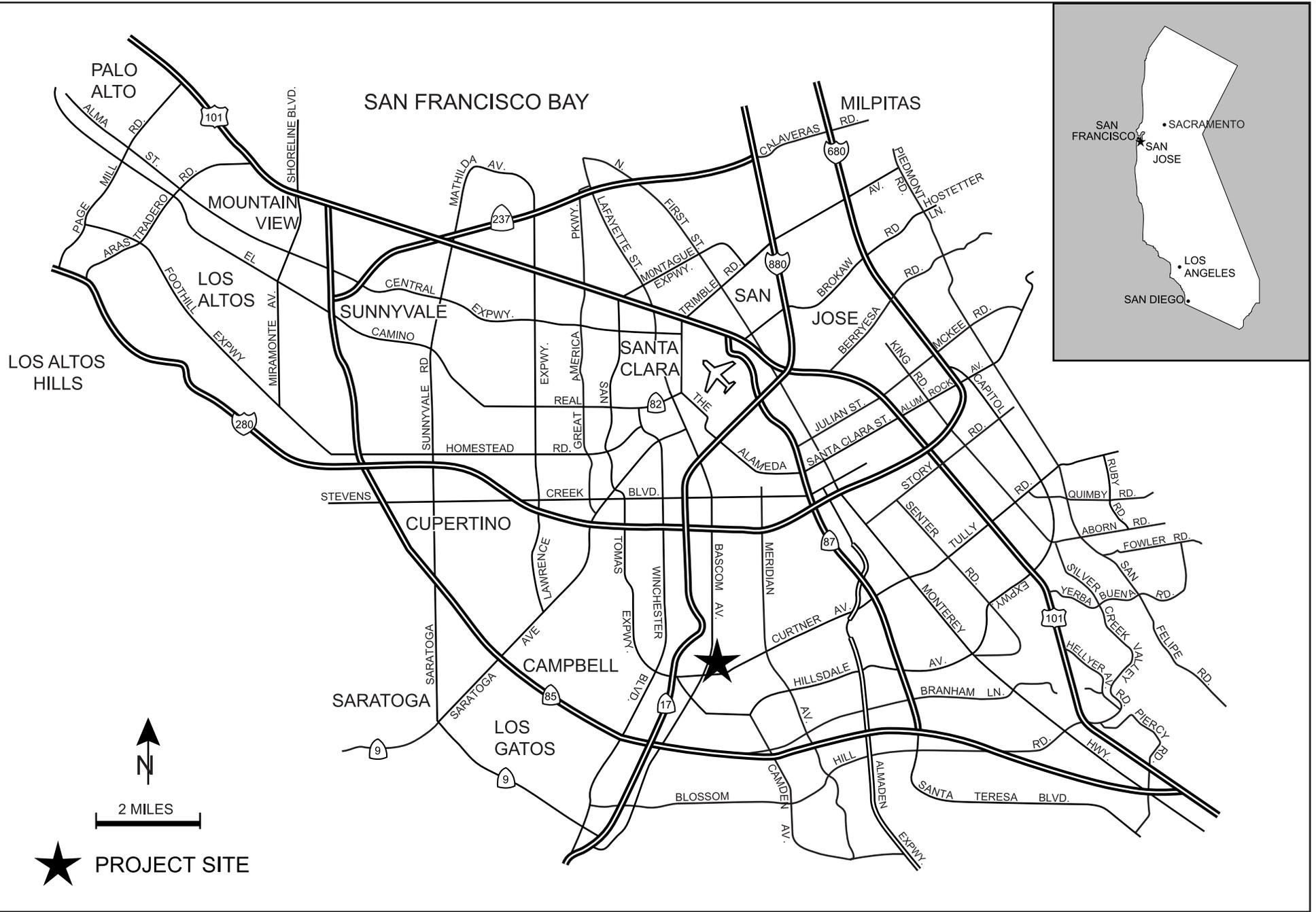
2.5 ASSESSOR'S PARCEL NUMBER

412-22-036, 412-22-037, 412-22-038, and 412-22-039

2.6 GENERAL PLAN DESIGNATION AND ZONING DISTRICT

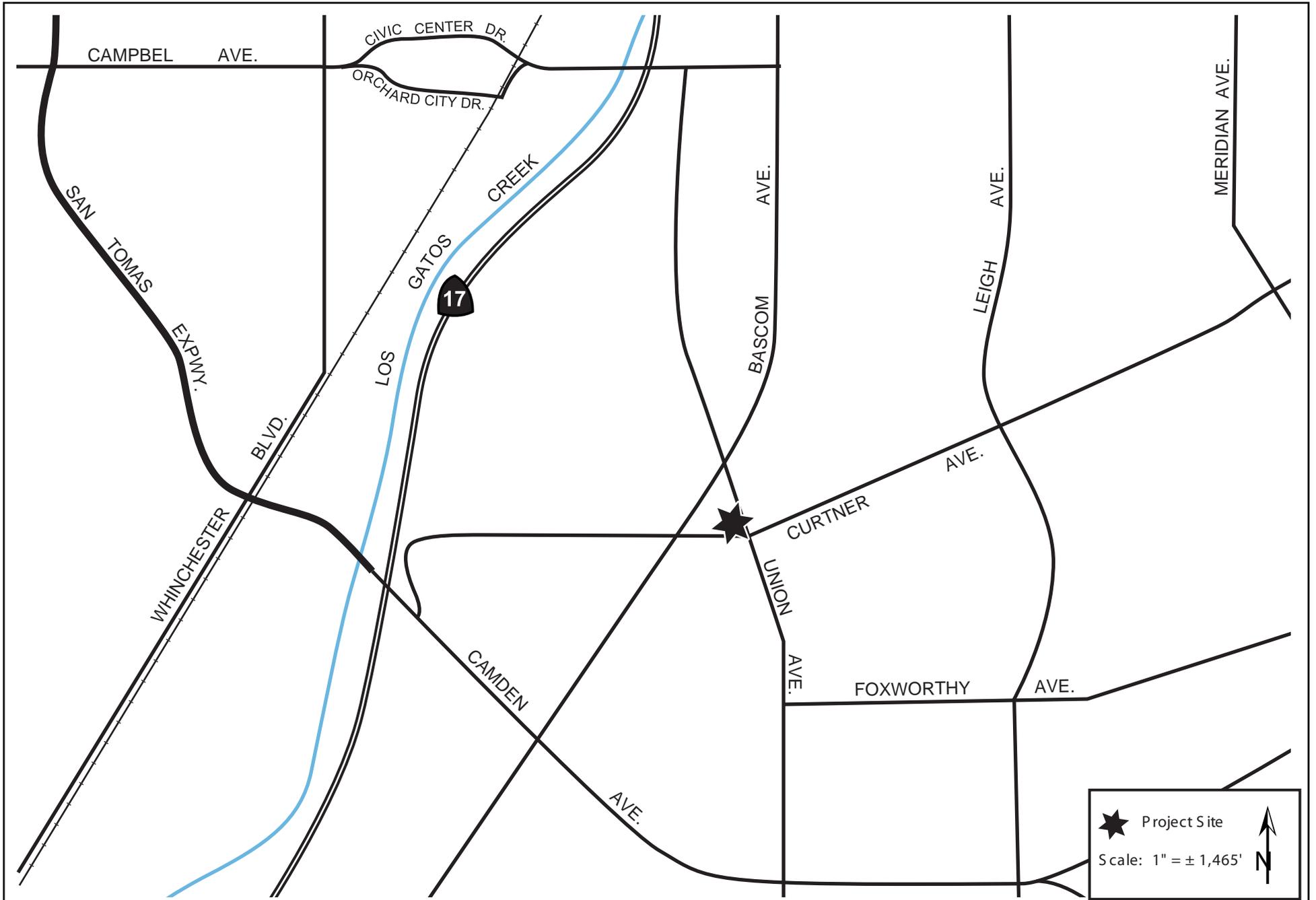
General Plan Designation: *Neighborhood/Community Commercial*

Zoning District: *CP-Commercial Pedestrian*



REGIONAL MAP

FIGURE 2.0-1



VICINITY MAP

FIGURE 2.0-2



AERIAL PHOTOGRAPH AND SURROUNDING LAND USES

FIGURE 2.0-3

SECTION 3.0 PROJECT DESCRIPTION

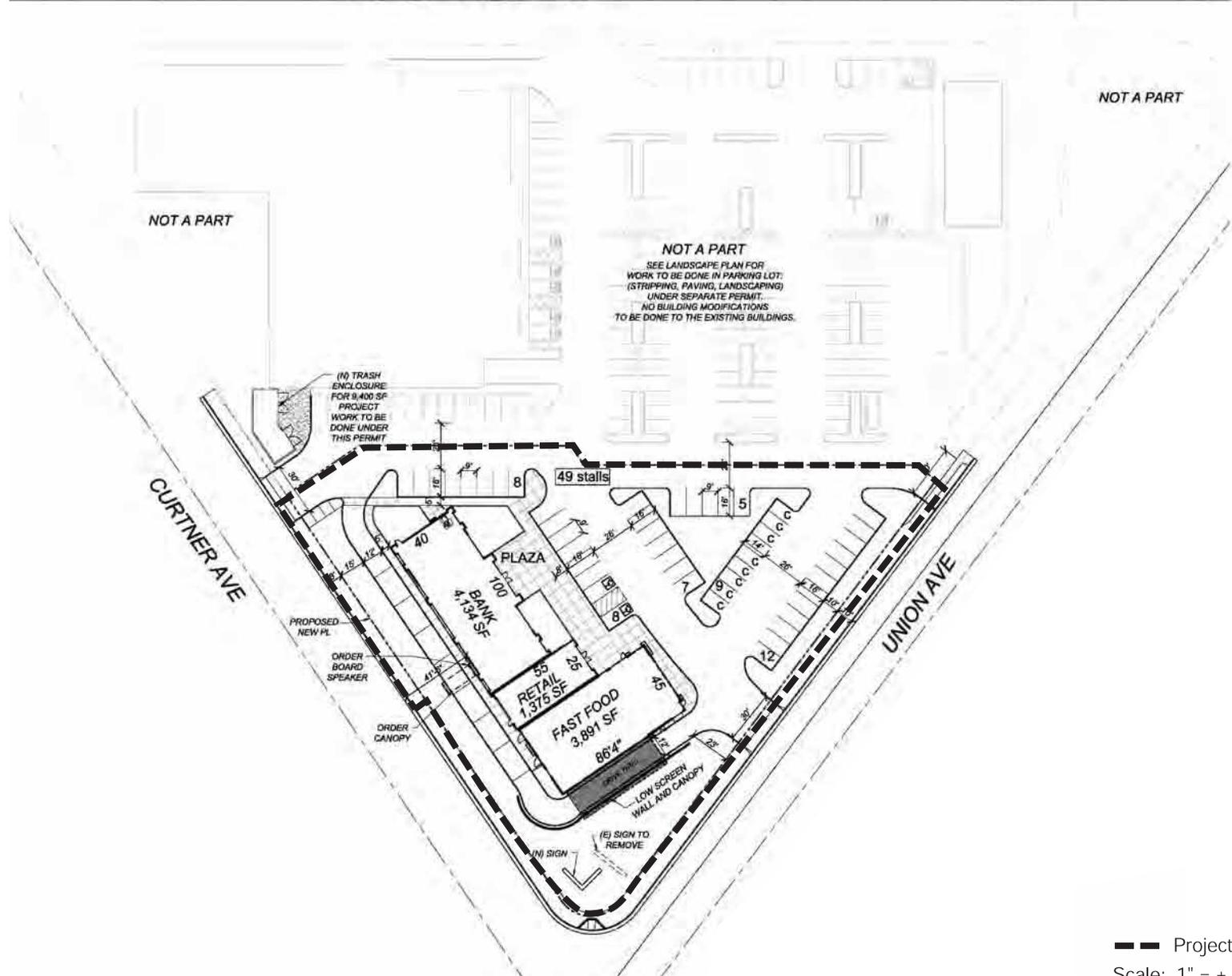
The project proposes to redevelop the 1.23-acre, triangular-shaped site with new retail and commercial uses, and rezone the site to the *A(PD) Planned Development Zoning District*. The proposed project would include the demolition of up to seven existing structures and surrounding paved areas, and the development of 9,400 square feet (s.f.) of retail/restaurant and commercial uses, including 1,375 s.f. of retail space, a 4,134 s.f. bank, and a 3,891 s.f. fast food restaurant with a drive-thru. The proposed development would be surrounded by 204 surface parking spaces, a driveway for the drive-thru restaurant, surrounding paved walkways, and landscaping. Figure 3.0-1 shows the conceptual project site plan. The proposed development would be up to two stories (30 feet) in height, which is consistent with the existing City of San Jose zoning designation (see Figure 3.0-2 for site elevations) and the surrounding area.

The project site has a General Plan land use designation of *Neighborhood/Community Commercial* and is currently zoned *CP-Commercial Pedestrian*. The *Neighborhood/Community Commercial* land use designation is intended to support a broad range of commercial activity, including commercial uses that serve the communities in neighboring areas, such as neighborhood serving retail and services and commercial/professional office development. The current *CP-Commercial Pedestrian* zoning designation is intended to support pedestrian oriented retail activity at a scale compatible with surrounding residential neighborhoods. The project proposes to rezone the site to the *A(PD) Planned Development Zoning District* to allow for drive-thru uses.

The immediate area surrounding the site contains commercial, retail, and office uses. The area within one half mile of the site includes single and multi-family residential uses. Therefore, the project's proposed retail and commercial services for the surrounding neighborhood community will be consistent with the existing General Plan.

As shown on the conceptual site plan (Figure 3.0-1), the proposed retail/restaurant and commercial uses will be oriented to the northeast, facing the surrounding surface parking. Access to the proposed development would be provided via two driveways, one on Union Avenue and the other on Curtner Avenue. The surrounding parking lot would be connected via parking aisles to the surface parking lot adjacent to the existing Lundari's grocery store and Wendy's drive-thru restaurant located immediately northwest of the project site.

SOUTH BASCOM AVENUE



10

--- Project Boundary
Scale: 1" = ± 90'



CONCEPTUAL SITE PLAN

FIGURE 3.0-1



NORTH ELEVATION



SOUTH ELEVATION



EAST ELEVATION



WEST ELEVATION

SECTION 4.0 ENVIRONMENTAL SETTING, CHECKLIST, AND DISCUSSION OF IMPACTS

This section describes the existing environmental conditions on and near the project area, as well as environmental impacts associated with the proposed project. The environmental checklist, as recommended in the California Environmental Quality Act (CEQA) Guidelines, identifies environmental impacts that could occur if the proposed project is implemented.

The right-hand column in the checklist lists the source(s) for the answer to each question. The sources cited are identified at the end of this section. Mitigation measures are identified for all significant project impacts. Measures that are standard and required by the City or law are categorized as “Standard Measures.” Measures that are proposed by the applicant that will further reduce already less than significant impacts are categorized as “Avoidance Measures.” Measures that are required to reduce significant impacts to a less than significant level are categorized as “Mitigation Measures.”

4.1 AESTHETICS

4.1.2 Setting

4.1.2.1 *Project Site*

The 1.23-acre, triangular-shaped project site is located within a residential and commercial area of southwest San Jose, at the northwestern quadrant of the Union Avenue/Curtner Avenue intersection. The site and the surrounding area are flat, and as a result, the project site is only visible from the immediate area. The site is not located within a scenic viewshed or along a scenic highway. Photographs of the project site and surrounding area are provided as Photos 1-10.

The site is currently developed with three single family residential homes with associated outbuildings, two small commercial buildings, fencing, two large billboards, and surface parking areas. The three single family homes (2073, 2081, and 2089) front onto Curtner Avenue. All structures are older than 50 years old, and have each been converted to commercial uses. The 2089 house is one-story, cottage style, with a stucco exterior (see Photo 1). A four to six foot wooden fence runs along the western border of the 2089 property, adjacent to two large recycling containers located in the Lunardi’s surface parking lot immediately west of the house. A small accessory structure is located at the rear of the 2089 property. Approximately 15 feet of gravel parking fronts the 2089 property, allowing for four to five vehicles to park along Curtner Avenue in front of the business. The 2089 property is located adjacent to 2081 Curtner Avenue.

