

## **PLANNING COMMISSION**

### **REGULAR MEETING OF**

**October 1, 2014**

**7:00 p.m.**

### **CITY COUNCIL CHAMBERS**

**A. CALL TO ORDER** - Persons wishing to speak on an agenda item are asked to complete an information card and present it to the secretary. The Planning Commission meeting is recorded to assist in the preparation of the minutes, and you are, therefore, asked to give your name and address prior to offering testimony. All testimony is to be given from the podium.

**B. ROLL CALL**

**C. PLEDGE OF ALLEGIANCE**

**D. ITEMS TO BE DELETED OR ADDED**

**E. ORAL REPORTS/PUBLIC PARTICIPATION ON NON-AGENDA ITEMS (LIMITED TO 30 MINUTES; 3 MINUTES ALLOTTED FOR EACH SPEAKER)** - This portion of the agenda provides opportunity to speak on an item, which is **NOT** on the agenda. Pursuant to the Brown Act, the Planning Commission can take no action at this time; however, the Planning Commission may refer your comments/concerns to staff, or request the item be placed on a future agenda.

**F. NEW BUSINESS**

**G. AGENDA (THREE MINUTES IS ALLOTTED FOR EACH SPEAKER PER AGENDA ITEM)**

1. **PRECISE PLAN OF DESIGN (PPD) NO. 14-057 (PUBLIC HEARING)** - A request to construct a 6,700 square foot office/warehouse on a vacant lot located at 25449 Redlands Boulevard in the East Valley Corridor Specific Plan – Commercial Industrial. The building will include 2,000 square feet of office area, and a five-bay, 4,750 square foot warehouse area. The project will include 19 parking spaces and approximately 11,616 square feet of landscaping.

#### **RECOMMENDATION**

The recommendation is that the Planning Commission approve Precise Plan of Design No. 14-057, subject to the attached Conditions of Approval.

2. **CONDITIONAL USE PERMIT (CUP) 14-096 (PUBLIC HEARING)** – A digital sign cabinet on an existing free-standing sign at the Corporate Business Center at 10459 Mt. View Avenue. Due to an error in publishing, the project will be re-noticed and the Public Hearing set for October 15, 2014.

**H. APPROVAL OF MINUTES – (LIMITED TO 5 MINUTES)**

1. September 3, 2014

**I. REPORTS BY THE PLANNING COMMISSIONERS**

**J. COMMUNITY DEVELOPMENT DIRECTOR REPORT**

**K. ADJOURNMENT** - Reports and documents relating to each agenda item are on file in the Department of Community Development and are available for public inspection during normal business hours, Monday through Thursday, 7:00 a.m. to 5:30 p.m. The Loma Linda Branch Library can also provide an agenda packet for your convenience.

*In compliance with the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please contact the City Clerk at (909) 799-2819. Notification 48 hours prior to the meeting will enable the City to make reasonable arrangements to ensure accessibility to this meeting. Later requests will be accommodated to the extent feasible.*

# Staff Report City of Loma Linda

From the Department of Community Development

## PLANNING COMMISSION MEETING OF OCTOBER 1, 2014

**TO:** PLANNING COMMISSION

**FROM:** KONRAD BOLOWICH, ASSISTANCE CITY MANAGER

**SUBJECT:** PRECISE PLAN OF DESIGN (PPD) NO. 14-057 - A PROPOSAL TO CONSTRUCT 6,700 SQUARE FOOT OFFICE/WAREHOUSE ON A VACANT LOT LOCATED AT 25449 REDLANDS BOULEVARD WITHIN THE EAST VALLEY CORRIDOR SPECIFIC PLAN – COMMERCIAL INDUSTRIAL ZONE.

### SUMMARY

A request to construct a 6,700 square foot office/warehouse on a vacant lot located at 25449 Redlands Boulevard in the East Valley Corridor Specific Plan – Commercial Industrial. The building will include 2,000 square feet of office area, and a five-bay, 4,750 square foot warehouse area. The project will include 19 parking spaces and approximately 11,616 square feet of landscaping.

### RECOMMENDATION

It is recommended that the Planning Commission approve Precise Plan of Design No. 14-057 based on the Findings, and subject to the attached Conditions of Approval (Attachment B)

### PERTINENT DATA

Owner/Applicant: Tryco, LLC

General Plan: Commercial

Zoning: East Valley Corridor Specific Plan – Commercial Industrial

Site: The vacant, 48,846 square foot site is located on Redlands Blvd, just east of Coloma Street.

Topography: Mostly flat area

Vegetation: Vacant lot, with sparse grasses and weeds.

## EXISTING SETTING

The Project Site is presently vacant with residential uses to the west, and tire shop and other commercial/industrial uses to the east. The property to the south appears to be vacant, however, it is developed with a single-family dwelling unit, with a majority of the site un-developed. The properties to the north are also vacant.

## CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) STATUS

The construction of the 6,700 square foot office/warehouse is exempt from CEQA pursuant to the CEQA Guidelines § 15303(c), which provides a Class 3 Categorical Exemption for new construction, in urbanized areas, of up to four such commercial buildings not exceeding 10,000 square feet in area.

## PUBLIC COMMENTS

Public hearing notices for this project were mailed to property owners within 300 feet of the project site on September 18, 2014. As of the date of this Staff Report, the City has received no written comments on the project.

## ANALYSIS

### Project Description / Site Analysis

Tryco, LLC is proposing to develop the majority of the subject site with a 6,700 square foot office/warehouse facility. The project includes 19 parking spaces, 11,616 square feet of landscaping, and five bays. Parking would be distributed between the front of the building and center portion of the lot. The site will also include a 6-foot high perimeter block wall along the south and west property lines.

### General Plan, Zoning and Existing Land Use

	<b>General Plan</b>	<b>Zoning</b>	<b>Existing Use</b>
<b>Subject Site</b>	Commercial	EVC – Commercial Industrial	Vacant
<b>North</b>	Commercial	EVC – General Commercial	Vacant
<b>South</b>	Low Density Residential	Single Residence	Single-Family Dwelling Unit
<b>East</b>	Commercial	EVC – Commercial Industrial	Tire Shop
<b>West</b>	Commercial	EVC – Commercial Industrial	Single Family Dwelling Units

**Development Standards**

**EVC - Commercial Industrial Zone Development Standards**

	Required/Maximum Allowed	Proposed	Complies
Front	25' – Building 15' – Parking	44' 15'	Yes
Side			
- East P.L.	0'	10'	Yes
- West P.L.	40'	70'	
Rear	40' when adjacent to residential district	>200'	Yes
Lot Size – Minimum	20,000 square feet	48,846 square feet	Yes
Lot Width – Minimum	100'	125'	Yes
Lot Depth – Minimum	150'	390'	Yes
Building Coverage – Maximum	24,423 sq.ft. 50%	6,700 sq.ft. 13.7%	Yes
Maximum – fBuilding Height	50'	18'	Yes
Parking	Office: 1 per 250 sq.ft. 8 spaces Warehouse: 1 per 500 sq.ft. 9.5 spaces Total: 18	19	Yes
Open Area Landscaping	20% of lot area 9,600 sq. ft.	23.8% of lot area 11,616 sq. ft.	Yes
Trash Enclosure	Required	Proposed	Yes
Block Wall	6' high block wall along residentially zoned districts	6' high block wall proposed along south and west property lines	Yes

**Architecture and Design**

The building will include a rustic architectural design, with cappuccino colored wood siding, a mixed brown colored stone wainscot, and a tan metal roof. The stone will be included in the wrought iron fence that separates the front from the rear parking areas. The east and west

facades are treated with a stone wainscot along the base and as columns to help break up the expansive walls along the east façade. The east façade also includes steel lattice screens with ivy planted at the base to deter graffiti and also provide added architectural articulation. The west façade is further articulated with the bay doors.

## **Landscaping**

The applicant has provided 11,616 square feet of landscaping throughout the site. The East Valley Corridor requires that an extra wide landscape buffer be placed between the subject site, which is zoned Commercial-Industrial, and the residentially zoned properties to the west and south. The current landscape plan includes two types of trees, a *blue spruce*, which is provide along the front portion of the lot, and *italian cypress* along the east façade. As stated above, the east façade will include steel screening to support the proposed ivy along the base. In time, the ivy will cover the metal screening.

The overall landscape includes a desert theme. The buffer along the west and south property lines includes a combination of the following drought tolerant shrubs and plants: *blue yucca rigida*, *rainbow hedge cactus*, *brazilian plume*, *birds of paradise*, and *ferns*. In order to create a visual buffer between the subject site and the residentially developed properties to the west and south, staff has added a condition of approval that requires the applicant plan trees within the buffer area, as well as two additional trees along the front setback to complement the proposed blue spruce trees. Trees that can be added include *blue palo verde*, *african sumac*, or *mesquite* and maintain the xeriscape design.

## **Traffic**

The traffic analysis, prepared by Kunzman and Associates, indicates that there will be an almost insignificant increase in traffic along Redlands Boulevard associated with the construction of the office/warehouse. The trips generated by the project are determined by multiplying an appropriate trip generation rate by the quantity of land use. Trip generation rates are based on the assumption that energy costs, the availability of roadway capacity, the availability of vehicles to drive, and our life styles remain similar to what we know today. A major change in these variables may affect trip generation rates. The office/warehouse building is anticipated to generate 40 additional daily trips, 5 of which will occur during the morning peak hour and 5 of which will occur during the evening peak hour. Based on the number of vehicle trips generated, the Traffic Impact Analysis indicates that the project will not result in any measurable impacts that would increase either the number of vehicle trips or the volume to capacity ratio on roads and the Level of Service will remain relatively unchanged. The applicant will be required to pay their fair share of any unfunded intersection improvements.

As outlined in Section I (A)(3) of Measure V, the project includes a condition that requires the applicant to pay all required development impact fees to cover 100 percent of the pro rata share of the estimated cost of public infrastructure, facilities, and services.

## FINDINGS

### Precise Plan of Design Findings

According to LLMC Section 17.30.290, Precise Plan of Design (PPD), Application Procedure, PPD applications shall be processed using the procedure for a variance (as outlined in LLMC Section 17.30.030 through 17.30.060) but excluding the grounds (or findings). As such, no specific findings are required. However, LLMC Section 17.30.280, states the following:

“If a PPD would substantially depreciate property values in the vicinity or would unreasonably interfere with the use or enjoyment of property in the vicinity by the occupants thereof for lawful purposes or would adversely affect the public peace, health, safety or general welfare to a degree greater than that generally permitted by this title, such plan shall be rejected or shall be so modified or conditioned before adoption as to remove the said objections.”

In an effort to ensure that the foregoing project is consistent with the General Plan, compliant with the zoning and other City requirements, compatible with the surrounding area, and appropriate for the site, staff and the City Attorney have opted to apply the Conditional Use Permit Findings in LLMC §17.30.210 to this project, as follows:

1. *That the use applied for at the location set forth in the application is properly one for which a conditional use permit is authorized by this title.*

The project is consistent with the Commercial land use designation and is in compliance with the EVC – Commercial Industrial zone, which permits commercial and industrial type uses, such as the one proposed. The proposed office/warehouse is a permitted use generally found in the Commercial Industrial zones.

2. *That the said use is necessary or desirable for the development of the community, is in harmony with the various elements and objectives of the general plan, and is not detrimental to existing uses specifically permitted in the zone in which the proposed use is to be located.*

The project is consistent with the goals of the East Valley Corridor Specific Plan, which seeks to promote and facilitate high-quality commercial, industrial, and residential development within the Corridor, and maximum employment opportunities. As proposed, the project would create a visually pleasing office/warehouse building with associated landscaping and customer and employee parking. The development of the vacant site would add value to the area, and perhaps become a catalyst for additional development in the area.

3. *That the site for the intended use is adequate in size and shape to accommodate said use and all of the yards, setbacks, walls, or fences, landscaping and other features required in order to adjust said use to those existing or permitted future uses on land in the neighborhood.*

The subject parcel is adequate in size and shape to accommodate the proposed development of the site. The project will be developed on an approximate one-acre site (49,000 square feet). The lot coverage of the site (approximately 6,700 square feet) will be approximately 13.7 percent of the overall site, which conforms to the requirements of the EVCSP Chapter 9.

Therefore, the project site can accommodate the proposed development which will be compatible with the existing and future land uses.

4. *That the site or the proposed use related to streets and highways is properly designed and improved to carry the type and quantity of traffic generated or to be generated by the proposed use.*

The project site has direct access from Redlands Boulevard, which will continue to accommodate the type and quantity of traffic generated by the facility. The project would generate a total of approximately 40 daily trips (including existing plus traffic from the expansion). Of the total trips, 5 would occur during the morning peak hour, and 5 would occur during the evening peak hour. The parking requirement for the 6,700 square foot office/warehouse building is 18 spaces, and the applicant is proposing 19 spaces.

5. *That the conditions set forth in the permit and shown on the approved site plan are deemed necessary to protect the public health, safety and general welfare.*

The public health, safety and general welfare will be protected with the implementation of the Conditions of Approval for this Precise Plan of Design to insure compatibility with the surrounding uses and neighborhood.

## **CONCLUSION**

Staff recommends approval of the project because it meets the goals and policies of the East Valley Corridor Specific Plan. The applicant has worked closely with staff and has made every effort possible to provide the most appropriate layout, design, and architectural design for this project. The proposed development of the office/warehouse building is compatible with the existing and future uses in the surrounding area and will help to eliminate long standing, vacant property along the East Valley Corridor, and increasing employment opportunities for the area.

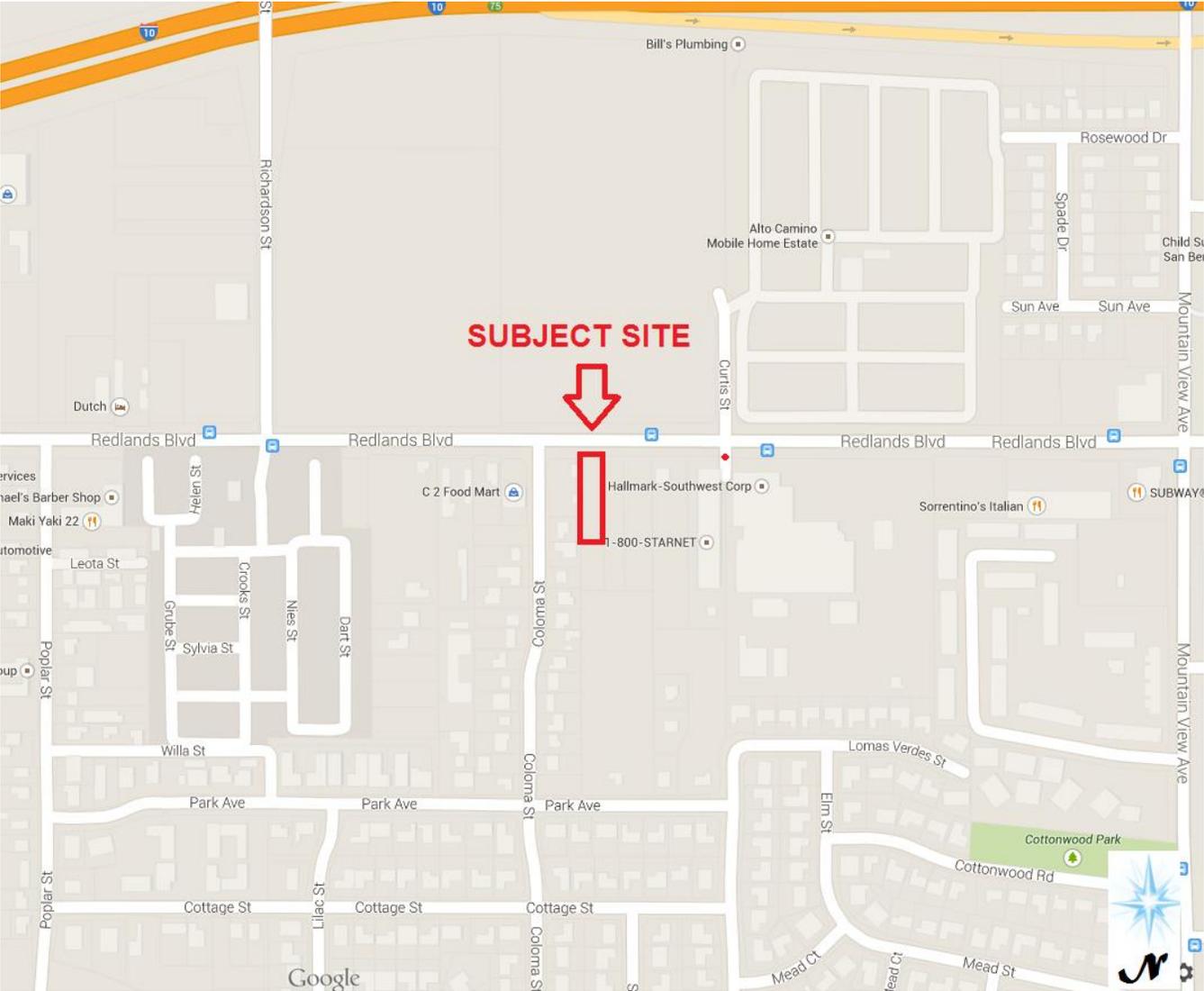
Report prepared by:

Guillermo Arreola  
Associate Planner

## **ATTACHMENTS**

- A. Vicinity Map
- B. Conditions of Approval
- C. Traffic Study
- D. Project Plans

# VICINITY MAP



**CONDITIONS OF APPROVAL  
PRECISE PLAN OF DESIGN (PPD) NO. 14-057**

**COMMUNITY DEVELOPMENT DEPARTMENT**

**General**

1. Within two years of this approval, the Precise Plan of Design shall be exercised by substantial construction or the permit/approval shall become null and void. In addition, if after commencement of construction, work is discontinued for a period of one year, the permit/approval shall become null and void.

**PROJECT:**

**PRECISE PLAN OF DESIGN (PPD) NO. 14-057**

**EXPIRATION DATE:**

**October 1, 2016**

2. Within forty-eight (48) hours of this approval of the subject project, the applicant shall deliver a payment of fifty dollars (\$50) (made out to the **Clerk of the Board of Supervisors**) to enable the City to file the appropriate environmental documentation for the project. If within such forty-eight (48) hour period that applicant has not delivered to the Community Development Department the above-noted check, the statute of limitations for any interested party to challenge the environmental determination under the provisions of the California Environmental Quality Act could be significantly lengthened.
3. The review authority may, upon application being filed 30 days prior to the expiration date and for good cause, grant a one-time extension not to exceed 12 months. The review authority shall ensure that the project complies with all current Development Code provisions.
4. In the event that this approval is legally challenged, the City will promptly notify the applicant of any claim or action and will cooperate fully in the defense of the matter. Once notified, the applicant agrees to defend, indemnify, and hold harmless the City, Redevelopment Agency (RDA), their affiliates officers, agents and employees from any claim, action or proceeding against the City of Loma Linda. The applicant further agrees to reimburse the City and RDA of any costs and attorneys fees, which the City or RDA may be required by a court to pay as a result of such action, but such participation shall not relieve applicant of his or her obligation under this condition.
5. Construction shall be in substantial conformance with the plan(s) approved by the Planning Commission. Minor modification to the plan(s) shall be subject to approval by the Director through a minor administrative variation process. Any modification that exceeds 10% of the following allowable measurable design/site considerations shall require the refiling of the original application and a subsequent hearing by the appropriate hearing review authority if applicable:
  - a. On-site circulation and parking, loading and landscaping;
  - b. Placement and/or height of walls, fences and structures;
  - c. Reconfiguration of architectural features, including colors, and/or modification of finished materials that do not alter or compromise the previously approved theme; and,

- d. A reduction in density or intensity of a development project.
6. No vacant, relocated, altered, repaired or hereafter erected structure shall be occupied or no change of use of land or structure(s) shall be inaugurated, or no new business commenced as authorized by this permit until a Certificate of Occupancy has been issued by the Building Division. A Temporary Certificate of Occupancy may be issued by the Building Division subject to the conditions imposed on the use, provided that a deposit is filed with the Community Development Department prior to the issuance of the Certificate, if necessary. The deposit or security shall guarantee the faithful performance and completion of all terms, conditions and performance standards imposed on the intended use by this permit.
7. This permit or approval is subject to all the applicable provisions of the Loma Linda Municipal Code, Title 17 in effect at the time of approval, and includes development standards and requirements relating to: dust and dirt control during construction and grading activities; emission control of fumes, vapors, gases and other forms of air pollution; glare control; exterior lighting design and control; noise control; odor control; screening; signs, off-street parking and off-street loading; and, vibration control. Screening and sign regulations compliance are important considerations to the developer because they will delay the issuance of a Certificate of Occupancy until compliance is met. Any exterior structural equipment, or utility transformers, boxes, ducts or meter cabinets shall be architecturally screened by wall or structural element, blending with the building design and include landscaping when on the ground.
8. Signs are not approved as a part of this permit. Prior to establishing any new signs, the applicant shall submit an application, and receive approval, for a sign permit from the Planning Division (pursuant to LLMC, Chapter 17.18) and building permit for construction of the signs from the Building Division, as applicable.
9. The applicant shall comply with all of the Public Works Department requirements for recycling prior to issuance of a Certificate of Occupancy.
10. Prior to issuance of Certificate of Occupancy, the applicant shall submit a photometric plan and final lighting plan to City staff showing the exact locations of light poles and the proposed orientation and shielding of the fixtures to prevent glare onto the existing home to the east.
11. During construction of the site, the project shall comply with Section 9.20 (Prohibited Noises) which limit construction activities to the hours between 7:00 a.m. to 6:00 p.m. Monday through Friday, with no heavy construction occurring on weekends or national holidays. Additionally, all equipment is required to be properly equipped with standard noise muffling apparatus. Adhering to the City's noise ordinance and implementation of the above mitigation measure would ensure impacts from construction noise would be less than significant.
12. The applicant shall implement SCAQMD Rule 403 and standard construction practices during all operations capable of generating fugitive dust, which will include but not be limited to the use of best available control measures and reasonably available control measures such as:
  - a. Water active grading areas and staging areas at least twice daily as needed;

- b. The project proponent shall ensure that all disturbed areas are treated to prevent erosion until the site is constructed upon.
  - c. The project proponent shall ensure that landscaped areas are installed as soon as possible to reduce the potential for wind erosion.
  - d. Suspend grading activities when wind gusts exceed 25 mph;
  - e. Sweep public paved roads if visible soil material is carried off-site;
  - f. Enforce on-site speed limits on unpaved surface to 15 mph; and
  - g. Discontinue construction activities during Stage 1 smog episodes.
13. The applicant shall implement the following construction practices during all construction activities to reduce VOC emission as stipulated in the project Initial Study and identified as mitigation measures:
- a. The contractor shall utilize (as much as possible) pre-coated building materials and coating transfer or spray equipment with high transfer efficiency, such as high volume, low pressure (HVLP) spray method, or manual coating applications such as paint brush, hand roller, trowel, dauber, rag, or sponge.
  - b. The contractor shall utilize water-based or low VOC coating of 100 g/l of VOC (allowing approximately 31,500 square feet painted per day) to 250 g/l of VOC (allowing approximately 12,950 square feet painted per day). The following measures shall also be implemented:
    - Use Super-Compliant VOC paints whenever possible.
    - If feasible, avoid painting during peak smog season: July, August, and September.
    - Recycle leftover paint. Take any left-over paint to a household hazardous waste center; do not mix leftover water-based and oil-based paints.
    - Keep lids closed on all paint containers when not in use to prevent VOC emissions and excessive odors.
    - For water-based paints, clean up with water only. Whenever possible, do not rinse the clean-up water down the drain or pour it directly into the ground or the storm drain. Set aside the can of clean-up water and take it to a hazardous waste center ([www.cleanup.org](http://www.cleanup.org)).
    - Recycle the empty paint can.
    - Look for non-solvent containing stripping products.
    - Use Compliant Low-VOC cleaning solvents to clean paint application equipment.
    - Keep all paint and solvent laden rags in sealed containers to prevent VOC emissions.
    - The developer/contractor shall use building materials that do not require painting, where feasible.
    - The developer/contractor shall use pre-painted construction materials where feasible.
14. The applicant shall work with the City's franchised solid waste hauler to follow a debris management plan to divert the material from landfills by the use of separate recycling

bins (e.g., wood, concrete, steel, aggregate, glass) during demolition and construction to minimize waste and promote recycle and reuse of the materials.

