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## **4. ENVIRONMENTAL IMPACT ANALYSIS**

### **9. TRANSPORTATION AND TRAFFIC**

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#### **4.9.1 INTRODUCTION**

The following section addresses the Proposed Project's impact on transportation and traffic based on the Traffic Study titled, *Traffic Impact Analysis: Dockweiler Drive Alignment Project, Santa Clarita, CA*, prepared by David Evans and Associates, dated August 8, 2017. The scope and methodology of this analysis was determined in conjunction with the City of Santa Clarita. The complete Traffic Study is included in Appendix H to this Draft EIR.

The purpose of the Dockweiler Drive Alignment Project is to ascertain the feasibility of the General Plan alignment for Dockweiler Drive, which identifies the connection of Dockweiler Drive to Lyons Avenue at Railroad Avenue. The Project would extend Lyons Avenue from its existing terminus at Railroad Avenue on the west to future Master's University Master Plan Dockweiler extension to the east of railroad crossing consistent with the Circulation Element. This Project would include the consideration of a new at-grade rail crossing at Lyons Avenue and Railroad Avenue and includes the closure of the 13<sup>th</sup> Street rail crossing.

#### **4.9.2 ENVIRONMENTAL SETTING**

##### **Existing Conditions**

The City of Santa Clarita is one of the fastest growing cities in Los Angeles County. The City's General Plan includes several large developments in the area, and traffic volumes are expected to increase significantly. As such the City of Santa Clarita has identified a Project to extend Dockweiler Drive to Lyons Avenue. The proposed Dockweiler Drive Alignment Project is located in the City of Santa Clarita, approximately 35 miles northwest of the City of Los Angeles, within the Newhall community.

Sierra Highway and the SR-14 (Antelope Valley) Freeway provide a boundary for the study area along the eastern side. Through traffic access on Placerita Canyon Road is restricted with a gate entrance west of Sierra Highway. Placerita Canyon Road currently is the primary connection to the Master's University and residents to the north. Newhall Avenue on the southern boundary of the study area provides a direct connection for cross valley traffic and connects Sierra Highway and Railroad Avenue. The UP/Metrolink Railroad line restricts access to the west with three existing at-grade railroad crossings located at 13<sup>th</sup> Street, Market Street, and Newhall Avenue.

The extension of Lyons Avenue to Dockweiler Drive across the existing Metrolink line has been identified by the City as one of five key transportation projects. The alignment is part of the City's General Plan and consistent with the goals of the Old Town Newhall Specific Plan, Santa Clarita Valley Consolidated Traffic Model (SCVCTM), and the Compass Blueprint Plan.

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### ***Existing Street System***

*Dockweiler Drive* is designated as an east-west Secondary Highway from Sierra Highway to Railroad Avenue on the City of Santa Clarita Circulation Map Joint Highway Plan. The existing portion of Dockweiler Drive consists of one and two lanes in each direction with a landscaped median and limited parking throughout the study area. Dockweiler Drive is used as the primary access to single- and multi-family residences.

*State Route 14 Freeway* (SR 14) provides regional access within the study area. The freeway is a four-lane (two in each direction) facility with interchange access at Placerita Canyon Road and Newhall Avenue.

*Lyons Avenue* is designated as an east-west major highway west of Railroad Avenue and Secondary Highway east of Railroad Avenue on the City of Santa Clarita Circulation Map Joint Highway Plan. Three lanes in each direction are provided with traffic signals and left turn channelization at major intersections.

*Newhall Avenue* is designated as a north-south secondary highway from Lyons Avenue to Railroad Avenue with one lane in each direction. From Railroad Avenue to SR-14, Newhall Avenue is designated as a major highway with three northbound lanes and three southbound lanes south of Railroad Avenue. Newhall Avenue roadway designation is identified on the City of Santa Clarita Circulation Map Joint Highway Plan.

*Railroad Avenue* (formerly San Fernando Road) is a north-south major highway from Magic Mountain Parkway to Lyons Avenue and a secondary highway from Lyons Avenue to Newhall Avenue. This roadway provides two lanes in each direction and limited parking throughout the study area. Railroad Avenue roadway designation is identified on the City of Santa Clarita Circulation Map Joint Highway Plan.

*Sierra Highway* is an old alignment of SR-14 from Los Angeles to Mojave. It is designated as a north-south major highway on the City of Santa Clarita Map Joint Highway Plan. It is a four lane (two in each direction) with traffic signals and left turn channelization at major intersections.

*Placerita Canyon Road* is an east-west local roadway. This roadway provides a gate at the eastern entrance. The gate provides restrictive access to residents of the Placerita Canyon neighborhood.

*13<sup>th</sup> Street* is an east-west unimproved local roadway. This roadway provides access to The Master's University and the Placerita Canyon neighborhood via its intersection with Railroad Avenue. One lane is provided in each direction.

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## Study Intersections

A total of seventeen study intersections have been identified for analysis based on potential traffic impacts to the area roadways. Figure 4.9-1 shows the locations of the study intersections. The intersections identified for analysis are as follows:

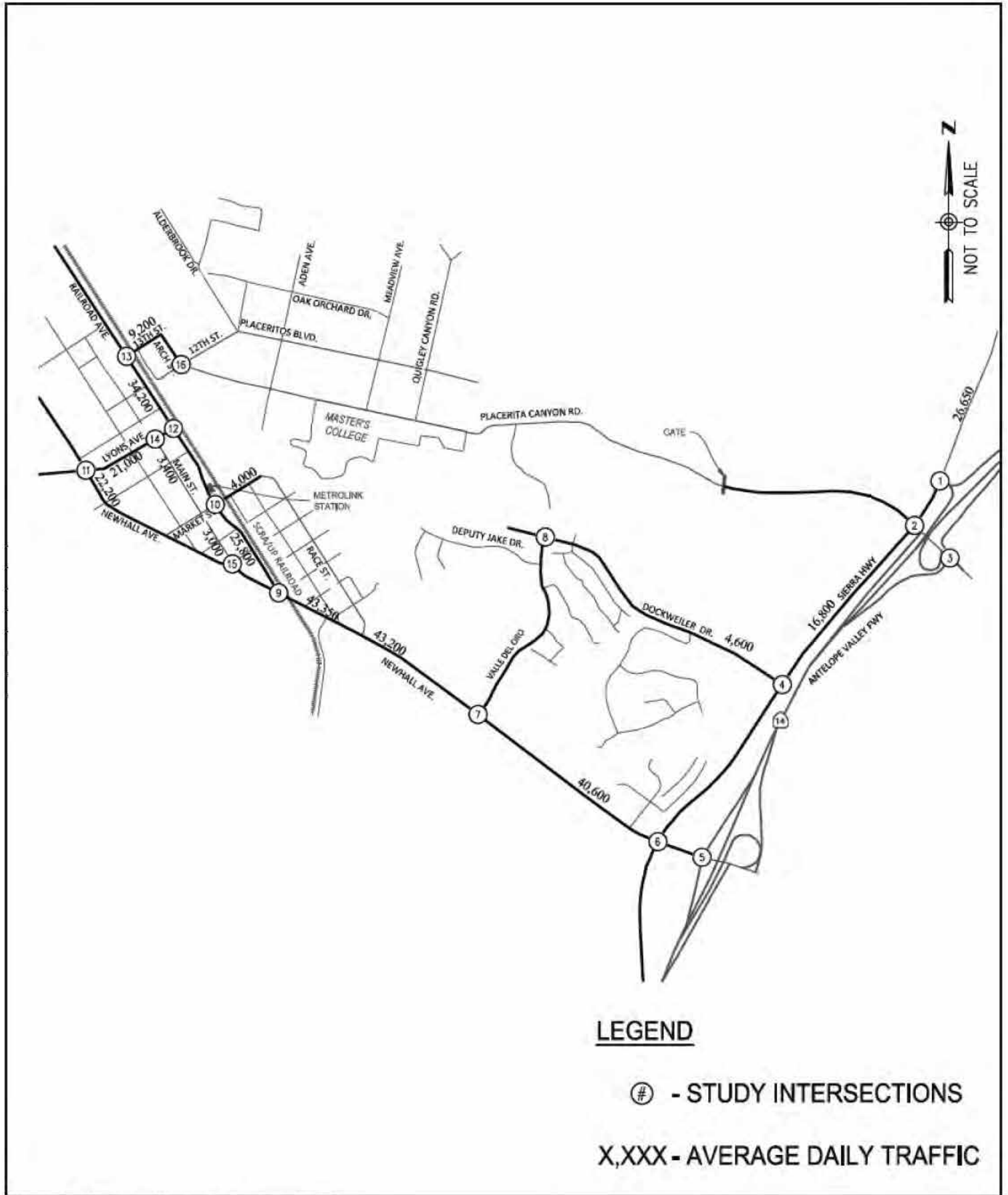
1. Sierra Highway and SR-14 Freeway Southbound Ramps
2. Sierra Highway and Placerita Canyon Road
3. SR-14 Freeway Northbound Ramps and Placerita Canyon Road
4. Sierra Highway and Dockweiler Drive
5. SR-14 Freeway Southbound Ramps and Newhall Avenue
6. Sierra Highway and Newhall Avenue
7. Valle Del Oro and Newhall Avenue
8. Valle Del Oro and Dockweiler Drive
9. Railroad Avenue and Newhall Avenue
10. Railroad Avenue and Market Street
11. Newhall Avenue and Lyons Avenue
12. Railroad Avenue and Lyons Avenue
13. Railroad Avenue and 13<sup>th</sup> Street
14. Main Street and Lyons Avenue
15. Main Street and Newhall Avenue
16. Arch Street and 12<sup>th</sup> Street/Placerita Canyon Road
17. Lyons Avenue and Dockweiler Drive (This intersection is a future intersection)