The 2081 property is one-story, cottage style, with stucco exterior (see Photo 2). A partially gravel and paved area providing parking for six cars along Curtner Avenue is located at the front of the house. A five foot wooden fence, setback approximately 40 feet from Curtner Avenue is located along the eastern boundary of the property, adjacent to the 2073 A and B structure. A small stucco accessory structure is located behind the 2081 property. A corrugated roof connects the accessory structure to a large metal container located between the accessory structures behind the 2089 and the 2081 properties.

The 2073A and B property is located immediately east of the 2081 property. The house is one-story with a pitched roof and wooden siding (see Photo 3). A small paved parking area, sidewalk, one tree, and some landscaping shrubs front the house. The house has two main entry doors for the two businesses.

A six foot wooden fence runs behind the 2089, 2081, and 2073 properties, separating them from the Lunardi's parking lot (see Photo 4).

Adjacent to the 2073 property is a large gravel parking area located at the corner of Union Avenue and Curtner Avenue. Two large billboards are located in a vacant, wood chipped area (see Photo 3). One billboard faces Union Avenue and the other faces Curtner Avenue. A small, red, one-story, wooden building with an awning and flat, gravel roof is located adjacent to the gravel parking lot (see Photo 5). The small building provides office space for a paper shredding business (Red Dog Shred). Another small building is located behind the office structure. A privacy chain-link fence meets with the wooden fence along the back of the 2073, 2081, and 2089 properties and encloses a partially paved drop-off area behind the office building. Three recycling dumpsters/containers (one on a trailer) and a large truck with shredding capabilities on the bed of the truck are located in the fenced drop-off/storage area (see Photo 6). The drop-off/storage area has two gates for access. A paved area is located to the north of the small office structure, along Union Avenue, and a sidewalk runs along the Union Avenue portion of the site (see Photo 7).

A six foot wooden fence surrounds the rear perimeter of the shredding business property adjacent to the Lunardi's surface parking area to the north.

4.1.2.2 *Surrounding Area*

The surrounding land uses include commercial uses to the north, south, east, and west. The parking lot for Lunardi's is located to the north and west of the site (Photo 8), a strip mall and small two-story office building are located to the south (Photo 9), and gas station and strip mall are located to the east of the project site (Photo 10).



Photo 1 - View of 2089 property and adjacent recycling containers, looking north.



Photo 2 - View of 2081 and 2073 A and B properties, looking northeast.

PHOTOS 1 AND 2



Photo 3 - View of 2073 A and B property and billboards, looking east.



Photo 4 - View of wooden fencing at rear of project site, adjacent to Lunardi's parking lot, looking southeast.

PHOTOS 3 AND 4



Photo 5 - View of paper shredding business, drop-off area, and parking, looking northwest.



Photo 6 - View of paper shredding drop-off and storage area, looking west.

PHOTOS 5 AND 6



Photo 7 - View of eastern perimeter of site along Union Avenue, looking south.



Photo 8 - View of adjacent Lunardi's surface parking lot, looking west.

PHOTOS 7 AND 8



Photo 9 - View of commercial uses to the south of the project site, looking east.



Photo 10 - View of commercial and retail uses across Union Avenue to the east of the site, looking east.

PHOTOS 9 AND 10

4.1.2 Environmental Checklist and Discussion

AESTHETICS						
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Beneficial Impact	Information Source(s)
Would the project:						
1) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1
2) 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"/>	<input type="checkbox"/>	1
3) 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"/>	<input type="checkbox"/>	1
4) 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1

Change in Visual Character

The proposed project would replace the existing structures and surface parking on-site with 9,400 square feet (s.f.) of commercial and retail uses. The proposed uses would be up to two stories (30 feet) in height and range from 1,375 to 4,134 s.f. in size. Access to the proposed retail/restaurant and commercial uses would be provided via two driveways, one on Curtner Avenue and the other on Union Avenue (refer to Figure 3.0-1). The driveways would connect to surface parking adjacent to the proposed commercial and retail uses. New landscaping, including trees, bushes and shrubs, would be planted throughout the project site (refer to Figure 3.0-2).

The development of the proposed project would be of similar mass, density, and height as the surrounding commercial and retail uses located north, south, east, and west of the project site. Given the developed nature of the project site, the project’s conformance with the City’s *Commercial Design Guidelines*, and the project’s overall consistency with the surrounding neighborhood, the project would not result in significant visual or aesthetic impacts.

The project proposes to implement the following standard measure:

- Conform to the City’s *Commercial Design Guidelines*.

Light and Glare Impacts

The project would include outdoor security lighting on the site, along walkways, parking, and entrance areas. This outside lighting would increase the level of illumination in the area, but would be similar to the lighting at the adjacent surrounding commercial and retail uses. The lighting on-site would conform to the City’s *Outdoor Lighting Policy*. For these reasons, the project would not result in significant light and glare impacts.

The project proposes to implement the following measure:

- Conform to the City's *Outdoor Lighting Policy* (4-3).

4.1.3 Conclusion

The proposed project, with the implementation of the above standard measures, would not result in significant, adverse visual or aesthetic impacts. **(Less Than Significant Impact)**

4.2 AGRICULTURAL AND FOREST RESOURCES

4.2.1 Setting

According to the Santa Clara County Important Farmland 2010 map, the project site is designated as *Urban and Built-Up Land*. *Urban and Built-up Land* is defined as residential land with a density of at least six units per 10-acre parcel, as well as land used for industrial and commercial purposes, golf courses, landfills, airports, sewage treatment and water control structures.

4.2.1.1 *Forest Land Resources*

The project site is currently developed and is not used for agricultural purposes. The site is not designated by the California Resources Agency as Farmland of any type, and is not the subject of a Williamson Act contract. There is no property used for agricultural purposes adjacent to the project site.

4.2.2 Environmental Checklist and Discussion

AGRICULTURAL AND FOREST RESOURCES						
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Beneficial Impact	Information Source(s)
Would the project:						
1) 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"/>	<input type="checkbox"/>	1,4
2) 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"/>	<input type="checkbox"/>	1,4
3) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by 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"/>	<input type="checkbox"/>	1,4
4) Result in a 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"/>	<input type="checkbox"/>	1,4
5) 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"/>	<input type="checkbox"/>	1,4

The project site is not currently used for agricultural purposes and is not designated as farmland of any type. For these reasons, the proposed project would not result in a significant impact on agricultural resources.

4.2.3 Conclusion

The proposed project would not result in impacts to agricultural or forest resources. **(No Impact)**

4.3 AIR QUALITY

The following discussion is based upon a greenhouse gas emissions analyses prepared by *Illingworth and Rodkin, Inc.* in December 2011. A copy of the report is provided in Appendix A.

4.3.1 Setting

Air quality and the amount of a given pollutant in the atmosphere are determined by the amount of pollutant released and the atmosphere's ability to transport and dilute the pollutant. The major determination of transport and dilution are wind, atmospheric stability, terrain, and for photochemical pollutants, sun light.

The project area is within the San Francisco Bay Area Air Basin. The Bay Area Air Quality Management District (BAAQMD) is the regional government agency that monitors and regulates air pollution within the air basin.

Both the U.S. Environmental Protection Agency and the California Air Resources Board have established ambient air quality standards for common pollutants. These ambient air quality standards are levels of contaminants which represent safe levels that avoid specific adverse health effects associated with each pollutant. The ambient air quality standards cover what are called "criteria" pollutants because the health and other effects of each pollutant are described in criteria documents. The major criteria pollutants are ozone, carbon monoxide, nitrogen dioxide (NO_x) sulfur dioxide, and particulate matter.

Three pollutants are known at times to exceed the state and federal standards in the project area: ozone, particulates (PM₁₀), and carbon monoxide. Both ozone and PM₁₀ are considered regional pollutants because their concentrations are not determined by proximity to individual sources, but show a relative uniformity over a region. Carbon monoxide is considered a local pollutant because elevated concentrations are usually only found near the source (e.g., congested intersections).

In addition to the criteria pollutants discussed above, Toxic Air Contaminants (TACs) are another group of pollutants of concern. There are many different types of TACs, with varying degrees of toxicity. Sources of TACs include industrial processes such as petroleum refining and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, and motor exhaust. Cars and trucks release at least forty different toxic air contaminants. The most important, in terms of health risk, are diesel particulate, benzene, formaldehyde, 1,3-butadiene and acetaldehyde. Public exposure to TACs can result from emissions from normal operations, as well as accidental releases.

Sensitive Receptors

BAAQMD defines sensitive receptors as facilities where sensitive receptor population groups (children, the elderly, the acutely ill and the chronically ill) are likely to be located. These land uses include residences, school playgrounds, childcare centers, retirement homes, convalescent homes, hospitals and medical clinics. Sensitive uses are not located immediately adjacent to the project site. Multi-family residential uses are located to the southwest of the site on Curtner Avenue, and single-family residential is located southeast of the site across Union Avenue on Curtner Avenue. These residential uses would be considered sensitive uses.

4.3.2 Environmental Checklist and Discussion

AIR QUALITY						
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Beneficial Impact	Information Source(s)
Would the project:						
1) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,5
2) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,5
3) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is classified as 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"/>	<input type="checkbox"/>	1,5
4) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,5
5) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1

4.3.2.1 *Long Term Air Quality Impacts*

As part of an effort to attain and maintain ambient air quality standards for ozone and PM₁₀, BAAQMD has established thresholds of significance for air pollutants. Updated BAAQMD thresholds of significance were recently adopted in June 2010. These thresholds are for ozone precursor pollutants (reactive organic gases and nitrogen oxides), PM₁₀, and PM_{2.5}. A project that generates more than 10 tons per year or 54 pounds per day of reactive organic gases (ROG), nitrogen oxides, or PM_{2.5}, or more than 15 tons per year or 82 pounds per day of PM₁₀ is considered to have a significant operational and/or construction-related air quality impacts, according to the BAAQMD thresholds of significance. The Bay Area has attained carbon monoxide standards.

Emissions related to the proposed project were calculated using the URBEMIS 2007 model. The assumptions used in the model were based on the project plans and information contained in the greenhouse gas emissions analyses as well as the traffic study prepared for the project (see Appendices A and E). Because the project would replace the existing retail uses on the site with new retail uses, the modeling calculated the net new emissions that would result from the project. The results of the calculations are compared against the updated BAAQMD thresholds in Table 4.3-1, below.

Table 4.3-1: Proposed Project Criteria Pollutant Emissions Calculations				
	Criteria Pollutant Emissions (lbs/day)			
	ROG	NOx	PM₁₀	PM_{2.5}
Existing Retail Uses	15.95	21.00	41.38	7.88
Proposed Project	18.97	24.96	49.11	9.35
Net Increase in Emissions	3.02	3.96	7.73	1.47
BAAQMD Threshold	54	54	82	54

The proposed project would not result in an increase in regional air pollutant emissions in excess of BAAQMD thresholds and, therefore, the project would not result in significant impacts to regional air quality.

4.3.2.2 Short Term Air Quality Impacts

Construction Dust Emissions

The proposed project includes demolition of existing structures on the site. The physical demolition of existing structures has a high potential for creating air pollutants. In addition to the dust created during demolition, substantial dust emissions could be created as debris is loaded into trucks for disposal.

According to the BAAQMD CEQA Guidelines, emissions of ozone precursors (ROG and NOx) and carbon monoxide related to construction equipment are already included in the emission inventory that is the basis for regional air quality plans, and thus are not expected to impede attainment or maintenance of ozone and carbon monoxide standards in the Bay Area.

Although construction activities would be temporary, they would have the potential to cause both health air quality impacts and nuisance. PM₁₀ is the pollutant of greatest concern associated with dust. If uncontrolled, PM₁₀ levels downwind of actively disturbed areas could possibly exceed state standards. In addition, dust fall on adjacent properties could be an irritant.

Impact AQ-1: Construction activities, particularly generation of construction dust, if uncontrolled, could result in significant short-term air quality impacts. **(Significant Impact)**

MM AQ-1.1: The proposed project includes the following construction practices that can reduce construction dust/air quality impacts to a less than significant level. BAAQMD has prepared a list of feasible construction dust control measures that can reduce construction impacts to a level that is less than significant. The following construction practices shall be implemented during construction of the proposed project:

- All exposed surfaces (e.g. parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day.
- All haul trucks transporting soil, sand, or other loose material offsite shall be covered.
- 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.
- Sweep daily (with water sweepers) all paved parking areas and staging areas at construction sites.
- All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible.
- Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used.
- 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 Regulations [CCR]). Clear signage shall be provided for construction workers at all access points.
- 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.
- All excavation, grading, and/or demolition activities shall be suspended when average wind speeds exceed 20 mph.
- Vegetative ground cover (e.g. fast-germinating native grass seed) shall be planted in disturbed areas as soon as possible and watered appropriately until vegetation is established.
- The simultaneous occurrence of excavation, grading, and ground-disturbing construction activities on the same area at any one time shall be limited. Activities shall be phased to reduce the amount of disturbed surfaces at any one time.
- All trucks and equipment, including their tires, shall be washed off prior to leaving the site.
- Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent.
- Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

Construction Toxic Air Contaminant Emissions

Construction of proposed development would require the use of various diesel-powered vehicles and equipment. In 1998 the California Air Resources Board identified particulate matter from diesel fueled engines as a toxic air contaminant (TAC). CARB has completed a risk management process that identified potential cancer risks for a range of activities using diesel-fueled engines. High

volume freeways, stationary diesel engines and facilities attracting heavy and constant diesel vehicle traffic (distribution centers, truck stops) were identified as having the highest associated risk.

Health risks from Toxic Air Contaminants are a function of both concentration and duration of exposure. Unlike the above types of sources, construction diesel emissions are temporary, affecting an area for a period of days or perhaps weeks. Additionally, construction related sources are mobile and transient in nature. Statewide emissions standards for heavy-duty construction equipment will be causing diesel particulate emission rates to drop over the buildout period of the project. Due to the short duration of construction activities in any one location, health risks from construction emissions of diesel particulate would result in less than significant impacts to nearby sensitive receptors.

Due to the short duration of toxic air contaminant emissions from construction, health risks from construction emissions of diesel particulates would not result in significant air quality impacts.

Odor

The proposed development would not include any processes that would generate objectionable odors.

4.3.3 Conclusion

The proposed project, with the implementation of the above mitigation measures, would not result in significant air quality impacts. **(Less Than Significant Impact with Mitigation Incorporated)**

4.4 BIOLOGICAL RESOURCES

4.4.1 Setting

The project site is located in a heavily urbanized area of San Jose. The 1.23-acre project site is located at northwest quadrant of the Curtner Avenue/Union Avenue intersection. The project site is part of a larger, triangular retail area (4.04 acres) bounded by Bascom Avenue to the northwest, Curtner Avenue to the south, and Union Avenue to the east.

4.4.1.1 *Biotic Habitats*

The project area is composed of a mixture of developed hardscape and associated landscaping. Hardscape includes all paved surfaces including road, parking lots, buildings, and sidewalks. Vegetation in the area is comprised of intentionally planted landscaping which includes two trees, shrubs and some grassy areas.

4.4.1.2 *Trees*

City of San José Tree Ordinance

The City of San Jose has established regulations for removal of landscape trees at least 56 inches in circumference measured two feet above grade. The proposed project will obtain a permit for the removal of ordinance-sized trees and provide for the replacement of removed trees in conformance with the City of San José Tree Ordinance. It should be noted that per City policy, plantings for impacts to riparian habitat do not count towards the mitigation for removal of trees outside of the riparian area. The proposed development will result in the removal of two existing trees, neither of which are ordinance-sized trees.

City of San Jose Heritage Trees

Under the City of San Jose Municipal Code, Section 13.28.330 and Section 13.32.090, specific trees are found, because of factors including, but not limited to, their history, girth, height, species or unique quality, to have a special significance to the community and are designated as “heritage trees.” There are no heritage trees present on the project site.