15. The Project Proponent shall comply with City adopted policies regarding the reduction of construction and demolition (C&D) materials.
16. To reduce emissions, all equipment used in grading and construction must be tuned and maintained to the manufacturer's specification to maximize efficient burning of vehicle fuel.
17. The project proponent shall ensure that existing power sources are utilized where feasible via temporary power poles to avoid on-site power generation during construction.
18. The project proponent shall ensure that construction personnel are informed of ride sharing and transit opportunities.
19. The operator shall maintain and effectively utilize and schedule on-site equipment in order to minimize exhaust emissions from truck idling.
20. The operator shall comply with all existing and future CARB and SCAQMD regulations related to diesel-fueled trucks, which may include among others: (1) meeting more stringent emission standards; (2) retrofitting existing engines with particulate traps; (3) use of low sulfur fuel; and (4) use of alternative fuels or equipment.
21. The proposed project shall contribute on a fair share basis, through an adopted traffic impact fee schedule, in the implementation of the recommended intersection lane improvements or in dollar equivalent in lieu mitigation contributions, or in the implementation of additional capacity on parallel routes to offset potential impacts to study area intersections as listed the Traffic Impact Analysis.
22. All Development Impact fees shall be paid to the City of Loma Linda prior to the issuance of any building and/or construction permits or Certificate of Occupancy.
23. Prior to issuance of any Building and/or Construction Permits, the applicant shall submit to the Community Development Department proof of payment or waiver from both the City of San Bernardino for sewer capacity fees and Redlands Unified School District for school impact fees.
24. The applicant shall pay all required development impact fees to cover 100 percent of the pro rata share of the estimated cost of public infrastructure, facilities, and services.
25. The developer shall provide infrastructure for the Loma Linda Connected Community Program, which includes providing a technologically enabled development that includes coaxial, cable and fiber optic lines to all outlets in each unit of the development. Plans for the location of the infrastructure shall be provided with the precise plan of design, which includes providing a technologically enabled development that includes coaxial, cable, and fiber optic lines to all outlets in each unit of the development. Plans for the location of the infrastructure shall be provided with the precise grading plans and reviewed and approved by the City of Loma Linda prior to issuing grading permits.
26. The project shall comply with the City Art in Public Places Ordinance (LLMC Chapter 17.26), which establishes grounds for compliance for new enterprises to facilitate public art. The establishment of artistic assets will be financed and/or constructed by the development community as part of the development requirements.

27. Should paleontological resources be uncovered during grading, a qualified vertebrate paleontologist shall be contracted to perform a field survey to determine and record any nonrenewable paleontological resources found on-site. The paleontologist will determine the significance, and make recommendations for appropriate mitigation measures in compliance with the guidelines of the California Environmental Quality Act.
28. In the event that human remains are encountered during grading, all provisions of state law requiring notification of the County Coroner, contacting the Native American Heritage Commission, and consultation with the most likely descendant, shall be followed.
29. The project shall comply with all non-exempt provisions of Measure V and shall pay the full amount of any recalculated development impact fees, including traffic impact fees, prior to occupancy.
30. The proposed trash enclosure design should incorporate matching colors and finishes to those found on the proposed office/warehouse building.
31. The Applicant shall provide bicycle racks near the entrance of the facility.
32. On-site traffic signing and striping shall be implemented in conjunction with detailed construction plans for the project.

### **Landscaping**

33. The applicant shall submit three sets of the final landscape plan prepared by a state licensed Landscape Architect, subject to the approval of the Community Development Department, and Public Works Department for landscaping in the public right-of-way. Landscape plans for the Landscape Maintenance District shall be on separate plans.
34. Final landscape and irrigation plans shall be in substantial conformance with the approved conceptual landscape plan and these conditions of approval. Any and all fencing shall be illustrated on the final landscape plan.
35. Landscape plans shall depict the utility laterals, concrete improvements, and tree locations. Any modifications to the landscape plans shall be reviewed and approved by the Public Works and Community Development Departments prior to issuance of permits.
36. The applicant, property owner, and/or business operator shall maintain the property and landscaping in a clean and orderly manner and all dead and dying plants shall be replaced with similar or equivalent type and size of vegetation.
37. The applicant shall perform a Phase I Environmental Site Assessment to determine if the project site includes any contamination prior to the issuance of building permits.
38. The applicant shall prepare a study for the presence of hazardous chemicals, mercury, and asbestos containing materials (ACM) as a result of the demolition of the existing on-site structures. If other hazardous chemicals, lead-based paints (LPB) or products, mercury or ACMs are identified, proper precautions should be taken during demolition activities. Additionally, the contaminants should be remediated in compliance with California environmental regulations and policies.

39. Should future project construction require soil excavation or filling in certain areas, soil sampling may be required. If soil is contaminated, it must be properly disposed. Land Disposal Restrictions (LDRs) may be applicable to such soils. Soil sampling shall also be conducted on any imported soil.
40. If it is determined that hazardous wastes are, or will be generated by the proposed operation of the facility, the wastes shall be managed in accordance with the California Hazardous Waste Control Law and the Hazardous Waste Control Regulations. If it is determined that hazardous wastes will be generated, the facility shall obtain a United States Environmental Protection Agency Identification Number. Certain hazardous waste treatment processes or hazardous materials, handling, storage or uses may require authorization from the local Certified Unified Program Agency (CUPA).
41. If clean up oversight is required of the project, the applicant shall be required to obtain an Environmental Oversight Agreement with the DTSC.
42. The Applicant shall work with staff to revised the landscape plan to include additional trees (*blue palo verde, african sumac, or mesquite*) within the front yard setback and within the required landscape buffer zones along the south and west property lines. The trees within the landscape buffer zone should provide a visual buffer between the residentially developed properties to the west and south of the subject site.

#### **FIRE DEPARTMENT**

43. The applicant shall submit a complete set of plans to the Loma Linda Fire Department for review and approval prior to the issuance of building permits.
44. All construction shall meet the requirements of the editions of the California Building Code (CBC) and the California Fire Code (CFC)/International Fire Code (IFC) as adopted and amended by the City of Loma Linda and legally in effect at the time of issuance of building permit.
45. Pursuant to CFC Section 903, as amended in Loma Linda Municipal Code (LLMC) Sections 15.28.230-450, the building(s) shall be equipped with automatic fire sprinkler system(s). Pursuant to CFC Section 901.2, plans and specifications for the fire sprinkler system(s) shall be submitted to Fire Prevention for review and approval prior to installation. Fire flow test data for fire sprinkler calculations must be current within the last 6 months. Request flow test data from Loma Linda Fire Prevention.
46. On-site civil engineering improvement plans shall be submitted to Fire Prevention for review and approval prior to construction. Plans shall show the proposed locations for water mains and fire hydrants; driveways, drive aisles and access roadways for fire apparatus.
47. The site address shall be as assigned by the Fire Marshal in a separate document, following approval of the project, and upon submittal of a working copy of the final approved site plan.
48. The developer shall submit a Utility Improvement Plan showing the location of fire hydrants for review and approval by the Fire Department.

#### **PUBLIC WORKS DEPARTMENT**

49. The developer shall submit an engineered grading plan for the proposed project.

50. All utilities shall be underground. The City of Loma Linda shall be the sewer purveyor.
51. All public improvement plans shall be submitted to the Public Works Department for review and approval.
52. Any damage to existing improvements as a result of this project shall be repaired by the applicant to the satisfaction of the City Engineer.
53. Prior to issuance of grading permits, the applicant shall submit to the City Engineer a Notice of Intent (NOI) to comply with obtaining coverage under the National Pollutant Discharge Elimination System (NPDES) General Construction Storm Water Permit from the State Water Resources Control Board. Evidence that this has been obtained (i.e., a copy of the Waste Dischargers Identification Number) shall be submitted to the City Engineer for coverage under the NPDES General Construction Permit.
54. All site drainage shall be handled on-site and shall not be permitted to drain onto adjacent properties.
55. An erosion/sediment control plan and a Water Quality Management Plan are required to address on-site drainage construction and operation.
56. All necessary precautions and preventive measures shall be in place in order to prevent material from being washed away by surface waters or blown by wind. These controls shall include at a minimum: regular wetting of surface or other similar wind control method, installation of straw or fiber mats to prevent rain related erosion. Detention basin(s) or other appropriately sized barrier to surface flow must be installed at the discharge point(s) of drainage from the site. Any water collected from these controls shall be appropriately disposed of at a disposal site. These measures shall be added as general notes on the site plan and a statement added that the operator is responsible for ensuring that these measures continue to be effective during the duration of the project construction.
57. Per the City of Loma Linda recycling policy, the project proponent shall incorporate interior and exterior storage areas for recyclables.
58. The project shall comply with the Low Impact Development (LID) Principles and LID Best Management Practices (BMPs) for Southern California.
59. The developer shall require that all construction equipment is properly maintained with operating mufflers and air intake silencers, and prioritizes the location of equipment staging and storage as far as practical from the existing residential properties to the south and west of site.
60. The applicant shall abide with all Federal, State, County, and Local laws as they pertain to this project.

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Applicant signature

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Date

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Owner signature

End of Conditions



**KUNZMAN ASSOCIATES, INC.**

**25449 REDLANDS BOULEVARD PROJECT**

**TRAFFIC IMPACT ANALYSIS**

**September 17, 2014**

**Traffic Engineering | Transportation Planning | Parking | Noise/Vibration | Expert Witness  
Air Quality | Global Climate Change | Health Risk Assessment**

**EXHIBIT - C**



KUNZMAN ASSOCIATES, INC.

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**September 17, 2014**

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## **I. Introduction**

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The purpose of this report is to provide an assessment of the traffic impacts resulting from the development of the proposed 25449 Redlands Boulevard project and to identify the traffic mitigation measures necessary to maintain the established level of service standard for the elements of the impacted roadway system. The traffic issues related to the proposed land use and development have been evaluated in the context of the California Environmental Quality Act.

The City of Loma Linda is the lead agency responsible for preparation of the traffic impact analysis, in accordance with California Environmental Quality Act authorizing legislation. This report analyzes traffic impacts for the anticipated opening date with partial occupancy of the development in Opening Year (2015), at which time it will be generating traffic at its full potential, and for the current traffic forecast year, which is the Year 2035.

Although this is a technical report, every effort has been made to write the report clearly and concisely. To assist the reader with those terms unique to transportation engineering, a glossary of terms is provided in Appendix A.

### **A. Project Description**

The proposed development is located at 25449 Redlands Boulevard in the City of Loma Linda. A vicinity map showing the project location is provided on Figure 1.

The applicant is proposing a facility with a 4,754 square foot of warehouse and a 1,996 square foot of office. The project will have access to Redlands Boulevard.

### **B. Study Area**

Regional access to the project site is provided by the I-10 Freeway. Local access is provided by various roadways in the vicinity of the site. The north-south roadways which will be most affected by the project include Anderson Street, Richardson Street, and Mountain View Avenue. The east-west roadway expected to provide local access includes Redlands Boulevard.

A series of scoping discussions were conducted with the City of Loma Linda to define the desired analysis locations for each future analysis year. In addition, the San Bernardino Associated Governments staff has also been contacted to discuss the project and its associated travel patterns.

No analysis is required further than 5 miles from the project site. The roadway elements that must be analyzed are dependent on both the analysis year (project Opening Year or Year 2035) and project generated traffic volumes. The identification of the study area, and the intersections and highway segments requiring analysis, was based on an estimate of the two-way traffic volumes on the roadway segments near the project site. All arterial segments are required to be included in the analysis when the anticipated project volume equals or exceeds 50 two-way trips in the peak hours. The requirement is 100 two-way peak hour trips for freeways.

The project does not contribute trips greater than the freeway threshold volume of 100 two-way peak hour trips to the I-10 Freeway. The project does not contribute trips greater than the arterial link threshold volume of 50 two-way trips in the peak hours on facilities serving intersections outside of the City of Loma Linda.

### C. Analysis Methodology

The analysis of the traffic impacts from the proposed development and the assessment of the required mitigation measures were based on an evaluation of the existing and forecast traffic conditions in the vicinity of the site with and without the project. The following analysis years are considered in this report:

- Existing Conditions (2014)
- Existing Plus Project Conditions<sup>1</sup>
- Project Opening Year Conditions (2015)
- Horizon Year Conditions (2035)

Existing intersections traffic conditions were established through morning and evening peak hour traffic counts obtained by Kunzman Associates, Inc. from August 2013 (see Appendix B). In addition, truck classification counts were conducted at the study area intersections. The existing percent of trucks was used in the conversion of trucks to Passenger Car Equivalent's (see Appendix C).

Project traffic volumes for all future projections were estimated using the manual approach. Trip generation has been based upon rates obtained from the Institute of Transportation Engineers, Trip Generation, 9th Edition, 2012 and data provided by the applicant.

The average daily traffic volume forecasts have been determined using the growth increment approach on the SBTAM traffic model Year 2008 and Year 2035 average daily traffic volume forecasts (see Appendix C). This difference defines the growth in traffic over the 27 year period. The incremental growth in average daily traffic volume has been factored to reflect the forecast growth between Year 2013 and Year 2035. For this purpose, linear growth between the Year 2008 base condition and the forecast Year 2035 condition was assumed. Since the increment between Year 2014 and Year 2035 is 22 years of the 27 year time frame, a factor of 0.78 (i.e., 22/27) was used.

The Year 2035 without project daily and peak hour directional roadway segment volume forecasts have been determined using the growth increment approach on the SBTAM traffic model Year 2008 and Year 2035 peak hour volumes. The growth increment calculation worksheets are shown in Appendix C. Current peak hour intersection approach/departure data is a necessary input to this approach. The existing traffic count data serves as both the starting point for the refinement process, and also provides important insight into current travel patterns and the relationship between peak hour and daily traffic conditions. The initial turning movement proportions are estimated based upon the relationship of each

---

<sup>1</sup> The existing plus project conditions has been analyzed to comply with the Sunnyvale West Neighborhood Association v. City of Sunnyvale CEQA court case. This scenario assumes the full development of the proposed project and full absorption of the proposed project trips on the circulation system at the present time. This scenario is provided for informational purposes only, and will not be used for impact determinations or mitigation.

approach leg's forecast traffic volume to the other legs forecast volumes at the intersection. The initial estimate of turning movement proportions is then entered into a spreadsheet program consistent with the National Cooperative Highway Research Program Report 255. A linear programming algorithm is used to calculate individual turning movements that match the known directional roadway segment volumes computed in the previous step. This program computes a likely set of intersection turning movements from intersection approach counts and the initial turning proportions from each approach leg.

The Opening Year (2015) traffic volumes have been interpolated from the Year 2035 traffic volumes based upon a portion of the future growth increment.

Project traffic volumes were then added to the Year 2035 SBTAM traffic model volumes. Quality control checks and forecast adjustments were performed as necessary to ensure that all future traffic volume forecasts reflect a minimum of 10% growth over existing traffic volumes. The result of this traffic forecasting procedure is a series of traffic volumes suitable for traffic operations analysis.

The technique used to assess the capacity needs of an intersection is known as the Intersection Delay Method (see Appendix D) based on the Highway Capacity Manual – Transportation Research Board Special Report 209. To calculate delay, the volume of traffic using the intersection is compared with the capacity of the intersection. A signalized intersection is considered deficient (Level of Service F) if the overall intersection critical volume to capacity ratio equals or exceeds 1.0, even if the Levels of Service defined by the delay value is below the defined Level of Service standard. The volume to capacity ratio is defined as the critical volumes divided by the intersection capacity. A volume to capacity ratio greater than 1.0 implies an infinite queue.

The Level of Service analysis for signalized intersections has been performed using optimized signal timing. This analysis has included an assumed lost time of two seconds per phase. Signal timing optimization has considered pedestrian safety and signal coordination requirements. Appropriate time for pedestrian crossings has also been considered in the signalized intersection analysis. The following formula has been used to calculate the pedestrian minimum times for all Highway Capacity Manual runs:

$$(\text{Curb to curb distance}) / (3.5 \text{ feet/second}) + 7 \text{ seconds.}$$

For existing/existing plus project/Opening Year traffic conditions, saturation flow rates of 1,800 vehicles per hour of green for through and right turn lanes and 1,700 vehicles per lane for single left turn lanes, 1,600 vehicles per lane for dual left turn lanes and 1,500 vehicles per lane for triple left turn lanes have been assumed for the capacity analysis.

For Year 2035 traffic conditions, saturation flow rates of 1,900 vehicles per hour of green for through and right turn lanes and 1,800 vehicles per lane for single left turn lanes, 1,700 vehicles per lane for dual left turn lanes and 1,800 vehicles per lane for double right turn lanes have been assumed for the capacity analysis.

The peak hour traffic volumes have been adjusted to peak 15 minute volumes for analysis purposes using the existing observed peak 15 minute to peak hour factors for all scenarios analyzed. Where feasible improvements in accordance with the local jurisdiction's General

Plan and which result in acceptable operations cannot be identified, the Year 2035 peak hour factor has been adjusted upwards to 0.95. This is to account for the effects of congestion on peak spreading. Peak spreading refers to the tendency of traffic to spread more evenly across time as congestion increases.

The traffic mitigation needs anticipated at the time of the project opening with full occupancy and for the Year 2035 were combined into a summary of mitigation requirements and costs. The mitigation cost responsibility for the proposed development was estimated based on the percent of the increase in traffic from the existing condition to the Year 2035 that was attributed to the project generated trips.

**D. Definition of Deficiency and Significant Impact**

The following definitions of deficiencies and significant impacts have been developed in accordance with the City of Loma Linda requirements.

**1. Definition of Deficiency**

The definition of an intersection deficiency has been obtained from the City of Loma Linda General Plan and Measure V. The General Plan and Measure V state that peak hour intersection operations of Level of Service C or better are generally acceptable. To assure the adequacy of various public services and prevent degradation of the quality of life experienced by the residents of Loma Linda, all new development projects shall assure by implementation of appropriate mitigation measures that, at a minimum, traffic Levels of Service are maintained at a minimum of Level of Service C throughout the City, except where the current Level of Service is lower than Level of Service C. In any location where the Level of Service is below Level of Service C at the time an application for a development project is submitted, mitigation measures shall be imposed on that development project to assure, at a minimum, that the level of traffic service is maintained at Levels of Service that are no worse than those existing at the time an application for development is filed. In any location where the Level of Service is F at the time an application for a development project is submitted, mitigation measures shall be imposed on that development project to assure, at a minimum, that the volume to capacity ratio is maintained at a volume to capacity ratio that is no worse than that existing at the time an application for development is filed. Projects where sufficient mitigation to achieve the above stated objectives is infeasible shall not be approved unless and until the necessary mitigation measures are identified and implemented.

For freeway facilities, the Congestion Management Program controls the definition of deficiency for purposes of this study. The Congestion Management Program definition of deficiency is based on maintaining a Level of Service standard of Level of Service E or better, except where an existing Level of Service F condition is identified in the Congestion Management Program document (San Bernardino County Congestion Management Program Table 2-1). A Congestion Management Program deficiency is, therefore, defined as any freeway segment operating or projected to operate at Level of Service F, unless the segment is identified explicitly in the Congestion Management Program document.

The identification of a Congestion Management Program deficiency requires further analysis in satisfaction of Congestion Management Program requirements, including:

- Evaluation of the mitigation measures required to restore traffic operations to an acceptable level with respect to Congestion Management Program Level of Service standards.
- Calculation of the project share of new traffic on the impacted Congestion Management Program facility during peak hours of traffic.
- Estimation of the cost required to implement the improvements required to restore traffic operations to an acceptable Level of Service as described above.

This study incorporates each of these aspects for all locations where a Congestion Management Program deficiency is identified.

2. Definition of Significant Impact

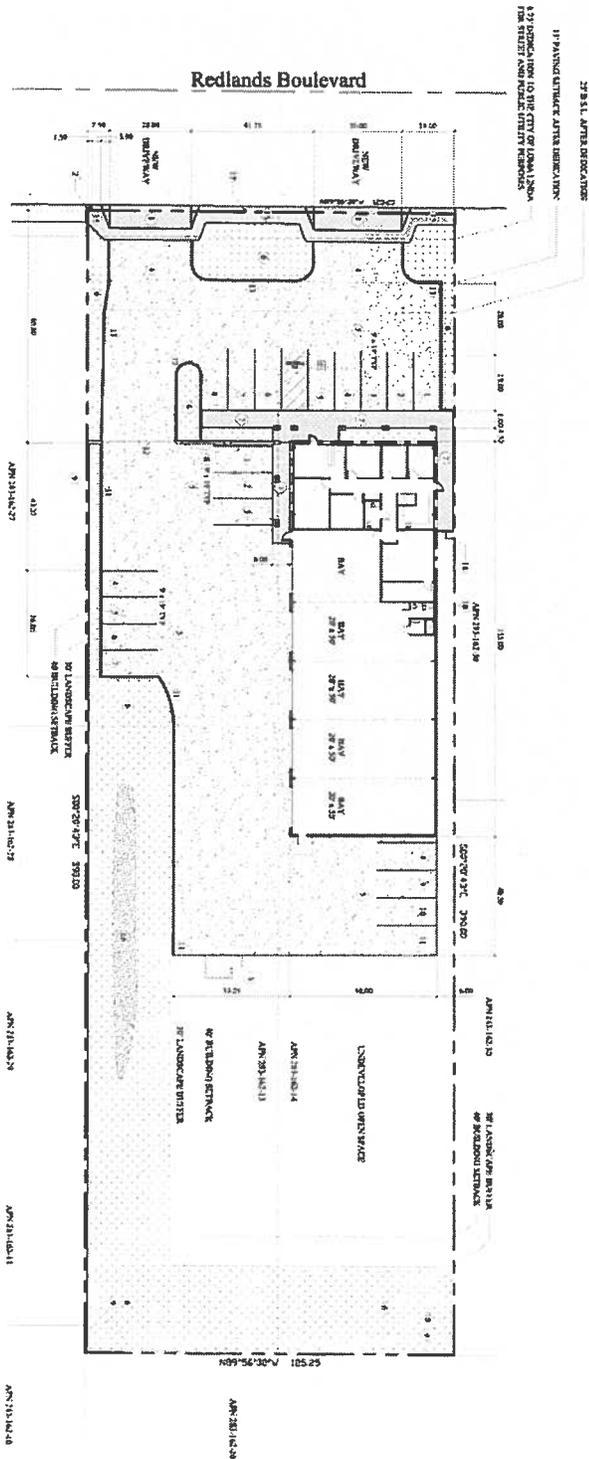
The identification of significant impacts is a requirement of the California Environmental Quality Act. The City of Loma Linda General Plan and Circulation Element have been adopted in accordance with California Environmental Quality Act requirements, and any roadway improvements within the City of Loma Linda that are consistent with these documents are not considered a significant impact, so long as the project contributes its "fair share" funding for improvements.