## Existing Intersection Conditions

### *Existing Traffic Volumes*

As referenced from the City of Santa Clarita Circulation Element, Average Daily Traffic (ADT) is a measurement of the average number of vehicles that travel a segment of roadway during a 24-hour period. The ADT is a useful benchmark for determining roadway capacities. Figure 4.9-1 illustrates the existing street system ADT and intersection locations.

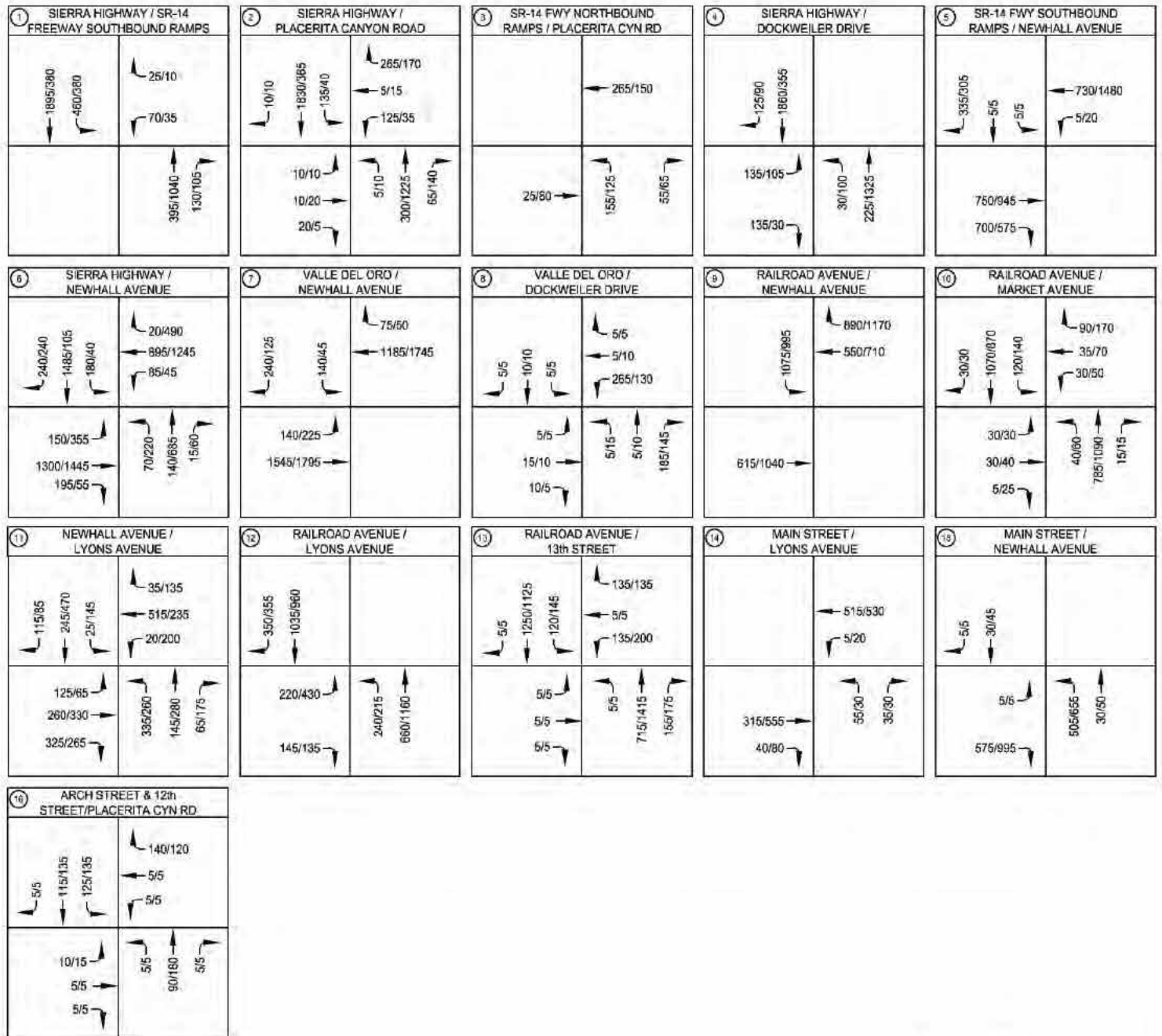
Figure 4.9-2 illustrates the existing peak hour traffic volumes in the study area. As referenced from the City of Santa Clarita Circulation Element, Peak hour information, which is the highest volume of traffic to pass over a road in a one-hour period, allows for a more detailed method of evaluating traffic conditions along roadways and intersections, and is used whenever operational analysis is required. The traffic volume data used in the intersection capacity analysis were based on traffic counts conducted by Newport Traffic Studies, an independent traffic data collection company. Turn movement counts were collected during the AM (7-9 AM) and PM (4-6 PM) peak periods at the above-mentioned existing intersections identified for detailed analysis. These counts were conducted in December 2012. The resulting turning movement volumes are presented in the Intersection Capacity Analysis Appendix of the Traffic Study.



Source: David Evans and Associates, Inc., August 8, 2017.



Figure 4.9-1  
Existing Study Intersection Locations



### LEGEND

- # - STUDY INTERSECTIONS
- XX/XX - AM/PM PEAK HOUR VOLUMES

Source: David Evans and Associates Inc, August 8, 2017.



Figure 4.9-2  
Existing Peak Hour Traffic Volumes

**Levels of Service Methodology**

Based on the existing intersection geometrics and traffic volumes during the AM and PM Peak Hour, the intersection capacity analyses were conducted for the signalized and un-signalized intersections. The analysis determines a level-of-service (LOS) which quantitatively describes the operating characteristics of signalized intersections and the maximum delay. The LOS ranges from “A” (the best) through “F” (system breakdown). The level-of-service is based on the average delay of vehicles at the intersections. Table 4.9-1 provides the LOS thresholds for signalized intersections per the HCM 2010 methodology.

**Table 4.9-1  
HCM 2010 – LOS Criteria for Signalized Intersections**

<b>LOS</b>	<b>Control Delay per Vehicle (s/veh)</b>
A	≤ 10
B	> 10 and ≤ 20
C	> 20 and ≤ 35
D	> 35 and ≤ 55
E	> 55 and ≤ 80
F	> 80

*Source: HCM 2010*

For un-signalized intersections the HCM measures the LOS based on the computed or measured control delay for Two Way Stop Controlled intersections (TWSC) and control delay for All Way Stop Controlled (AWSC) intersections. For a TWSC the LOS is computed for each movement and the most critical LOS is the one that describes the effectiveness of that intersection, which is typically the stop controlled left turn movement from the minor street. For an AWSC intersection the LOS defines the whole intersection. Table 4.9-2 provides the LOS thresholds for TWSC and AWSC intersections.

**Table 4.9-2  
HCM 2010 – LOS Criteria for TWSC, AWSC, and Roundabout Intersections**

<b>LOS</b>	<b>Control Delay per Vehicle (s/veh)</b>
A	≤ 10
B	> 10 and ≤ 15
C	> 15 and ≤ 25
D	> 25 and ≤ 35
E	> 35 and ≤ 50
F	> 50

*Source: HCM 2010*

The intersection capacity analyses were conducted for the roundabout intersections. For the roundabout intersections the HCM measures the LOS based on the control delay and the LOS defines the whole intersection. The level-of-service is based on the average delay of vehicles at the intersections. Table 4.9-2 provides the LOS thresholds for roundabout intersections per the HCM 2010 methodology.

The City of Santa Clarita preferred maximum acceptable level of service on arterial roads is LOS E. The City of Santa Clarita desired maximum acceptable level of service on residential neighborhood roads is LOS C or better.