4.4.1.3 *Migratory Bird Species Act*

The federal Migratory Bird Treaty Act (MBTA) prohibits killing, possessing, or trading migratory birds except in accordance with regulations prescribed by the Secretary of the Interior. Species protected by the MBTA include all native migratory birds that occur in the United States, whether they are common or protected by state or federal laws. This act encompasses whole birds, parts of birds, and bird nests and eggs. Generally, construction disturbance during the breeding season violates the MBTA if it results in the incidental loss of fertile eggs or nestlings, or otherwise leads to nest abandonment.

Migratory birds are also protected by the State of California. The State Fish and Game Code (Section 3503) emulates the MBTA and protects birds’ nests and eggs from all forms of take. Disturbance that causes nest abandonment resulting in the loss of eggs or young may be considered “take” by the California Department of Fish and Game (CDFG). Nesting raptors (birds of prey) are specifically protected under CDFG Code, Section 3503.5.

Habitat Conservation Plan

To promote the recovery of endangered species while accommodating planned development, infrastructure and maintenance activities, the Local Partners, consisting of the City of San Jose, Santa Clara Valley Transportation Authority, Santa Clara Valley Water District, Santa Clara County and the City of Morgan Hill, are preparing a joint Habitat Conservation Plan/Natural Community Conservation Plan (Habitat Plan). The Santa Clara Valley Habitat Plan (Plan) is being developed in association with the U.S. Fish & Wildlife Service (USFWS), California Department of Fish & Game (CDFG), the National Marine Fisheries Service (NMFS), and in consultation with stakeholder groups and the general public to protect and enhance ecological diversity and function within more than 500,000 acres of southern Santa Clara County.

The Santa Clara Habitat Plan Planning Agreement outlines the Interim Project Process to ensure coordination of projects approved or initiated in the Planning Area before completion of the Habitat Plan to help achieve the preliminary conservation objectives of the plan, and not preclude important conservation planning options or connectivity between areas of high habitat values. The Interim Project Process requires the local participating agencies to notify the wildlife agencies (CDFG and USFWS) of projects that have the potential to adversely impact covered species, natural communities, or conflict with the preliminary conservation objectives of the Habitat Plan. The Wildlife Agencies comments on Interim Projects should recommend mitigation measures or project alternatives that would help achieve the preliminary conservation objectives of the Habitat Plan.

The subject site does not meet the threshold that requires an interim HCP project referral because it does not meet all of the required criteria for referral to the CDFG and USFWS.

4.4.1.4 *Special Status Plant and Wildlife Species*

Because of the history of development on the site, no natural or sensitive habitats exist that would support rare, threatened, endangered or special status species of flora or fauna are known to inhabit the site.

4.4.2 Environmental Checklist and Discussion

BIOLOGICAL RESOURCES						
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Beneficial Impact	Information Source(s)
Would the project: 1) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2

BIOLOGICAL RESOURCES						
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Beneficial Impact	Information Source(s)
Would the project:						
2) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
3) 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"/>	<input type="checkbox"/>	1,2
4) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,6
5) 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"/>	<input type="checkbox"/>	1,3,6
6) 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"/>	<input type="checkbox"/>	1,2

The project site does not include riparian habitat, wetlands, or any other sensitive habitat. Implementation of the proposed project would not have any impact, direct or indirect, on wetlands.

4.4.2.1 *Trees*

The project proposes to remove all of the existing trees within the project area due to the redevelopment of the site. The loss of two non-ordinance size trees would not be considered a significant impact according to the City of San Jose's Tree Ordinance. As shown on Figure 3.0-2 Site Elevation, the project proposes new landscaping and trees to help offset the removal of existing landscaping and trees. In addition, the project proposes to implement the following standard measures to further reduce impacts to trees.

All trees that are to be removed shall be replaced at the following ratios:

Table 4.4-1: Tree Replacement Ratios

Diameter of Tree to be Removed	Type of Tree to be Removed			Minimum Size of Each Replacement Tree
	Native	Non-Native	Orchard	
18 inches or greater	5:1	4:1	3:1	24-inch box
12 - 18 inches	3:1	2:1	none	24-inch box
less than 12 inches	1:1	1:1	none	15-gallon container

x:x = tree replacement to tree loss ratio

Note: Trees greater than 18" diameter shall not be removed unless a Tree Removal Permit, or equivalent, has been approved for the removal of such trees.

The species and exact number of trees to be planted on the site will be determined at the development permit stage, in consultation with the City Arborist and the Department of Planning, Building, and Code Enforcement.

In the event the project site does not have sufficient area to accommodate the required tree mitigation, one or more of the following measures will be implemented, to the satisfaction of the Director of Planning, Building and Code Enforcement, at the development permit stage:

- The size of a 15-gallon replacement tree may be increased to 24-inch box and count as two replacement trees.
- An alternative site(s) will be identified for additional tree planting. Alternative sites may include local parks or schools or installation of trees on adjacent properties for screening purposes to the satisfaction of the Director of the Department of Planning, Building, and Code Enforcement. Contact Jaime Ruiz, PRNS Landscape Maintenance Manager, at 975-7214 or Jaime.Ruiz@sanjoseca.gov for specific park locations in need of trees.
- A donation of \$300 per mitigation tree to Our City Forest for in-lieu off-site tree planting in the community. These funds will be used for tree planting and maintenance of planted trees for approximately three years. Contact Rhonda Berry, Our City Forest, at (408) 998-7337 x106 to make a donation. A donation receipt for off-site tree planting shall be provided to the Planning Project Manager prior to issuance of a development permit.

4.4.2.2 Special Status Bird Species

The loss of two trees on the project site is not expected to affect the number and variety of bird species in the project vicinity because the available habitat for nesting and foraging is significantly degraded and highly populated.

While unlikely, the mature trees on-site may be utilized by nesting and/or foraging raptors if prey species are abundant in the area or by other migratory birds. As discussed earlier, nesting raptors (i.e. nests of falcons, hawks, eagles, or owls) and other migratory birds are protected under provisions of the Migratory Bird Species Act and CDFG Code Sections 3503, 3503.5, and 2800.

Impact BIO-1: Construction disturbance of or near nests can result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes abandonment and/or loss of reproductive effort is considered a taking by the CDFG. **(Significant Impact)**

MM BIO-1.1: If possible, construction should be scheduled between October and December (inclusive) to avoid the raptor nesting season. If this is not possible, pre-construction surveys for nesting raptors shall be conducted by a qualified ornithologist to identify active raptor nests that may be disturbed during project implementation. Between January and April (inclusive) pre-construction surveys shall be conducted no more than 14 days prior to the initiation of construction activities or tree relocation or removal. Between May and August (inclusive), pre-construction surveys shall be conducted no more than thirty (30) days prior to the initiation of these activities. The surveying ornithologist shall inspect all trees in and immediately adjacent to the construction area for raptor nests. If an active raptor nest is found in or close enough to the construction area to be disturbed by these activities, the ornithologist, shall, in consultation with the State of California, Department of Fish & Game (CDFG), designate a construction-free buffer zone (typically 250 feet) around the nest. The applicant shall submit a report to the City's Environmental Principal Planner indicating the results of the survey and any designated buffer zones to the satisfaction of the Director of Planning prior to the issuance of any grading or building permit.

Special-Status Plants and Animals

Under the proposed project, the site would continue to provide urban habitat for urban-adapted species. Since the entire project site has been previously disturbed by human use and there are no wetlands or other sensitive habitats on the project site, the presence of any special-status plants or animals on site is unlikely. For this reason, the project would not impact special-status species or sensitive habitats.

4.4.3 Conclusion

The proposed project, with the implementation of the above standard and mitigation measures, would not result in significant impacts to biological resources. **(Less Than Significant Impact with Mitigation Incorporated)**

4.5 CULTURAL RESOURCES

The following discussion is based on a historic report prepared by *Archives & Architecture, LLC* in December 2011. This report is located in Appendix B of this document.

4.5.1 Setting

4.5.1.1 *Prehistoric Resources*

The project site is located at an infill location within an urbanized area of San Jose. There are no recorded archaeological sites or reported cultural resources located at the project site. According to the City of San Jose *Archaeological Sensitivity Map*, the project site has low potential for the discovery of archaeological resources and is not considered archaeologically sensitive.

4.5.1.2 *Historic Resources*

There are five existing structures, and two accessory structures on the site. Three of the structures are houses located at 2073, 2081, and 2089 Curtner Avenue. The house located at 2073 Curtner Avenue was moved onto the site in 1949, and has been converted to a business (Hair Salon). The architecture of the house is “Minimal Traditional” style, which is a transition between the revival styles of the 1920s and the post-war Ranch-style houses of the 1950s. The house is a one-story building with an L-shaped main mass that extends to the rear (see Photo 3). The roof is hipped and the eaves are shallow, with applied gutters. The exterior is clad with siding and the roof is made of composition shingles. The property maintains only some of its integrity as per the National Register’s seven aspects of historical integrity. The surrounding area has changed significantly over time, from a rural Campbell orchard district near San Jose, to a commercial corridor focused along South Bascom and Union Avenues. The building is adjacent to two buildings originally constructed as houses that are of a similar size and scale; however, these related neighboring properties are inadequate to provide a historic setting for the subject properties.

Adjacent to 2073 Curtner Avenue is 2081 Curtner Avenue. The small one-story house was constructed in 1947 and has been converted to a commercial use. The structure is a Minimal Traditional architectural style, as described above (see Photos 1 and 2). The frame building is set low on its concrete foundation and has a side-gabled main roof mass that is accented by a gabled focal wing to the front. The inset porch projects under a lower-sloped shed extension of the main front roof. The exterior walls are clad in textured stucco, and the roof is composition shingles. The detached garage has a gabled roof and stucco cladding.

The property located at 2089 Curtner Avenue is located adjacent to 2081 Curtner Avenue. The one-story house was built in 1949 and has been converted to a commercial use. This structure is also Minimal Traditional architectural style, as described earlier (see Photo 1). The frame building has a roughly square main mass that is accented by an overlapping rectangular wing to the rear. The porch is recessed at the southeast corner of the façade. The exterior walls are textured stucco, and the roof is composition shingles. The detached garage has an asymmetrically gabled roof and is clad with horizontal wood siding.

The property located at 2677 Union Avenue is immediately west of 2073 Curtner Avenue. The property contains two small one-story commercial buildings constructed in 1960. The site is used for commercial recycling drop-off, and one of the buildings contains offices. The area around the buildings is paved, with entrances off both Union and Curtner Avenues. A section of the site along the west boundaries has been fenced off for storage. The front building has a low form with a low-

sloped roof, shallow eaves and plywood siding. The back ancillary building underwent a remodel sometime in the late 1970s, changing its footprint from an L-shape into its current rectangular shape.

4.5.2 Environmental Checklist and Discussion

CULTURAL RESOURCES						
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Beneficial Impact	Information Source(s)
Would the project:						1,2,8
1) Cause a substantial adverse change in the significance of an historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2,8
2) Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2,7
3) 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"/>	<input type="checkbox"/>	1,2,7
4) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2,7

Prehistoric Resources

According to the City's *Archaeological Sensitivity Map*, the project site has a low potential for the discovery of archaeological resources and is not considered archaeologically sensitive. The project is not anticipated to impact archaeological resources. However, in the event any resources are found during grading, their disturbance would be a significant impact.

The project proposes to incorporate the following measures as part of the project in the unlikely event that historic or prehistoric resources are uncovered during project construction:

- Should evidence of prehistoric cultural resources be discovered during construction, work within 50 feet of the find shall be stopped to allow adequate time for evaluation and mitigation by a qualified professional archaeologist. The material shall be evaluated and if significant, a mitigation program including collection and analysis of the materials at a recognized storage facility shall be developed and implemented under the direction of the City's Environmental Principal Planner.
- As required by County ordinance, this project has incorporated the following guidelines. - Pursuant to Section 7050.5 of the Health and Safety Code, and Section 5097.94 of the Public Resources Code of the State of California in the event of the discovery of human remains during construction, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains. The Santa Clara County Coroner shall be notified and shall make a determination as to whether the remains are Native American. If the Coroner determines that the remains are not subject to his authority, he shall notify the Native American Heritage Commission who shall attempt to identify descendants of the deceased Native American. If no satisfactory agreement can be reached as to the disposition of the remains pursuant to this State law, then the land owner shall re-enter the human remains and items

associated with Native American burials on the property in a location not subject to further subsurface disturbance.

Historic Resources

Since none of the four properties individually represent important patterns of development or events, contribute to a recognized district of historical significance, have association with personages, and lack visual interest as representatives of historic architecture, they would not be eligible for the National or California Registers.¹ In addition, under the City of San Jose evaluation rating system, the properties do not meet the threshold for listing on the City of San Jose Historic Resources Inventory as a Potential Resource.

Demolition of the existing structures and development of the proposed project would have a less than significant impact on historic resources.

4.5.3 Conclusion

The proposed project, with the implementation of the above standard measures, would not result in significant impacts to cultural resources. **(Less Than Significant Impact)**

¹ Archives and Architecture. Historic Report for the properties located at: 2089, 2081, and 2073 Curtner Avenue and 2677 Union Avenue. December 19, 2011.

4.6 GEOLOGY AND SOILS

The following discussion of geologic features, soils, and seismic conditions of the project site is based on the Cooper-Clark *Geotechnical Investigation for the City of San José Sphere of Influence* (1974), the United States Geological Service *Generalized Geologic Map* (1975), the County of Santa Clara Department of Public Works soil map sheet 27 (1964), and the County of Santa Clara Geologic Hazards Zones - Maps and Data website.

4.6.1 Setting

The City of San Jose is located in the eastern portion of Santa Clara Valley. The Santa Clara Valley is surrounded by the Santa Cruz Mountains to the west and the Diablo Mountain Range to the east. The geology consists of Franciscan-Knoxville, marine sedimentary rocks, and Pliocene strata. The valley floor consists mostly of Quaternary clay, sand, and gravel with isolated areas of Tertiary volcanic rock.

The project site is located on the Valley floor which was formed in the Holocene period approximately 11,000 years ago by the sediment runoff of the many rivers and streams that entered the Valley from both mountain ranges, creating alluvial fans and flood plains. The Valley floor is mostly flat. The alluvial fans are diversely defined as moderately to poorly sorted silt and clay rich in organic material containing fresh-water and aboriginal artifacts; a resource that provides deposits good for agriculture; and a potential hazard from shrink-swell problems and periodic flooding. Drainage from the valley floor runs mostly north into the San Francisco Bay. The drainage is well developed, yet there are areas where poorly drained soils occur.

The nearest waterway to the project site is Los Gatos Creek, located approximately 1.5 miles west of the project site.

Geologic and Soil Conditions

The site soils are described as Pleasanton gravelly loam (PpA). The loam is characterized as brown, massive, hard, and slightly acidic. The gravelly, sandy clay loam is underlain by gravelly alluvium soils.

The soils on-site exhibit moderate potential for expansion. Expansive soils shrink and swell as a result of moisture changes. These changes can cause heaving and cracking of slabs-on-grade, pavements and structures found on shallow foundations. Due to the flatness of the topography, there is no likeliness of erosion and landslides.

Groundwater

Groundwater within the project area occurs at depths of approximately 80 to 100 feet below the ground surface (BGS). Groundwater flow is variable depending on the time of year and the amount of rainfall, but is generally assumed toward the north or northeast along with surface drainage patterns.

Seismicity

The San Francisco Bay Area is one of the most seismically active regions in the United States. An earthquake of moderate to high magnitude generated within the San Francisco Bay region could

cause considerable ground shaking at the project site. The degree of shaking is dependent on the magnitude of the event, the distance to its zone of rupture and local geologic conditions.

The San Andreas Fault runs in a north-south direction, and parallel to the Hayward and Calaveras Fault lines. The San Andreas Fault is located approximately eight miles southwest of the site. The Hayward Fault is located about 12 miles to the northeast of the site, and the Calaveras Fault is located approximately 14 miles northeast of the site.

Seismic hazards may arise from three sources: surface fault rupture, ground shaking, and liquefaction. Since no active faults pass through the site, the potential for rupture is relatively low. Based on the available geological and seismic data, the possibility for the site to experience strong ground shaking is considered moderate to high.