A traffic impact is considered significant if the project both: i) contributes measurable traffic to and ii) substantially and adversely changes the Level of Service at any off-site location projected to experience deficient operations under foreseeable cumulative conditions, where feasible improvements consistent with the City of Loma Linda General Plan cannot be constructed.

Figure 1  
Project Location Map



# Figure 2 Site Plan



## II. Existing Conditions

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### A. Existing Roadway System

Figure 3 identifies the existing conditions for the study area roadways. The number of through lanes for existing roadways and the existing intersection controls are identified.

Regional access to the project site is provided by the I-10 Freeway. Local access is provided by various roadways in the vicinity of the site. The north-south roadways which will be most affected by the project include Anderson Street, Poplar Avenue, Richardson Street, and Mountain View Avenue. The east-west roadway expected to provide local access includes Redlands Boulevard.

### B. Existing Volumes

Figure 4 depicts the existing average daily traffic volumes. The existing average daily traffic volumes were factored from peak hour counts (see Appendix B) obtained by Kunzman Associates, Inc. using the following formula for each intersection leg:

$$\text{PM Peak Hour (Approach + Exit Volume)} \times 11.5 = \text{Daily Leg Volume.}$$

This is a conservative estimate and may over estimate the average daily traffic volumes.

Existing intersection traffic conditions were established through morning and evening peak hour traffic counts obtained by Kunzman Associates, Inc. from August 2013 (see Appendix B) and shown on Figures 5 and 6, respectively. Explicit peak hour factors have been calculated using the data collected for this effort as well. The morning and evening peak hour traffic volumes were identified by counting the two-hour periods from 7:00 AM – 9:00 AM and 4:00 PM – 6:00 PM.

### C. Existing Level of Service

The existing delay and Level of Service for the intersections in the vicinity of the project are shown in Table 1. The study area intersections currently operate at Level of Service C or better during the peak hours for existing traffic conditions, except for the following study area intersection that is currently operating at Level of Service D during the evening peak hour:

Anderson Street (NS) at:  
Redlands Boulevard (EW) - #1

Existing delay worksheets are provided in Appendix D.

**D. Planned Transportation Improvements and Relationship to General Plan**

The City of Loma Linda General Plan Circulation Element is shown on Figure 7. Existing and future roadways are included in the Circulation Element of the General Plan and are graphically depicted on Figure 7. This figure shows the nature and extent of arterial highways that are needed to adequately serve the ultimate development depicted by the Land Use Element of the General Plan. The City of Loma Linda General Plan roadway cross-sections are illustrated on Figure 8.

**Table 1**

**Existing Intersection Delay and Level of Service**

Intersection	Jurisdiction	Traffic Control <sup>3</sup>	Intersection Approach Lanes <sup>1</sup>												Peak Hour Delay-LOS <sup>2</sup>	
			Northbound			Southbound			Eastbound			Westbound			Morning	Evening
			L	T	R	L	T	R	L	T	R	L	T	R		
Anderson Street (NS) at: Redlands Boulevard (EW) - #1	Loma Linda	TS	1	1.5	0.5	1	1.5	0.5	1	2	d	1	2	d	27.0-C	36.0-D
Poplar Street (NS) at: Redlands Boulevard (EW) - #2	Loma Linda	TS	0.5	0	0.5	0	0	0	0	2	d	1	2	0	12.4-B	12.0-B
Richardson Avenue (NS) at: Redlands Boulevard (EW) - #3	Loma Linda	TS	0	1	0	0.5	0.5	1	1	2	d	1	2	d	16.0-B	17.1-B
Mountain View Avenue (NS) at: Redlands Boulevard (EW) - #5	Loma Linda	TS	1	1.5	0.5	2	2	1	1	2	d	1	2	d	26.8-C	28.0-C

<sup>1</sup> When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane, there must be sufficient width for right turning vehicles to travel outside the through lanes. L = Left; T = Through; R = Right; d = De Facto Right Turn Lane.

<sup>2</sup> Delay and level of service has been calculated using the following analysis software: Traffix, Version 7.9.0215 (2008). Per the Highway Capacity Manual, overall average for intersection delay and level of service are shown for intersections with traffic signal or all way stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

<sup>3</sup> TS = Traffic Signal.

Figure 3  
Existing Through Travel Lanes and Intersection Controls

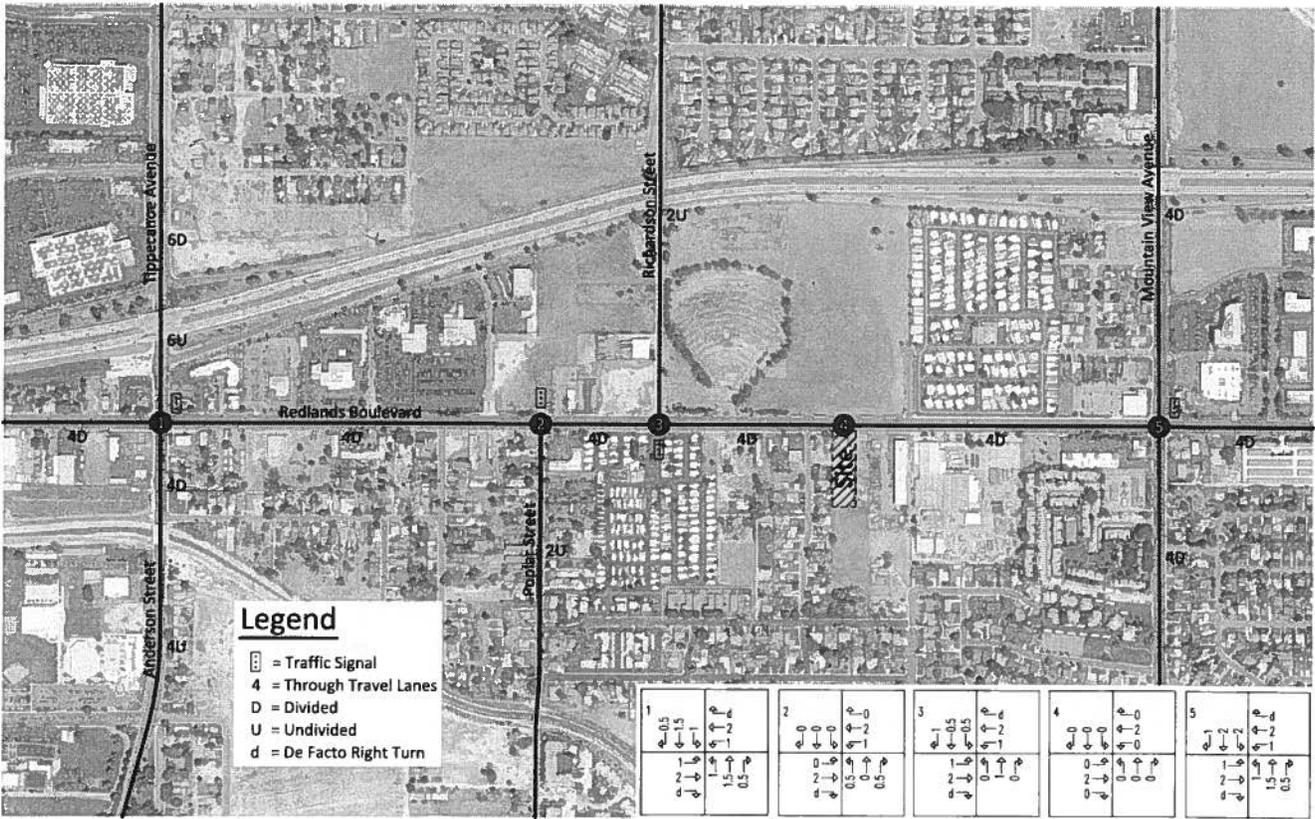
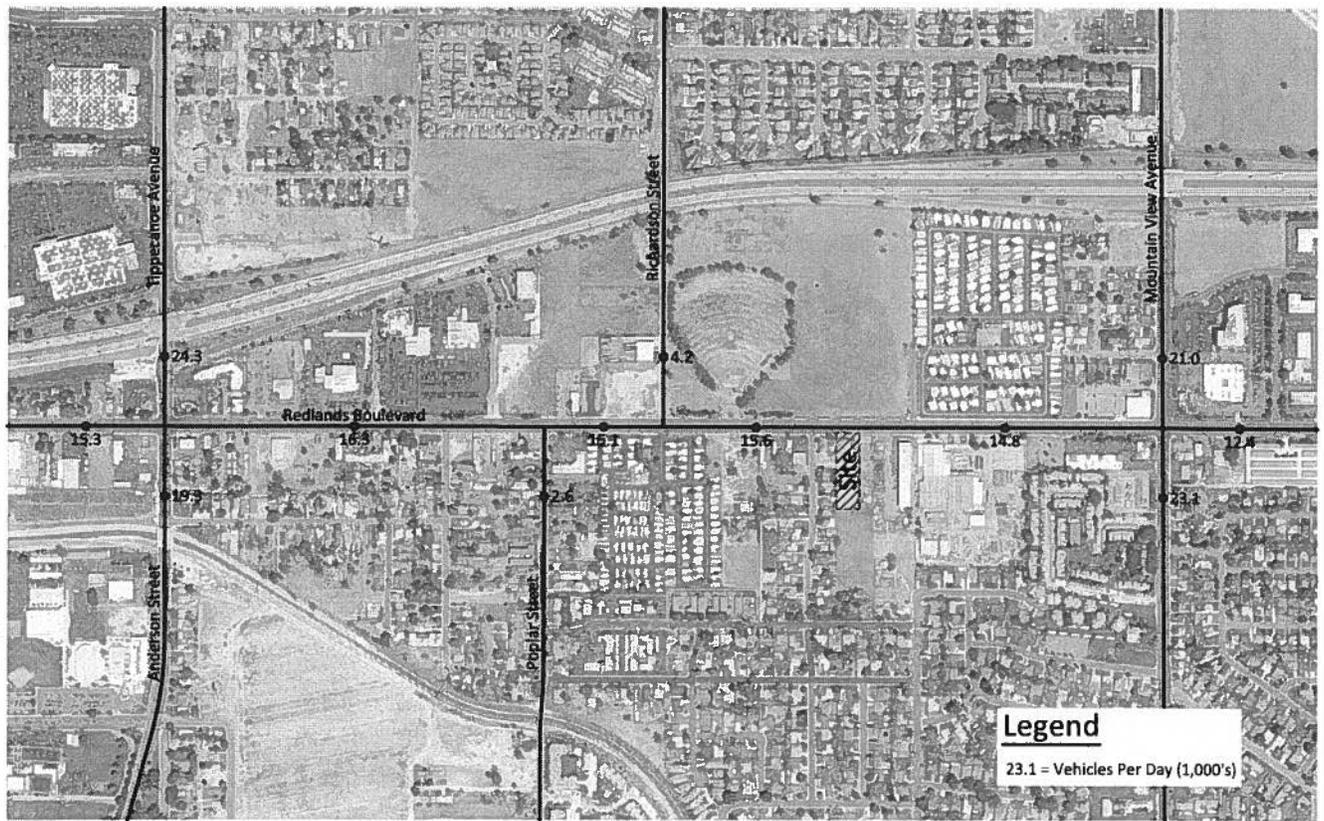


Figure 4  
Existing Average Daily Traffic Volumes



**Legend**  
23.1 = Vehicles Per Day (1,000's)

**Figure 5**  
Existing Morning Peak Hour Intersection Turning Movement Volumes

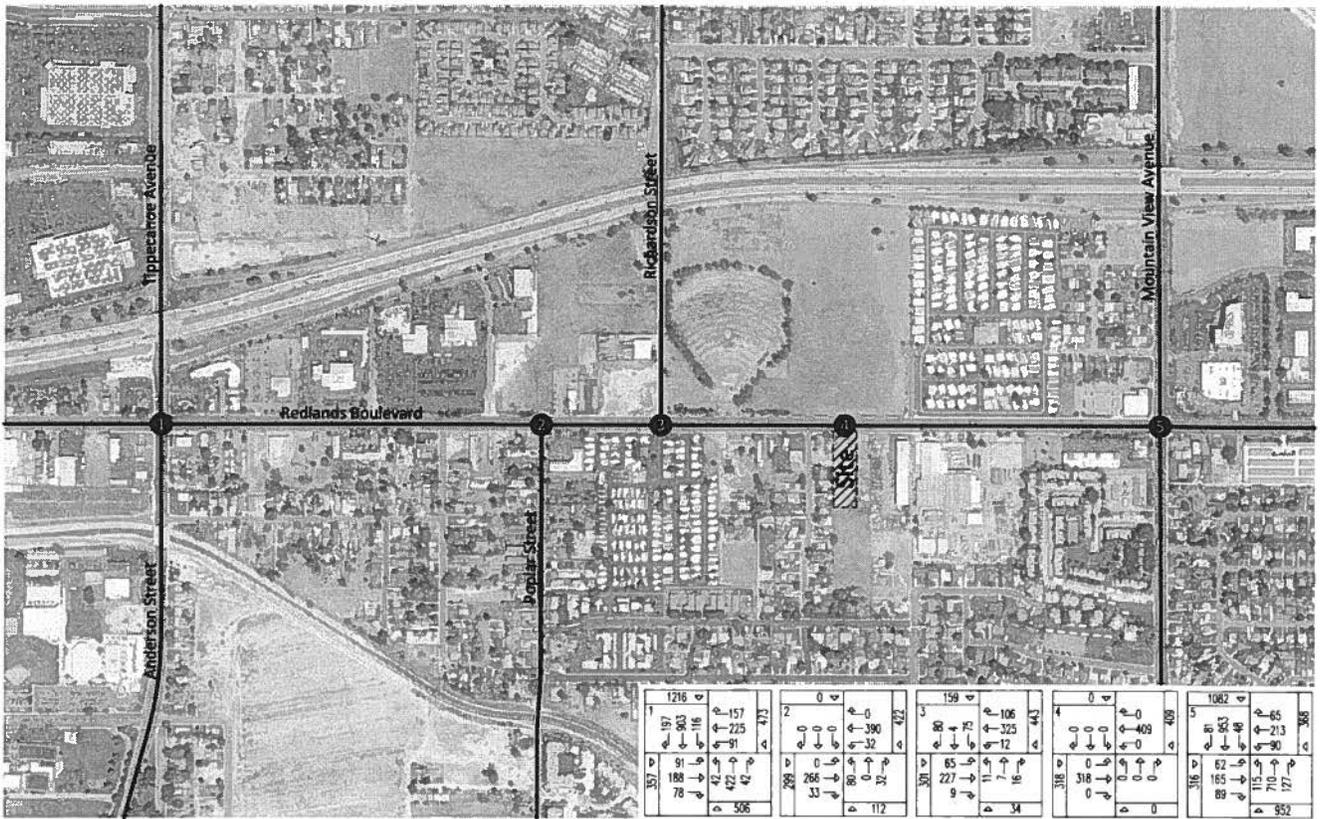
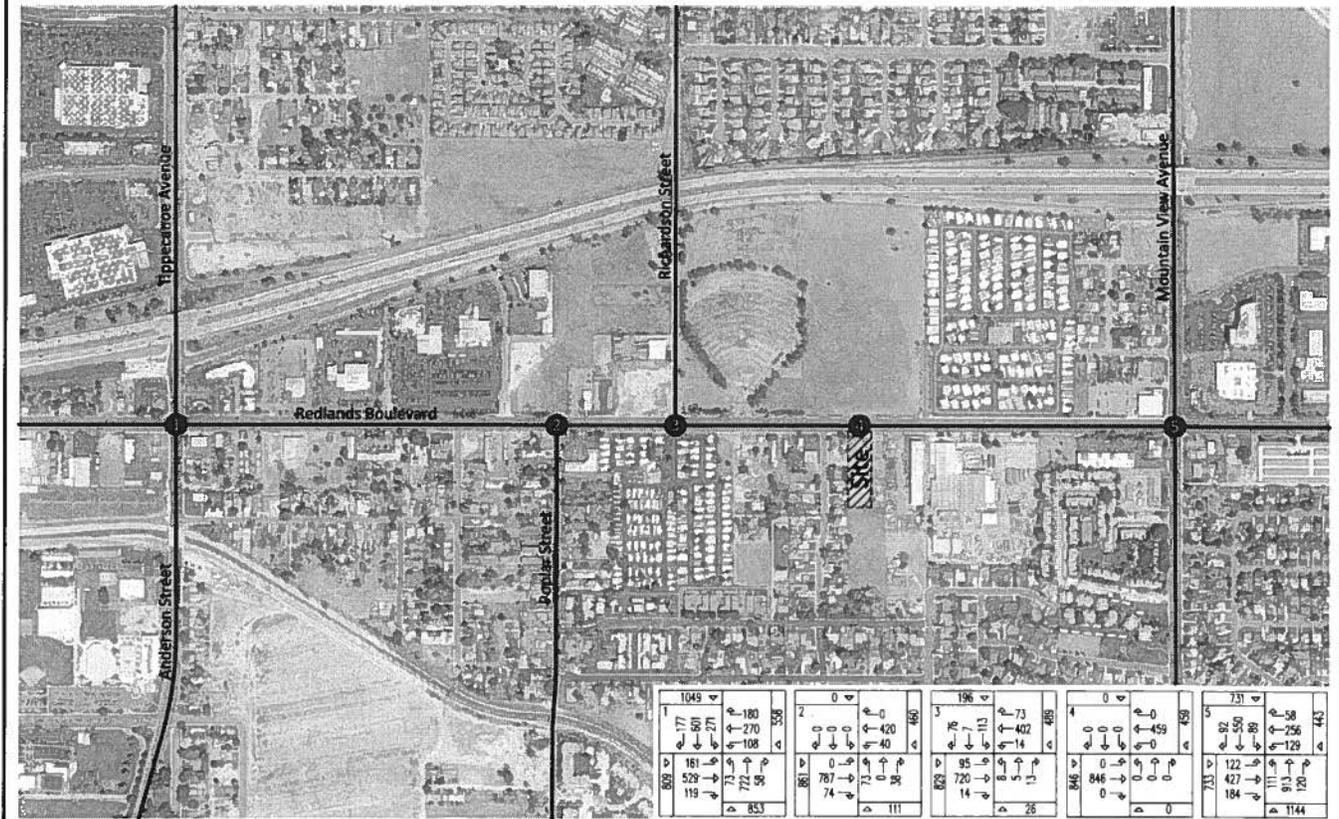


Figure 6  
Existing Evening Peak Hour Intersection Turning Movement Volumes



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Intersection reference numbers are in upper left corner of turning movement boxes.

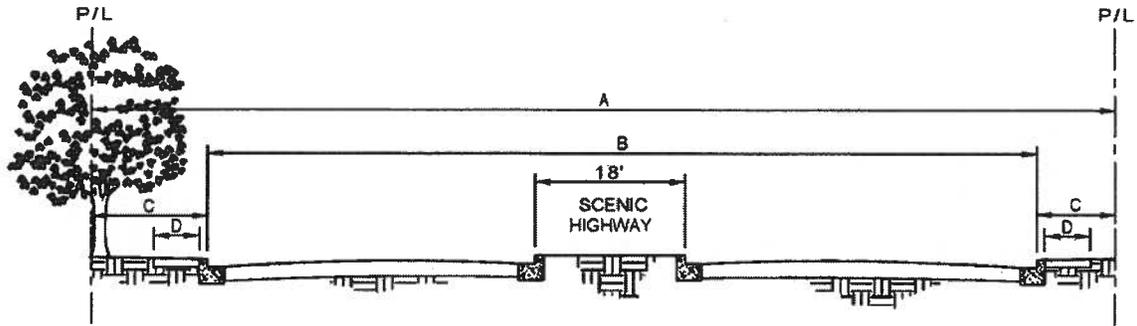
Figure 7  
 City of Loma Linda General Plan Circulation Element



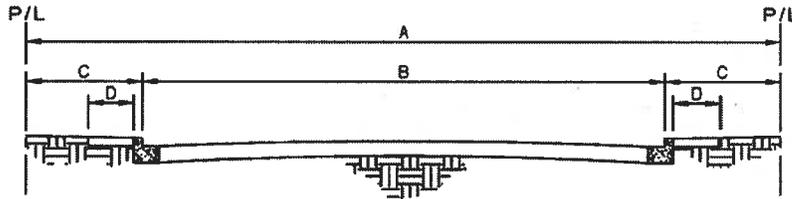
**Legend**

- FUTURE ROADWAY
- 2-LANE UNDIVIDED LOCAL STREET
- 2-LANE UNDIVIDED ROADWAY
- 2-LANE DIVIDED ROADWAY
- 4-LANE UNDIVIDED ROADWAY
- 4-LANE DIVIDED ROADWAY
- MODIFIED 4-LANE UNDIVIDED ROADWAY
- 6-LANE UNDIVIDED ROADWAY
- 6-LANE DIVIDED ROADWAY
- JURISDICTIONAL AND INFRASTRUCTURE**
- SPHERE OF INFLUENCE
- CITY LIMIT
- FREEWAY
- RAILROAD

**Figure 8**  
**City of Loma Linda General Plan Roadway Cross-Sections**



MAJOR ARTERIAL SECTION



STANDARD SECTION

STREET-TYPE	DIMENSIONS				MIN. PAVING	
	A	B	C	D*	T.I.	AC"/CAB"
LOCAL	60'	36'	12'	5'	6	3.5"/6"
COLLECTOR	64'	40'	12'	5'	6	3.5"/6"
COLLECTOR (SPECIAL)	66'	44'	11'	5'	7	4/6
SECONDARY HIGHWAY	88'	64'	12'	5'	8	4/7
MAJOR HIGHWAY	100'	72'	14'	5'	9	5/8
SCENIC HIGHWAY	120'	94'	13'	5'	9	5/8

\*SIDEWALK EXTENDS TO PROPERTY LINE IN COMMERCIAL ZONE

Source: City of Loma Linda

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### **III. Project Traffic**

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#### **A. Project Description**

The applicant is proposing a facility with 4,754 square foot of warehouse and 1,996 square foot of office. The project will have access to Redlands Boulevard.

#### **B. Trip Generation**

The trips generated by the project are determined by multiplying an appropriate trip generation rate by the quantity of land use. Trip generation rates are based on the assumption that energy costs, the availability of roadway capacity, the availability of vehicles to drive, and life styles remain similar to what are known today. A major change in these variables may affect trip generation rates.

- Trip generation rates were determined for daily traffic and morning peak hour inbound and outbound traffic, and evening peak hour inbound and outbound traffic for the proposed land uses. By multiplying the trip generation rates by the land use quantities, the traffic volumes are determined. Table 2 shows the project trip generation based upon rates obtained from the Institute of Transportation Engineers, Trip Generation, 9th Edition, 2012 and data provided by the applicant.

As shown in Table 2, the proposed development is projected to generate a total of approximately 40 daily vehicle trips, 5 of which will occur during the morning peak hour and 5 of which will occur during the evening peak hour.

#### **C. Trip Distribution**

To determine the trip distributions for the proposed project, peak hour traffic counts of the existing directional distribution of traffic for existing areas in the vicinity of the site, and other additional information on future development and traffic impacts in the area were reviewed. Figures 9 and 10 contain the directional distributions of the project trips for the proposed land use.

#### **D. Trip Assignment**

Based on the identified trip generation and distributions, project average daily traffic volumes have been calculated and shown on Figure 11. Morning and evening peak hour intersection turning movement volumes expected from the project are shown on Figures 12 and 13, respectively.