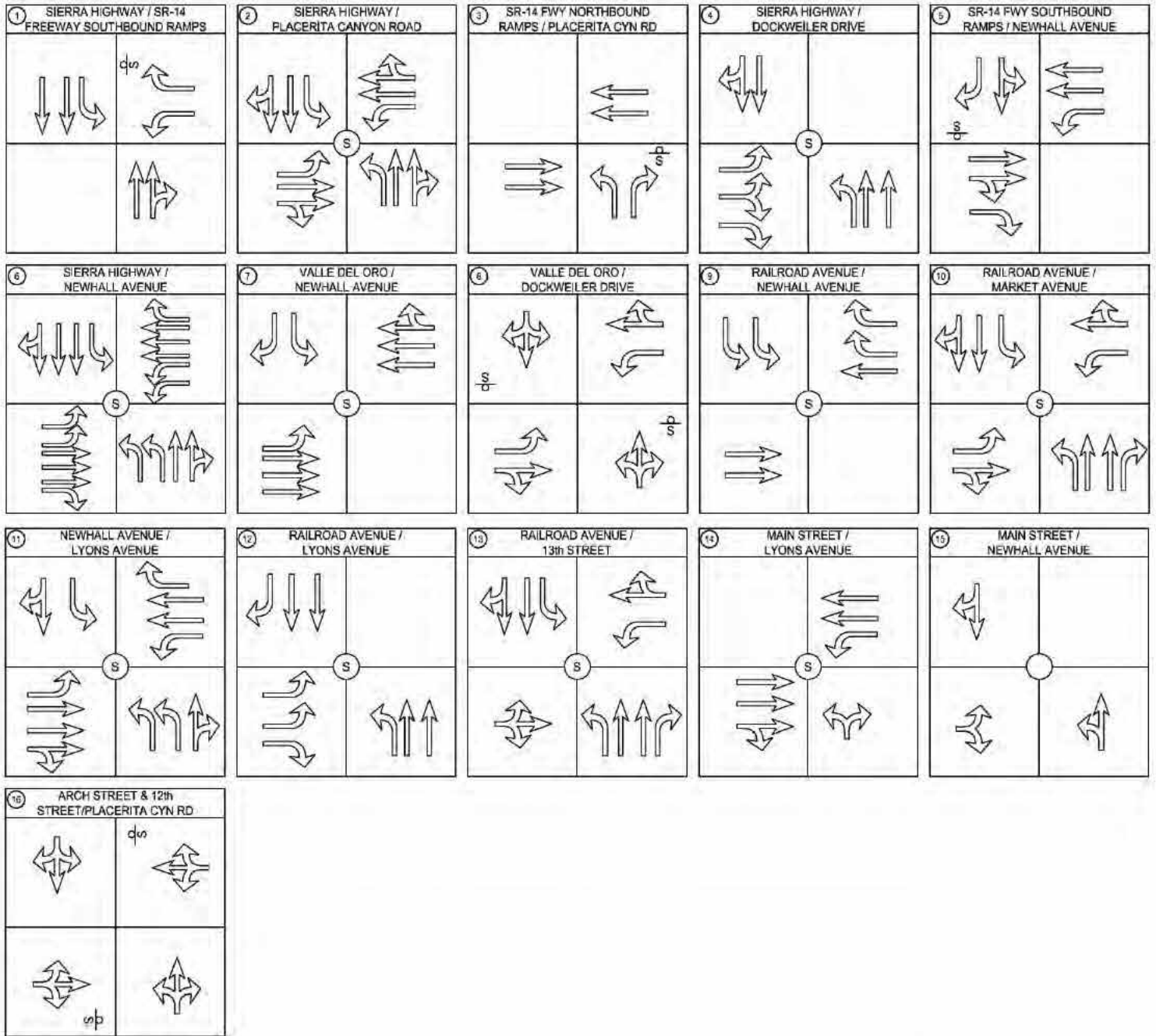
**Existing Peak Hour Levels of Service**

To determine the impacts of the Project to the study intersections, existing traffic intersection capacity analysis was conducted. The analysis was conducted with the existing intersection geometrics as illustrated in Figure 4.9-3, Existing Configurations of Study Intersections. As presented in Table 4.9-3, Intersection Capacity Analysis – Existing Conditions, under existing conditions, most intersections are operating at LOS E or better. There are two intersections that are currently operating at LOS F, they are: Sierra Highway and SR-14 Southbound Ramps and SR-14 Southbound Ramps and Newhall Avenue.

**Table 4.9-3  
Intersection Capacity Analysis - Existing Conditions**

Intersection	AM		PM	
	Delay <sup>a</sup>	LOS <sup>b</sup>	Delay <sup>a</sup>	LOS <sup>b</sup>
1. Sierra Highway and SR-14 Southbound Ramps <sup>c</sup>	99.99 <sup>e</sup>	F	99.99 <sup>e</sup>	F
2. Sierra Highway and Placerita Canyon Road	46.8	D	24.1	C
3. SR-14 Northbound Ramps and Placerita Canyon Road <sup>c</sup>	10.7	B	10.7	B
4. Sierra Highway and Dockweiler Drive	12.6	B	7.0	A
5. SR-14 Southbound Ramps and Newhall Avenue <sup>c</sup>	20.3	A	69.1	F
6. Sierra Highway and Newhall Avenue	35.0	D	34.2	C
7. Valle Del Oro and Newhall Avenue	17.8	B	15.8	B
8. Valle Del Oro and Dockweiler Drive <sup>c</sup>	14.8	B	11.5	B
9. Railroad Avenue and Newhall Avenue	23.6	C	30.1	C
10. Railroad Avenue and Market Street	14.3	B	17.4	B
11. Newhall Avenue and Lyons Avenue	32.6	C	45.5	D
12. Railroad Avenue and Lyons Avenue	22.5	C	20.8	C
13. Railroad Avenue and 13 <sup>th</sup> Street	19.8	B	23.1	C
14. Main Street and Lyons Avenue	10.8	B	8.2	A
15. Main Street and Newhall Avenue <sup>d</sup>	12.0	B	42.5	E
16. Arch Street and 12 <sup>th</sup> Street/Placerita Canyon Road <sup>c</sup>	13.8	B	18.6	C

*Notes:*  
<sup>a</sup> Delay – In Seconds  
<sup>b</sup> LOS – Level of Service  
<sup>c</sup> Un-Signalized Intersection  
<sup>d</sup> Roundabout Intersection  
<sup>e</sup> 99.99 – Intersection Delay Exceeds Level of Service Standard  
 Source: David Evans and Associates, Traffic Impact Analysis: Dockweiler Drive Alignment Project, Santa Clarita, CA, August 8, 2017.



- LEGEND**
- ROUNDABOUT INTERSECTION
  - SIGNALIZED INTERSECTION
  - UNSIGNALIZED INTERSECTION
  - EXISTING GEOMETRICS

Source: David Evans and Associates Inc, August 8, 2017.



Figure 4.9-3  
Existing Configurations of Study Intersections



### **Existing Transit Service**

The Santa Clarita Valley's circulation system is a comprehensive transportation network of roadways, multi-use trails, bicycle paths, bus transit, and commuter rail. This network provides mobility options to Santa Clarita Valley residents and businesses. Figure 4.9-4 illustrates the portion of the Santa Clarita Valley Circulation Plan bounded by the study area.