Liquefaction

Liquefaction is a phenomenon in which saturated cohesionless soils are subject to temporary, but essentially total loss of shear strength associated with earthquake shaking. According to the Santa Clara County Liquefaction Hazard Zones Map,² the site is not susceptible to liquefaction.

Lateral spreading is a failure within a nearby horizontal soil zone, commonly associated with liquefaction, which causes the overlying soil mass to move toward a free face or down a gentle slope. There are no slopes or free faces on the site that would be susceptible to lateral spreading. The landslide potential is non-existent, due to the flat nature of the project site.³

4.6.2 Environmental Checklist and Discussion

GEOLOGY AND SOILS						
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Beneficial Impact	Information Source(s)
Would the project:						
1) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:						
a) Rupture of a known earthquake fault, as described 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"/>	<input type="checkbox"/>	1
b) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
c) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1

² Santa Clara County.

[http://www.sccgov.org/SCC/docs/Planning,%20Office%20of%20\(DEP\)/attachments/58238127.pdf](http://www.sccgov.org/SCC/docs/Planning,%20Office%20of%20(DEP)/attachments/58238127.pdf)

³ Santa Clara County.

[http://www.sccgov.org/SCC/docs/Planning,%20Office%20of%20\(DEP\)/attachments/58253127.pdf](http://www.sccgov.org/SCC/docs/Planning,%20Office%20of%20(DEP)/attachments/58253127.pdf)

GEOLOGY AND SOILS						
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Beneficial Impact	Information Source(s)
Would the project:						
d) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	10
2) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9,10
3) Be located on a geologic unit or soil that is unstable, or that will 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"/>	<input type="checkbox"/>	10
4) 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"/>	<input type="checkbox"/>	10
5) 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 wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1

4.6.2.1 *Geologic and Soil Conditions*

Soils

The project alignment is generally flat and the potential for erosion and siltation occurring at the site during construction would be low. The proposed project is not expected to be exposed to slope instability, erosion, or landslide-related hazards, due to the flat topography of the project site.

Grading and project construction would result in exposed earth on large portions of the site. However, because of the flat nature and relatively small size of the site, project construction is not anticipated to result in significant erosion and/or siltation on the site. Refer to Section 4.9 *Hydrology and Water Quality* for a discussion of the project's impacts on runoff and water quality, as well as the measures included in the project to mitigate drainage and water quality impacts.

The project proposes to implement the following standard measure to reduce geologic and soil impacts:

- The project will comply with the City of San Jose Grading Ordinance, including erosion and dust control during site preparation and with the City of San Jose Zoning Ordinance requirement for keeping adjacent streets free of dirt and mud during construction. The following specific BMPs will be implemented to prevent substantial erosion and siltation during construction activities:
 1. Restriction of grading to the dry season (April 15 through October 15) or meet City requirements for grading during the rainy season.

2. Utilize on-site sediment control BMPs (such as fiber rolls, sand bag barriers, sediment traps, silt fences, straw bales, and storm drain inlet protection) to retain sediment on the project site;
3. Utilize stabilized construction entrances and/or wash racks;
4. Provide temporary cover of disturbed surfaces to help control erosion during construction;
5. Provide permanent cover to stabilize the disturbed surfaces after construction has been completed.
6. Sandbags or other erosion control measures shall be installed to prevent silt runoff to public roadways from sites with a slope greater than one percent.

Groundwater

Based on the depth to groundwater within the project area footprint, it is unlikely that groundwater will be encountered during construction activities.

Seismicity and Seismic Hazards

The site is not located within a Geologic Hazard Zone or Liquefaction Zone. However, the project site is located within the seismically active San Francisco region, which requires that the building be designed and built in conformance with the requirements of the 1997 Uniform Building Code for Seismic Zone 4. The potential for geologic and soils impacts resulting from conditions on the site can be mitigated by utilizing standard engineering and construction techniques. As the project includes these required measures, the potential for seismic impacts will be less than significant.

4.6.3 Conclusion

With implementation of the standard measures described above, development of the proposed project, in conformance with standard engineering practices, would not result in significant impacts to soils and/or geology. **(Less Than Significant Impact)**

4.7 GREENHOUSE GAS EMISSIONS

4.7.1 Setting

This section provides a general discussion of global climate change and focuses on emissions from human activities that alter the chemical composition of the atmosphere. The discussion on global climate change and greenhouse gas emissions is based upon the California Global Warming Solutions Act of 2006 (Assembly Bill (AB) 32), the 2006 and 2009 Climate Action Team (CAT) reports to Governor Schwarzenegger and the Legislature, and research, information and analysis completed by the International Panel on Climate Change (IPCC), the United States Environmental Protection Agency, California Air Resources Board, and the CAT.

Global climate change refers to changes in weather including temperatures, precipitation, and wind patterns. Global temperatures are modulated by naturally occurring and anthropogenic (generated by mankind) atmospheric gases such as carbon dioxide, methane, and nitrous oxide.⁴ These gases allow sunlight into the Earth's atmosphere but prevent heat from radiating back out into outer space and escaping from the earth's atmosphere, thus altering the Earth's energy balance. This phenomenon is known as the "greenhouse" effect.

Naturally occurring greenhouse gases include water vapor⁵, carbon dioxide, methane, nitrous oxide, and ozone. Several classes of halogenated substances that contain fluorine, chlorine, or bromine are also greenhouse gases, but are for the most part, solely a product of industrial activities.

Agencies at the international, national, state, and local levels are considering strategies to control emissions of gases that contribute to global warming. There is no comprehensive strategy that is being implemented on a global scale that addresses climate change; however, in California, a multi-agency "Climate Action Team", has identified a range of strategies and the California Air Resources Board (CARB), under Assembly Bill (AB) 32, has approved the *Climate Change Scoping Plan*. AB 32 requires achievement by 2020 of a statewide greenhouse gas emissions limit equivalent to 1990 emissions, and the adoption of rules and regulations to achieve the maximum technologically feasible and cost-effective greenhouse gas emissions reductions. The ARB and other state agencies are currently working on regulations and other initiatives to implement the *Scoping Plan*. By 2050, the state plans to reduce emissions to 80 percent below 1990 levels.

The California Natural Resources Agency, as required under state law (Public Resources Code §21083.05), has amended the State CEQA Guidelines to address the analysis and mitigation of greenhouse gas emissions, effective March 18, 2010. In these changes to the CEQA Guidelines, Lead Agencies, such as the City of San Jose, retain discretion to determine the significance of impacts from greenhouse gas emissions based upon individual circumstances.

Neither CEQA nor the CEQA Guidelines provide a specific methodology for analysis of greenhouse gases. Given the global scope of global climate change, the issue becomes one of cumulative

⁴ IPCC, Summary for Policymakers. In: Climate Change 2007: The Physical Science Bases. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [S. Solomon, D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor, and H.L. Miller (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA. 2007. Available at: <http://ipcc.ch/>

⁵ Concentrations of water are highly variable in the atmosphere over time, with water occurring as vapor, cloud droplets and ice crystals. Changes in its concentration are also considered to be a result of climate feedbacks rather than a direct result of industrialization or other human activities. For this reason, water vapor is not discussed further as a greenhouse gas.

impacts and translating the issue down to the level of a CEQA document for a specific project in a way that is meaningful to the decision making process.

The Bay Area Air Quality Management District (BAAQMD) is primarily responsible for assuring that the national and state ambient air quality standards are attained and maintained in the Bay Area. On June 2, 2010, BAAQMD adopted thresholds of significance for greenhouse gas emissions for both plan-level and project-level CEQA analyses, which describe methods for estimating greenhouse gas and assessing whether projects make a cumulatively considerable contribution to greenhouse gas emissions.

4.7.2 Environmental Checklist and Discussion of Impacts

GREENHOUSE GAS EMISSIONS						
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Beneficial Impact	Information Source(s)
Would the project:						
1) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,11
2) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,11

The proposed project includes replacing five commercial structures (and two accessory structures) on the 1.23-acre site at the northwest corner of Union Avenue and Curtner Avenue with 9,400 s.f. of commercial and retail/restaurant uses. The project site is located within a larger 4.04-acre shopping area bordered by Union Avenue, Curtner Avenue, and South Bascom Avenue. The existing shopping center adjacent to the 1.23-acre project site contains a Lunardi’s grocery store, Wendy’s drive-thru restaurant, and surrounding surface parking.

The proposed project’s commercial and retail/restaurant uses would be oriented such that they would be incorporated into the existing shopping center via driveways and parking. Therefore, greenhouse gas emissions were evaluated by considering the proposed project’s overall impact to the existing uses within the greater 4.04-acre shopping center area.

4.7.2.1 *Impacts From the Project*

Greenhouse gas (GHG) emissions were computed for the build out of the proposed project. The URBEMIS2007 model was used to compute annual air pollutant emissions. The URBEMIS 2007 input files were then processed with the Bay Area Air Quality Management District’s (BAAQMD) new Greenhouse Gas Model (BGM).⁶ BGM provides emissions for transportation, area sources, electricity consumption, natural gas combustion, electricity usage associated with water usage and wastewater discharge, as well as solid waste land filling and transport.

⁶ BGM is an Excel workbook tool that uses the URBEMIS2007 file to provide GHG emissions in the form of CO2 emissions in metric tons per year.

Construction Emissions

CO₂ emissions associated with construction were assumed to all occur in 2012. Under this scenario, construction of the project would emit 119 metric tons of CO₂. These would be temporary emissions. Neither the City of San Jose nor BAAQMD have quantified thresholds for construction activities. However, the emissions would be below the lowest threshold adopted by BAAQMD (see Table 4.7-1).

Operational Emissions

The GHG emissions associated with the proposed project are provided in Table 4.7-1 below. Existing uses at the project site currently generate approximately 4,242 metric tons of CO₂ per year. In 2013, these uses, if unchanged operational emissions are anticipated to generate approximately 4,024 metric tons. As described above, the proposed 9,400 s.f. of commercial and retail/restaurant uses would be connected to the existing shopping center, and would essentially function as an expansion of the existing shopping center. As a result, the project site would produce 4,816 metric tons of CO_{2e}. This would be an increase of 574 metric tons over existing conditions and 791 metric tons over the levels expected by the existing uses in 2013.

Table 4.7-1: Operational GHG Emissions (Metric tons per year)			
Source Category	BGM Unmitigated Emissions	Emissions with Project and City Conditions	Emissions Converted for PG&E Rates Adjusted for RPS
Existing Shopping Center in 2012			
Transportation 3810		3810	3810
Area Source	0	0	0
Electricity 477		477	332
Natural Gas	71	71	71
Water and Wastewater	2	2	1
Solid Waste	56	28	28
Total			4242
Existing Shopping Center in 2013			
Transportation 3669		3669	3669
Area Source	0	0	0
Electricity 477		477	256
Natural Gas	71	71	71
Water and Wastewater	2	2	1
Solid Waste	56	28	28
Total			4024

Proposed Shopping Center in 2014			
Transportation 4354		4354	4354
Area Source	0	0	0
Electricity 619		619	332
Natural Gas	92	92	92
Water and Wastewater	2	2	1
Solid Waste	73	36	36
Total			4816
Net Increase in GHG vs. Existing Conditions			574
2013 Net Increase in GHG Emissions			791
Construction Emissions from URBEMIS	US tons/year	Metric tons/year	
2012	131 119		

According to the BAAQMD CEQA Air Quality Guidelines, projects with operational emissions increases of less than 1,100 metric tons annually of CO_{2e} would be considered to have a less than significant impact for GHG emissions.

4.7.2.2 *Impacts to the Project*

Impacts to the project from global climate change may include the potential for reduced water availability due to changes in the Sierra snowpack and/or droughts. Energy use could also rise as average temperatures rise. The project area is located more than 14 miles from San Francisco Bay and is not within the possible inundation areas from an estimated three meter (approximately 10 feet) rise in sea level.

4.7.2.3 *Significance of Cumulative Global Climate Change Impacts*

Declaring an impact significant or not implies some knowledge of incremental effects that is several years away, at best. In an effort to disclose environmental impacts and to conform with the CEQA Guidelines [16064(b)], based on the nature of this project and its location within an established urban area (rather than a greenfield site), the proposed project would not impede the state's ability to reach the emission reduction limits/standards set forth by the State of California by Executive Order S-3-05 and AB 32.

4.7.3 Conclusion

The project would not result in a significant climate change impact due to greenhouse gas emissions, nor would it result in a cumulatively considerable contribution to global climate change. **(Less Than Significant Impact)**

4.8 HAZARDS AND HAZARDOUS MATERIALS

The following discussion is based upon a Phase I Environmental Site Assessment (ESA) completed for the project by *Michael Gingrass* (December 2010), and an Asbestos Survey Report prepared for the project site by *Abatement Analytics* (December 2010).

The purpose of the ESA was to identify potential sources of hazardous waste materials at the site and to assess their potential to impact the project. The assessment also included a regulatory database search for any known or suspected hazardous materials or waste problems on the site or in the vicinity of the site, and a reconnaissance survey of the site. Copies of the environmental assessment and asbestos survey report are included in Appendix C of this Initial Study.

4.8.1 Setting

Hazardous materials are commonly used by large institutions, commercial, and industrial businesses. Hazardous materials include a broad range of common substances such as motor oil and fuel, pesticides, detergents, paint, and solvents. A substance may be considered hazardous if, due to its chemical and/or physical properties, it poses a substantial hazard when it is improperly treated, stored, transported, disposed of, or released into the atmosphere in the event of an accident.

The Phase I ESA includes a review of local regulatory agency records, a review of local, state, and federal regulatory agency lists compiled by Environmental Data Resources, Inc., a review of aerial photographs, both current and historical, review of pertinent building permit records and city directories, a site inspection of existing on-site conditions and observations of adjacent property uses, and interview(s) with person(s) knowledgeable of the previous and current ownership and uses of the project site.

4.8.1.1 *Site Conditions*

The proposed project site is comprised of four parcels. Two parcels are developed with three stand alone, single story, formerly single family residences now converted to commercial uses. One parcel has two single story commercial structures, and the fourth parcel is paved with asphaltic cement and used as a parking area for adjacent commercial buildings. The three developed parcels are occupied by commercial uses.

On-Site Observations

A site reconnaissance survey was conducted by *Michael Gingrass* on November 30, 2010. The property was viewed for evidence of hazardous materials storage, surficial staining or discoloration, debris, stressed vegetation, or other conditions that may be indicative of potential sources of soil or groundwater contamination. The site was also observed for fill/ventilation pipes, ground subsidence, or other evidence of existing or pre-existing underground storage tanks.

The site is bounded on all sides by other uses compatible with the designated zoning. Visual inspection of the exterior appearance and activities of the adjacent properties did not reveal any obvious evidence of environmental risk to the site. None of the neighboring operations are considered a threat to the environmental integrity of the property.

Historical Site Condition

According to the Santa Clara County Assessors Office, the project site was first developed as three residential sites beginning in 1947. In the 1970s, the residential parcels were all rezoned for commercial use. The buildings on the corner parcel (2073 Curtner Avenue) were put into commercial use as a bait shop. The parcels at 2081 and 2089 Curtner Avenue remained in residential use until the properties were sold in the 1980s. According to the San Jose Fire Department records, the past owners or tenants did not use hazardous materials of any kind. The current occupants of the three developed parcels are all commercial with no use or storage of large quantities of hazardous materials.

4.8.1.2 *Potential On-Site and Off-Site Sources of Contamination*

Asbestos-Containing Materials and Lead-Based Paint

Asbestos containing materials (ACMs) are of concern because exposure to ACMs has been linked to cancer. The Environmental Protection Agency (EPA) defines ACMs as materials containing more than one percent (1%) asbestos. Title 8, Section 1529, of the California Code of Regulations (CCR), however, defines asbestos-containing construction material (ACCM) as any manufactured construction material that contains more than one-tenth of one percent (0.1%) asbestos by weight.

Lead-based paint is of concern, both as a source of direct exposure through ingestion of paint chips and as a contributor to lead interior dust and exterior soil. Lead was widely used as a major ingredient in most oil-based paints prior to 1950. In 1978, the Consumer Product Safety Commission banned the use of lead as an additive in paint. The current structures were constructed between the 1940s and the 1960s and should be assumed to have asbestos-containing building materials as a part of each of the main structures. The age of the buildings makes the presence of lead-based paint a distinct probability.