#### **E. Project Traffic Contribution Test**

No analysis is required further than 5 miles from the project site. The roadway elements that must be analyzed are dependent on both the analysis year (project Opening Year or Year 2035) and project generated traffic volumes. The identification of the study area, and

the intersections and highway segments requiring analysis, was based on an estimate of the two-way traffic volumes on the roadway segments near the project site. All arterial segments are required to be included in the analysis when the anticipated project volume equals or exceeds 50 two-way trips in the peak hours. The requirement is 100 two-way peak hour trips for freeways. Figure 14 graphically depicts the project traffic contribution test volumes on all of the roadway segments until the project volume contribution has clearly dropped below the 50 trip threshold and 100 trip threshold.

The project does not contribute trips greater than the freeway threshold volume of 100 two-way peak hour trips to the I-10 Freeway. The project does not contribute trips greater than the arterial link threshold volume of 50 two-way trips in the peak hours on facilities serving intersections outside of the City of Loma Linda.

**Table 2**  
**Project Trip Generation<sup>1</sup>**

Land Use	Quantity	Units <sup>2</sup>	Peak Hour						Daily
			Morning			Evening			
			Inbound	Outbound	Total	Inbound	Outbound	Total	
<b><u>Trip Generation Rates</u></b>									
Warehouse		TSF	0.24	0.06	0.30	0.08	0.24	0.32	3.56
Single Tenant Office		TSF	1.60	0.20	1.80	0.26	1.48	1.74	11.65
<b><u>Trips Generated</u></b>									
Warehouse	4.754	TSF	1	0	1	1	1	2	17
Single Tenant Office	1.996	TSF	3	1	4	0	3	3	23
<b>Total</b>	<b>6.750</b>	<b>TSF</b>	<b>4</b>	<b>1</b>	<b>5</b>	<b>1</b>	<b>4</b>	<b>5</b>	<b>40</b>

<sup>1</sup> Source: Institute of Transportation Engineers, Trip Generation, 9th Edition, 2012, Land Use Categories 150 and 715.

<sup>2</sup> TSF = Thousand Square Foot

Figure 9  
Project Outbound Trip Distribution

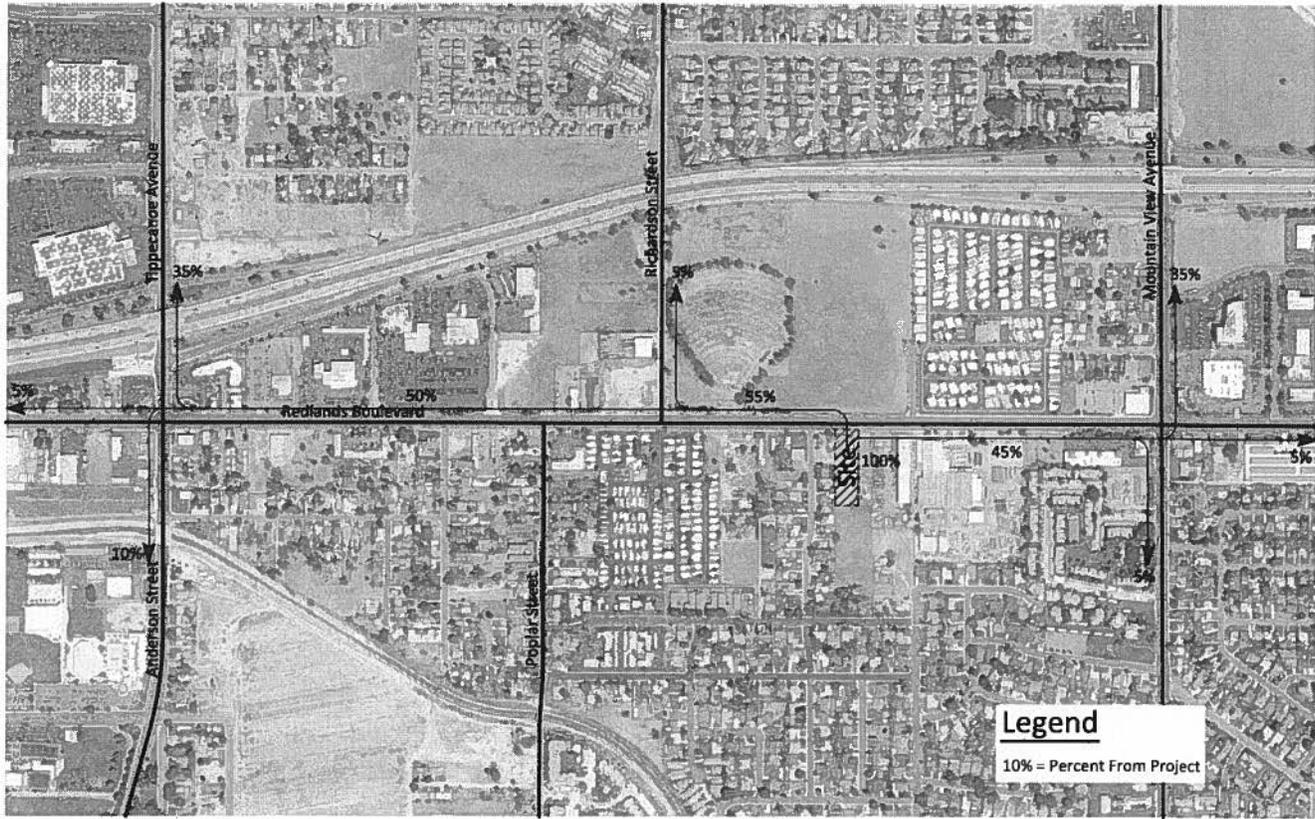


Figure 10  
Project Inbound Trip Distribution

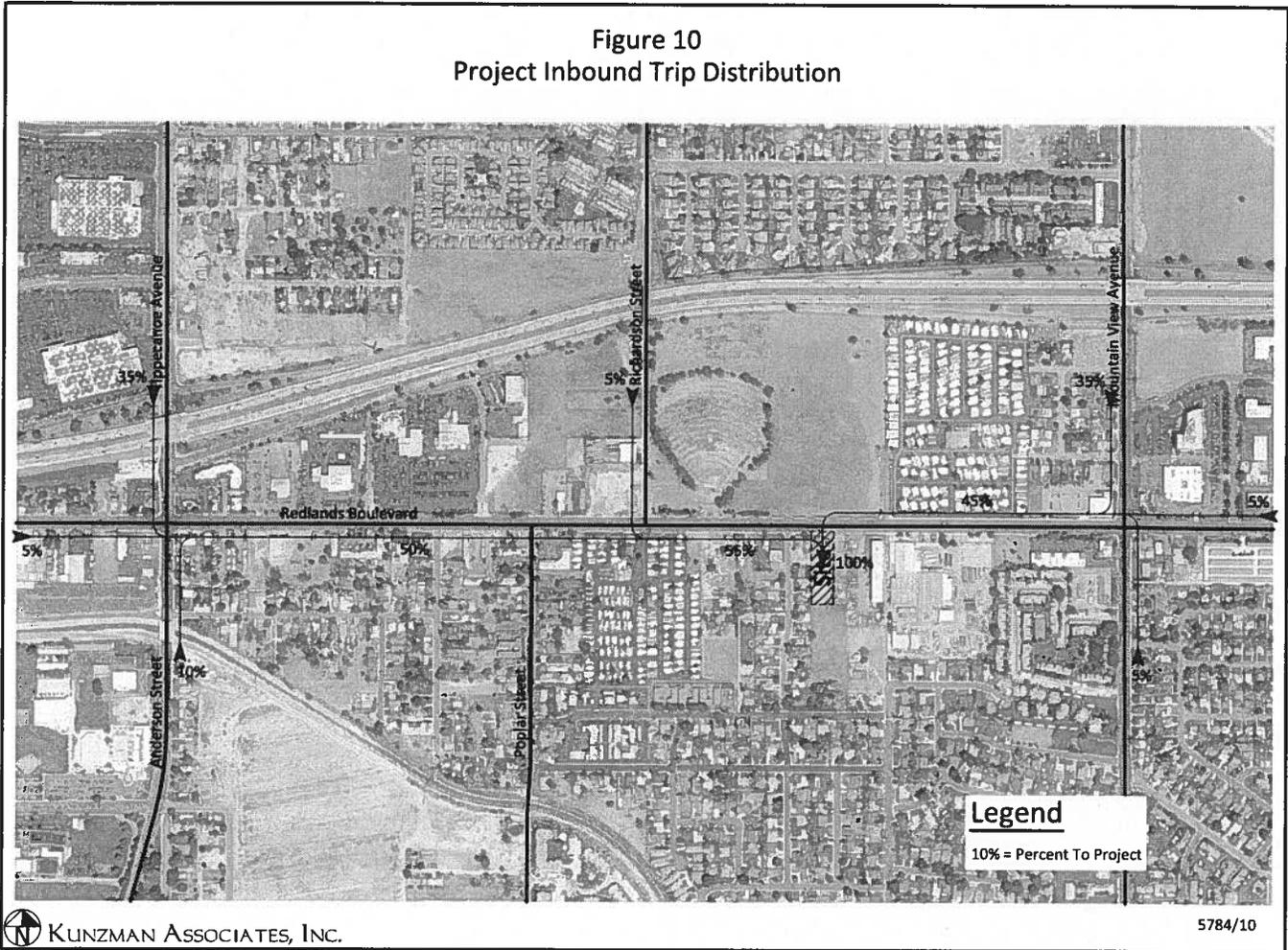


Figure 11  
Project Average Daily Traffic Volumes



**Figure 12**  
**Project Morning Peak Hour Intersection Turning Movement Volumes**

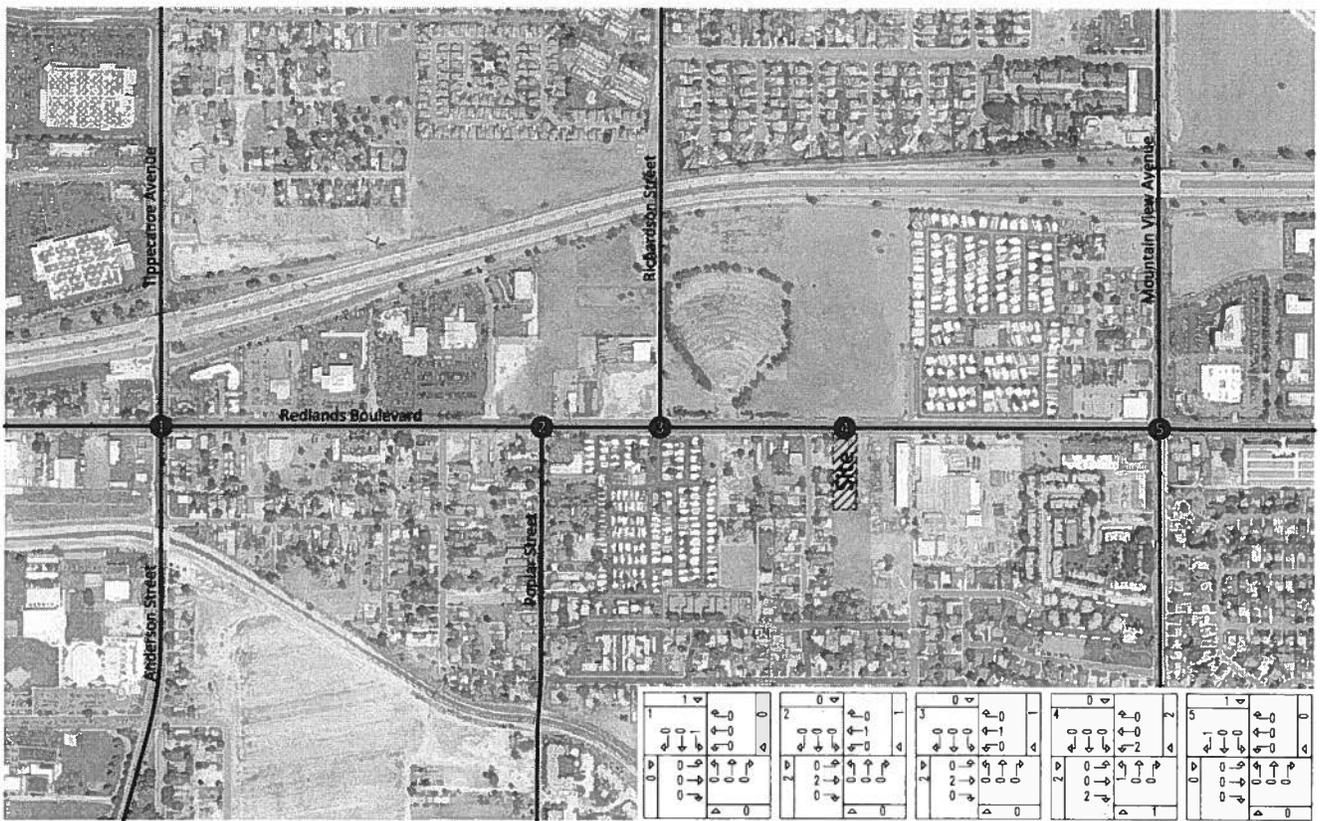
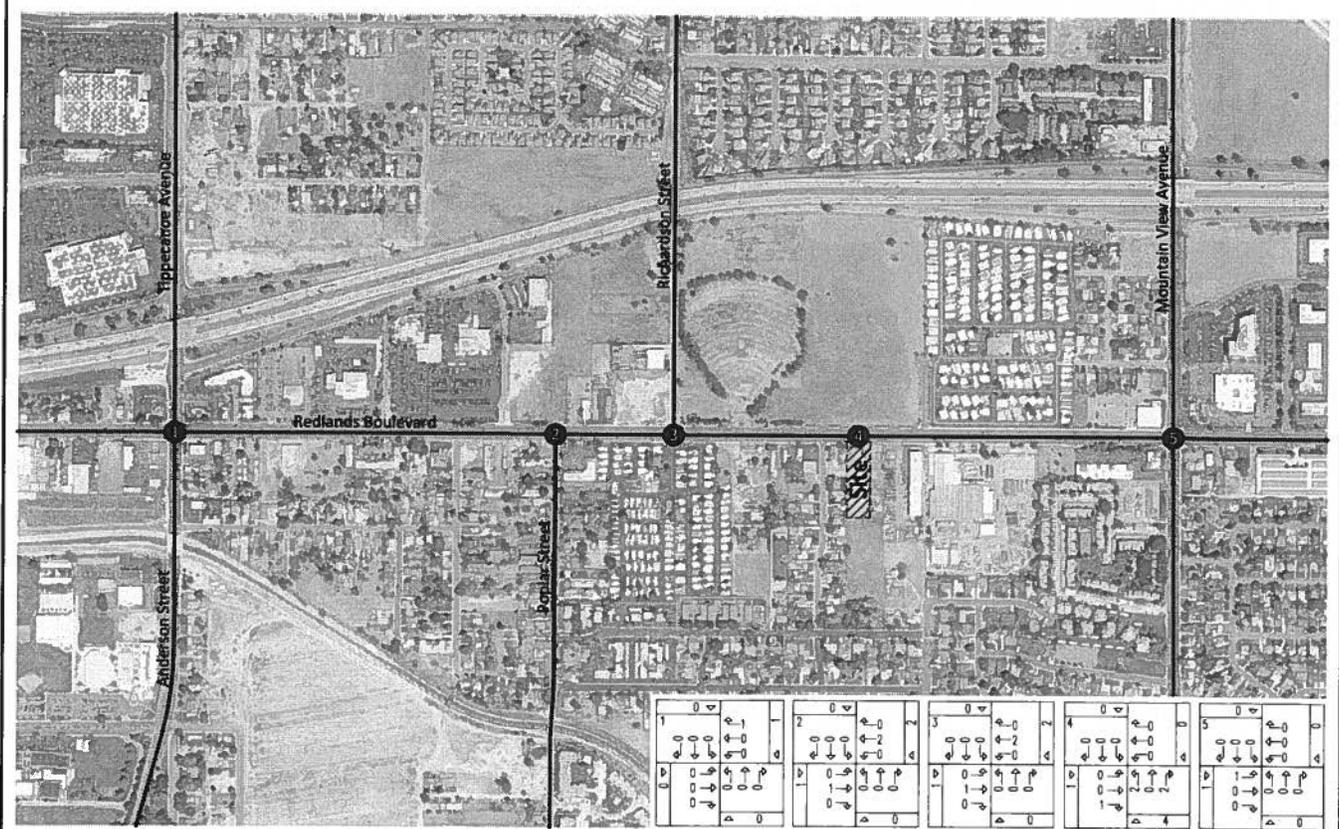


Figure 13  
 Project Evening Peak Hour Intersection Turning Movement Volumes





## IV. Future Conditions

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### A. Future Volumes

As described within Section I.C., the Year 2035 average daily traffic volume forecasts with the project are developed using a growth increment process based on volumes predicted by the SBTAM traffic model Year 2008 and Year 2035 traffic models. The growth increment for Year 2035 on each roadway segment is the increase in SBTAM traffic model volumes from existing Year 2014 to Year 2035. The final Year 2035 roadway segment volume used for analysis purposes is then determined by adding the Year 2035 growth increment volume to the existing counted volume.

The Opening Year (2015) traffic projections have been interpolated between Year 2035 traffic volumes and existing traffic volumes utilizing a portion of the growth increment (see Section I.C.). Project traffic volumes for all future projections were estimated using the manual approach.

#### 1. Existing Plus Project

The average daily traffic volumes for Existing Plus Project traffic conditions have been determined. Existing Plus Project average daily traffic volumes are shown on Figure 15.

#### 2. Opening Year (2015) Without Project

The average daily traffic volumes for Opening Year (2015) Without Project traffic conditions have been determined as described above using the growth interpolation process (see Section I.C.). Opening Year (2015) Without Project average daily traffic volumes are shown on Figure 16.

#### 3. Opening Year (2015) With Project

The average daily traffic volumes for Opening Year (2015) With Project traffic conditions have been determined as described above using the volume addition process (see Section I.C.). Opening Year (2015) With Project average daily traffic volumes are shown on Figure 17.

#### 4. Year 2035 Without Project

The average daily traffic volumes for Year 2035 Without Project traffic conditions have been determined as described above using the growth increment process (see Section I.C.). Year 2035 Without Project average daily traffic volumes are shown on Figure 18.

5. Year 2035 With Project

The average daily traffic volumes for Year 2035 With Project traffic conditions have been determined as described above using the volume addition process (see Section I.C). Year 2035 With Project average daily traffic volumes are shown on Figure 19.

**B. Future Level of Service**

1. Existing Plus Project

The Existing Plus Project delay and Level of Service for the study area roadway network are shown in Table 3. Table 3 shows delay values based on the geometrics at the study area intersections without and with improvements. Existing Plus Project delay calculation worksheets are provided in Appendix D. Existing Plus Project morning and evening peak hour intersection turning movement volumes are shown on Figures 20 and 21, respectively.

For Existing Plus Project traffic conditions, the following study area intersection is projected to operate at Level of Service D during the evening peak hours:

Anderson Street (NS) at:  
Redlands Boulevard (EW) - #1

As shown in Table 3, the study area intersections are projected to operate within acceptable Levels of Service consistent with Measure V during the peak hours for Existing Plus Project traffic conditions.

2. Opening Year (2015) Without Project

The Opening Year (2015) delay and Level of Service for the study area roadway network without the proposed project are shown in Table 4. Table 4 shows delay values based on geometrics at the study area intersections without and with improvements. Opening Year (2015) Without Project delay calculation worksheets are provided in Appendix D. Opening Year (2015) Without Project morning and evening peak hour intersection turning movement volumes are shown on Figures 22 and 23, respectively.

For Opening Year (2015) Without Project traffic conditions, the following study area intersection is projected to operate at Level of Service D during the evening peak hours:

Anderson Street (NS) at:  
Redlands Boulevard (EW) - #1

As shown in Table 4, the study area intersections are projected to operate within acceptable Levels of Service consistent with Measure V during the peak hours for Opening Year (2015) Without Project traffic conditions.

3. Opening Year (2015) With Project

The Opening Year (2015) delay and Level of Service for the study area roadway network with the proposed project are shown in Table 5. Table 5 shows delay values based on geometrics at the study area intersections without and with improvements. Opening Year (2015) With Project delay calculation worksheets are provided in Appendix D. Opening Year (2015) With Project morning and evening peak hour intersection turning movement volumes are shown on Figures 24 and 25, respectively.

For Opening Year (2015) With Project traffic conditions, the following study area intersection is projected to operate at Level of Service D during the evening peak hours:

Anderson Street (NS) at:  
Redlands Boulevard (EW) - #1

As shown in Table 5, the study area intersections are projected to operate within acceptable Levels of Service consistent with Measure V during the peak hours for Opening Year (2015) With Project traffic conditions.

4. Year 2035 Without Project

The Year 2035 delay and Level of Service for the study area roadway network without the proposed project are shown in Table 6. Table 6 shows delay values based on the geometrics at the study area intersections without and with improvements. Year 2035 Without Project delay calculation worksheets are provided in Appendix D. Year 2035 Without Project morning and evening peak hour intersection turning movement volumes are shown on Figures 26 and 27, respectively.

For Year 2035 Without Project traffic conditions, the following study area intersections are projected to operate at Level of Service D during the evening peak hours, without improvements:

Anderson Street (NS) at:  
Redlands Boulevard (EW) - #1

Mountain View Avenue (NS) at:  
Redlands Boulevard (EW) - #5

As shown in Table 6, the study area intersections are projected to operate within acceptable Levels of Service consistent with Measure V during the peak hours for Year 2035 Without Project traffic conditions, with improvements.

5. Year 2035 With Project

The Year 2035 delay and Level of Service for the study area roadway network with the proposed project are shown in Table 7. Table 7 shows delay values based on the geometrics at the study area intersections without and with improvements. Year 2035

With Project delay calculation worksheets are provided in Appendix D. Year 2035 With Project morning and evening peak hour intersection turning movement volumes are shown on Figures 28 and 29, respectively.

For Year 2035 With Project traffic conditions, the following study area intersections are projected to operate at Level of Service D during the evening peak hours, without improvements:

Anderson Street (NS) at:  
Redlands Boulevard (EW) - #1

Mountain View Avenue (NS) at:  
Redlands Boulevard (EW) - #5

As shown in Table 7, the study area intersections are projected to operate within acceptable Levels of Service consistent with Measure V during the peak hours for Year 2035 With Project traffic conditions, with improvements.

**Table 3**

**Existing Plus Project Intersection Delay and Level of Service**

Intersection	Jurisdiction	Traffic Control <sup>3</sup>	Intersection Approach Lanes <sup>1</sup>												Peak Hour Delay-LOS <sup>2</sup>	
			Northbound			Southbound			Eastbound			Westbound			Morning	Evening
			L	T	R	L	T	R	L	T	R	L	T	R		
Anderson Street (NS) at: Redlands Boulevard (EW) - #1	Loma Linda	TS	1	1.5	0.5	1	1.5	0.5	1	2	d	1	2	d	27.1-C	36.0-D
Poplar Street (NS) at: Redlands Boulevard (EW) - #2	Loma Linda	TS	0.5	0	0.5	0	0	0	0	2	d	1	2	0	12.4-B	12.0-B
Richardson Avenue (NS) at: Redlands Boulevard (EW) - #3	Loma Linda	TS	0	1	0	0.5	0.5	1	1	2	d	1	2	d	16.0-B	17.1-B
Project Driveway (NS) at: Redlands Boulevard (EW) - #4	Loma Linda	CSS	0.5	0	0.5	0	0	0	0	1.5	0.5	1	2	0	12.6-B	14.6-B
Mountain View Avenue (NS) at: Redlands Boulevard (EW) - #5	Loma Linda	TS	1	1.5	0.5	2	2	1	1	2	d	1	2	d	26.8-C	28.0-C

<sup>1</sup> When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane, there must be sufficient width for right turning vehicles to travel outside the through lanes. L = Left; T = Through; R = Right; d = De Facto Right Turn Lane, 1 = Improvement.