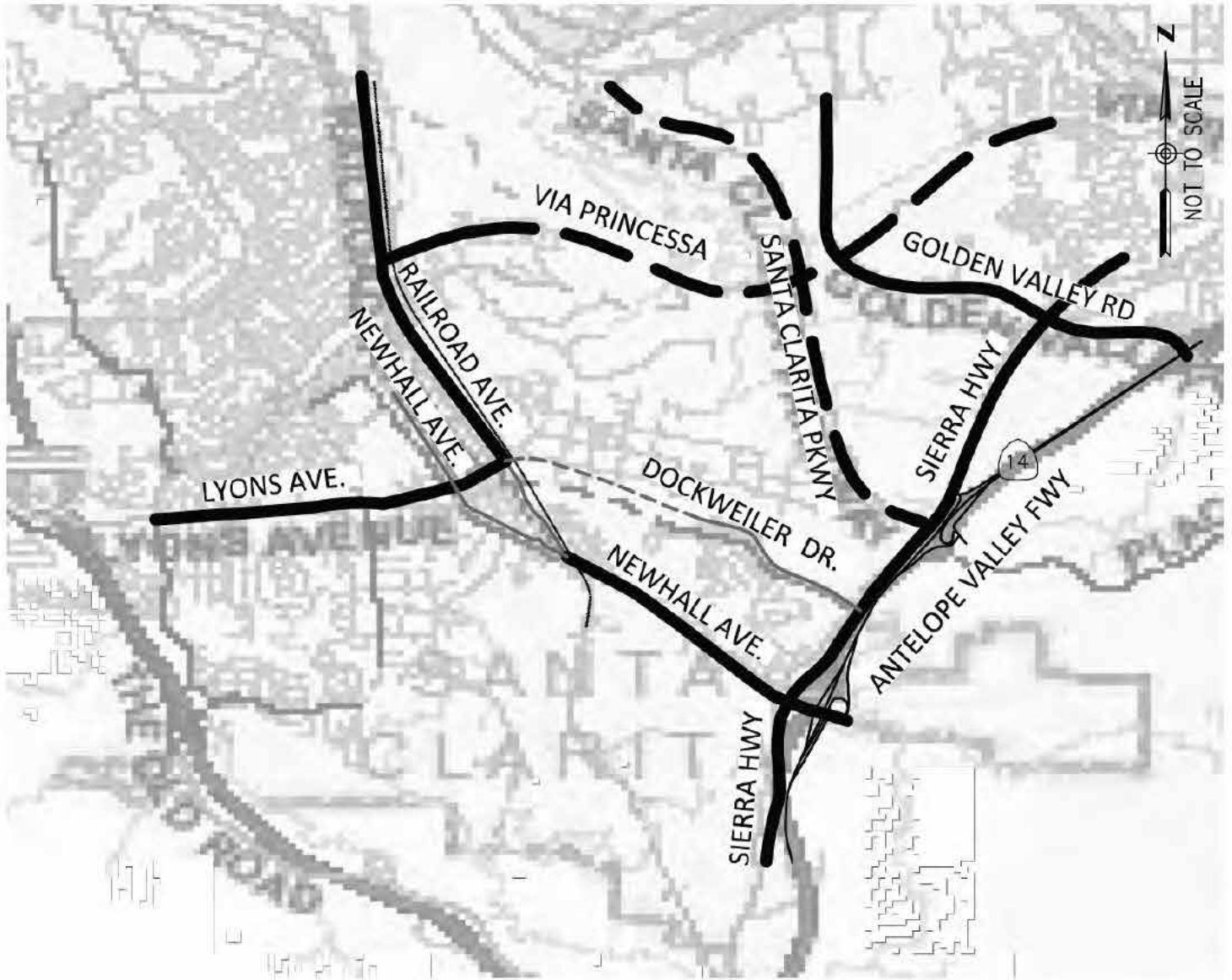
A major component in the development of the Santa Clarita Valley is the inclusion of alternative travel modes and support facilities. These facilities include efficiency and capacity of existing systems, by promoting mixed-use development near transit facilities. Bicycle lanes and accessibility of bike paths are a fundamental component to a comprehensive transportation network. Figure 4.9-5 illustrates a portion of the Santa Clarita Valley's Bicycle Master Plan bounded by the study area.

### **Opening Year (2019) Conditions Without Proposed Project**

A Project year of 2019 has been identified as the opening year for the Dockweiler Drive Alignment Project. A major factor in distribution of traffic is the anticipated growth within the study area due to development. The Year 2019 traffic volumes were provided by the City of Santa Clarita using the Santa Clarita Valley Consolidated Traffic Model (SCVCTM) for the Interim Year. It is to be noted that Other Area Projects anticipated to be constructed by Year 2019, have been incorporated into the SCVCTM, and account for expected growth.

The Santa Clarita Valley Consolidated Traffic Model (SCVCTM) for Interim Year provided traffic volumes for the Project Year 2019 Condition. The model plots provided a No-Build Condition outlining the distribution of future traffic without the Project. The Project Year 2019 No-Build study intersections are provided in Figure 4.9-6 and the volumes are provided in Figure 4.9-7.

The intersections were analyzed using the capacity analysis methodology described in the above. The analysis was conducted with the existing intersection geometrics illustrated in Figure 4.9-8. The LOS for the study intersections presented in Table 4.9-4 represents the LOS for the critical movement. This is typically the stop controlled left turn from the minor street. As presented in Table 4.9-4 under Year 2019 No-Build Condition, most of the study intersections are anticipated to continue to operate at LOS E or better. There are four intersections that are anticipated to operate at LOS F, they are: Sierra Highway and SR-14 Southbound Ramps, Sierra Highway and Placerita Canyon Road, SR-14 Northbound Ramps and Placerita Canyon Road, and SR-14 Southbound Ramp and Newhall Avenue.



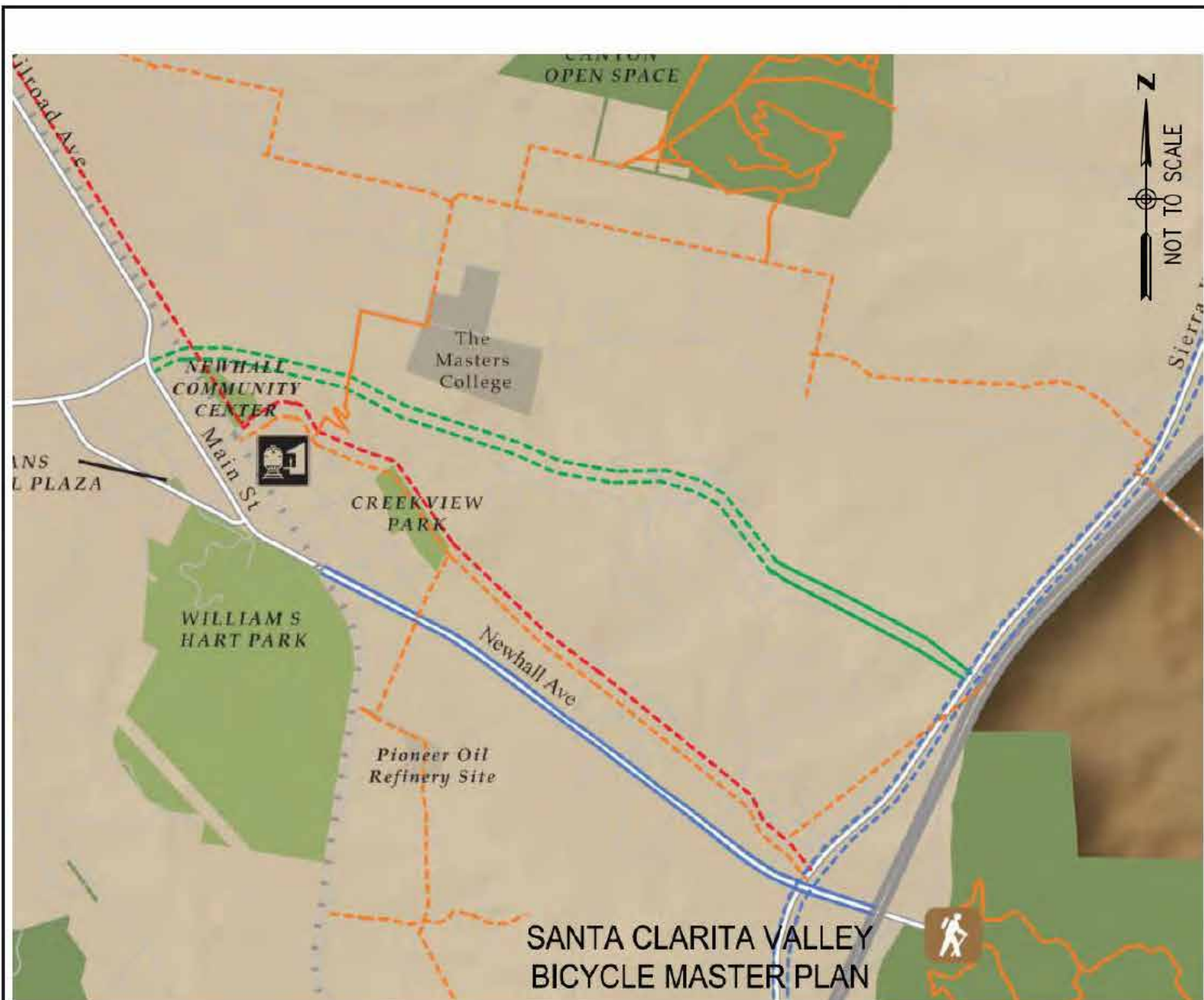
**LEGEND:**

	MAJOR HIGHWAY - EXISTING (6 LANES)
	MAJOR HIGHWAY - PROPOSED (6 LANES)
	SECONDARY HIGHWAY EXISTING (4 LANES)
	SECONDARY HIGHWAY PROPOSED (4 LANES)

Source: David Evans and Associates Inc, August 8, 2017.