Agricultural Use Impacts

As stated in the Phase I ESA, the project site and surrounding area was historically used for orchards prior to first being developed in 1947. The title records and historical aerial photographs indicate nine years of agriculture land use from 1939-1947. There doesn't seem to appear to be any information on when the agriculture land use began prior to 1939. Although, the project site has been developed since 1947, pesticide impacts continue to persist in unexpected areas (including redevelopment projects) across Santa Clara County. Santa Clara County's long history of agriculture land use since the late 1880's included the use of pesticides such as arsenical insecticides and organochlorine pesticides. Such chemicals were used as part of what was once known as the normal farming operations.

Regulatory Database Search

A records search was completed for the project area. The purpose of the search was to identify all sites within the one mile of the project area where there are known or suspected sources of contamination, as well as sites that handle or store hazardous materials. Federal, state, local environmental regulatory lists were searched. The databases searched and the results are provided in Appendix C of this Initial Study. The identification of nearby contaminated or hazardous materials sites is important so that potential land use compatibility and public safety impacts can be avoided and/or mitigated.

4.8.2

Environmental Checklist and Discussion

HAZARDS AND HAZARDOUS MATERIALS						
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Beneficial Impact	Information Source(s)
Would the project:						
1) 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"/>	<input type="checkbox"/>	12,13
2) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	12,13
3) 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"/>	<input type="checkbox"/>	1
4) 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"/>	<input type="checkbox"/>	1
5) 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
6) 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"/>	<input type="checkbox"/>	1
7) Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1
8) 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1

The project site is not located within two miles of an airport or within the Santa Clara County Airport Land Use Commission (ALUC) jurisdiction safety zone, nor is it on a City designated evacuation route. The site, within a highly developed area of San Jose, is also not located within an area subject to wildfires.

The proposed project area is not included on the CORTESE List (which includes the Geotracker, Lustop, and Envirostor lists). The CORTESE database and is a hazardous waste and substances sites list. The sites on this list are designated by the State Water Resources Control Board, the Integrated Waste Board, and the Department of Toxic Substances Control.

4.8.2.1 *Potential On-Site and Off-Site Sources of Contamination*

Hazardous Substances and Petroleum Product Impacts

The site inspection found no evidence of a current underground fuel storage tank, any potentially hazardous waste treatment sumps, or other residue of heavy industrial activity on the project site. There was no evidence of petroleum, paint, or other chemicals being spilled or disposed onto the property. There was no evidence of chemically stressed vegetation on the property or the adjacent properties.

There are no hazardous substances or petroleum products on the property that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into structures on the property or into ground, groundwater, or surface water of the property.

Asbestos Containing Materials and Lead-Based Paint

The asbestos survey report prepared for the project site found that all ten samples taken from the structures at 2073, 2081, and 2089 Curtner Avenue tested positive for asbestos containing materials (greater than one percent).⁷

Demolition of buildings which contain lead-based paint may create lead-based dust at concentrations which would expose workers and nearby receptors to potential health risks. State regulations require that air monitoring be performed during and following renovation or demolition activities at sites containing lead-based paint. If the lead-based paint is peeling, flaking, or blistered, it shall be removed prior to demolition. It is assumed that such paint would become separated from the building components during demolition activities, and must be managed and disposed of as a separate waste stream. If the lead-based paint is still bonded to the building materials, its removal is not required prior to demolition. Currently, the EPA and U.S. Department of Housing and Urban Development are proposing additional lead-based paint regulations.

ACMs and lead-based paint are present in some of the existing buildings on the site. The National Emissions Standards for Hazardous Air Pollutants (NESHAP) guidelines require that all potentially friable ACMs be removed prior to building demolition or renovation that may disturb ACMs.

The project proposes to implement the following standard measures to reduce potential impacts due to the presence of ACMs and/or lead-based paint to a less than significant level:

⁷ Abatement Analytics. Asbestos Survey Report. December 2010.

- All potentially friable asbestos-containing materials shall be removed in accordance with National Emissions Standards for Hazardous Air Pollutants (NESHAP) guidelines prior to building demolition or renovation that may disturb the materials. All demolition activities will be undertaken in accordance with Cal/OSHA standards, contained in Title 8 of the California Code of Regulations (CCR), Section 1529, to protect workers from exposure to asbestos. Materials containing more than one percent asbestos are also subject to Bay Area Air Quality Management District (BAAQMD) regulations.
- During demolition activities, all building materials containing lead-based paint shall be removed in accordance with Cal/OSHA Lead in Construction Standard, Title 8, California Code of Regulations 1532.1, including employees training, employee air monitoring and dust control. Any debris or soil containing lead-based paint or coatings will be disposed of at landfills that meet acceptance criteria for the waste being disposed.

Testing for Soil Contamination

- Shallow soil sampling and testing for pesticides must be completed prior to redevelopment of the project site to account for worker and community safety during construction. In accordance with the Interim Guidance for Sampling Agriculture Properties (DTSC, 2008), a four-part composite sample per acreage is appropriate.

Potential Off-Site Sources of Contamination

Regulatory Database Search

Based on the information obtained from the database search, various facilities in the vicinity of the site were reported as hazardous materials users. Based on the distances to the identified release sites and regional topographic gradient, it is unlikely that past or future accidental releases from the facilities identified could significantly impact the project site, or impair its suitability for the uses proposed (refer to Appendix C).

Based on the information obtained from the database search, there are 32 current and historical sites that have reported the use of hazardous materials or generated hazardous waste in the past within one mile of the project site. There have been six fuel or solvent releases within a half-mile radius of the site. Five of the release sites have completed a remediation program under the supervision of a regulatory agency. The remaining active site is in the process of completing a remediation plan under the supervision of the appropriate regulatory agency.

No sites within the project vicinity would significantly impact the project site.

4.8.3 Conclusion

The proposed project, with the implementation of the above standard measures, would not result in significant hazardous materials impacts. **(Less Than Significant Impact)**

4.9 HYDROLOGY AND WATER QUALITY

4.9.1 Setting

4.9.1.1 *Background*

Under the Clean Water Act (CWA), and issued by the State Water Resources Control Board (SWRCB), the National Pollution Discharge Elimination System (NPDES) Construction General Permit regulates stormwater runoff from construction sites. Any construction or demolition activity that results in land disturbance of equal to or greater than one acre must comply with the Construction General Permit. The Construction General Permit specifies minimum construction site Best Management Practices, and implements a risk-based permitting approach that also requires more stringent effluent monitoring and reporting requirements for projects representing a high risk to water quality. Projects subject to the Construction General Permit must file a Notice of Intent (NOI) with the SWRCB and develop, implement and maintain a Storm Water Pollution Prevention Plan (SWPPP) to control the discharge of stormwater pollutants including sediments associated with construction activities. All development projects shall comply with the City of San Jose's Grading Ordinance, including erosion and dust controls during site preparation, and with the City of San Jose's Zoning Ordinance requirement of keeping adjacent streets free of dirt and mud during construction.

The CWA also requires the City of San Jose to operate under a Municipal Stormwater NPDES Permit for the discharge of stormwater from urbanized areas to surface waters via the City's stormwater collection system. On October 14, 2009, the RWQCB adopted the San Francisco Bay Region Municipal Stormwater NPDES Permit (Municipal Regional Permit) for 76 Bay Area municipalities, including the City of San Jose. The Municipal Regional Permit mandates the City of San Jose to use its planning and development review authority to require that stormwater management measures such as Site Design, Pollutant Sources Control and Treatment measures are included in new and redevelopment projects to minimize and properly treat stormwater runoff.

Provision C.3 (New Development and Redevelopment) of the Municipal Regional Permit requires all new and redevelopment projects that create or replace 10,000 square feet or more of impervious surface and Special Land Use Categories that create or replace 5,000 square feet or more of impervious surface to: 1) incorporate site design and source control measures and numerically-sized Low Impact Development (LID) stormwater treatment measures; and 2) ensure that storm water treatment measures are properly installed, operated and maintained. The Municipal Regional Permit also requires development projects to incorporate measures to control hydromodification impacts where such hydromodification is likely to cause increased erosion, silt pollutant generation, or other adverse impact to local rivers and creeks. Development projects that create and/or replace one acre or more of impervious surface and are located in a subwatershed or catchment area that is less than 65 percent impervious must manage increases in runoff flow and volume so that post-project runoff shall not exceed estimated pre-project rates and durations.

The City has developed policies that implement Provision C.3, consistent with the Municipal Regional Permit. The City's Post-Construction Urban Runoff Management Policy (6-29) establishes specific requirements to minimize and treat stormwater runoff from new and redevelopment projects. The City's Post-Construction Hydromodification Management Policy (8-14) establishes an implementation framework for incorporating measures to control hydromodification impacts from development projects.

The City has developed a policy that implements Provision C.3 of the NPDES Permit, requiring new development projects to include specific construction and post-construction measures for improving the water quality of urban runoff to the maximum extent feasible. The City’s Post-Construction Urban Runoff Management Policy (6-29) established general guidelines and minimum Best Management Practices (BMPs) for specified land uses, and includes the requirement of regular maintenance to ensure their effectiveness. Later, the City adopted the Post-Construction Hydromodification Management Policy (8-14) to manage development related increases in peak runoff flow, volume and duration, where such hydromodification is likely to cause increase erosion, silt pollutant generation or other impacts to local rivers, streams and creeks. Implementation of these Policies will reduce potential water quality impacts to less than significant levels.

4.9.1.2 Drainage and Flooding

Based on the Federal Emergency Management Agency’s (FEMA) Flood Insurance Rate Maps, the project site is located in Flood Zone D, which is defined as having undetermined, but possible flood hazards. The project site is not located within a designated 100-year flood plain.⁸

The site is not subject to inundation by tsunami, seiche or mudflow.⁹

4.9.1.3 Water Quality

The water quality of ponds creeks, streams, and other surface water-bodies can be greatly affected by pollution carried in contaminated surface runoff. Pollutants from unidentified sources, known as “non-point” source pollutants, are washed from streets, construction sites, parking lots, and other exposed surfaces into storm drains. Stormwater runoff often contains contaminants such as oil and grease, plant and animal debris (e.g., leaves, dust, and animal feces), pesticides, litter, and heavy metals. In sufficient concentrations, these pollutants have been found to adversely affect the aquatic habitats to which they drain.

Storm drainage lines in the site area are provided and maintained by the City of San Jose. Several storm drainage lines are located near the project area. A 42-inch storm drain line is located in Union Avenue, and an 18-inch storm drain line is located in Curtner Avenue, both adjacent to the project site.

4.8.2 Environmental Checklist and Discussion

HYDROLOGY AND WATER QUALITY						
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Beneficial Impact	Information Source(s)
Would the project: 1) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1

⁸ FEMA Flood Insurance Rate Map Community-Panel Number 060349 0036 D. August 2, 1982.

⁹ Association of Bay Area Governments (ABAG).

<http://gis.abag.ca.gov/website/Tsunami/>

HYDROLOGY AND WATER QUALITY						
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Beneficial Impact	Information Source(s)
Would the project:						
2) 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1
3) 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1
4) 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1
5) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
6) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
7) 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"/>	<input type="checkbox"/>	14
8) 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"/>	<input type="checkbox"/>	14
9) 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"/>	<input type="checkbox"/>	14

HYDROLOGY AND WATER QUALITY						
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Beneficial Impact	Information Source(s)
Would the project:						
10) Be subject to inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	15

4.9.2.2 *Drainage and Flooding*

Currently, 58,144 square feet (approximately 88 percent) of the site is covered with impervious surfaces. This includes the existing buildings and surrounding parking areas (refer to Table 4.9-1). The project proposes to construct up to 9,400 s.f. of retail and commercial uses, and a drive-thru restaurant with surrounding parking, walkways, and landscaping. With the proposed design, approximately 49,403 square feet (approximately 75 percent) of the site would be impervious (refer to Table 4.9-1).¹⁰ The proposed project, therefore, would decrease the amount of runoff from the site. Because the proposed project results in the decrease in runoff from the project site, it would not exceed the capacity of drainage facilities. The specific drainage pattern of the site itself would be slightly altered due to the locations of the proposed buildings and parking areas.

As mentioned above, the project site is located in a Zone D according to the Flood Insurance Rate Map (FIRM). The project area is not located within a 100-year flood zone, therefore, the proposed project would not result in drainage or flooding impacts.

Total Site (acres)	Existing Condition of Site Area Disturbed (square feet)	Total Area of Site (disturbed acres)	
		Proposed Condition of Site Area Disturbed (square feet)	
		Replaced	New
Roof Area(s)	6,914	10,430	3,516
Parking 51,230		33,318	
Sidewalks, Patios, Paths, etc. 0		0	5,655
Streets (private)	0	0	0
Streets (public)	0	0	0
Total Impervious Surfaces	58,144	43,748	9,171
Pervious Surfaces			
Landscaped Areas	7,621	7,621	9,741
Pervious Paving	0	0	0
Other pervious surfaces	0	0	0

¹⁰ The project proposes the following allocation of impervious surfaces on the site: building footprint: 25,392 square feet, parking: 15,600 square feet, and sidewalks and patios: 3,962 square feet. Refer to Table 2.

Total Pervious Surfaces	7,621	7,621	9,741
Total Proposed Replaced + New Impervious Surfaces:			52,919
Total Proposed Replaced + New Pervious Surfaces:			17,362

4.9.2.3 *Water Quality*

Project construction activities would affect the water quality of storm water surface runoff. Removal of the existing structures and construction of the new structures, parking, walkways, and landscaping will result in a disturbance to the underlying soils, thereby increasing the potential for sedimentation and erosion. When disturbance of underlying soils occurs, the surface runoff that flows across the site may contain sediments that are ultimately discharged into the storm drainage system. Best management practices are incorporated into the project to prevent erosion and storm water runoff during construction activities. These BMPs are listed below under Standard Construction Measures.

Construction activities could temporarily increase pollutant loads in stormwater runoff. The following standard measures are included in the project, consistent with NPDES Permit and City Policy requirements, which will further reduce the potential for temporary construction impacts to surface water quality.

Standard Construction Measures

- Prior to the commencement of any clearing, grading or excavation, the project shall comply with the State Water Resources Control Board’s National Pollutant Discharge Elimination System (NPDES) General Construction Activities Permit, to the satisfaction of the Director of Public Works, as follows:
 1. The Project proponent shall develop, implement and maintain a Storm Water Pollution Protection Program (SWPPP) to control the discharge of stormwater pollutants including sediments associated with construction activities;
 2. The Project proponent shall file a Notice of Intent (NOI) with the State Water Resources Control Board (SWRCB).
- The project shall incorporate Best Management Practices (BMPs) into the project to control the discharge of stormwater pollutants including sediments associated with construction activities. Examples of BMPs are contained in the *Blueprint for a Clean Bay*. Prior to grading, the Project proponent will prepare an Erosion Control Plan approved by the City Project Engineer, Department of Public Works, 200 E. Santa Clara Street, San Jose, California 95113. The Erosion Control Plan may include BMPs as specified in ABAG’s *Manual of Standards Erosion & Sediment Control Measures* for reducing impacts on the City’s storm drainage system from construction activities. For additional information about the Erosion Control Plan, the NPDES Permit requirements or the documents mentioned above, please call the Department of Public Works at (408) 535-8300.
- The project will comply with the City of San Jose Grading Ordinance, including erosion and dust control during site preparation and with the City of San Jose Zoning Ordinance requirement for keeping adjacent streets free of dirt and mud during construction. The following specific BMPs will be implemented to prevent stormwater pollution and minimize potential sedimentation during construction:

1. Restriction of grading to the dry season (June 15 through October 15) or meet City requirements for grading during the rainy season.
2. Utilize on-site sediment control BMPs (such as fiber rolls, sand bag barriers, sediment traps, silt fences, straw bales, and storm drain inlet protection) to retain sediment on the project site;
3. Utilize stabilized construction entrances and/or wash racks;
4. Implement damp street sweeping;
5. Provide temporary cover of disturbed surfaces to help control erosion during construction;
6. Provide permanent cover to stabilize the disturbed surfaces after construction has been completed.