<sup>2</sup> Delay and level of service has been calculated using the following analysis software: Traffix, Version 7.9.0215 (2008). Per the Highway Capacity Manual, overall average for intersection delay and level of service are shown for intersections with traffic signal or all way stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

<sup>3</sup> TS = Traffic Signal; CSS= Cross Street Stop.

**Table 4**

**Opening Year (2015) Without Project Intersection Delay and Level of Service**

Intersection	Jurisdiction	Traffic Control <sup>3</sup>	Intersection Approach Lanes <sup>1</sup>												Peak Hour Delay-LOS <sup>2</sup>	
			Northbound			Southbound			Eastbound			Westbound			Morning	Evening
			L	T	R	L	T	R	L	T	R	L	T	R		
Anderson Street (NS) at: Redlands Boulevard (EW) - #1	Loma Linda	TS	1	1.5	0.5	1	1.5	0.5	1	2	d	1	2	d	28.0-C	36.7-D
Poplar Street (NS) at: Redlands Boulevard (EW) - #2	Loma Linda	TS	0.5	0	0.5	0	0	0	0	2	d	1	2	0	12.3-B	12.1-B
Richardson Avenue (NS) at: Redlands Boulevard (EW) - #3	Loma Linda	TS	0	1	0	0.5	0.5	1	1	2	d	1	2	d	16.2-B	17.2-B
Mountain View Avenue (NS) at: Redlands Boulevard (EW) - #5	Loma Linda	TS	1	1.5	0.5	2	2	1	1	2	d	1	2	d	27.0-C	28.7-C

<sup>1</sup> When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane, there must be sufficient width for right turning vehicles to travel outside the through lanes. L = Left; T = Through; R = Right; d = De Facto Right Turn Lane.

<sup>2</sup> Delay and level of service has been calculated using the following analysis software: Traffix, Version 7.9.0215 (2008). Per the Highway Capacity Manual, overall average for intersection delay and level of service are shown for intersections with traffic signal or all way stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

<sup>3</sup> TS = Traffic Signal.

**Table 5**

**Opening Year (2015) With Project Intersection Delay and Level of Service**

Intersection	Jurisdiction	Traffic Control <sup>3</sup>	Intersection Approach Lanes <sup>1</sup>												Peak Hour Delay-LOS <sup>2</sup>	
			Northbound			Southbound			Eastbound			Westbound			Morning	Evening
			L	T	R	L	T	R	L	T	R	L	T	R		
Anderson Street (NS) at: Redlands Boulevard (EW) - #1	Loma Linda	TS	1	1.5	0.5	1	1.5	0.5	1	2	d	1	2	d	28.0-C	36.7-D
Poplar Street (NS) at: Redlands Boulevard (EW) - #2	Loma Linda	TS	0.5	0	0.5	0	0	0	0	2	d	1	2	0	12.3-B	12.1-B
Richardson Avenue (NS) at: Redlands Boulevard (EW) - #3	Loma Linda	TS	0	1	0	0.5	0.5	1	1	2	d	1	2	d	16.2-B	17.2-B
Project Driveway (NS) at: Redlands Boulevard (EW) - #4	Loma Linda	CSS	0.5	0	0.5	0	0	0	0	1.5	0.5	1	2	0	11.9-B	15.1-C
Mountain View Avenue (NS) at: Redlands Boulevard (EW) - #5	Loma Linda	TS	1	1.5	0.5	2	2	1	1	2	d	1	2	d	26.9-C	28.7-C

<sup>1</sup> When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane, there must be sufficient width for right turning vehicles to travel outside the through lanes. L = Left; T = Through; R = Right; d = De Facto Right Turn Lane, 1 = Improvement.

<sup>2</sup> Delay and level of service has been calculated using the following analysis software: Traffix, Version 7.9.0215 (2008). Per the Highway Capacity Manual, overall average for intersection delay and level of service are shown for intersections with traffic signal or all way stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

<sup>3</sup> TS = Traffic Signal; CSS= Cross Street Stop.

**Table 6**

**Year 2035 Without Project Intersection Delay and Level of Service**

Intersection	Jurisdiction	Traffic Control <sup>3</sup>	Intersection Approach Lanes <sup>1</sup>												Peak Hour Delay-LOS <sup>2</sup>	
			Northbound			Southbound			Eastbound			Westbound			Morning	Evening
			L	T	R	L	T	R	L	T	R	L	T	R		
Anderson Street (NS) at: Redlands Boulevard (EW) - #1 -Without Improvements	Loma Linda	TS	1	1.5	0.5	1	1.5	0.5	1	2	d	1	2	d	32.0-C	46.8-D
-With Improvements		TS	1	1.5	0.5	1	1.5	0.5	1	<u>3</u>	d	1	<u>3</u>	d	31.6-C	45.4-D
Poplar Street (NS) at: Redlands Boulevard (EW) - #2	Loma Linda	TS	0.5	0	0.5	0	0	0	0	2	d	1	2	0	12.1-B	11.6-B
Richardson Avenue (NS) at: Redlands Boulevard (EW) - #3	Loma Linda	TS	0	1	0	0.5	0.5	1	1	2	d	1	2	d	16.1-B	17.2-B
Mountain View Avenue (NS) at: Redlands Boulevard (EW) - #5 -Without Improvements	Loma Linda	TS	1	1.5	0.5	2	2	1	1	2	d	1	2	d	28.4-C	40.1-D
-With Improvements		TS	1	2	<u>1</u>	2	2	1	1	<u>3</u>	<u>1&gt;</u>	1	<u>3</u>	<u>1&gt;</u>	26.5-C	35.3-D

<sup>1</sup> When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane, there must be sufficient width for right turning vehicles to travel outside the through lanes. L = Left; T = Through; R = Right; d = De Facto Right Turn Lane; > = Right Turn Overlap; 1 = Improvement.

<sup>2</sup> Delay and level of service has been calculated using the following analysis software: Traffix, Version 7.9.0215 (2008). Per the Highway Capacity Manual, overall average for intersection delay and level of service are shown for intersections with traffic signal or all way stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

<sup>3</sup> TS = Traffic Signal.

Table 7

Year 2035 With Project Intersection Delay and Level of Service

Intersection	Jurisdiction	Traffic Control <sup>3</sup>	Intersection Approach Lanes <sup>1</sup>												Peak Hour Delay-LOS <sup>2</sup>	
			Northbound			Southbound			Eastbound			Westbound			Morning	Evening
			L	T	R	L	T	R	L	T	R	L	T	R		
Anderson Street (NS) at: Redlands Boulevard (EW) - #1 -Without Improvements -With Improvements	Loma Linda	TS TS	1 1	1.5 1.5	0.5 0.5	1 1	1.5 1.5	0.5 0.5	1 1	2 3	d d	1 1	2 3	d d	32.0-C 31.6-C	46.8-D 45.4-D
Poplar Street (NS) at: Redlands Boulevard (EW) - #2	Loma Linda	TS	0.5	0	0.5	0	0	0	0	2	d	1	2	0	12.2-B	11.6-B
Richardson Avenue (NS) at: Redlands Boulevard (EW) - #3	Loma Linda	TS	0	1	0	0.5	0.5	1	1	2	d	1	2	d	16.1-B	17.2-B
Project Driveway (NS) at: Redlands Boulevard (EW) - #4	Loma Linda	CSS	0.5	0	0.5	0	0	0	0	1.5	0.5	1	2	0	20.5-C	19.0-C
Mountain View Avenue (NS) at: Redlands Boulevard (EW) - #5 -Without Improvements -With Improvements	Loma Linda	TS TS	1 1	1.5 2	0.5 1	2 2	2 2	1 1	1 1	2 3	d 1>	1 1	2 3	d 1>	28.4-C 26.5-C	40.2-D 35.4-D

<sup>1</sup> When a right turn lane is designated, the lane can either be striped or unstriped. To function as a right turn lane, there must be sufficient width for right turning vehicles to travel outside the through lanes. L = Left; T = Through; R = Right; d = De Facto Right Turn Lane; > = Right Turn Overlap; 1 = Improvement.

<sup>2</sup> Delay and level of service has been calculated using the following analysis software: Traffix, Version 7.9.0215 (2008). Per the Highway Capacity Manual, overall average for intersection delay and level of service are shown for intersections with traffic signal or all way stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

<sup>3</sup> TS = Traffic Signal; CSS= Cross Street Stop.

Figure 15  
Existing Plus Project Average Daily Traffic Volumes



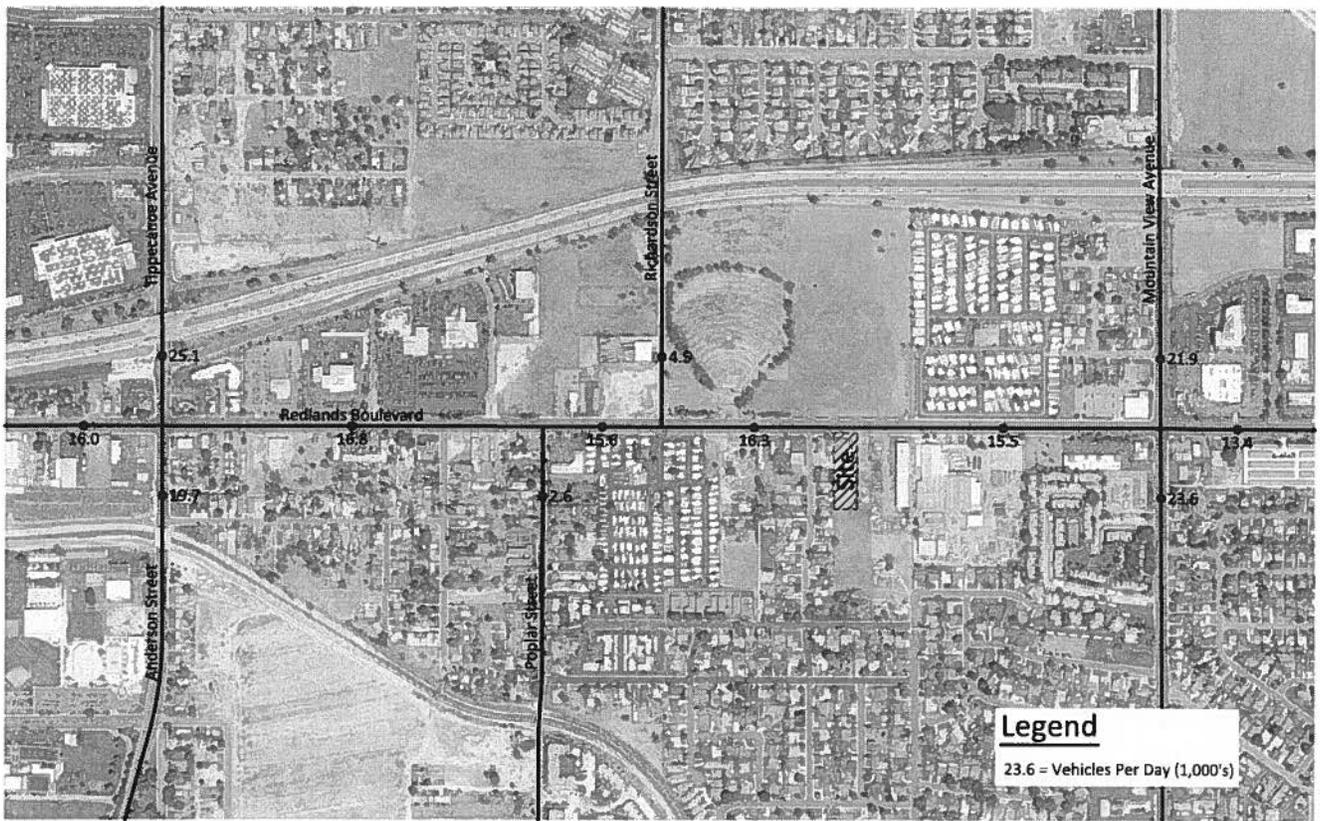
**Legend**  
23.1 = Vehicles Per Day (1,000's)

Figure 16  
 Opening Year (2015) Without Project Average Daily Traffic Volumes



**Legend**  
 23.6 = Vehicles Per Day (1,000's)

Figure 17  
 Opening Year (2015) With Project Average Daily Traffic Volumes



**Legend**  
 23.6 = Vehicles Per Day (1,000's)

Figure 18  
 Year 2035 Without Project Average Daily Traffic Volumes



Figure 19  
 Year 2035 With Project Average Daily Traffic Volumes



**Figure 20**  
**Existing Plus Project**  
**Morning Peak Hour Intersection Turning Movement Volumes**

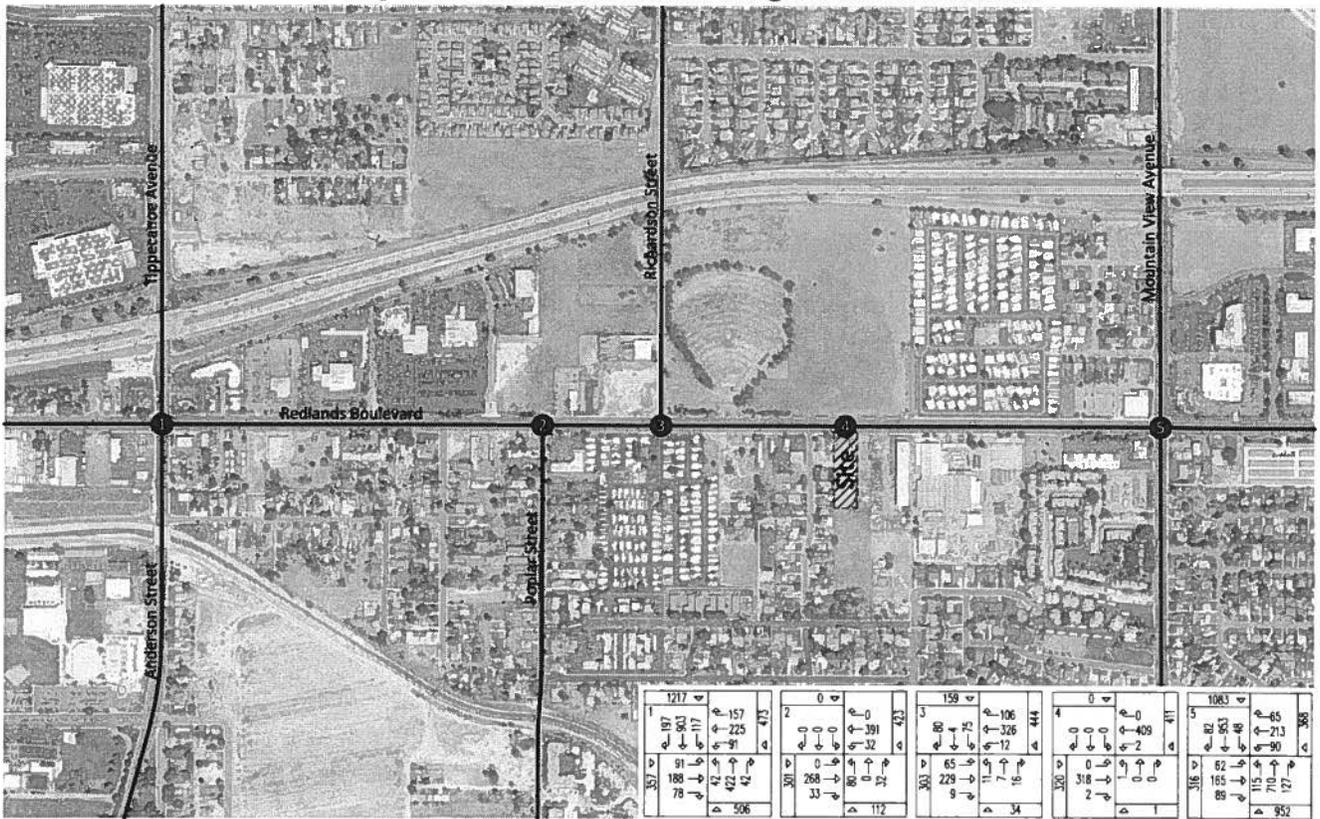


Figure 21  
Existing Plus Project  
Evening Peak Hour Intersection Turning Movement Volumes

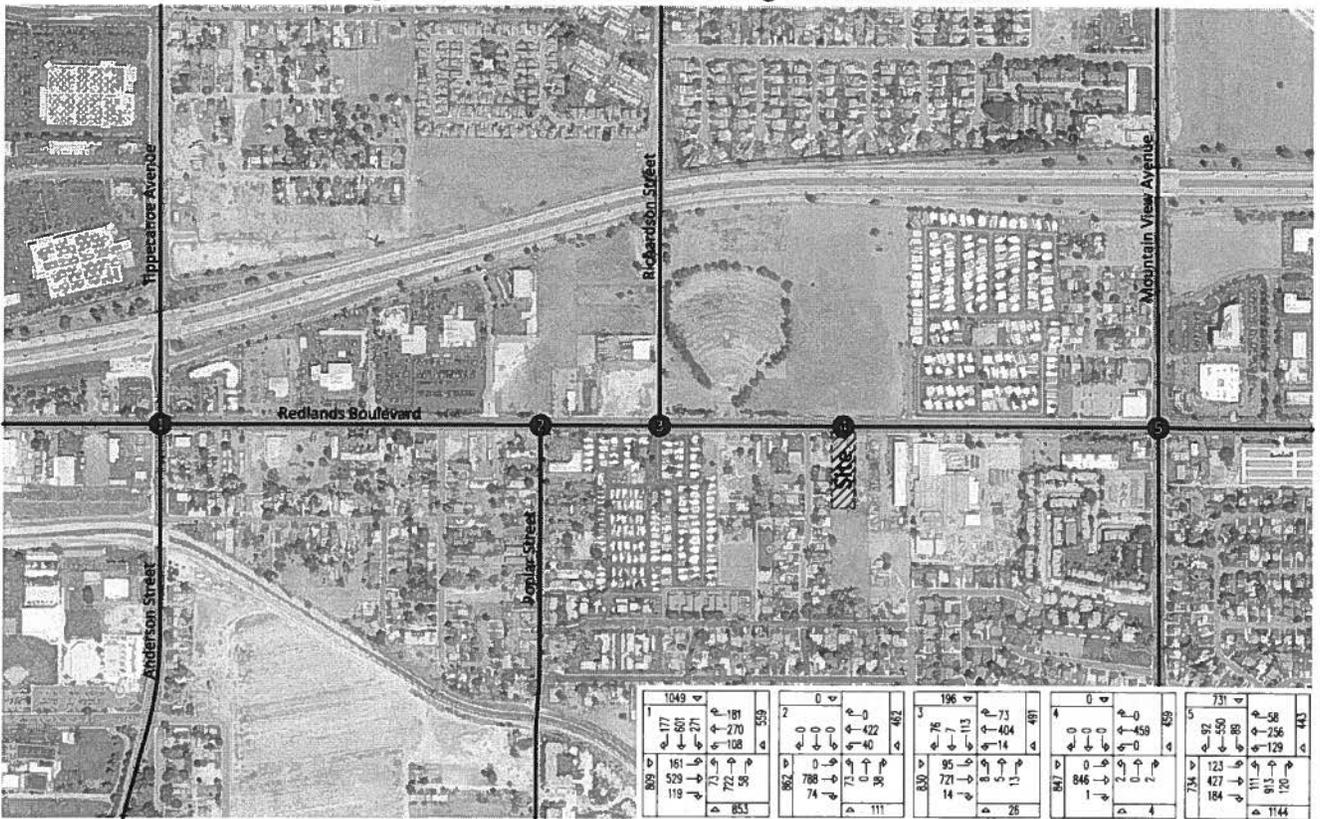


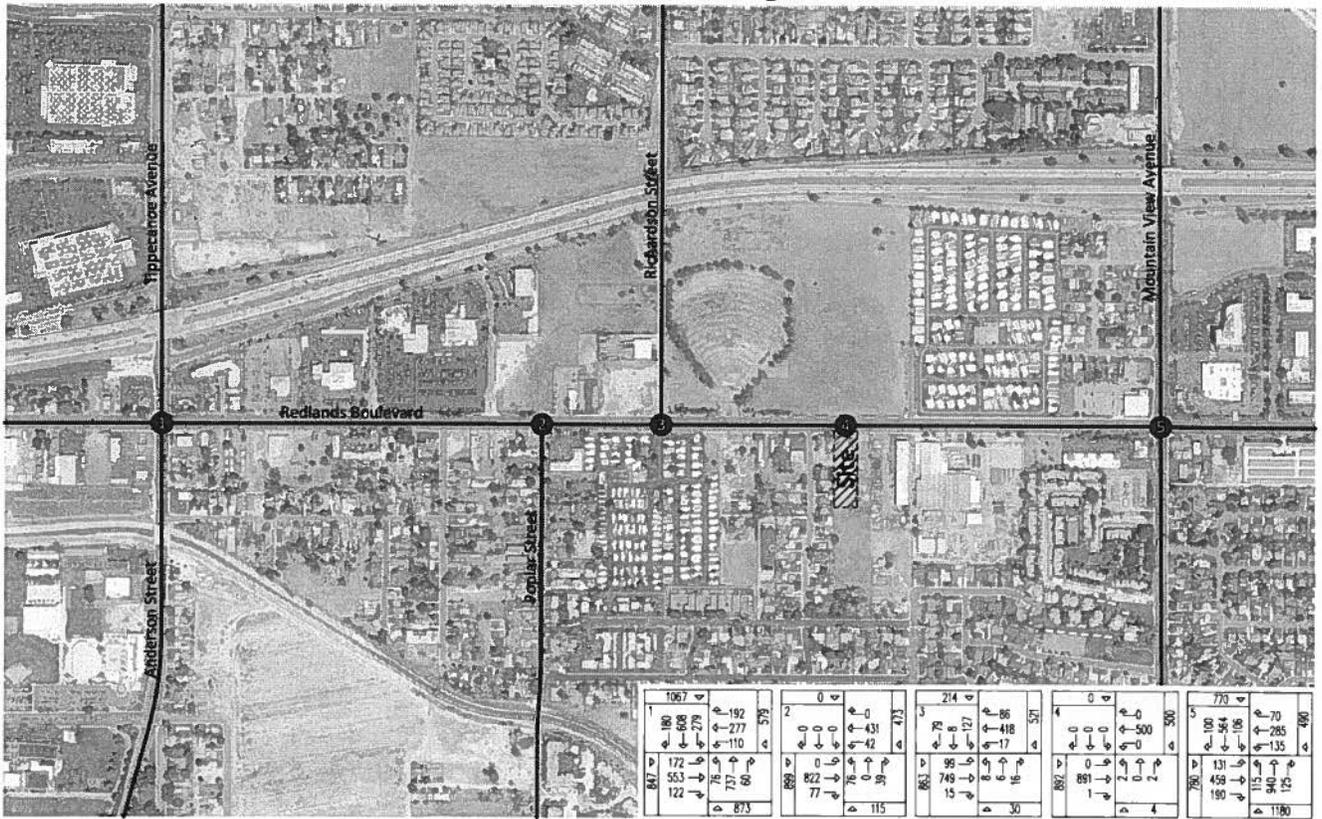


Figure 23  
 Opening Year (2015) Without Project  
 Evening Peak Hour Intersection Turning Movement Volumes