Figure 4.9-4  
Santa Clarita Valley Circulation Plan



**SANTA CLARITA VALLEY BICYCLE MASTER PLAN**

**Legend**

Visit the City trails website at [www.santa-clarita.com/trails](http://www.santa-clarita.com/trails)

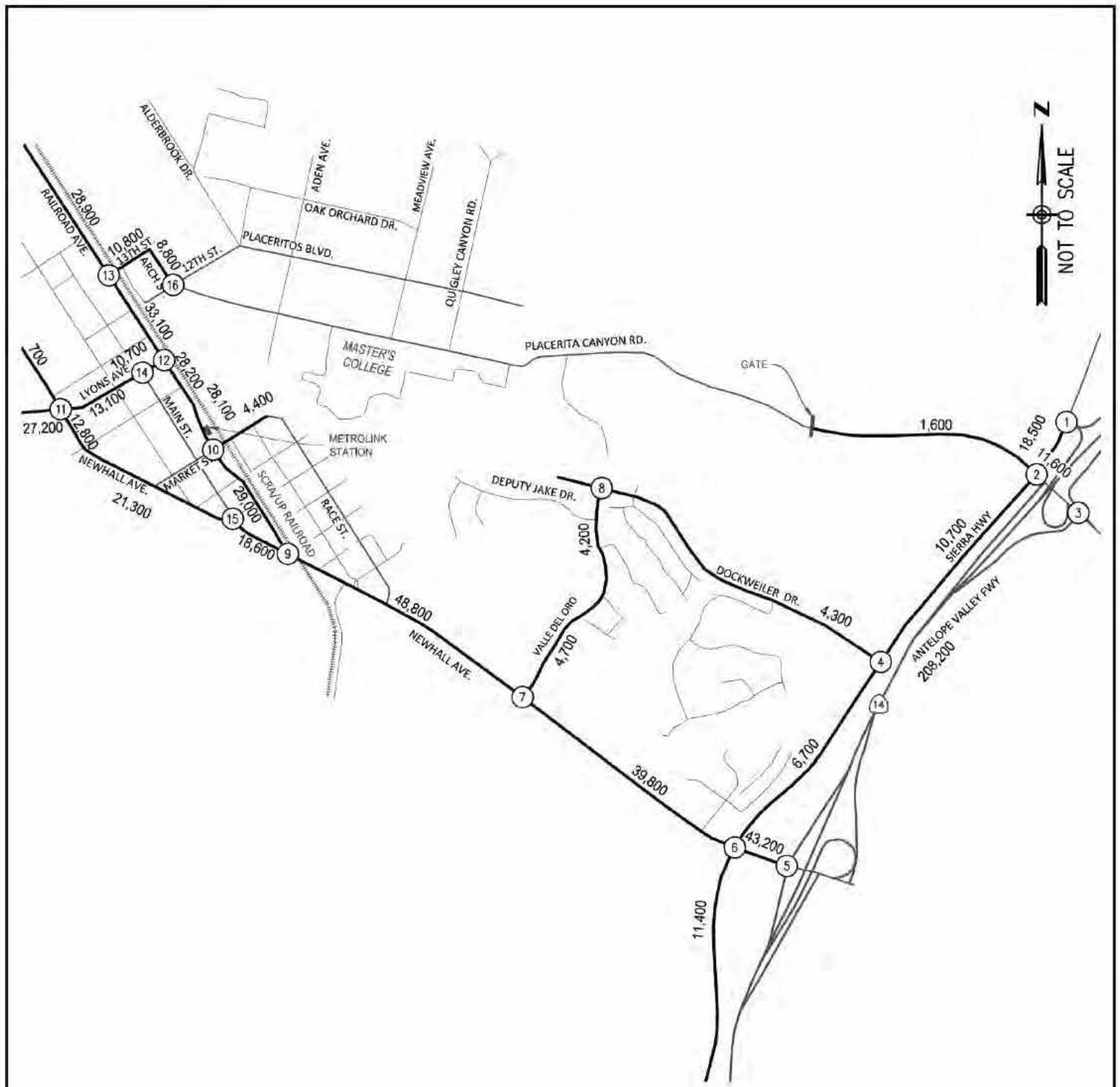
- |   |  |   |  |
|---|--|---|--|
| <p> Existing Class I Bike Route</p> <p> Proposed Class I Bike Route<br/>Provides a completely separated right-of-way for the exclusive use of bicycles and pedestrians with cross-flow traffic minimized. Fencing encourages use of designated access points.</p> <p> Existing Class II Bike Route</p> <p> Proposed Class II Bike Route<br/>Provides a striped lane for one-way bike travel on a street or highway. Bike lanes are marked with signs and pavement striping.</p> | <p> Existing Class III Bike Route</p> <p> Proposed Class III Bike Route<br/>Provides for shared use with pedestrian or motor vehicle traffic. Bike routes are marked with signs.</p> <p> Existing Multi-Purpose Use</p> <p> Proposed Multi-Purpose Use<br/>Located primarily in rural areas, these trails are unpaved and are available for equestrian, hiking, and mountain bike use. Trails are marked with lodgepole fencing.</p> | <p> Trailhead</p> <p> Metrolink Station</p> <p> Railroad</p> <p> Pascos</p> <p> Mileage Between Markers</p> | <p> Places of Interest</p> <p> Parks</p> <p> Golf Course</p> <p> Open Space</p> <p> Santa Clara River Open Space</p> <p> Santa Clara River</p> |
|---|--|---|--|

Revised July 2011

Source: David Evans and Associates Inc, August 8, 2017.



Figure 4.9-5  
Santa Clarita Valley Bicycle Master Plan



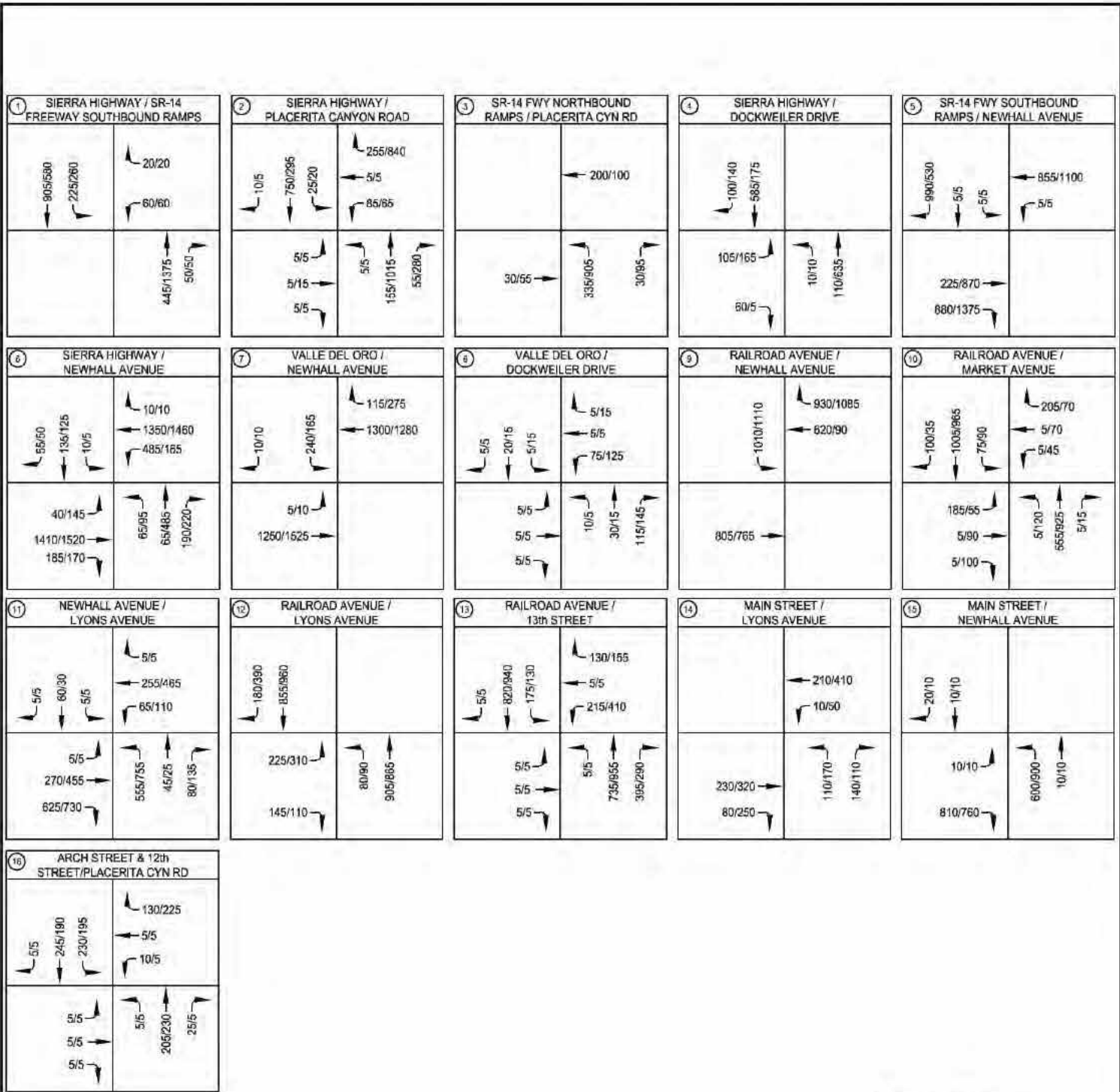
**LEGEND**

- Ⓝ - STUDY INTERSECTIONS
- X,XXX - AVERAGE DAILY TRAFFIC

Source: David Evans and Associates Inc, August 8, 2017.