Post Construction

- Prior to the issuance of a Planned Development Permit, the applicant must provide details of specific Best Management Practices (BMPs), including, but not limited to, bioswales, disconnected downspouts, landscaping to reduce impervious surface area, and inlets stenciled “No Dumping – Flows to Bay” to the satisfaction of the Director of Planning, Building and Code Enforcement.
- The project shall comply with Provision C.3 of NPDES permit Number CAS612008, which provides enhanced performance standards for the management of stormwater of new development.
- The project shall comply with applicable provisions of the following City Policies-1) Post-Construction Urban Runoff Management Policy (6-29) which establishes guidelines and minimum BMPs for all projects. The proposed project is located in a catchment or subwatershed that is greater than 65 percent impervious and is not subject to Post-Construction Hydromodification Management Policy (8-14).

4.9.3 Conclusion

With the implementation of the standard measures identified above, the proposed project will further avoid any potential hydrology or water quality impacts. **(Less Than Significant Impact)**

4.10 LAND USE

4.10.1 Setting

Existing Land Use

The 1.23-acre site is located at the northwest quadrant of the Curtner Avenue/Union Avenue intersection in San Jose. The project site has a General Plan land use designation of *Neighborhood/Community Commercial* and is currently zoned *CP-Commercial Pedestrian*. The *Neighborhood/Community Commercial* land use designation is intended to support a broad range of commercial activity, including commercial uses that serve the communities in neighboring areas, such as neighborhood serving retail and services and commercial/professional office development. The current *CP-Commercial Pedestrian* zoning designation is intended to support pedestrian oriented retail activity at a scale compatible with surrounding residential neighborhoods.

The project proposes to redevelop the 1.23-acre, triangular-shaped site with retail and commercial uses, and rezone the site to the *A(PD) Planned Development Zoning District*. The proposed project would include the demolition of up to seven existing structures and surrounding paved areas, and the development of 9,400 square feet (s.f.) of retail and commercial uses, including 1,375 s.f. of retail space, a 4,134 s.f. bank, and a 3,891 s.f. fast food restaurant with a drive-thru. The proposed development would be surrounded by 204 surface parking spaces, a driveway for the drive-thru restaurant, surrounding paved walkways, and landscaping.

The project site is part of a larger, triangular retail area (4.04 acres) bounded by Bascom Avenue to the northwest, Curtner Avenue to the south, and Union Avenue to the east. Figure 3.0-1 shows the conceptual project site plan.

Surrounding Land Uses

The immediate area surrounding the site contains commercial, retail, and office uses. The area within one half mile of the site includes single and multi-family residential uses. Refer to Figure 2.0-3 for an aerial photograph showing the surrounding land uses.

4.10.2 Environmental Checklist and Discussion

LAND USE						
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Beneficial Impact	Information Source(s)
Would the project:						
1) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
2) 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"/>	<input type="checkbox"/>	1,2,3

LAND USE						
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Beneficial Impact	Information Source(s)
Would the project:						
3) 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"/>	<input type="checkbox"/>	1,2

The project proposes to demolish and remove the seven existing commercial and accessory structures from the site and construct 9,400 square feet (s.f.) of new retail/restaurant and commercial uses. While the project would not result in a change of the existing land use designation, the project does propose to rezone the site to include a *Planned Development (PD)* zoning, allowing for a drive-thru use. The proposed commercial, retail, and drive-thru uses for the site would be compatible with the adjacent grocery store (Lunardi's) and existing drive-thru restaurant (Wendy's) located within the 4.04 acre larger site area. The proposed project would also be compatible with the commercial and retail uses to the south and east of the site, across Curtner and Union Avenues.

The proposed project would not divide an established community, conflict with any applicable land use plan, policy or regulation, or conflict with a habitat conservation plan or natural community conservation plan. The proposed project, therefore, would not result in significant land use impacts.

4.10.3 Conclusion

The proposed project will not result in land use impacts. **(No Impact)**

4.11 MINERAL RESOURCES

4.11.1 Setting

The project is within a developed urban area. It does not contain any known or designated mineral resources.

4.11.2 Environmental Checklist and Discussion

MINERAL RESOURCES						
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Beneficial Impact	Information Source(s)
Would the project:						
1) 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"/>	<input type="checkbox"/>	1
2) 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"/>	<input type="checkbox"/>	1

Extractive resources known to exist in and near the Santa Clara Valley include cement, sand, gravel, crushed rock, clay, and limestone. Santa Clara County has also supplied a significant portion of the nation’s mercury over the past century. Pursuant to the mandate of the Surface Mining and Reclamation Act of 1975 (SMARA), the State Mining and Geology Board has designated the Communications Hill Area (Sector EE), bounded generally by the Southern Pacific Railroad, Curtner Avenue, State Route 87, and Hillsdale Avenue as containing mineral deposits that are of regional significance as a source of construction aggregate materials.

Neither the State Geologist nor the State Mining and Geology Board has classified any other areas in San Jose as containing mineral deposits which are either of statewide significance or the significance of which requires further evaluation. Therefore, other than the Communications Hill area cited above, San Jose does not have mineral deposits subject to SMARA.

The project is outside the Communications Hill area, and will therefore not result in a significant impact from the loss of availability of a known mineral resource.

4.11.3 Conclusion

The project would not result in significant impacts known mineral resources. **(No Impact)**

4.12 NOISE

The following discussion is based upon a noise and vibration assessment prepared for the project by *Illingworth & Rodkin, Inc.* in December 2011. A complete copy of the noise and vibration assessment is provided in Appendix D of this report.

4.12.1 Setting

4.12.1.1 *Background Information*

Several factors influence sound as it is perceived by the human ear, including the actual level of sound, the period of exposure to the sound, the frequencies involved, and fluctuation in the noise level during exposure. Noise is measured on a “decibel” scale which serves as an index of loudness. Because the human ear cannot hear all pitches or frequencies, sound levels are frequently adjusted or weighted to correspond to human hearing. This adjusted unit is known as the “A-weighted” decibel or dBA. Further, sound is averaged over time and penalties are added to the average for noise that is generated during times that may be more disturbing to sensitive uses such as early morning, or late evening.

Since excessive noise levels can adversely affect human activities (such as conversation and sleeping) and human health, federal, state, and local governmental agencies have set forth criteria or planning goals to minimize or avoid these effects. The noise guidelines are almost always expressed using one of several noise averaging methods such as L_{eq} , DNL, or CNEL.¹¹ Using one of these descriptors is a way for a location’s overall noise exposure to be measured, realizing of course that there are specific moments when noise levels are higher (e.g., when a jet is taking off or a leafblower is operating) and specific moments when noise levels are lower (e.g., during lulls in traffic flows or in the middle of the night). For this report, the DNL will be used as it is consistent with the guidelines for the City of San Jose and the State of California.

Vibration

Ground vibration consists of rapidly fluctuating motions or waves with an average motion of zero. The Peak Particle Velocity (PPV) vibration velocity amplitude is used to evaluate human response to vibration. The PPV is defined as the maximum instantaneous positive or negative peak of the vibration wave. A PPV descriptor with units of mm/sec or in/sec is used to evaluate construction generated vibration for building damage and human complaints. Table 4.12-1 displays the reactions of people and the effects on buildings that continuous vibration levels produce. The annoyance levels shown in Table 4.12-1 should be interpreted with care since vibration may be found to be annoying at much lower levels than those shown, depending on the level of activity or the sensitivity of the individual. To sensitive individuals, vibrations approaching the threshold of perception can be annoying.

Low-level vibrations frequently cause irritating secondary vibration, such as a slight rattling of windows, doors or stacked dishes. The rattling sound can give rise to exaggerated vibration complaints, even though there is very little risk of actual structural damage. In high noise

¹¹ L_{eq} stands for the Noise Equivalent Level and is a measurement of the average energy level intensity of noise over a given period of time such as the noisiest hour. **DNL** (also known as L_{dn}) stands for Day-Night Level and is a 24-hour average of noise levels, with 10 dB penalties applied to noise occurring between 10:00 PM and 7:00 AM. **CNEL** stands for Community Noise Equivalent Level; it is similar to the DNL except that there is an additional five (5) dB penalty applied to noise which occurs between 7:00 PM and 10:00 PM. As a general rule of thumb where traffic noise predominates, the CNEL and DNL are typically within two (2) dBA of the peak-hour L_{eq} .

environments, which are more prevalent where groundborne vibration approaches perceptible levels, this rattling phenomenon may also be produced by loud airborne environmental noise causing induced vibration in exterior doors and windows.

Vibration Level, PPV (in/sec)	Human Reaction	Effect on Buildings
0.006 to 0.019	Threshold of perception, Possibility of intrusion	Vibration unlikely to cause damage of any type
0.08	Vibrations readily perceptible	Recommended upper level of the vibration to which ruins and ancient monuments should be subjected
0.10	Level at which continuous vibrations begin to annoy people	Virtually no risk of “architectural” damage to normal buildings
0.20	Vibrations annoying to people in buildings	Threshold at which there is a risk of “architectural” damage to normal dwellings such as plastered walls or ceilings.
0.4 to 0.6	Vibrations considered unpleasant by people subjected to continuous vibrations	Vibration at this level would cause “architectural” damage and possibly minor structural damage.

4.12.1.2 Regulatory Background

City of San Jose General Plan

The Envision San Jose 2040 General Plan sets forth policies related to noise and vibration control in the City of San Jose. Policy EC-1.1 establishes noise and land use compatibility guidelines. Office buildings, business/commercial, and professional offices are compatible where the exterior noise exposure is up to 70 dBA DNL. Where the exterior noise exposure is between 70 dBA DNL and 80 dBA DNL the “specified land use may be permitted only after detailed analysis of the noise reduction requirements and needed noise insulation features included in the design.” The following additional policies are applicable to the proposed development.

EC-1.2 Minimize the noise impacts of new development on land uses sensitive to increased noise levels (Categories 1, 2, 3 and 6) by limiting noise generation and by requiring use of noise attenuation measures such as acoustical enclosures and sound barriers, where feasible. The City considers significant noise impacts to occur if a project would:

- Cause the DNL at noise sensitive receptors to increase by five dBA DNL or more where the noise levels would remain “Normally Acceptable”; or

- Cause the DNL at noise sensitive receptors to increase by three dBA DNL or more where noise levels would equal or exceed the “Normally Acceptable” level.
- EC-1.3** Mitigate noise generation of new nonresidential land uses to 55 dBA DNL at the property line when located adjacent to existing or planned noise sensitive residential and public/quasi-public land uses.
- EC-1.6** Regulate the effects of operational noise from existing and new industrial and commercial development on adjacent uses through noise standards in the City’s Municipal Code.
- EC-1.7** Require construction operations within San Jose to use best available noise suppression devices and techniques and limit construction hours near residential uses per the City’s Municipal Code. The City considers significant construction noise impacts to occur if a project located within 500 feet of residential uses or 200 feet of commercial or office uses would:
- Involve substantial noise generating activities (such as building demolition, grading, excavation, pile driving, use of impact equipment, or building framing) continuing for more than 12 months.
 - For such large or complex projects, a construction noise logistics plan that specifies hours of construction, noise and vibration minimization measures, posting or notification of construction schedules, and designation of a noise disturbance coordinator who would respond to neighborhood complaints will be required to be in place prior to the start of construction and implemented during construction to reduce noise impacts on neighboring residents and other uses.
- EC-1.8** Allow commercial drive-thru uses only when consistency with the City’s exterior noise level guidelines and compatibility with adjacent land uses can be demonstrated.
- EC-2.3** Require new development to minimize vibration impacts to adjacent uses during demolition and construction. For sensitive historic structures, a vibration limit of 0.08 in/sec PPV (peak particle velocity) will be used to minimize the potential for cosmetic damage to a building. A vibration limit of 0.20 in/sec PPV will be used to minimize the potential for cosmetic damage at buildings of normal conventional construction.

City of San Jose Municipal Code

The City’s Municipal Code contains a Zoning Ordinance that limits noise levels at any residential property to 55 dBA. The code is not explicit in terms of the acoustical descriptor associated with the noise level limit. A reasonable interpretation of this standard has been made based on similar codes of other Bay Area communities. This analysis assumes that the intent of the code is to limit noise levels at any residential property to 55 dBA L_{eq} .

4.12.1.3 Existing Noise Conditions

A noise monitoring survey was prepared to quantify ambient noise levels at the project site. Short-term noise measurements were made at two locations. One location was on Curtner Avenue (ST-1), in the shopping center located at the southwest corner of the intersection of Curtner Avenue and Union Avenue. The second location (ST-2) was near the swimming pool of the townhomes located on South Bascom Avenue south of the intersection of Union Avenue. A long-term noise measurement (LT-1) was made along Curtner Avenue near the office suites located at 2100 Curtner Avenue. Figure 4.12-1 shows the location of the three noise monitoring locations.

At location ST-1 along Curtner Avenue, traffic was light, with only 40 cars passing the noise monitor during the 20-minute noise measurement period. The measured average noise level was 64 dBA L_{eq} . At location ST-2 two consecutive 10-minute measurements were made. During the first measurement a barking dog, which generated noise levels of up to 76 dBA L_{max} , raised the measured noise level to 54 dBA L_{eq} . The second 10-minute measurement yielded an average noise level of 48 dBA L_{eq} .

At the LT-1 measurement location hourly average noise levels during the daytime typically ranged from 55 to 60 dBA L_{eq} . Hourly nighttime noise levels ranged from about 45 to 50 dBA L_{eq} . The day/night average noise level was 60 dBA L_{dn} .



NOISE MEASUREMENT LOCATIONS

FIGURE 4.12-1

4.11.2 Environmental Checklist and Discussion

NOISE						
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Beneficial Impact	Information Source(s)
Would the project result in:						
1) 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"/>	<input type="checkbox"/>	1,2,16
2) 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"/>	<input type="checkbox"/>	1,2,16
3) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,16
4) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2,16
5) 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 checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2,16
6) 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"/>	<input type="checkbox"/>	1,2,16

4.12.2.1 Noise Impacts to the Project

Exterior Noise Levels

The project site adjoins Curtner Avenue and the corner of Curtner Avenue and Union Avenue. The measured noise level along Curtner Avenue was 60 dBA DNL. According to The Envision San Jose 2040 General Plan, existing and projected noise levels along Union Avenue are about 67 dBA DNL. The project's design orients outdoor circulation areas toward the parking lot area, and away from both Curtner Avenue and Union Avenue. The noise exposure for the project site is less than 70 dBA DNL, and therefore, is compatible with the proposed retail/commercial development.

Noise levels at the project site are below the City of San Jose's noise and land use compatibility guidelines for retail/commercial development.

4.12.2.2 Noise Impacts from the Project

The project proposes a fast food restaurant at the corner of Curtner Avenue and Union Avenue. A drive-thru lane is proposed along Curtner Avenue, which would wrap around the corner of the development at the intersection of Curtner Avenue and Union Avenue and exit into the parking lot along Union Avenue. Apartments are located across Curtner Avenue and west of the development site, at a distance of about 180 feet from the closest point on the proposed drive-thru lane. Single-family residences are located along Curtner Avenue east of Union Avenue, at a distance of about 320 feet from the nearest point of the drive-thru lane. Typical drive-thru hours of operation include both the daytime, nighttime and late nighttime periods. The major noise sources attributed to the drive-thru include amplified speech emanating from the speaker, idling cars, cars circulating along the drive-thru aisle, and less frequently, engines starting.

Based on measurements conducted at an existing fast food restaurant in San Jose, the drive-thru speaker and patron voices would result in maximum instantaneous noise levels ranging from 42 to 49 dBA L_{max} at the nearest apartment along Curtner Avenue and ranging from about 38 to 45 dBA L_{max} at the nearest single-family residence along Curtner Avenue east of Union Avenue. Background noise levels at night (10:00 PM until 5:00 AM) along Curtner Avenue typically range from 40 to 45 dBA. Noise levels from the site are not calculated to exceed 55 dBA either instantaneously or averaged over an hour (55 dBA L_{eq}) or throughout the day and night (55 dBA DNL). Noise from the project would, therefore, comply with standards set forth in the Noise Element of the General Plan and the Municipal Code.