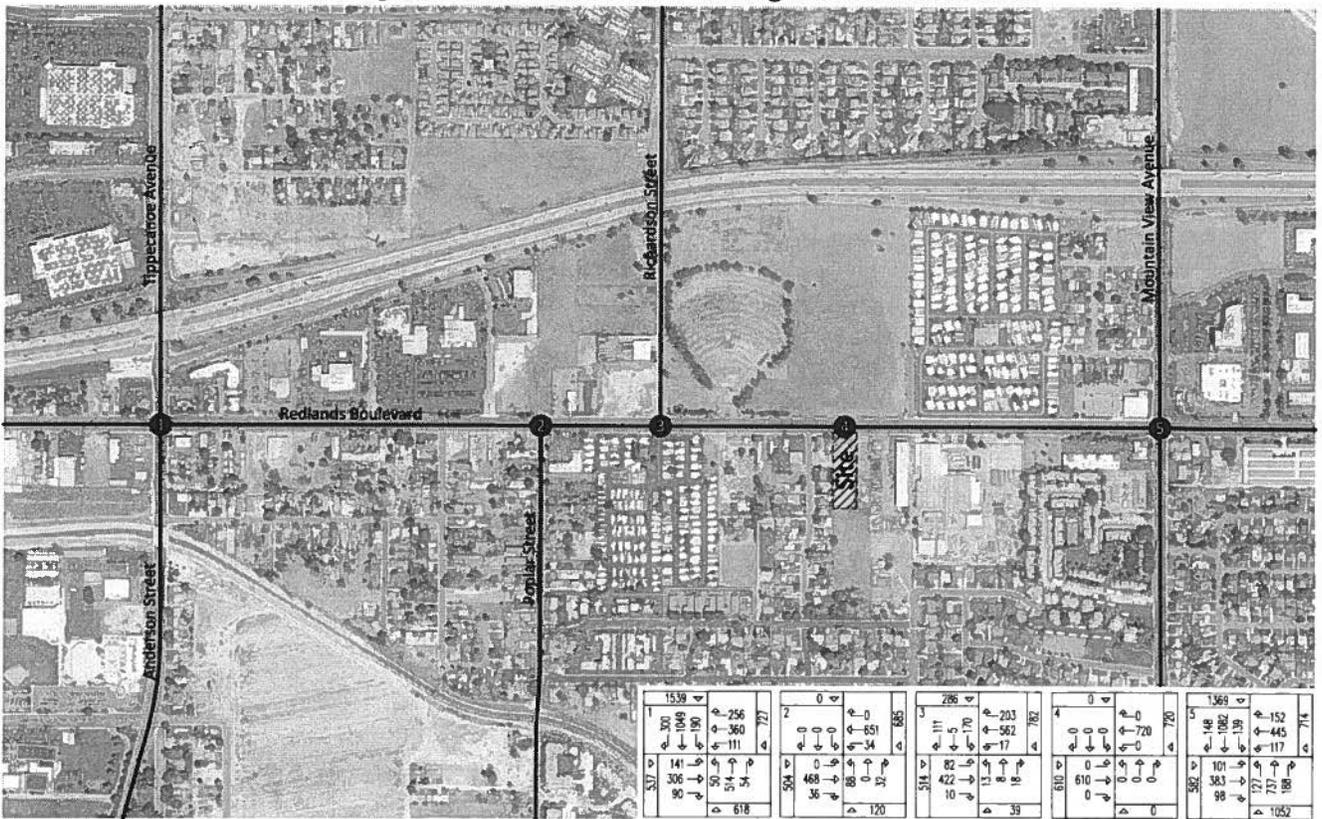




**Figure 25**  
**Opening Year (2015) With Project**  
**Evening Peak Hour Intersection Turning Movement Volumes**



**Figure 26**  
**Year 2035 Without Project**  
**Morning Peak Hour Intersection Turning Movement Volumes**



**Figure 27**  
**Year 2035 Without Project**  
**Evening Peak Hour Intersection Turning Movement Volumes**

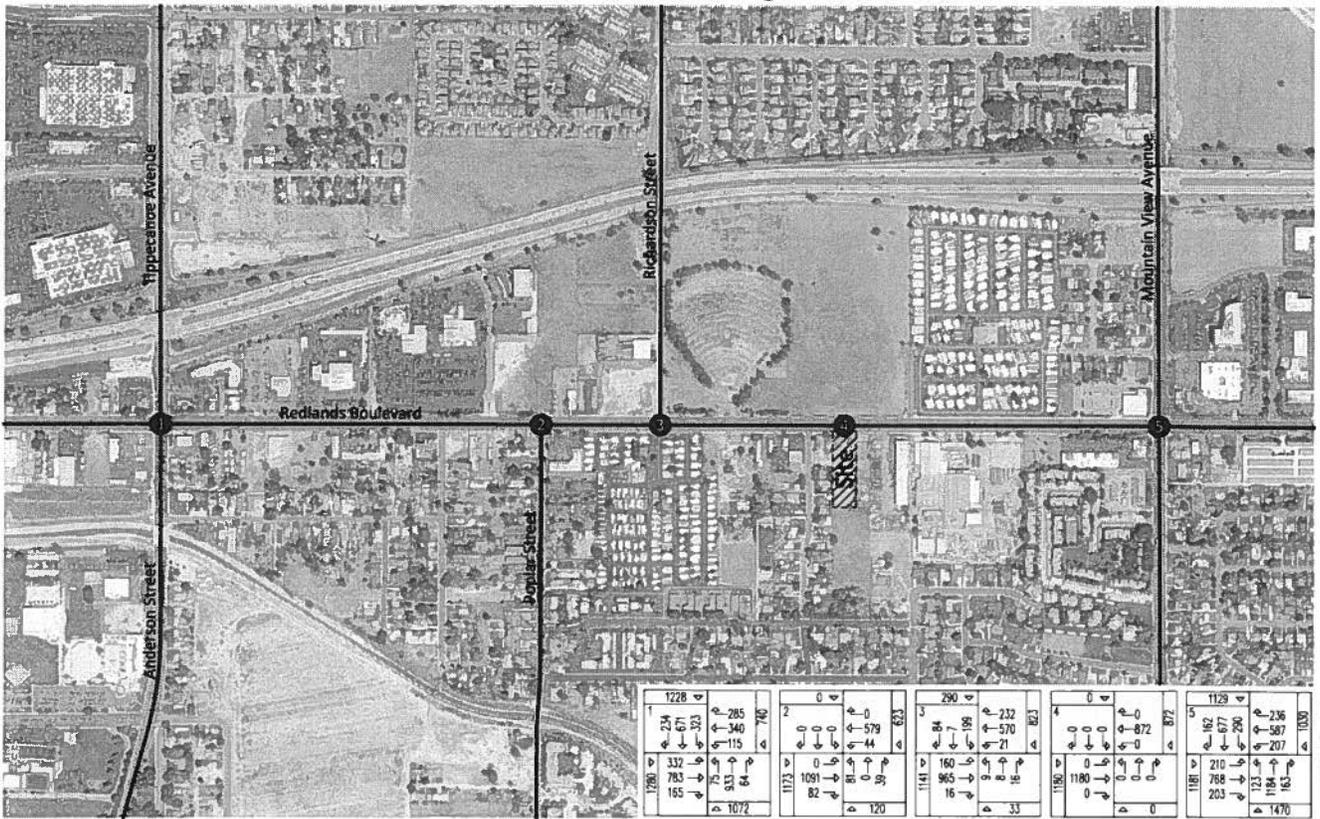
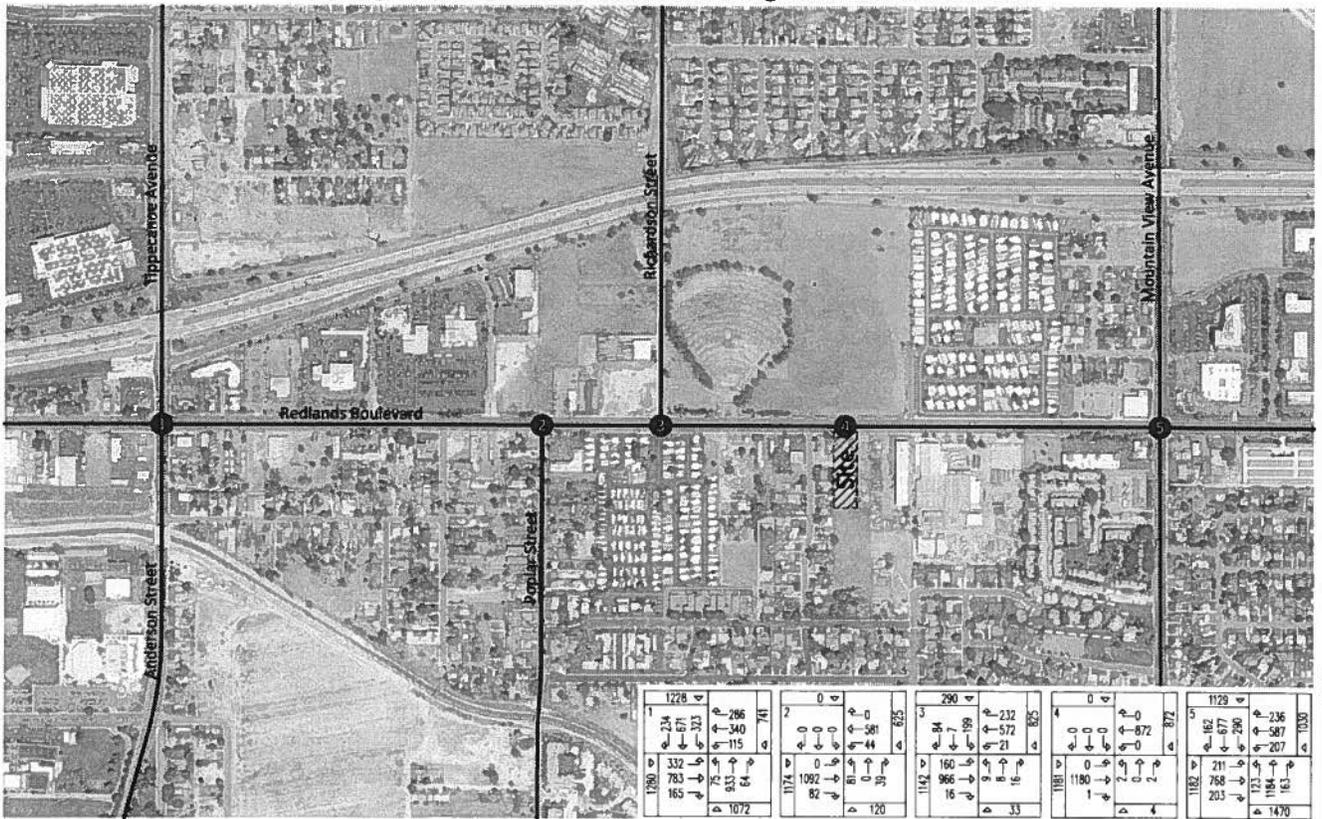




Figure 29  
 Year 2035 With Project  
 Evening Peak Hour Intersection Turning Movement Volumes



## V. Project Mitigation

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### A. Required Improvements and Costs

Improvements that will eliminate all anticipated roadway operational deficiencies throughout the study area have been identified for Existing Plus Project, Opening Year (2015), and Year 2035 traffic conditions. The improvements were determined through the operations analysis of Section IV.

The approximate costs for the Year 2035 improvements have generally been estimated using cost guidelines in the Congestion Management Program Handbook (see Appendix F). A unit cost of \$400,000 for installation of a traffic signal has been substituted for the somewhat lower value cited in the Congestion Management Program materials. For adding a through lane, a unit cost of \$290,000 has been assumed. The needed improvements and resulting costs are summarized in Table 8 for study area intersections.

The total cost of needed and unfunded intersection improvements is \$170,000.

### B. Project Contribution and Fair Share Costs

The project fair share contributions have also been calculated for Year 2035 improvement locations. The project share of cost has been based on the proportion of project peak hour traffic contributed to the improvement location relative to the total new peak hour Year 2035 traffic volume.

Table 9 presents a summary of improvement cost and project cost shares at the Year 2035 intersection improvement locations. The intersection fair share cost calculations are based on the highest of the morning or evening peak hour traffic volumes. As shown in Table 9, the project's fair share of identified intersection costs is \$170.

The dollar figures are rough order of magnitude estimates only. They are intended only for the discussion purposes of this traffic impact analysis, and do not imply any legal responsibility or formula for contributions or mitigation.

Consistent with Measure V, as mitigation for the potential traffic impacts, the proposed project shall contribute on a fair share basis, through an adopted traffic impact fee program, in the implementation of the recommended intersection lane improvements or freeway improvements, or in dollar equivalent in lieu mitigation contributions, or in the implementation of additional capacity on parallel routes to offset potential impacts to study area intersections.

**Table 8**

**Summary of Intersection Improvements and Costs**

Intersection	Improvement	Total Cost
Anderson Street (NS) at: Redlands Boulevard (EW) - #1	Construct Additional EB Through Lane <sup>1</sup>	Nexus <sup>2</sup>
	Construct Additional WB Through Lane <sup>1</sup>	Nexus <sup>2</sup>
Mountain View Avenue (NS) at: Redlands Boulevard (EW) - #5	Construct NB Right Turn Lane <sup>1</sup>	\$ 50,000
	Construct Additional EB Through Lane <sup>1</sup>	Nexus <sup>2</sup>
	Construct EB Right Turn Lane W/Overlap <sup>1</sup>	\$ 60,000
	Construct Additional WB Through Lane <sup>1</sup>	Nexus <sup>2</sup>
	Construct WB Right Turn Lane W/Overlap <sup>1</sup>	\$ 60,000
<b>Total</b>		<b>\$ 170,000</b>

<sup>1</sup> Improvements are only needed for Year 2035.

<sup>2</sup> Improvement is included within the 2011 San Bernardino Associated Governments (SANBAG) Development Mitigation Nexus Study.

**Table 9**

**Project Fair Share Intersection Traffic Contribution**

Intersection	Total Cost	Existing Traffic	Year 2035 With Project Traffic	Project Traffic	Total New Traffic	Project % of New Traffic	Project Cost Share <sup>1</sup>
Anderson Street (NS) at: Redlands Boulevard (EW) - #1							
- Morning Peak Hour	Nexus <sup>2</sup>	2,552	3,422	1	870	0.1%	\$ -
- Evening Peak Hour		3,269	4,321	1	1,052	0.1%	-
Mountain View Avenue (NS) at: Redlands Boulevard (EW) - #4							
- Morning Peak Hour	\$ 170,000	2,718	3,718	1	1,000	0.1%	\$ 170
- Evening Peak Hour		3,051	4,811	1	1,760	0.1%	-
<b>Total</b>	<b>\$ 170,000</b>						<b>\$ 170</b>

<sup>1</sup> The project cost share is the highest amount for either the morning or evening peak hour.

<sup>2</sup> Improvement is included within the 2011 San Bernardino Associated Governments (SANBAG) Development Mitigation Nexus Study.

## VI. Conclusions and Recommendations

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### A. Summary

The traffic issues related to the proposed land use and development have been evaluated in the context of the California Environmental Quality Act.

The City of Loma Linda is the lead agency responsible for preparation of the traffic impact analysis, in accordance with California Environmental Quality Act authorizing legislation. This report analyzes traffic impacts for the anticipated opening date with full occupancy of the development in Year 2015, at which time it will be generating traffic at its full potential, and for the current traffic forecast year, which is the Year 2035.

A series of scoping discussions were conducted with the City of Loma Linda to define the desired analysis locations for each future analysis year. In addition, the San Bernardino Associated Governments staff has also been contacted to discuss the project and its associated travel patterns.

No analysis is required further than 5 miles from the project site. The roadway elements that must be analyzed are dependent on both the analysis year (project Opening Year or Year 2035) and project generated traffic volumes. The identification of the study area, and the intersections and highway segments requiring analysis, was based on an estimate of the two-way traffic volumes on the roadway segments near the project site. All arterial segments are required to be included in the analysis when the anticipated project volume equals or exceeds 50 two-way trips in the peak hours. The requirement is 100 two-way peak hour trips for freeways.

The project does not contribute trips greater than the freeway threshold volume of 100 two-way peak hour trips to the I-10 Freeway. The project does not contribute trips greater than the arterial link threshold volume of 50 two-way trips in the peak hours on facilities serving intersections outside the City of Loma Linda.

The average daily traffic volume forecasts have been determined using the growth increment approach on the SBTAM traffic model Year 2008 and Year 2035 average daily traffic volume forecasts (see Appendix C). This difference defines the growth in traffic over the 27 year period. The incremental growth in average daily traffic volume has been factored to reflect the forecast growth between Year 2013 and Year 2035. For this purpose, linear growth between the Year 2008 base condition and the forecast Year 2035 condition was assumed. Since the increment between Year 2014 and Year 2035 is 22 years of the 27 year time frame, a factor of 0.77 (i.e., 22/27) was used.

The Year 2035 without project daily and peak hour directional roadway segment volume forecasts have been determined using the growth increment approach on the SBTAM traffic model Year 2008 and Year 2035 peak hour volumes. The growth increment calculation worksheets are shown in Appendix C. Current peak hour intersection approach/departure data is a necessary input to this approach. The existing traffic count data serves as both the

starting point for the refinement process, and also provides important insight into current travel patterns and the relationship between peak hour and daily traffic conditions. The initial turning movement proportions are estimated based upon the relationship of each approach leg's forecast traffic volume to the other legs forecast volumes at the intersection. The initial estimate of turning movement proportions is then entered into a spreadsheet program consistent with the National Cooperative Highway Research Program Report 255. A linear programming algorithm is used to calculate individual turning movements that match the known directional roadway segment volumes computed in the previous step. This program computes a likely set of intersection turning movements from intersection approach counts and the initial turning proportions from each approach leg.

Project traffic volumes were then added to the Year 2035 SBTAM traffic model volumes. Quality control checks and forecast adjustments were performed as necessary to ensure that all future traffic volume forecasts reflect a minimum of 10% growth over existing traffic volumes. The result of this traffic forecasting procedure is a series of traffic volumes suitable for traffic operations analysis.

**B. Existing Conditions**

Regional access to the project site is provided by the I-10 Freeway. Local access is provided by various roadways in the vicinity of the site. The north-south roadways which will be most affected by the project include Anderson Street, Richardson Street, and Mountain View Avenue. The east-west roadway expected to provide local access includes Redlands Boulevard.

The existing delay and Level of Service for the intersection in the vicinity of the project are shown in Table 1. The study area intersections currently operate at Level of Service C or better during the peak hours for existing traffic conditions, except for the following study area intersection that is currently operating at Level of Service D during the evening peak hours:

Anderson Street (NS) at:  
Redlands Boulevard (EW) - #1

**C. Project Traffic**

Project traffic volumes for all future projections were estimated using the manual approach. Trip generation has been based upon rates obtained from the Institute of Transportation Engineers, Trip Generation, 9th Edition, 2012 and data provided by the applicant.

To determine the trip distributions for the proposed project, peak hour traffic counts of the existing directional distribution of traffic for existing areas in the vicinity of the site, and other additional information on future development and traffic impacts in the area were reviewed.

As shown in Table 2, the proposed development is projected to generate a total of approximately 40 daily vehicle trips, 5 of which will occur during the morning peak hour and 5 of which will occur during the evening peak hour.

**D. Future Conditions**

An Existing Plus Project, Opening Year (2015) analysis, and Year 2035 analysis are included in this report. Existing Plus Project traffic operations analyses have been completed for the morning and evening peak hour and are shown in Table 3. Opening Year (2015) traffic operations analysis have been completed for the morning and evening peak hour and are shown in Tables 4 and 5. Morning and evening peak hour traffic operations analysis are summarized in Tables 6 and 7 for Year 2035.

For Existing Plus Project traffic conditions, the following study area intersection is projected to operate at Level of Service D during the evening peak hours:

Anderson Street (NS) at:  
Redlands Boulevard (EW) - #1

As shown in Table 3, the study area intersections are projected to operate within acceptable Levels of Service consistent with Measure V during the peak hours for Existing Plus Project traffic conditions.

For Opening Year (2015) Without Project traffic conditions, the following study area intersection is projected to operate at Level of Service D during the evening peak hours:

Anderson Street (NS) at:  
Redlands Boulevard (EW) - #1

As shown in Table 4, the study area intersections are projected to operate within acceptable Levels of Service consistent with Measure V during the peak hours for Opening Year (2015) Without Project traffic conditions.

For Opening Year (2015) With Project traffic conditions, the following study area intersection is projected to operate at Level of Service D during the evening peak hours:

Anderson Street (NS) at:  
Redlands Boulevard (EW) - #1

As shown in Table 5, the study area intersections are projected to operate within acceptable Levels of Service consistent with Measure V during the peak hours for Opening Year (2015) With Project traffic conditions.

For Year 2035 Without Project traffic conditions, the following study area intersections are projected to operate at Level of Service D during the evening peak hours, without improvements:

Anderson Street (NS) at:  
Redlands Boulevard (EW) - #1

Mountain View Avenue (NS) at:  
Redlands Boulevard (EW) - #5

As shown in Table 6, the study area intersections are projected to operate within acceptable Levels of Service consistent with Measure V during the peak hours for Year 2035 Without Project traffic conditions, with improvements.

For Year 2035 With Project traffic conditions, the following study area intersections are projected to operate at Level of Service D during the evening peak hours, without improvements:

Anderson Street (NS) at:  
Redlands Boulevard (EW) - #1

Mountain View Avenue (NS) at:  
Redlands Boulevard (EW) - #5

As shown in Table 7, the study area intersections are projected to operate within acceptable Levels of Service consistent with Measure V during the peak hours for Year 2035 With Project traffic conditions, with improvements.

**E. Cost Summary**

Improvements that will eliminate all anticipated roadway operational deficiencies throughout the study area have been identified for Opening Year (2015) and Year 2035 traffic conditions. The improvements were determined through the operations analysis of Section IV.

The total cost of needed and unfunded intersection improvements is \$170,000.

Table 9 presents a summary of improvement cost and project cost shares at the Year 2035 intersection improvement locations. The intersection fair share cost calculations are based on the highest of the morning or evening peak hour traffic volumes. As shown in Table 9, the project's fair share of identified intersection costs is \$170.

The dollar figures are rough order of magnitude estimates only. They are intended only for the discussion purposes of this traffic impact analysis, and do not imply any legal responsibility or formula for contributions or mitigation.

Consistent with Measure V, as mitigation for the potential traffic impacts, the proposed project shall contribute on a fair share basis, through an adopted traffic impact fee program, in the implementation of the recommended intersection lane improvements or freeway improvements, or in dollar equivalent in lieu mitigation contributions, or in the implementation of additional capacity on parallel routes to offset potential impacts to Congestion Management Program intersections and freeway segments.

**F. Recommendations**

Site-specific circulation and access recommendations are depicted on Figure 30.

**1. On-Site Improvements**

Construct Redlands Boulevard from the west project boundary to east project boundary at its ultimate half-section width including landscaping and parkway improvements in conjunction with development, as necessary.

The project site should provide sufficient parking spaces to meet City of Loma Linda parking code requirements in order to service on-site parking demand.

On-site traffic signing and striping should be implemented in conjunction with detailed construction plans for the project.