Figure 4.9-6  
Project Year 2019 No Build Study Intersections



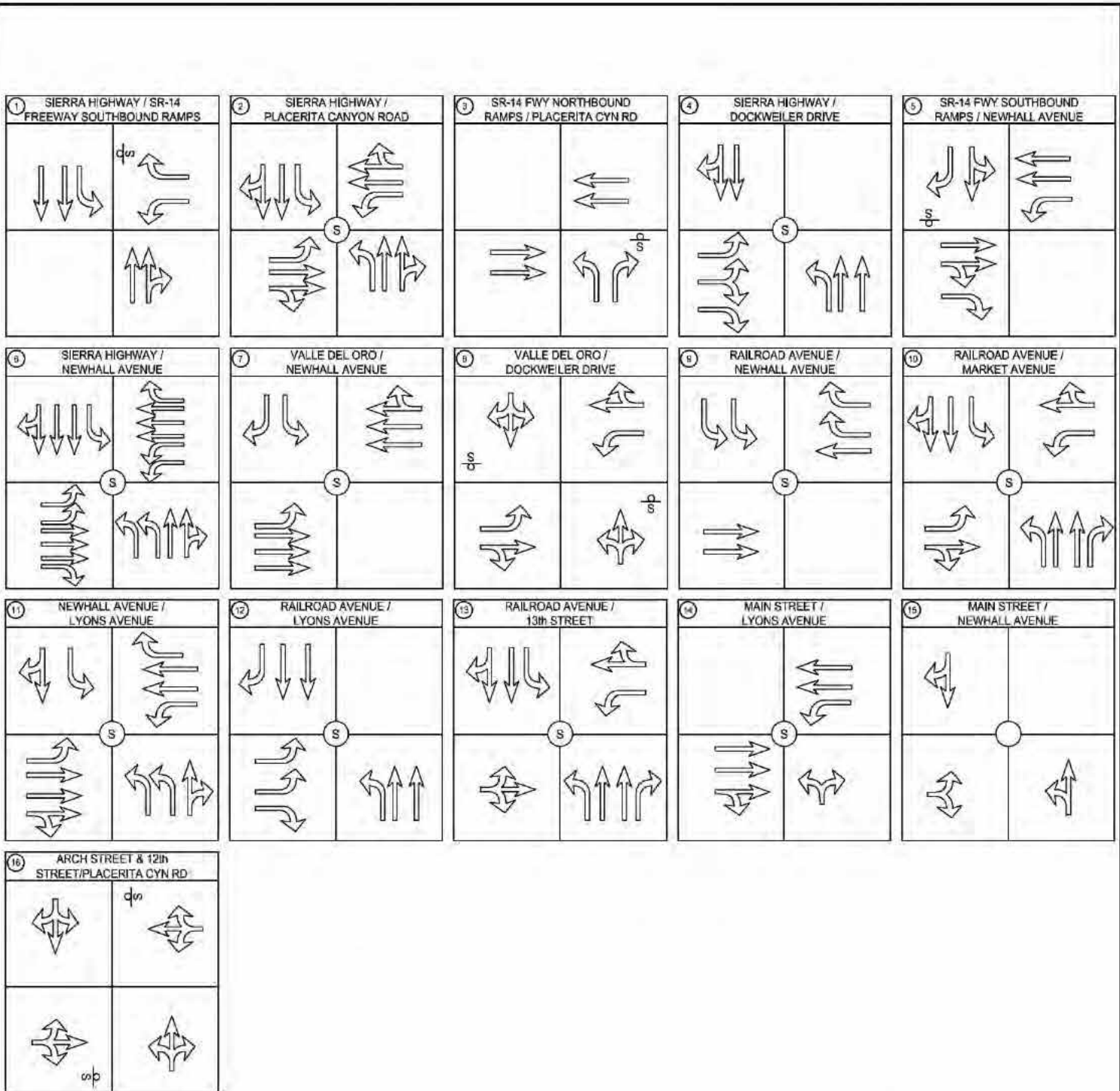
### LEGEND

- # - STUDY INTERSECTIONS
- XX/XX - AM/PM PEAK HOUR VOLUMES

Source: David Evans and Associates Inc, August 8, 2017.



Figure 4.9-7  
Project Year 2019 No Build Traffic Volumes



- LEGEND**
- ROUNDABOUT INTERSECTION
  - SIGNALIZED INTERSECTION
  - UNSIGNALIZED INTERSECTION
  - EXISTING GEOMETRICS

Source: David Evans and Associates Inc, August 8, 2017.



Figure 4.9-8  
Project Year 2019 No Build Intersection Configurations

**Table 4.9-4  
Intersection Capacity Analysis – Year 2019 No-Build Condition**

Intersection	AM		PM	
	Delay <sup>a</sup>	LOS <sup>b</sup>	Delay <sup>a</sup>	LOS <sup>b</sup>
1. Sierra Highway and SR-14 Southbound Ramps <sup>c</sup>	28.9	D	99.99 <sup>e</sup>	F
2. Sierra Highway and Placerita Canyon Road	24.2	C	99.99 <sup>e</sup>	F
3. SR-14 Northbound Ramps and Placerita Canyon Road <sup>c</sup>	12.8	B	99.99 <sup>e</sup>	F
4. Sierra Highway and Dockweiler Drive	8.9	A	7.4	A
5. SR-14 Southbound Ramps and Newhall Avenue <sup>c</sup>	99.99 <sup>e</sup>	F	99.99 <sup>e</sup>	F
6. Sierra Highway and Newhall Avenue	27.2	C	29.6	C
7. Valle Del Oro and Newhall Avenue	15.2	B	11.7	B
8. Valle Del Oro and Dockweiler Drive <sup>c</sup>	10.7	B	12.3	B
9. Railroad Avenue and Newhall Avenue	23.3	C	40.8	D
10. Railroad Avenue and Market Street	30	C	17.5	B
11. Newhall Avenue and Lyons Avenue	56.5	E	66.6	E
12. Railroad Avenue and Lyons Avenue	15.9	B	16.7	B
13. Railroad Avenue and 13 <sup>th</sup> Street	28.3	C	48.9	D
14. Main Street and Lyons Avenue	18.5	B	18.4	B
15. Main Street and Newhall Avenue <sup>d</sup>	23.7	C	25.8	D
16. Arch Street and 12 <sup>th</sup> Street/Placerita Canyon Road <sup>c</sup>	22.2	C	25.3	D

*Notes:*  
<sup>a</sup> Delay – In Seconds  
<sup>b</sup> LOS – Level of Service  
<sup>c</sup> Un-Signalized Intersection  
<sup>d</sup> Roundabout Intersection  
<sup>e</sup> 99.99 – Intersection Delay Exceeds Level of Service Standard  
 Source: David Evans and Associates, Traffic Impact Analysis: Dockweiler Drive Alignment Project, Santa Clarita, CA, August 8, 2017.

**Future (2035) Conditions Without Proposed Project**

Future Year 2035 traffic volumes were provided by the City of Santa Clarita using the Santa Clarita Valley Consolidated Traffic Model (SCVCTM) for the Buildout Year. The model plots provided a No-Build Condition outlining the distribution of future traffic without the Project. The analysis of No-Build Condition utilizes the traffic volume projections for the City of Santa Clarita’s traffic model together with the existing traffic flow data. It is to be noted that Other Area Projects anticipated to be constructed by Year 2035, have been incorporated into the SCVCTM, and account for expected growth. The buildout includes construction of future roadways Dockweiler Drive between Railroad Avenue and Valle Del Oro, Magic Mountain Parkway from Railroad Avenue to Via Princessa, Via Princessa between Claibourne Lane and Sheldon Avenue, and Santa Clarita Parkway. This also includes the proposed conceptual development of the North Newhall area (809 dwelling unit plus an approximate 11-acre commercial land use).