An analysis of the proposed drive-thru and other future noise sources at the project site shows consistency with the City's exterior noise level guidelines and standards as well as compatibility with nearby residential uses.

Project-Generated Traffic

Traffic data prepared by *Hexagon Transportation Consultants* was reviewed to calculate potential traffic noise level increases attributable to the project that are expected along roadways serving the site. The project would generate a net increase of 42 peak hour trips distributed between Curtner Avenue and Union Avenue. The increase in traffic is calculated to increase noise levels along these roadways by less than 0.5 dBA DNL. The increase would not be substantial. Project traffic would not make a cumulatively considerable contribution to cumulative traffic noise increases in the area.

Project-generated traffic would not substantially increase traffic noise levels along area roadways.

Vibration

The project proposes to demolish the existing buildings and structures on the project site. The demolition phase would include removal of the existing site circulation network (i.e., driveways, parking, paths, etc.) and existing landscaping. Construction activities would include site preparation work, excavation, foundation work, and new building framing. Impact pile driving, which typically produces the highest vibration levels, would not be required for this development.

Project construction activities such as drilling, the use of jackhammers, rock drills and other high-power or vibratory tools, and rolling stock equipment (tracked vehicles, compactors, etc.) may generate substantial vibration in the immediate vicinity. Erection of the building structure is not anticipated to be a source of substantial vibration with the exception of sporadic events such as

dropping of heavy objects, which should be avoided to the extent possible. Jackhammers typically generate vibration levels of 0.035 in/sec peak particle velocity (PPV), and drilling typically generates vibration levels of 0.09 in/sec PPV at a distance of 25 feet. Vibration levels would vary depending on soil conditions, construction methods, and equipment used. At the nearest residential land uses, typical construction activities would be expected to result in vibration levels of 0.01 in/sec PPV or less, below the threshold of human perceptibility (0.03 in/sec PPV) and well below the 0.20 in/sec PPV significance threshold.

Construction related vibration would not be excessive at nearby residential land uses.

Construction Noise

The development of the project is expected to generate noise and would temporarily increase noise levels at nearby sensitive land uses. Noise impacts resulting from construction depend on the noise generated by various pieces of construction equipment, the timing and duration of noise generating activities, and the distance between construction noise sources and noise sensitive receptors and existing ambient noise levels. Construction activities generate considerable noise, especially during the demolition phase and the construction of project infrastructure when heavy equipment is used.

Project construction activities would include the demolition of existing structures and circulation network, grading of the site, and construction of project buildings, circulation areas, and surface parking. The total duration of project construction involving major noise generating activities would be for a period of less than 12 months.

The highest noise levels would be generated during the demolition, foundation, and building framing and siding. During construction, maximum noise levels would vary depending on the equipment operating on site. The typical range of maximum noise levels would be 80 to 90 dBA L_{max} at a distance of 50 feet. Hourly average noise levels generated by demolition and construction are about 78 dBA to 89 dBA L_{eq} measured at a distance of 50 feet from the center of a busy construction site. Construction generated noise levels drop off at a rate of about six (6) dBA per doubling of distance between the source and receptor. Shielding provided by barriers or structures can provide an additional five to 10 dBA noise reduction at distant receivers.

The nearest noise sensitive receivers are multi-family residences located across Curtner Avenue, about 180 feet west of the site. Typical hourly average construction-generated noise levels would be anticipated to be 67 to 78 dBA L_{eq} outside the nearest residence during busy construction periods when construction is taking place in the westernmost portion of the site.

The construction of the project would elevate noise levels at nearby noise-sensitive land uses located near the site for a period of less than 12 months.

The project shall implement the following standard noise control measures, to reduce construction noise levels as low as practical.

- Construction will be limited to the hours of 7:00 a.m. to 7:00 p.m. Monday through Friday for any on-site or off-site work within 500 feet of any residential unit. Construction outside of these hours may be approved through a development permit based on a site-specific construction noise mitigation plan and a finding by the Director of Planning, Building, and Code Enforcement that the construction noise mitigation plan is adequate to prevent noise disturbance of affected residential uses.

- Use the best available noise control techniques (including mufflers, intake silencers, ducts, engine enclosures, and acoustically attenuating shields or shrouds) for all equipment and trucks to minimize construction noise impacts.
- Locate stationary noise generating equipment as far from sensitive receptors. If they must be located near receptors, adequate muffling (with enclosures where feasible and appropriate) will be used as necessary to comply with daytime noise limits. Any enclosure openings or venting will face away from sensitive receptors.
- Locate material stockpiles as well as maintenance/equipment staging and parking areas a minimum of 200 feet from noise sensitive receptors, such as residential uses.
- Designate a project liaison that will be responsible for responding to noise complaints during the construction phase. The name and phone number of the liaison will be conspicuously posted at construction areas and on all advanced notifications. This person will take steps to resolve complaints, including periodic noise monitoring, if necessary. Results of noise monitoring will be presented at regular project meetings with the project contractor, and the liaison will coordinate with the contractor to modify any construction activities that generated excessive noise levels to the extent feasible.
- Require a reporting program that documents complaints received, actions taken to resolve problems, and effectiveness of these actions.

The project site is not located within the Santa Clara County Airport Land Use Commission (ALUC) jurisdiction or within two miles of a public airport.

4.12.3 Conclusion

With the implementation of the standard construction measures identified above, the proposed project would not result in significant noise impacts. **(Less Than Significant Impact)**

4.13 POPULATION AND HOUSING

4.13.1 Setting

According to the Association of Bay Area Governments' (ABAG) *Projections 2009*, within the City of San Jose's Sphere of Influence, the population for 2010 was 981,000 in 305,140 households. For 2020, the projected population for San Jose is 1,137,700 in 356,470 households. The proposed project is located in Council District 9.

The jobs/housing balance is the relationship between the number of housing units required as a result of local jobs and the number of residential units available in the City. This relationship is quantified by the number of jobs/number of employed residents ratio. When the ratio reaches 1.0, a balance is struck between the supply of local housing and local jobs. The jobs/employed resident ratio is determined by dividing the number of local jobs by the number of employed residents that can be housed locally.

According to ABAG, the City of San Jose currently has a higher number of employed residents than jobs and is projected to continue to have a higher number of employed residents than jobs in the year 2015. This imbalance is opposite of the condition that a number of other cities in Santa Clara County experience, where there is a shortage of housing in relation to the number of jobs. In general, it is highly desirable for communities to have a balance between residences and jobs.

No housing exists within the project site; the house structures on the site are currently occupied as businesses. Multi-family housing is located to the southeast of the site, on Curtner Avenue, east of Union Avenue, as well as to the southwest of the site across Curtner Avenue west of South Bascom Avenue.

4.13.2 Environmental Checklist and Discussion

POPULATION AND HOUSING						
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Beneficial Impact	Information Source(s)
Would the project:						
1) 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"/>	<input type="checkbox"/>	1
2) 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"/>	<input type="checkbox"/>	1
3) 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"/>	<input type="checkbox"/>	1

The project does not propose any housing development. The proposed project would not induce population or job growth or displace either housing or persons.

The proposed redevelopment of the site with 9,400 square feet of new commercial and retail/restaurant uses would not induce substantial job growth, nor would it displace existing housing or people. The project would incrementally increase the number of jobs in a city that has more housing than jobs within its boundaries, therefore, incrementally reducing the jobs/housing imbalance. The project would not result in a significant impact on San Jose's jobs/housing imbalance.

4.13.3 Conclusion

The proposed project would not result in significant population or housing impacts. **(Less Than Significant Impact)**

4.14 PUBLIC SERVICES

4.14.1 Setting

Fire Service

Fire protection to the project site is provided by the San Jose Fire Department (SJFD), which serves a population of approximately 980,000 and an incorporated area of 176 square miles. The SJPD responds to all fires, hazardous materials spills, and medical emergencies (including injury accidents) in the project area. It is the SJFD's goal to not exceed four minutes for the "first response" and six minutes for the "second response" times.

Station No. 9, which is located at 3410 Ross Avenue, approximately 1.6 miles southeast of the project site, would be the first response unit to the site. Station No. 9 is an engine company with an aerial ladder. Station No. 6 located at 1386 Cherry Ave., approximately 3.3 miles northeast of the project site, would be the second response unit to the site.

Police Service

Police protection services are provided to the project site by the City of San Jose Police Department (SJPD). Officers patrolling the project area are dispatched from police headquarters, located at 201 West Mission Street. The SJPD presently consists of approximately 1,374 sworn officers and operates 338 marked police cars.¹²

The SJPD has four patrol divisions (plus San Jose International Airport), 16 patrol districts, 83 patrol beats and 357 patrol beat building block (BBB). The project site is located in the Central Division, of the SJPD's service area.

Schools

The project site is located within the Cambrian Unified School District and Campbell Union School District. Students in the project area likely attend Bagby Elementary School which is located at 1840 Harris Avenue, approximately 0.8 miles east of the site, Price Middle School located at 2650 New Jersey Avenue, approximately 0.4 miles east of the site, and Campbell Union High School which is located at 3235 Union Avenue, approximately 0.5 miles south of the site.

Parks

The project site is located in Council District 9. Council District 9 currently has 259.7 acres of neighborhood/community serving parkland. The City has a goal of providing 3.5 acres of neighborhood and community serving recreational lands per 1,000 population.

The nearest park to the project site is Doerr Park (11.7 acres) located at Potrero and Park Wilshire, approximately one mile east of the project site.

¹² Sergeant Michael Kihmm. San José Police Department. Personal Communication. March 9, 2007.

4.14.2 Environmental Checklist and Discussion

PUBLIC SERVICES						
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Beneficial Impact	Information Source(s)
Would the project: 1) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, 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? Police Protection? Schools? Parks? Other Public Facilities?	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/> <input checked="" type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	 1 1 1 1 1

The project would be required by the City to be constructed in conformance with current codes, including features that would reduce potential fire hazards. The project design shall be reviewed by the SJPD to ensure that it incorporates appropriate safety features to minimize criminal activity. It is the SJFD’s goal not to exceed four minutes for the “first response” and six minutes for the “second response” times.

Given the infill site location and the relatively small size of the project, the project is unlikely to substantially increase the demand for public services, including fire and police protection, or to require construction or expansion of their facilities.

The project would not add additional residents to the project area, and therefore, would not increase the demand for local schools or parks.

4.14.3 Conclusion

The proposed project would not result in impacts to public services. **(No Impact)**

4.15 RECREATION

4.15.1 Setting

The City of San Jose provides parklands, open space, and community facilities for public recreation and community services. Park and recreation facilities vary in size, use and type of service and provide for regional and neighborhood uses. The project site is currently occupied by commercial uses and associated storage, parking, and landscaping.

The project site is located in Council District 9.

The closest park to the project area is Doerr Park (11.7 acres in size), located along Potrero and Park Wilshire, approximately one mile east of the site.

In addition to the parks within the project area, existing school playgrounds and play fields in the vicinity also contribute to public recreation. Fammatre Elementary School is located approximately 0.4 miles east of the project site and provides an outdoor school playground.

4.15.2 Environmental Checklist and Discussion

RECREATION						
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Beneficial Impact	Information Source(s)
Would the project:						
1) 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"/>	<input type="checkbox"/>	1
2) 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"/>	<input type="checkbox"/>	1

The project proposes to demolish five existing commercial structures and two accessory structures, and construct 9,400 s.f. of commercial and retail/restaurant uses on the project site. The proposed project would not impact nor create a need for additional recreational facilities.

4.15.3 Conclusion

The proposed project will not result in significant impacts to parks and recreational facilities. **(No Impact)**

4.16 TRANSPORTATION

The following discussion is based upon a traffic study prepared for the project by *Hexagon Transportation Consultants* in December 2011. A complete copy of the traffic study is provided in Appendix E of this report.

4.16.1 Setting

The proposed project was reviewed in terms of vehicular trip generation, site access/circulation analysis, and vehicle queuing. The design of the drive-thru lane was also evaluated in accordance with criteria from San Jose City Council Policy 6-10, which includes design guidelines for the development of establishments with drive-thru facilities.

4.16.1.1 *Existing Roadway Network*

Direct access to the project site is provided via Union Avenue, Curtner Avenue, and South Bascom Avenue. These roadways are described below.

South Bascom Avenue is a six-lane arterial thoroughfare running north-south located to the east of the project site. Most intersections along South Bascom Avenue are signalized with turn lanes. South Bascom Avenue provides access to the site via Union Avenue and Curtner Avenue.

Union Avenue is a four-lane roadway running north-south immediately west of the project site. The roadway terminates at East Campbell Avenue to the north and Blossom Hill Road to the south. Most intersections along Union Avenue are signalized.

Curtner Avenue runs along the southern boundary of the project site. The roadway has two eastbound lanes and one westbound lane. The roadway terminates at Camden Avenue to the west and turns into Tully Road on the east side of South First Street to the east. Most intersections along Curtner Avenue are signalized.

4.16.1.2 *Level of Service and Intersection Queuing Analysis*

Traffic conditions at the following three study intersections were evaluated using level of service (LOS):

- Bascom Avenue and Union Avenue
- Bascom Avenue and Curtner Avenue
- Union Avenue and Curtner Avenue

Level of Service is a qualitative description of operating conditions ranging from LOS A, or free-flow conditions with little or no delay, to LOS F, or jammed conditions with excessive delays. The City of San Jose level of service methodology for signalized intersections is the 2000 *Highway Capacity Manual* (HCM) method. This method is applied using the TRAFFIX software. The 2000 HCM operations method evaluates signalized intersection operations on the basis of average control delay time for all vehicles at the intersection. The City of San Jose level of service standard for signalized intersections is LOS D or better.

The analysis of intersection level of service was supplemented with an analysis of left-turn pocket storage for the study intersections on Curtner Avenue: Bascom Avenue/Curtner Avenue and Union Avenue/Curtner Avenue. Left-turn vehicle queues on Curtner Avenue were estimated using the

Poisson probability distribution method as follows: (1) the Poisson probability distribution was used to estimate the 95th percentile maximum number of queued vehicles per signal cycle for the left-turn movements on Curtner Avenue; (2) the estimated maximum number of left-turning vehicles in the queue was translated into a queue length, assuming 25 feet per vehicle; and (3) the estimated maximum queue length was compared to the existing or planned available storage capacity for the left-turn movements on Curtner Avenue. This analysis thus provides a basis for estimating future left-turn pocket storage requirements.

The 95th percentile queue length value indicates that during the peak hour, a queue of this length or less would occur on 95 percent of the signal cycles. Or, a queue length larger than the 95th percentile queue would only occur on 5 percent of the signal cycles (about three cycles during the peak hour for a signal with a 60-second cycle length). Therefore, left-turn storage pocket designs based on the 95th percentile queue length would ensure that storage space would be exceeded only five percent of the time. The 95th percentile queue length is also known as the “design queue length.”

4.16.1.3 *Site Access*

Currently, there are three driveways on Union Avenue and one driveway on Curtner Avenue providing access to the existing uses on the southeastern portion of the project site. Three additional driveways on Union Avenue and two driveways on Bascom Avenue provide access to the central parking lot that serves the existing shopping center.

4.16.1.4 *On-Site Circulation*

On-site vehicular circulation was reviewed in accordance with generally accepted traffic engineering standards. The City of San Jose’s standard width for two-way drive aisles is 26 feet wide where 90-degree parking is provided. This allows sufficient room for vehicles to back out of parking spaces.

4.16.1.5 *Drive-Thru Access*

The San Jose City Council Policy 6-10 guidelines for the development of establishments with drive-thru facilities within the City of San Jose. Policy 6-10 states that a fast-food restaurant drive-thru must provide enough vehicle stacking space for eight vehicles per lane, assuming 20 feet per vehicle, or 160 feet of required vehicle storage for the proposed project.