Sight distance at each project access should be reviewed with respect to California Department of Transportation/City of Loma Linda standards in conjunction with the preparation of final grading, landscaping, and street improvement plans. The final grading, landscaping, and street improvement plans shall demonstrate that sight distance standards are met. Such plans must be reviewed by the City and approved as consistent with this measure prior to issue of grading permits.

**2. Off-Site Improvements**

The necessary off-site improvement recommendations were described in previous sections of this report. The project should contribute towards the cost of necessary study area improvements on a fair share or "pro-rata" basis.

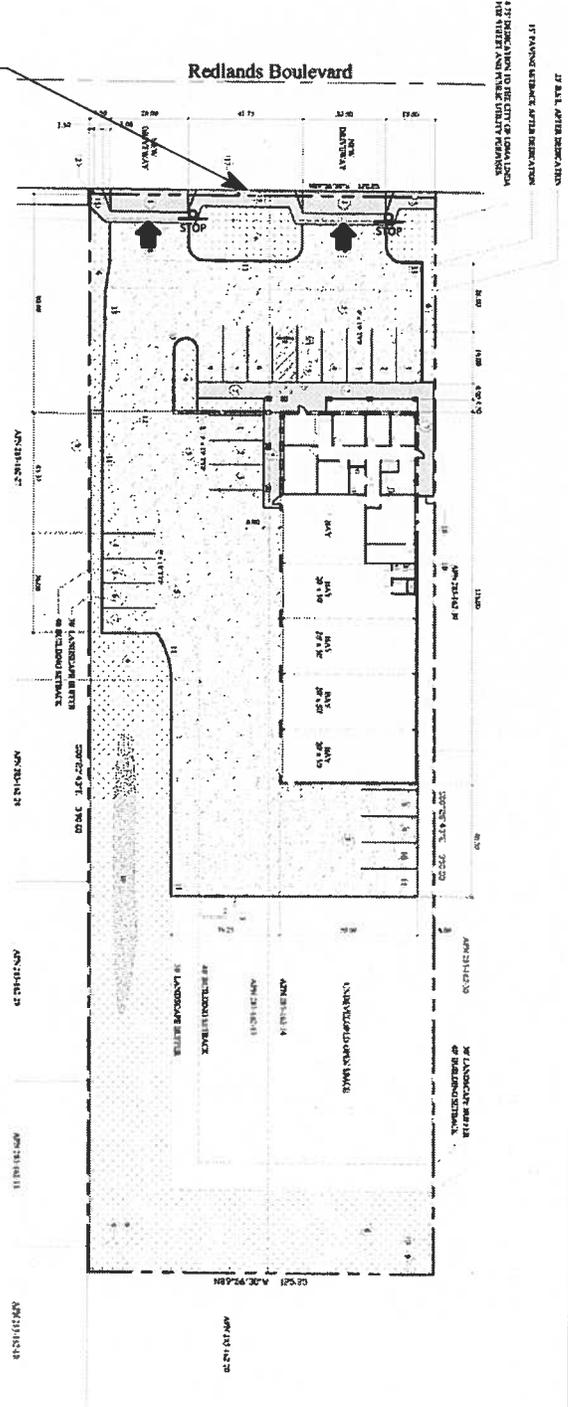
As is the case for any roadway design, the City of Loma Linda should periodically review traffic operations in the vicinity of the project once the project is constructed to assure that the traffic operations are satisfactory.

# Figure 30 Circulation Recommendations

Construct Redlands Boulevard from the west project boundary to east project boundary at its ultimate half-section width including landscaping and parkway improvements in conjunction with development, as necessary.

### Legend

-  = Stop Sign
-  = Full Access Driveway



The project site should provide sufficient parking spaces to meet City of Loma Linda parking code requirements in order to service on-site parking demand.

On-site traffic signing and striping should be implemented in conjunction with detailed construction plans for the project.

Sight distance at each project access should be reviewed with respect to California Department of Transportation/City of Loma Linda standards in conjunction with the preparation of final grading, landscaping, and street improvement plans. The final grading, landscaping, and street improvement plans shall demonstrate that sight distance standards are met. Such plans must be reviewed by the City and approved as consistent with this measure prior to issue of grading permits.

The project should contribute towards the cost of necessary study area improvements on a fair share or "pro-rata" basis.

As is the case for any roadway design, the City of Loma Linda should periodically review traffic operations in the vicinity of the project once the project is constructed to assure that the traffic operations are satisfactory.





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Loma Linda, CA, 92354

Issue Dates:

03.25.14 Preliminary  
07.14.14 Planning Submittal

**Proposed Landscape Plan**

Scale: 1" = 20'

L-1

14-101 ARS

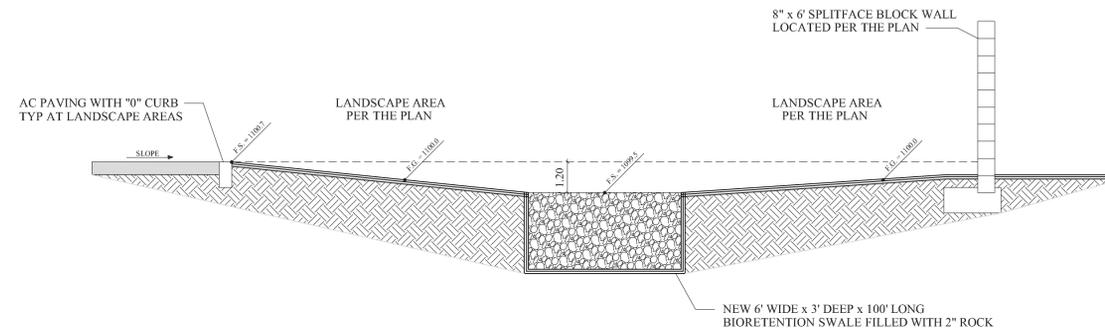
CONSTRUCTION NOTES:

- ① NEW CONCRETE DRIVEWAY APPROACH - 6" THICK CONCRETE PER CITY OF LOMA LINDA STANDARD DRAWING NO. R4.1
- ② EXISTING POWER POLE - 18" DIAMETER
- ③ INSTALL NEW TRASH ENCLOSURE PER CITY OF LOMA LINDA STANDARD DRAWING NO. T-2
- ④ NEW AC DRIVEWAY - 4" AC OVER 6" COMPACTED CLASS II BASE
- ⑤ NEW AC PARKING - 4" AC OVER 6" COMPACTED CLASS II BASE
- ⑥ NEW LANDSCAPE AREAS
- ⑦ NEW CONCRETE WALKWAYS - 4" CONCRETE OVER 6" COMPACTED CLASS II BASE
- ⑧ NEW BLOCK WALL PILASTERS WITH ROCK VENEER WITH WROUGHT IRON FENCE AT FRONT
- ⑨ NEW 8" BLOCK BY 6 FOOT HIGH WALL PER DETAIL
- ⑩ EXISTING CHAIN LINK FENCE
- ⑪ 6" WIDE FLUSH CONCRETE CURB AT PAVING AT REAR LANDSCAPE AREAS TYPICAL PER DETAIL
- ⑫ PAIR OF 12" WIDE WROUGHT IRON GATES
- ⑬ NEW 6" HIGH CONCRETE CURB
- ⑭ 3' DIAMETER BY 6' DEEP DRY WELL FILLED WITH 2" ROCK
- ⑮ NEW CONCRETE SIDEWALKS - 5' WIDE BY 4" THICK PER CITY OF LOMA LINDA STANDARD DRAWING NO. R3.2
- ⑯ 6' WIDE x 3' DEEP x 100' LONG BIORETENTION AREA FILLED WITH 2" ROCK
- ⑰ EXISTING STREET LAMP
- ⑱ CONDENSER FOR A.C.

NEW BOULDERS TO BE 2' TO 4' DIAMETER WITH 1/4 OF THE DIAMETER BURIED

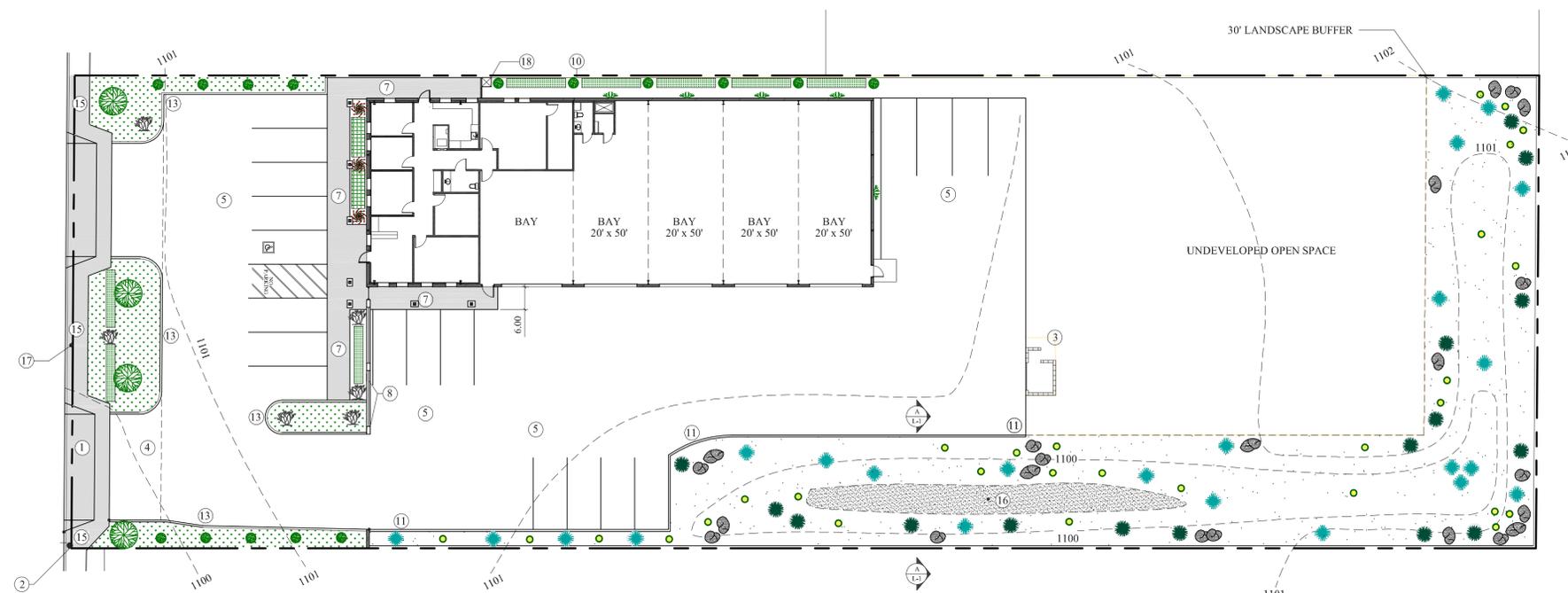


① TYPICAL LANDSCAPE BOULDER DETAIL



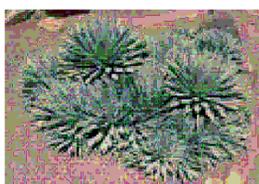
SECTION "A-A" THROUGH BIORETENTION SWALE AREA

NOTE: ALL LANDSCAPE AREAS TO BE PROVIDED WITH A FULL COVERAGE PERMANENT AUTOMATIC SPRINKLER SYSTEM.



LANDSCAPE NOTES:

- 2' TO 4' DIAMETER BOULDERS - SEE DETAIL 1
- BLUE YUCCA RIGIDA
- AGAVE MACROACANTHA
- RAINBOW HEDGEHOG CACTUS (ECHINOCEREUS RIGIDISSIMUS)
- BRAZILLIAN PLUME FOR FULL SHADE
- SHADE LOVING FERNS
- BLUE SPRUCE - 48" BOX
- ITALIAN CYPRUS - 36" BOX
- BIRDS OF PARADISE - 12" BOX
- BOX HEDGE - 12" BOX SPACED AT 24"
- ARTIFICIAL GRASS GROUND COVER
- IVY - SPACED AT 24"



AGAVE MACROACANTHA



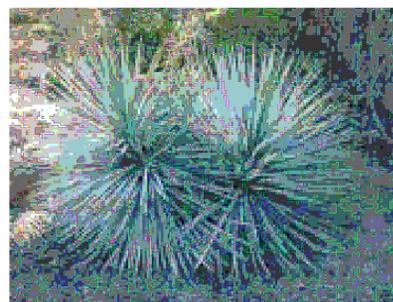
BIRD OF PARADISE



BRAZILLIAN PLUME



RAINBOW HEDGEHOG CACTUS



BLUE YUCCA RIGIDA

**Proposed Landscape Plan**





**GRADING NOTES**

1. ANY MODIFICATIONS OF OR CHANGES IN APPROVED GRADING PLANS MUST BE APPROVED BY THE CITY BUILDING OFFICIAL.
2. A COPY OF THE GRADING PERMIT AND APPROVED GRADING PLAN MUST BE IN THE POSSESSION OF A RESPONSIBLE PERSON AND AVAILABLE AT THE SITE WHILE WORK IS IN PROGRESS.
3. ENGINEER MUST SET GRADE STAKES FOR ALL DRAINAGE DEVICES AND OBTAIN INSPECTION APPROVAL BEFORE POURING.
4. PROVISIONS SHALL BE MADE FOR CONTRIBUTORY DRAINAGE AT ALL TIMES.
5. SECURE PERMISSION FROM CITY ENGINEER, EASEMENT GRANTEE, STATE HIGHWAY DEPARTMENT, AND/OR HOMEOWNERS ASSOCIATIONS FOR CONSTRUCTION, GRADING, AND/OR DISCHARGE OF DRAINAGE WITHIN STREET RIGHT-OF-WAY.
6. GRADING SHALL NOT BE STARTED WITHOUT FIRST NOTIFYING THE GRADING INSPECTOR.
7. CUT AND FILL SLOPES SHALL BE NO STEEPER THAN 1 UNIT VERTICAL TO 2 UNITS HORIZONTAL (1:2), EXCEPT WHERE SPECIFICALLY APPROVED
8. FILLS SHALL BE COMPACTED THROUGHOUT TO A MINIMUM OF 90% RELATIVE COMPACTION. AGGREGATE BASE FOR ASPHALTIC AREAS SHALL BE COMPACTED TO A MINIMUM OF 95% RELATIVE COMPACTION. NO ROCKS GREATER THAN 6" IN DIA. MAY BE PLACED IN FILL.
9. AREAS TO RECEIVE FILL SHALL BE PROPERLY PREPARED AND APPROVED IN WRITING BY THE SOIL ENGINEER AND THE BUILDING OFFICIAL PRIOR TO PLACING FILL.
10. FILL SHALL BE BENCHED INTO COMPETENT MATERIAL.
11. ALL EXISTING FILLS SHALL BE APPROVED BY THE BUILDING OFFICIAL OR REMOVED PRIOR TO PLACING ADDITIONAL FILLS.
12. STOCK PILING OF EXCESS MATERIAL SHALL BE APPROVED BY THE BUILDING OFFICIAL PRIOR TO EXCAVATION.
13. CLEAR AND REMOVE FROM SITE ALL DEBRIS, EXCEPTING THE EXISTING TREES IN DESIGNATED LANDSCAPE AREAS; STRIP SITE OF VEGETATION, LARGE ROOTS, SURFACE TRASH AND ROCKS. UNDER NO CIRCUMSTANCES SHALL THE CLEAN BEAR SITES BE USED FOR DISPOSAL. VIOLATORS ARE SUBJECT TO A \$500 FINE.
14. ALL TRENCH BACKFILLS SHALL BE TESTED AND APPROVED BY THE SOIL ENGINEER.
15. THE ENGINEERING GEOLOGIST AND SOIL ENGINEER SHALL, AFTER CLEARING AND PRIOR TO THE PLACEMENT OF FILL IN CANYONS, INSPECT EACH CANYON FOR AREAS OF ADVERSE STABILITY AND TO DETERMINE THE PRESENCE OR ABSENCE OF SUBSURFACE WATER OR SPRING FLOW. IF NEEDED, SUBDRAINS WILL BE DESIGNED AND CONSTRUCTED PRIOR TO THE PLACEMENT OF FILL IN EACH RESPECTIVE CANYON.
16. SUBDRAIN OUTLETS SHALL BE COMPLETED AT THE BEGINNING OF THE SUBDRAIN CONSTRUCTION.
17. THE EXACT LOCATION OF THE SUBDRAINS SHALL BE SURVEYED IN THE FIELD FOR LINE/GRADE AND REFLECTED ON AS-GRADE PLANS.
18. ALL CUT SLOPES SHALL BE INVESTIGATED BOTH DURING AND AFTER GRADING BY THE ENGINEERING GEOLOGIST TO DETERMINE IF ANY SLOPE STABILITY PROBLEM EXISTS. SHOULD EXCAVATION DISCLOSE ANY GEOLOGICAL HAZARDS OR POTENTIAL GEOLOGICAL HAZARDS, THE ENGINEERING GEOLOGIST SHALL SUBMIT RECOMMENDED REMEDIATION THE BUILDING OFFICIAL FOR APPROVAL.
19. WHERE SUPPORT OR BUTTRESSING OF CUT AND NATURAL SLOPES IS DETERMINED TO BE NECESSARY BY THE ENGINEERING GEOLOGIST AND SOIL ENGINEER, THE SOIL ENGINEER SHALL SUBMIT DESIGN, LOCATIONS AND CALCULATIONS TO THE BUILDING OFFICIAL PRIOR TO CONSTRUCTION. THE ENGINEERING GEOLOGIST AND SOIL ENGINEER SHALL INSPECT AND CONTROL THE CONSTRUCTION OF THE BUTTRESSING AND CERTIFY TO THE STABILITY OF THE SLOPE AND ADJACENT STRUCTURES UPON COMPLETION.
20. WHEN CUT PADS ARE BROUGHT TO NEAR GRADE, THE ENGINEERING GEOLOGIST SHALL DETERMINE IF THE BEDROCK IS EXTENSIVELY FRACTURED OR FAULTED AND WILL READILY TRANSMIT WATER. IF CONSIDERED NECESSARY BY THE ENGINEERING GEOLOGIST AND SOIL ENGINEER, A COMPACTED FILL BLANKET WILL BE PLACED.
21. THE ENGINEERING GEOLOGIST SHALL PERFORM PERIODIC INSPECTIONS AND SUBMIT A COMPLETE REPORT AND MAP UPON COMPLETION OF THE ROUGH GRADING.
22. THE COMPACTION REPORT AND APPROVAL FROM THE SOIL ENGINEER SHALL INDICATE THE TYPE OF FIELD TESTING PERFORMED. EACH TEST SHALL BE IDENTIFIED WITH THE METHOD OF OBTAINING THE IN-PLACE DENSITY, WHETHER SAND CONE OR NUCLEAR GAUGE, AND SHALL BE SO NOTED FOR EACH TEST.
23. THE GRADING CONTRACTOR SHALL SUBMIT A WRITTEN STATEMENT VERIFYING THAT THE WORK DONE UNDER HIS DIRECTION WAS PERFORMED IN ACCORDANCE WITH THE APPROVED PLANS AND REQUIREMENTS OF APPENDIX 33 OF THE CITY OF LOMA LINDA BUILDING CODE OR DESCRIBING ALL VARIANCES FROM THE APPROVED PLANS AND REQUIREMENTS OF THE CODE.
24. THE UNDERSIGNED DESIGN ENGINEER VERIFIES THAT THIS GRADING PLAN WAS PREPARED UNDER MY SUPERVISION IN ACCORDANCE WITH THE CITY OF LOMA LINDA BUILDING CODE. ALL SOILS ENGINEER AND ENGINEERING GEOLOGY RECOMMENDATIONS WERE INCORPORATED IN THE PLAN. (MUST BE SIGNED AND DATED BY THE DESIGN ENGINEER.)
25. GRADING OPERATIONS MUST BE CONDUCTED UNDER PERIODIC GEOLOGICAL INSPECTION WITH INSPECTION REPORTS TO BE SUBMITTED TO THE BUILDING DEPARTMENT.
26. EXPORT SOIL MUST BE TRANSPORTED TO A LEGAL DUMP OR TO A PERMITTED SITE SHOWN CLEARLY ON APPROVED PLANS.
27. SLOPES SHALL BE PLANTED WITH AN APPROVED PLANT MATERIAL AND PROVIDED WITH AN APPROVED IRRIGATION SYSTEM, UNLESS AN ALTERNATIVE HAS BEEN APPROVED BY THE CITY.
28. ANY CONTRACTOR PERFORMING WORK ON THIS PROJECT SHALL FAMILIARIZE HIMSELF WITH THE SITE AND SHALL BE SOLELY RESPONSIBLE FOR ANY DAMAGE TO EXISTING FACILITIES RESULTING DIRECTLY OR INDIRECTLY FROM HIS OPERATION, WHETHER OR NOT SUCH FACILITIES ARE SHOWN ON THESE PLANS. PUBLIC STREETS SHALL BE KEPT CLEAN FROM DIRT AND/OR DEBRIS. THE GRADING CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS INCURRED IN STREET CLEANING NECESSITATED BY HIS OPERATION.
29. THE ENGINEER SHALL SUBMIT A LETTER OF CERTIFICATION TO THE BUILDING OFFICIAL STATING THAT THE GRADING WAS DONE IN COMPLIANCE WITH THE APPROVED GRADING PLAN.
30. ALL ROADS USED BY CONSTRUCTION TRAFFIC SHALL BE KEPT CLEAR OF CONSTRUCTION DEBRIS, RELATED TO THE SITE CONSTRUCTION. IF DEBRIS FROM THE PROJECT IS LEFT ON THE ROAD OVERNIGHT, THE CITY MAY CLEAN THE ROAD AND CHARGE THE PERMIT HOLDER A MINIMUM FEE OF \$100.00 PLUS \$100 PER HOUR CLEANING THE ROAD.
31. PRELIMINARY SOIL AND GEOLOGY REPORTS AND ALL SUBSEQUENT REPORTS, AS APPROVED BY THE CITY OF LOMA LINDA, ARE CONSIDERED A PART OF THE APPROVED GRADING PLAN. ALL RECOMMENDATIONS CONTAINED ARE TO BE COMPLIED WITH OR REVISIONS SUBMITTED FOR REVIEW.
32. ALL EXISTING DRAINAGE COURSES THROUGH THIS SITE SHALL REMAIN OPEN UNTIL FACILITIES TO HANDLE STORM WATER ARE APPROVED AND FUNCTIONAL, HOWEVER, IN ANY CASE, THE PERMITTEE SHALL BE HELD LIABLE FOR ANY DAMAGE DUE TO OBSTRUCTING NATURAL DRAINAGE PATTERNS.
33. ROOF GUTTERS SHALL BE INSTALLED TO PREVENT ROOF DRAINAGE FROM FALLING ON MANUFACTURED SLOPES. GUTTERS SHALL BE CONNECTED TO NON-EROSIVE PIPING OR OTHER METHOD ACCEPTABLE TO THE BUILDING OFFICIAL.
34. ANY EXCAVATIONS ADJACENT TO OTHER PROPERTY OR STRUCTURES ARE SUBJECT TO THE PROVISIONS OF CALIFORNIA CIVIL CODE, SECTION 832, AND IS THE RESPONSIBILITY OF THE PERMITTEE AND/OR OWNER.