The Future Year 2035 No-Build study intersections provided in Figure 4.9-9, the volumes provided in Figure 4.9-10. The intersections were analyzed using the capacity analysis methodology described above. The analysis was conducted with the Future Year 2035 No-Build Condition existing and mitigated study intersection geometrics illustrated in Figure 4.9-11, Future Year 2035 No Build Intersection Configurations. The LOS for the study intersections presented in Table 4.9-5 represents the LOS for the critical movement. This is typically the stop controlled left turn from the minor street. As presented in Table 4.9-5 under Future Year 2035 No-Build Condition, eight intersections are anticipated to operate at

LOS F, these intersections are: Sierra Highway and SR-14 Southbound Ramps, Sierra Highway and Placerita Canyon Road, SR-14 Northbound Ramps and Placerita Canyon Road, SR-14 Southbound Ramps and Newhall Avenue, Sierra Highway and Newhall Avenue, Newhall Avenue and Lyons Avenue, and Main Street and Newhall Avenue.

**Table 4.9-5  
Intersection Capacity Analysis – Year 2035 No-Build Condition**

Intersection	AM		PM	
	Delay <sup>a</sup>	LOS <sup>b</sup>	Delay <sup>a</sup>	LOS <sup>b</sup>
1. Sierra Highway and SR-14 Southbound Ramps <sup>c</sup>	99.99 <sup>e</sup>	F	99.99 <sup>e</sup>	F
2. Sierra Highway and Placerita Canyon Road	99.99 <sup>e</sup>	F	99.99 <sup>e</sup>	F
3. SR-14 Northbound Ramps and Placerita Canyon Road <sup>c</sup>	99.99 <sup>e</sup>	F	99.99 <sup>e</sup>	F
4. Sierra Highway and Dockweiler Drive	15.2	B	16.2	B
5. SR-14 Southbound Ramps and Newhall Avenue <sup>c</sup>	99.99 <sup>e</sup>	F	99.99 <sup>e</sup>	F
6. Sierra Highway and Newhall Avenue	60.9	E	99.99 <sup>e</sup>	F
7. Valle Del Oro and Newhall Avenue	19.1	B	16.3	B
8. Valle Del Oro and Dockweiler Drive <sup>c</sup>	91.2	F	9.7	A
9. Railroad Avenue and Newhall Avenue	32.0	C	63.1	E
10. Railroad Avenue and Market Street	40.7	D	21.3	C
11. Newhall Avenue and Lyons Avenue	88.3	F	99.99 <sup>e</sup>	F
12. Railroad Avenue and Lyons Avenue	18.7	B	17.3	B
13. Railroad Avenue and 13 <sup>th</sup> Street	38.5	D	76.4	E
14. Main Street and Lyons Avenue	17.9	B	19.8	B
15. Main Street and Newhall Avenue <sup>d</sup>	77.6	F	99.99 <sup>e</sup>	F
16. Arch Street and 12 <sup>th</sup> Street/Placerita Canyon Road <sup>c</sup>	12.7	B	17.0	C

*Notes:*  
<sup>a</sup> Delay – In Seconds  
<sup>b</sup> LOS – Level of Service  
<sup>c</sup> Un-Signalized Intersection  
<sup>d</sup> Roundabout Intersection  
<sup>e</sup> 99.99 – Intersection Delay Exceeds Level of Service Standard  
 Source: David Evans and Associates, Traffic Impact Analysis: Dockweiler Drive Alignment Project, Santa Clarita, CA, August 8, 2017.





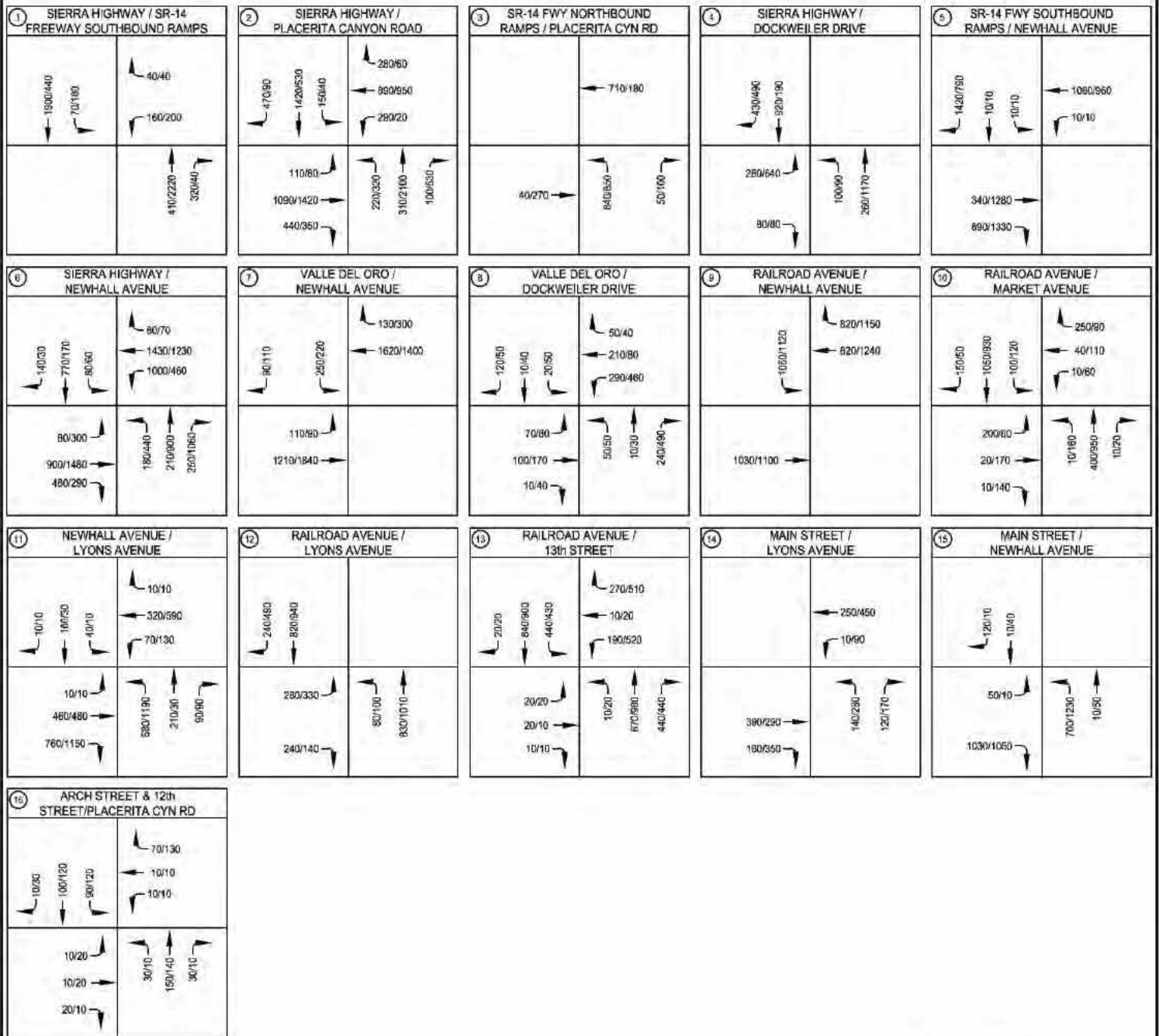
**LEGEND**

- Ⓝ - STUDY INTERSECTIONS
- X,XXX - AVERAGE DAILY TRAFFIC

Source: David Evans and Associates Inc, August 8, 2017.