4.16.2 Environmental Checklist and Discussion

TRANSPORTATION/TRAFFIC						
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Beneficial Impact	Information Source(s)
Would the project:						
1) 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,17
2) 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1
3) 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"/>	<input type="checkbox"/>	1
4) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible land uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,17
5) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,17
6) 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"/>	<input type="checkbox"/>	1,17

4.16.2.1 Project Trip Generation

The magnitude of traffic added to the roadway system by a particular development is estimated by multiplying the applicable trip generation rates by the size of the development. The trip generation rates published in the *Institute of Transportation Engineers' (ITE) Manual (Trip Generation, 8th Edition (2008))* for Shopping Center retail uses were used to establish the proposed project use at the site.

The project proposes to construct 9,400 s.f. of commercial and retail/restaurant uses on the northwest corner of Union Avenue and Curtner Avenue, adjacent to the existing Lunardi's shopping center. The proposed retail/restaurant uses would be oriented such that they would be incorporated into the existing shopping center. Shopping centers typically are composed of multiple land use types that complement each other. Thus, a portion of the trips that are generated by a shopping center do not enter or exit the shopping center, but are instead generated internally between the various land uses.

Trip generation for retail/restaurant uses is typically adjusted to account for "pass-by" trips. Pass-by trips are trips that are already on the adjacent roadways, but would turn into the site while passing by the site. Standard trip generation rates typically include pass-by trips. Therefore, the ITE trip rates that were applied to the project were adjusted to incorporate a 25 percent pass-by trip reduction, which is typical for similar projects in the City of San Jose.

4.16.1.2 *Project Trip Distribution and Assignment*

The proposed project trips were assigned to the surrounding roadway network and project driveways based on existing travel patterns in the study area and the locations of complementary land uses. Trip distribution and assignment are shown on Figure 1 of the traffic study in Appendix E.

The project trip estimates are shown in Table 4.16-1 below. The project would generate 10 new vehicle trips during the AM peak hour and 42 vehicle trips during the PM peak hour compared to the existing shopping center.

Land Use	Size	Daily Rate	Daily Trips	AM Peak Hour			PM Peak Hour				
				Pk-Hr Rate	In	Out	Total	Pk-Hr Rate	In	Out	Total
Existing Shopping Center	32,643	100.49	3,280	2.44	49	31	80	9.21	147	153	300
Proposed Shopping Center + Project	42,063	91.96	3,868	2.20	56	36	92	8.47	174	182	356
Net Increase	9,400		588		7	5	12		27	29	56
25% Retail/Restaurant pass-by Reduction			-147		-1	-1	-2		-7	-7	-14
Net New Trips			441		6	4	10		20	22	42

4.16.2.3 *Intersection Level of Service*

The results of the level of service analysis show that all three study intersections currently operate at an acceptable LOS D or better, and would continue to operate at LOS D under both background and project conditions (see Table 4.16-2). As shown in the table, the average delay and LOS are identical between existing and background conditions for each intersection. The reason for this is that there are no approved projects in the area that would add traffic to the study intersections. Also, since the project would add very little traffic to the surrounding roadway network, the average delay and resulting LOS under project conditions remained the same for each intersection.

Table 4.16-2: Intersection Level of Service							
Land Use	Peak Hour	Existing		Background		Project	
		Ave. Delay	LOS	Avg. Delay	LOS	Avg. Delay	LOS
Bascom Ave. & Union Ave.	AM	25.30	C 25.3	25.3	C 25.3	25.3	C
	PM	35.30	D 35.3	35.3	D 35.3	35.3	D
Bascom Ave. & Curtner Ave.	AM	34.90	C 34.9	34.9	C 34.9	34.9	C
	PM	38.40	D 38.4	38.4	D 38.3	38.3	D
Union Ave. & Curtner Ave.	AM	34.7	C 34.7	34.7	C 34.7	34.7	C
	PM	37.7	D 37.7	37.7	D 37.7	37.7	D

4.16.2.4 Intersection Queuing

The intersection queuing analysis indicates that the maximum vehicle queues for the westbound left-turn lane at the Bascom Avenue/Curtner Avenue intersection currently exceed the existing vehicle storage capacity during both the AM and the PM peak hours of traffic, and would continue to do so under background and project conditions. However, the project would not increase the 95th percentile vehicle queue length. The westbound left-turn lane has 125 feet of vehicle storage but requires 300 feet based on the queuing analysis. This left-turn lane could potentially be lengthened when this segment of Curtner Avenue is built out.

The intersection queuing analysis indicates that the maximum vehicle queues for the eastbound left-turn lane at the Union Avenue/Curtner Avenue intersection currently exceed the existing vehicle storage capacity by one vehicle during the PM peak hour of traffic. This condition would continue under background and project conditions. However, a left-turn storage inadequacy of only one vehicle is not likely to cause any operational issues.

4.16.2.5 Site Access

The project proposes to build out Curtner Avenue and construct a sidewalk along the project frontage. Curtner Avenue would be widened by approximately 20 feet along the project frontage. With the widening, Curtner Avenue could have four travel lanes (two lanes in each direction), or three travel lanes (two eastbound lanes and one westbound lane) with a shared two-way center left-turn (TWCLT) lane. Currently, this segment of Curtner Avenue has three lanes: two lanes eastbound and one lane westbound. Since the project is proposing a full access driveway on Curtner Avenue, a three-lane road with a TWCLT lane is the preferred configuration for this segment of Curtner Avenue. A TWCLT lane would provide a safe “refuge” for exiting vehicles, thereby facilitating a two-step merging process onto eastbound Curtner Avenue. In addition, a TWCLT lane would provide storage for vehicles turning left into the shopping center. All roadway and sidewalk improvements are subject to City of San Jose review and approval.

The driveways serving the project on Union Avenue and Curtner Avenue would be 30 feet wide measured at the throat. The proposed driveway widths are consistent with the two-way commercial driveway width recommendations contained in the *Institute of Transportation Engineers’* technical report entitled *Guidelines for Driveway Location & Design*.

The project proposes to preserve the northernmost driveway on Union Avenue and combine the remaining five driveways on Union Avenue into one. The new project driveway on Union Avenue would be located approximately 150 feet from the Union Avenue/Curtner Avenue intersection. Reducing the number of driveways would improve traffic operations by minimizing the number of potential turning-movement conflicts on Union Avenue. The project also proposes to remove the existing driveway on Curtner Avenue and provide a new driveway midway between Union Avenue and Bascom Avenue. The project does not propose any changes to the driveways on Bascom Avenue.

4.16.2.6 *On-Site Circulation*

The proposed project provides efficient on-site circulation with no dead-end drive aisles throughout the shopping center. The City's standard width for two-way drive aisles is 26-feet wide where 90-degree parking is provided. This allows sufficient room for vehicles to back out of parking spaces. According to the site plan, all of the drive aisles measure at least 26 feet wide. The standard and compact parking spaces on-site meet the City of San Jose off-street parking design standard for full-size car spaces (nine feet wide by 18 feet deep) and compact spaces (eight feet wide by 16 feet deep).

Pedestrian Circulation

A pedestrian plaza is proposed as part of the project. However, there is no pedestrian connection between the new development and sidewalks along the project frontages on Union Avenue and Curtner Avenue, and the existing grocery store. The project includes the following design measures to improve pedestrian circulation.

- Provide a crosswalk at the drive-thru location in order to provide a safe pedestrian connection between the public sidewalks and the new buildings.
- Provide a clearly marked pedestrian path between the new buildings and the existing grocery store.

4.16.2.7 *Drive-Thru Access*

A single drive-thru lane would serve the proposed fast food restaurant. The entrance to the drive-thru lane would be provided near the Curtner Avenue project driveway, which is located midway between Bascom Avenue and Union Avenue. The drive-thru exit would be located near the Union Avenue driveway, which would be approximately 150 feet from Curtner Avenue. Based on the project trip generation estimates and trip assignment, the proposed fast-food restaurant drive-thru would add very little traffic to the project driveways and the Union Avenue/Curtner Avenue intersection.

The proposed drive-thru design would provide adequate vehicle stacking.

4.16.3 Conclusion

The proposed project would not result in significant impacts to the transportation system. (**Less Than Significant Impact**)

4.17 UTILITIES AND SERVICE SYSTEMS

4.17.1 Setting

4.17.1.1 *Water Service*

Water service to the project site is supplied by the San Jose Water Company. A water line is located in the south side of Curtner Avenue, and in the center of Union Avenue.

4.17.1.2 *Wastewater*

Wastewater from the City of San Jose is treated at the San Jose/Santa Clara Water Pollution Control Plant, located near Alviso. The Water Pollution Control Plant (WPCP) is owned jointly by the Cities of San Jose and Santa Clara and is operated by the City of San Jose's Department of Environmental Services. The WPCP is one of the largest advanced wastewater treatment facilities in California and serves over 1,500,000 people in San Jose, Santa Clara, Milpitas, Campbell, Cupertino, Los Gatos, Saratoga, and Monte Sereno. The WPCP provides primary, secondary, and tertiary treatment of wastewater and has the capacity to treat 167 million gallons of wastewater a day (mgd).

The WPCP is currently operating under a 120 million gallon per day dry weather effluent flow constraint. This requirement is based upon the State Water Resources Control Board and the Regional Water Quality Control Board concerns over the effects of additional freshwater discharges from the WPCP on the saltwater marsh habitat, and pollutant loading to the Bay from the WPCP. Approximately ten percent of the plant's effluent is recycled for non-potable uses and the remainder flows into San Francisco Bay.

Currently, there is a six-inch and 21-inch sanitary sewer line located in Union Avenue, and a six-inch sanitary sewer line in Curtner Avenue.

4.17.1.3 *Storm Drainage*

Storm drainage lines in the site area are also provided and maintained by the City of San Jose. There is an 18-inch and 24-inch storm drain line in Curtner Avenue, and a 42-inch storm drain line in Union Avenue.

4.17.1.4 *Solid Waste*

Solid waste and recycling collection services for the site area are provided by the *Green Team* of San Jose. San Jose has a contract with Newby Island Landfill which extends until the year 2019. The City of San Jose disposes approximately 250,000 tons of residential garbage per year at Newby Island Landfill.

4.17.1.5 *Natural Gas*

Natural gas and electric service is provided to the site area by Pacific Gas and Electric Company. The project site is currently served from a six-inch underground natural gas line in Union Avenue and a two-inch gas line in Curtner Avenue.

4.17.2 Environmental Checklist and Discussion

UTILITIES AND SERVICE SYSTEMS						
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Beneficial Impact	Information Source(s)
Would the project:						
1) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2
2) 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"/>	<input type="checkbox"/>	1,2
3) 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"/>	<input type="checkbox"/>	1,2
4) 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"/>	<input type="checkbox"/>	1,2
5) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1
6) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2
7) 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"/>	<input type="checkbox"/>	1,2

The project proposes to demolish five existing commercial structures and two accessory structures, and construct 9,400 s.f. of commercial and retail/restaurant uses on the project site. The project includes connections to the existing water, sanitary sewer lines, and storm drain lines located in Curtner and Union Avenues.

As discussed in *Section 4.9 Hydrology and Water Quality*, the development of the proposed project would decrease the amount of impervious surfaces on the site, decreasing the amount of runoff generated on-site. For this reason, the project would not exceed the capacity of the existing storm drain system.

The proposed commercial and retail/restaurant uses, however, would result in a minimal increase in water usage and sewer generation, and an incremental increase in waste. Due to the small size of the proposed development, it is not anticipated that it would result in the need to upgrade or expand existing utility infrastructure or facilities.

4.17.3 Conclusion

The proposed project would not require substantial new utility lines and would not exceed the capacity of existing utility systems. For this reason, the proposed project would not result in significant impacts to utilities or service systems. **(Less Than Significant Impact)**

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Beneficial Impact	Information Source(s)
1) Does the project have the potential to substantially 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; substantially reduce the number or restrict the range of an endangered, rare or threatened species; or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1-15, p.1-80
2) Does the project have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1-80
3) Does the project have possible environmental effects that are individually limited but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are significant 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1-80
4) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1-80

The project includes standard and mitigation measures to avoid or reduce temporary air quality, biological, hydrology and water quality, and transportation impacts to a less than significant level. As described in the respective sections of this Initial Study, with implementation of standard and mitigation measures the proposed project would not result in other significant environmental impacts or substantially adversely affect human beings directly or indirectly (refer to *Section 4.0 Environmental Setting, Checklist, and Discussion of Impacts* of this Initial Study).

Conclusion: The project would result in significant transportation and biological resources impacts. However, mitigation measures are included in the project to reduce these impacts to a less than significant level. Construction-related and temporary air quality, hazards and hazardous materials, and hydrology and water quality impacts would be mitigated to a less than significant level with standard measures included in the project.

Checklist Information Sources

1. Professional judgment and expertise of the environmental specialist preparing this assessment, based upon a review of the site and surrounding conditions, as well as a review of the project plans.
2. City of San Jose 2040 General Plan.
3. City of San Jose Zoning Ordinance.
4. Santa Clara County Important Farmland Map. 2010.
5. Bay Area Air Quality Management District. CEQA Guidelines. December 2010.
6. City of San Jose Tree Ordinance.
7. City of San Jose Archaeological Sensitivity Maps.
8. Archives and Architecture. Historic Report. December 2011.
9. Cooper-Clark Associates. Geotechnical Investigation. City of San Jose's Sphere of Influence. 1974.
10. United States Geological Service. Generalized Geologic Map. 1975.
11. Illingworth and Rodkin, Inc. Greenhouse Gas Emissions Analyses. December 2010.
12. Michael Mingrass. Phase One Environmental Site Assessment. December 2009.
13. Abatement Analytics. Asbestos Survey Report. December 2009.
14. FEMA Flood Insurance Rate Map Community-Panel Number 060349 0036 D. August 2, 1982.
15. Association of Bay Area Governments. ABAG Geographic Information Systems, Hazard Maps, Tsunami Evacuation Planning Map for San Francisco & San Mateo Counties. ABAG. California Office of Emergency Services. 2005.
16. Illingworth & Rodkin, Inc. Noise and Vibration Assessment. December 2011.
17. Hexagon Transportation Consultants. Traffic Study. January 2012.

SECTION 5.0 REFERENCES

- Abatement Analytics. Asbestos Survey Report. December 2009.
- Archives and Architecture. Historic Report. December 2011.
- Association of Bay Area Governments. Projections 2010: Forecasts for the San Francisco Bay Area to the year 2030. 2009.
- Association of Bay Area Governments. ABAG Geographic Information Systems, Hazard Maps, Tsunami Evacuation Planning Map for San Francisco & San Mateo Counties. ABAG. California Office of Emergency Services. 2005.
- Bay Area Air Quality Management District. Bay Area Air Quality Management District CEQA Guidelines. 2010.
- California Department of Conservation. Santa Clara County Important Farmland Map. 2010.
- City of San Jose Envision San Jose 2040 General Plan.
- City of San Jose Archaeological Sensitivity Maps.
- City of San Jose Tree Ordinance.
- Cooper-Clark and Associates. Geotechnical Investigation City of San José's Sphere of Influence. Technical Report and Maps. 1974.
- Michael Gingrass. Phase One Environmental Site Assessment. December 2010.
- FEMA Flood Insurance Rate Map Community-Panel Number 060349 0036 D. August 2, 1982.
- Hexagon Transportation Consultants. Traffic Report. January 2012.
- Illingworth & Rodkin, Inc. Greenhouse Gas Emissions Analyses. December 2011.
- Illingworth & Rodkin, Inc. Noise and Vibration Assessment. December 2011.
- United States Geological Service. Generalized Geologic Map. 1975.

SECTION 6.0 AUTHOR AND CONSULTANTS

Author: **City of San Jose, PBCE**
Joseph Horwedal, Acting Director of Planning, Building, and Code Enforcement
John Davidson, Project Manager

Consultants: **David J. Powers and Associates**
John Schwarz, Principal Project Manager
Karli Grigsby, Associate Project Manager
Stephanie Francis, Graphic Artist

Archives and Architecture
Franklin Maggi, Architectural Historian
Sarah Winder, Historian
Olivia Sawi, Assistant Historian

Hexagon Transportation Consultants
Brian Jackson, Senior Associate

Illingworth & Rodkin, Inc.
James Reyff
Michael Thill