**PLANTING AND IRRIGATION NOTES**

35. ALL CUT AND FILL SLOPES WILL BE PLANTED WITH AN APPROVED GROUND COVER AND PROVIDED WITH AN IRRIGATION SYSTEM AS SOON AS PRACTICAL DURING GRADING. IN ADDITION TO THE GROUND COVER, PLANTS SHALL BE INSTALLED ON ALL SLOPES. ALL PLANTING SHALL BE OF A TYPE APPROVED BY THE CITY.
36. THE PLANS FOR A DESIGNED IRRIGATION SYSTEM FOR FULL COVERAGE OF ALL PORTIONS OF THE SLOPES SHALL BE SUBMITTED AND APPROVED PRIOR TO ROUGH GRADING APPROVAL BY THE CITY.
37. PLANTING AND IRRIGATION PLANS FOR SLOPES MUST BE PREPARED AND SIGNED BY A CIVIL ENGINEER OR LANDSCAPE ARCHITECT.
38. FINISH GRADING WILL BE COMPLETED AND APPROVED AND SLOPE PLANTING AND IRRIGATION SYSTEMS INSTALLED BEFORE OCCUPANCY OF BUILDINGS.

**EROSION CONTROL PROVISIONS CERTIFICATION**

39. STORM WATER MANAGEMENT PLANS INCORPORATING ALL THE PROVISIONS OF THE CITY OF LOMA LINDA MUNICIPAL CODE SHALL BE SUBMITTED AND APPROVED PRIOR TO PERMIT ISSUANCE. SUCH PLANS ARE TO INCLUDE CONSTRUCTION AND POST CONSTRUCTION PHASE PROVISIONS REFLECTING "BEST MANAGEMENT PRACTICES".
40. SPECIFY ON PLANS, IN CASE OF EMERGENCY CALL:  
WORK TELEPHONE NO. \_\_\_\_\_  
HOME TELEPHONE NO. \_\_\_\_\_
41. EQUIPMENT AND WORKERS FOR EMERGENCY WORK SHALL BE MADE AVAILABLE AT ALL TIMES DURING THE RAINY SEASON. NECESSARY MATERIALS SHALL BE AVAILABLE ON-SITE AND STOCKPILED AT CONVENIENT LOCATIONS TO FACILITATE RAPID CONSTRUCTION OF TEMPORARY DEVICES WHEN RAIN IS IMMINENT.
42. EROSION CONTROL DEVICES SHALL NOT BE MOVED OR MODIFIED WITHOUT THE APPROVAL OF THE CITY BUILDING OFFICIAL.
43. STOCKPILED MATERIALS SHALL BE PLACED TO BE ACCESSIBLE BY VEHICLE DURING PERIODS OF PRECIPITATION AND PROTECTED FROM PRECIPITATION AND RUNOFF AT THE END OF EACH WORKING DAY.
44. ALL REMOVABLE EROSION PROTECTIVE DEVICES SHALL BE IN PLACE AT THE END OF EACH WORKING DAY.
45. AFTER A RAINSTORM ALL SILT AND DEBRIS SHALL BE REMOVED FROM STREETS, CHECK BERMS, AND BASINS. NO STANDING WATER SHALL BE LEFT OPEN IN TRENCHES.
46. GRADED AREAS ON THE PERMITTED AREA PERIMETER MUST DRAIN AWAY FROM THE FACE OF SLOPES AT THE CONCLUSION OF EACH WORKING DAY. DRAINAGE TO BE DIRECTED TOWARD DESILTING FACILITIES.
47. ISSUANCE OF A GRADING PERMIT DOES NOT ELIMINATE THE NEED FOR PERMITS FROM OTHER AGENCIES WITH REGULATORY RESPONSIBILITIES FOR CONSTRUCTION ACTIVITIES ASSOCIATED WITH THE WORK AUTHORIZED ON THIS PLAN.
48. EROSION CONTROL MEASURES AND PLANTING SHALL BE INSTALLED AND MAINTAINED AS SOON AS PRACTICAL, IN AREAS NOT SUBJECT TO FREQUENT TRAFFIC.
49. ALL EROSION CONTROL, DESILTING BASINS, SILT FENCES, AND OTHER STORM WATER AND/OR EROSION CONTROL FEATURES SHALL BE INSPECTED BY THE RESPONSIBLE PARTY, ON A WEEKLY BASIS, CLEANED, AND MAINTAINED TO ENSURE THESE FEATURES FUNCTION AS DESIGNED.
50. THE UNDERSIGNED CIVIL ENGINEER AND CONTRACTOR SHALL INSPECT THE EROSION CONTROL WORK AND ENSURE THAT THE WORK IS IN ACCORDANCE WITH THE APPROVED PLANS.

SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_  
CONTRACTOR

SIGNATURE: \_\_\_\_\_ DATE: \_\_\_\_\_  
ENGINEER

**Grading Notes**  
STANDARD NOTES FOR GRADING AND EROSION CONTROL

**PROJECT ENGINEER**



**PROJECT OWNER**

**Tryco General Engineering**  
P.O. Box 391  
Rim Forest, CA, 92378  
909.337.336

**PROJECT LOCATION**

**25449 Redlands Blvd  
Loma Linda, CA. 92354**

**Issue Dates:**

<b>03.25.14</b>	<b>Preliminary</b>
<b>07.14.14</b>	<b>Planning Submittal</b>

**Standard  
Grading Notes**

**G-2**



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25449 Redlands Blvd  
 Loma Linda, CA, 92354

Issue Dates:

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07.14.14	Planning Submittal

Floor Plan

Scale: 3/16" = 1'-0"

A-1

14-101 ARS

EXIT LOCATIONS AND SIGNAGE - FIRE EXTINGUISHERS

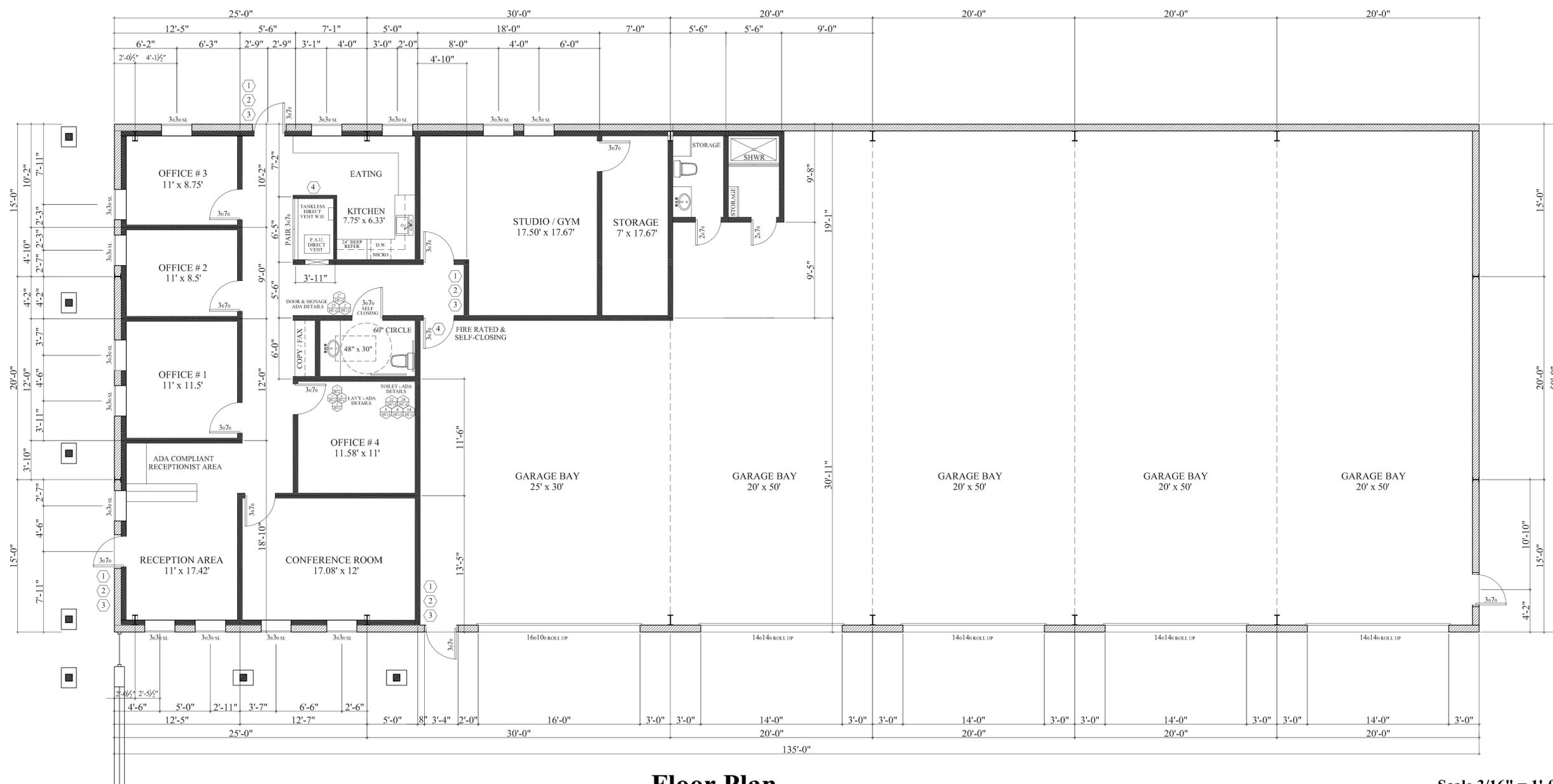
- ① EXIT DOORS - 36" MINIMUM WIDTH
- ② INDICATES EXIT SIGN / DIRECTIONAL ARROW
- ③ INDICATES LOCATIONS FOR EMERGENCY LIGHTS
- ④ FIRE EXTINGUISHER

EXIT NOTES:

- ① DOORS SHALL BE OPENABLE FROM THE INSIDE WITHOUT THE USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT.
- ② KEY LOCKING HARDWARE MAY BE USED AT THE MAIN ENTRIES, PROVIDED IT IS READILY DISTINGUISHABLE AS LOCKED AND A SIGN IN CONTRASTING LETTERS OF 1" HIGH OR MORE IS PROVIDED AT THE DOORS STATING: "THIS DOOR TO REMAIN UNLOCKED DURING BUSINESS HOURS"
- ③ THE MEANS OF EGRESS SHALL BE ILLUMINATED WITH AT LEAST ONE-FOOT CANDLE AT THE WALKING SURFACE LEVEL.
- ④ PROVIDE A SEPARATE SOURCE OF POWER FOR MEANS OF EGRESS ILLUMINATION
- ⑤ GLAZING IN INGRESS AND EGRESS DOORS SHALL BE TEMPERED.

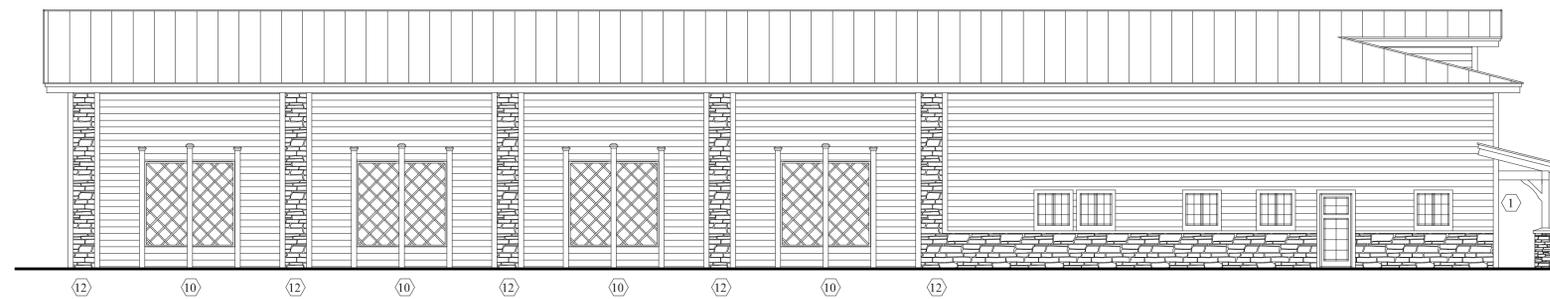
▨ = NEW 8" EXTERIOR SHEET METAL WALLS

▬ = NEW 2 x 4 INTERIOR AND 2 x 6 EXTERIOR WALLS



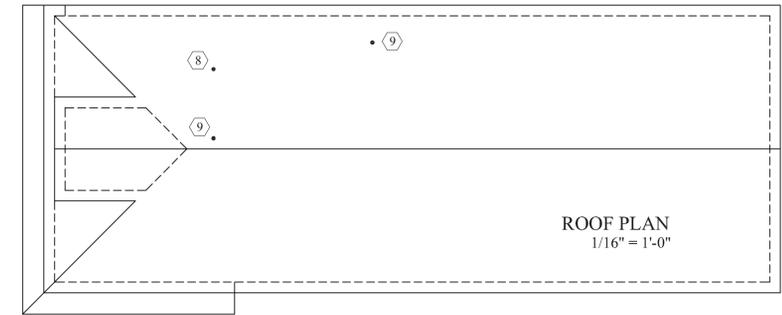
Floor Plan

Scale 3/16" = 1'-0"



New East Elevation - Left

Scale 1/8" = 1'-0"



New South Elevation - Rear

Scale 1/8" = 1'-0"

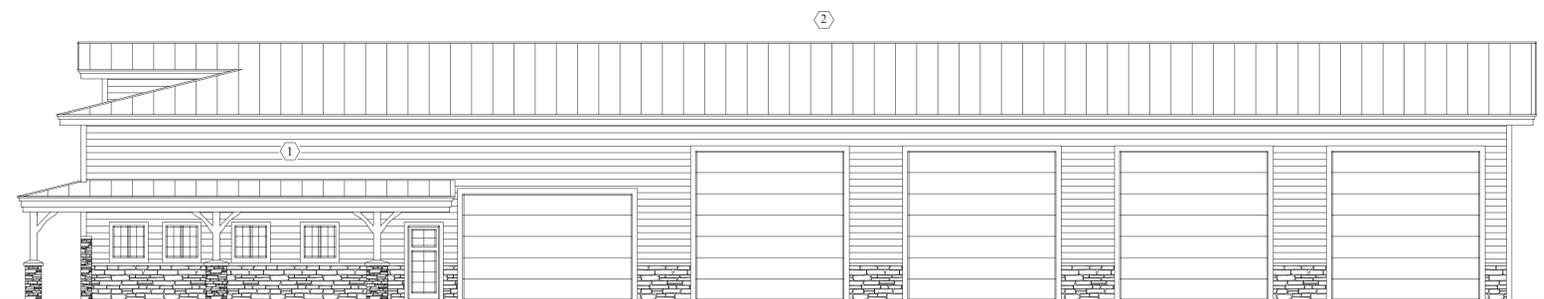


New North Elevation - Redlands Blvd

Scale 1/8" = 1'-0"

CONSTRUCTION KEYNOTES

- ① 1 x 8 LAPPED HORIZONTAL WOOD SIDING WITH 2 x WOOD TRIM
- ② METAL ROOFING - TYPICAL
- ③ BLOCK PILASTERS WITH ROCK VENEER AT FRONT
- ④ 5' HIGH WROUGHT IRON FENCING AS SHOWN ON PLAN
- ⑤ 8' x 4' SIGN AREA
- ⑥ 3' x 5' MAN GATE
- ⑦ PAIR 12' x 5' DRIVEWAY GATES
- ⑧ MECHANICAL VENTING
- ⑨ PLUMBING VENTS (MAY BE COMBINED)
- ⑩ STEEL LATTICE MOUNTED ON 6 x POSTS FOR IVY LANDSCAPE
- ⑪ FAUX DORMER WITH RECESSED PANELS OF VERTICAL SIDING
- ⑫ FAUX ROCK COLUMNS WITH LIGHT-WEIGHT, PUMICE-TYPE ROCK VENEER



New West Elevation - Right

Scale 1/8" = 1'-0"

PROJECT ENGINEER

ARS  
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PROJECT OWNER

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PROJECT LOCATION

25449 Redlands Blvd  
Loma Linda, CA. 92354

Issue Dates:  
05.09.14 Planning

Rendering  
North-West  
Corner



Rendering No. 1: North-West Corner



**Sahara Tan Metal Roof**



**Sahara Tan Wood Fascia**



**Cappuccino Wood Trim**



**Walnut Brown Wood Siding**

**Cappuccino Stone Cap**



**Mixed Brown Stone Veneer Wainscot**



MATERIAL AND COLOR CHART			
	SIZE	MATERIAL	COLOR
Siding	1"x8"	Doug Fir Lap Siding	Walnut
Trim	1"x4"	Doug Fir Trim	Cappuccino
Roof	na	Standing Seam Metal	Sahara Tan
Fascia	2"x10"	Doug Fir Fascia	Sahara Tan
Wainscot	3' high	Brown Stone Veneer	Mixed Browns
Wainscot Cap	3"	Stone Wainscot Cap	Cappuccino
Pilasters	2'x2'x3'	Block With Brown Stone Veneer	Mixed Browns
Canopy Columns	6"x6"	Doug Fir Posts and Braces	Cappuccino

PROJECT ENGINEER



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Issue Dates:  
05.09.14 Planning

Materials and Colors

## Planning Commission

Regular Meeting of September 3, 2014

A regular meeting of the Planning Commission was called to order by Chairman Nicholson at 7:00 p.m., Wednesday, September 3, 2014, in the City Council Chambers, 25541 Barton Road, Loma Linda, California.

**Commissioners Present:** John Nichols, Chairman  
Carolyn Palmieri  
Nikan Khatibi  
Ryan Gallant  
Jay Nelson

**Staff Present:** Konrad Bolowich, Assistant City Manager  
Richard Holdaway, City Attorney  
Guillermo Arreola, Associate Planner

Chairman Nichols led the Pledge of Allegiance. No items were added or deleted; no public participation comments were offered upon invitation of the Chairman.

**PC 14-19 – CONDITIONAL USE PERMIT PLAN (CUP) NO. 14-105** - A request to install a new 6' by 12' foot single-face digital cabinet sign on an existing concrete sign base for the Ronald McDonald House located 11365 Anderson Street on the southeast corner of Barton Road and Anderson Street. The subject site is located in the Institutional (I) Zone.

Chairman Nichols opened the Public Hearing.

Planner Arreola presented the staff report into evidence, reviewing the Site Plan, existing settings, the proposed digital sign with proposed elevations, zoning, and added and revised Conditions of Approval.

Discussion ensued with Planning Commissioners and Staff regarding:

- Reason for public service information – it would be items such as Childhood Cancer Awareness Week and similar items that pertain to the Ronald McDonald House mission.
- Compliments to the Ronald McDonald House, very appropriate for the community to support.
- Concern regarding angle of sign and the distraction to drivers as it is a busy intersection, both with vehicles and pedestrians - the flip rate and brightness matches the CalTrans standards for signs on the freeway, as well as matches the flip rate and brightness of the digital sign at Barton and Loma Linda Drive.
- Level of brightness – brightness is set pursuant to standards and is monitored; brightness is also automated to adjust with the natural light. It was suggested to add as a Condition of Approval that applicant/Ronald McDonald House work with staff regarding brightness should complaints arise.

Upon invitation of the Chairman, Dick Wiley addressed the Commission regarding use of the sign for public service messages, i.e. street/lane closures for street rehabilitation/construction.

Planner Arreola indicated that the applicant had requested a change to the Conditions of Approval, that Condition #2 be modified to replace “applicant” with “Ronald McDonald House Charities of Southern California – Loma Linda Ronald McDonald House”.

Planner Arreola further indicated a communication from a citizen not in favor of the digital sign, would like to see City keep signs tasteful, similar to Westlake Village or Carmel.

Chairman Nichols closed the Public Hearing.

**Motion by Nelson, seconded by Gallant and carried unanimously to approve Conditional Use Permit No. 14-105 subject to the Conditions of Approval with the modification to Condition #2 and addition that applicant/Ronald McDonald House work with Staff regarding brightness of the sign should complaints be received as indicated above.**

**PC 14-20 – PRECISE PLAN OF DESIGN (PPD) NO. 14-083** - A proposal to construct a 3,260 square foot commercial/retail building for restaurant purposes for property located at 10342 Mountain View Avenue. This project is associated with the recently approved Market Place development, which included a gasoline service station, convenience store, and drive-thru car wash, and a commercial building pad on the subject site. The project is located in the East Valley Corridor Specific Plan-General Commercial Zone.

Chairman Nichols clarified that PPD No. 14-083 has been approved by the City Council, subject pad and use was included in that PPD, so the role of the Commission in this particular instance was to act more in the capacity of design review.

Chairman Nichols opened the Public Hearing.

Planner Arreola presented the staff report into evidence, indicating what is proposed is smaller than originally approved and traffic impacts therefore reduced. He indicated additions to the Conditions of Approval to include a reciprocal parking agreement with the convenience store and the applicant work with staff to add bike racks.

Discussion ensued with Planning Commissioners and Staff regarding:

- Flow of traffic through the facility appears congested, with cars driving through, others backing out, fuel deliveries, etc. – the proposal complies with backing and parking standards; no real issue with fuel trucks blocking access as deliveries are typically once a day at night.
- Landscaping on provided Conceptual Landscape Plan not consistent throughout the project – landscaping indicated on the provided Plan addressed only the additional landscaping provided with this addition.
- It was suggested that doors to the patio portion of each restaurant be glass to tie the patio area to the restaurant and perhaps some architectural design to articulate the exit; applicant indicated his willingness to work with staff to address the concerns.

Upon invitation of the Chairman, Glenn Elssmann, resident of Loma Linda and local developer, addressed the Commission, indicated he has worked with the applicant on other projects, and is in favor of the project as it is a good addition to Loma Linda.

**Motion by Khatibi, seconded by Palmieri and carried unanimously to approve PPD No. 14-083 subject to the Conditions of Approval as amended to include a reciprocal parking agreement and applicant to work with Staff regarding the addition of bike racks and to address concerns noted above regarding doors to patio areas for each restaurant site.**

Mr. Wardeh, applicant, thanked the Commission and Staff for their input on this project.

**PC 14-21 – APPROVAL OF MINUTES – July 2, 2014**

**Motion by Palmieri, seconded by Gallant and carried unanimously to approve the minutes of July 2, 2014 as presented.**

**REPORTS BY PLANNING COMMISSIONERS**

Commissioner Gallant commented about panhandling on the medians and if there was something the City could do to address the situation.

**REPORTS BY STAFF**

Assistant City Manager Bolowich provided a brief update on the following:

- Stewart Street wrapping up with ribbon cutting scheduled for Tuesday, September 9.
- Campus Street pedestrian bridge was delayed on delivery this morning and impacted rush hour; however it is now in place and should be open for use in the next month or so.
- Holiday Inn project on Redland Boulevard is pouring footings.
- VA Clinic is also pouring footings; Bryn Mawr street extension is progressing as well
- Sunday, September 7 the Loma Linda and Colton Fire Departments will host a 9/11 Memorial Ceremony, to include a motorcycle ride from Quaid Harley Davidson to Fire Station 251.
- The Cole House at Heritage Park is in the process of renovation, with a substantial portion of the work complete.

Upon invitation of Chairman Nichols, Viorica Carmona, 25638 Rosewood Drive, Loma Linda and Nnodim Nod Nkwocha, 10396 Spade Drive, Loma Linda, addressed the Commission expressing concern that their houses were going to be taken from them for commercial development. Assistant City Manager Bolowich and Chairman Nichols assured them there was no plan by the City to take any homes; that while that area was, pursuant to the General Plan, zoned commercial, if their houses were sold it would be because they as homeowners wanted to sell.

The meeting adjourned at 7:40 p.m.

Minutes approved at the meeting of

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Barbara Nicholson  
Deputy City Clerk