Figure 4.9-9  
Project Year 2035 No Build Study Intersections



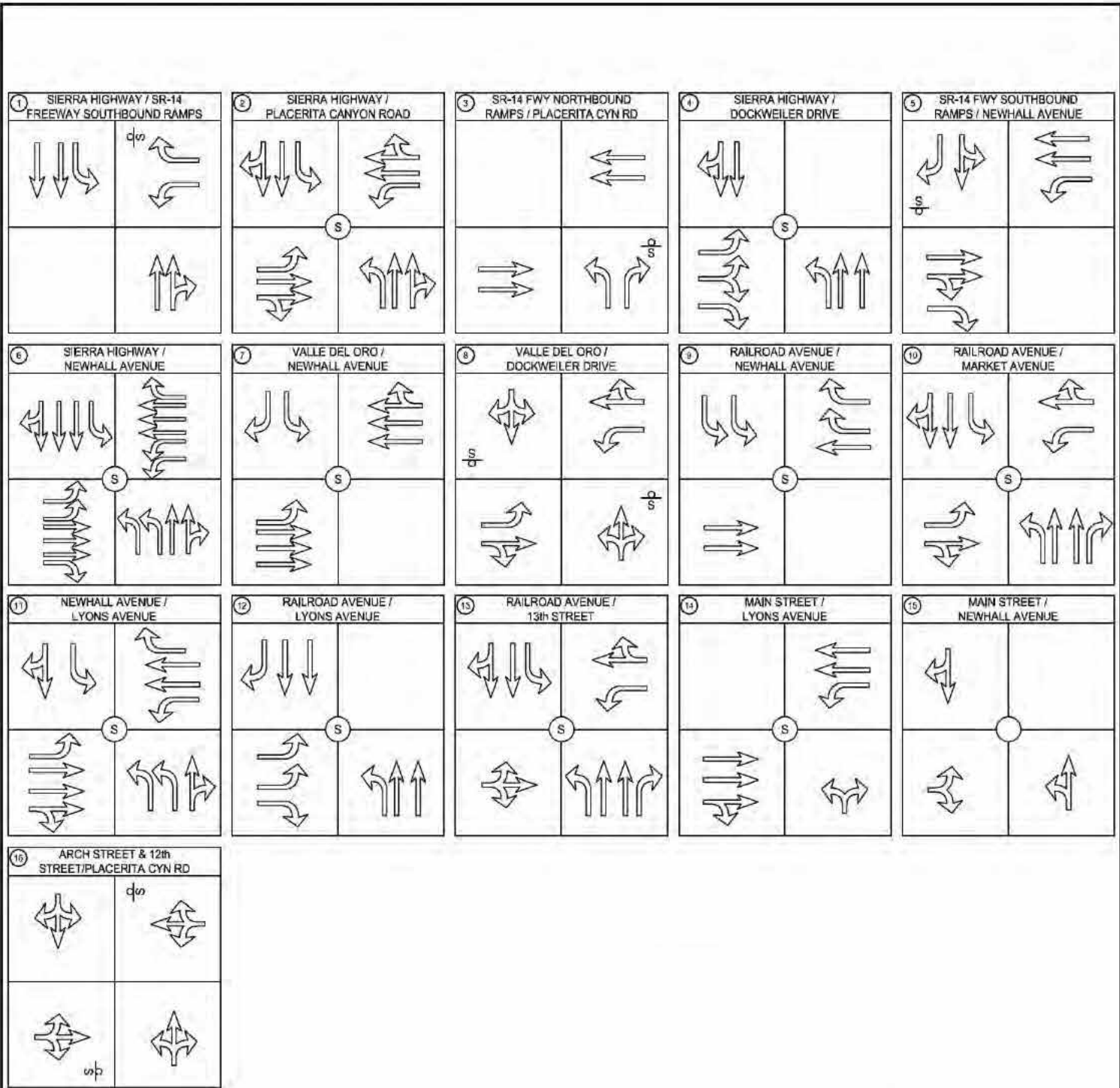
### LEGEND

- # - STUDY INTERSECTIONS
- XX/XX - AM/PM PEAK HOUR VOLUMES

Source: David Evans and Associates Inc, August 8, 2017.



Figure 4.9-10  
Project Year 2035 No Build Traffic Volumes



Source: David Evans and Associates Inc, August 8, 2017.



Figure 4.9-11  
Project Year 2035 No Build Intersection Configurations

### 4.9.3 ENVIRONMENTAL IMPACTS

#### Thresholds of Significance

A project would normally have a significant impact on intersection capacity if the operation of the project causes an increase in the control delay per vehicle for a given intersection's operating condition. As discussed above, the LOS ranges from "A" (the best) through "F" (system breakdown). The level-of-service is based on the average delay of vehicles at the intersections. View Tables 4.9-1 and 4.9-2, for the LOS criteria for signalized intersections and unsignalized intersections, respectively.

The City of Santa Clarita preferred maximum acceptable level of service on arterial roads is LOS E. The City of Santa Clarita desired maximum acceptable level of service on residential neighborhood roads is LOS C or better.

#### Project Impacts

##### *Opening Year (2019) Conditions With Proposed Project*

The Santa Clarita Valley Consolidated Traffic Model (SCVCTM) for Interim Year provided traffic volumes for the Project Year 2019 with Proposed Project Condition. The model plots outlined the distribution of future traffic with the construction of the Proposed Project. The Project Year 2019 Proposed Project study intersections are provided in Figure 4.9-12, and the volumes provided in Figure 4.9-13.

The analysis for the intersection of Arch Street/Dockweiler Drive and 12<sup>th</sup> Street/Placerita Canyon Road was conducted as a 5-leg all way stop controlled intersection. The analysis for the intersection of Lyons Avenue and Dockweiler Drive was conducted as a signalized intersection. The railroad crossing at the intersection of Railroad Avenue and 13<sup>th</sup> Street is proposed to be closed. The intersection will be modified, removing the northbound right turn lane and southbound left turn lane and restricting the eastbound through movement.

The intersections were analyzed using the capacity analysis methodology described above. The analysis was conducted with the Project Year 2019 with Proposed Project existing and mitigated study intersection geometrics illustrated in Figure 4.9-14. The LOS for the study intersections presented in Table 4.9-6 represents the LOS for the critical movement. This is typically the stop controlled left turn from the minor street.

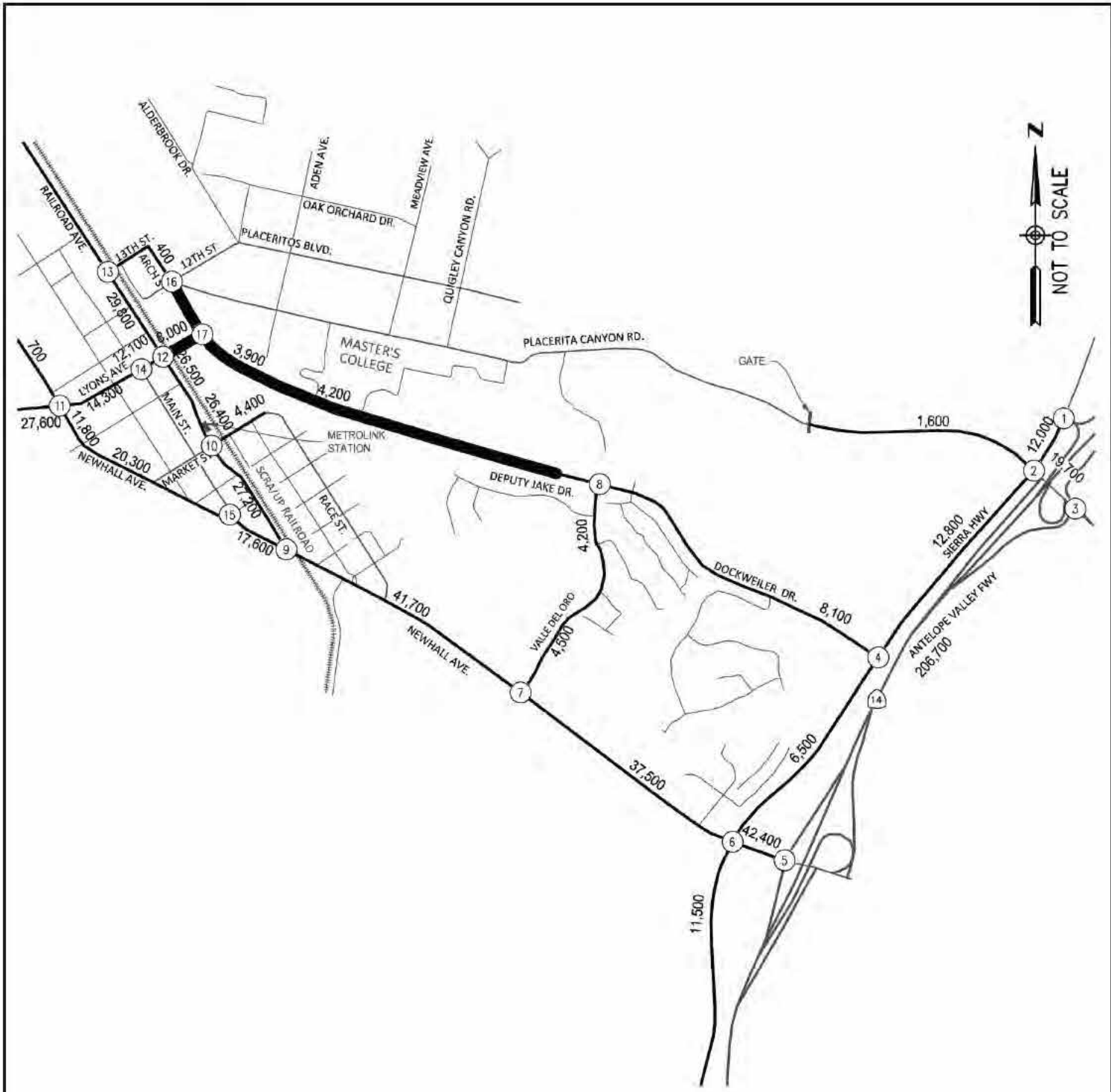
As presented in Table 4.9-6 under Year 2019 with Project Proposed Condition, most of the study intersections are anticipated to continue to operate at LOS E or better. There are four intersections that are anticipated to operate at LOS F, they are: Sierra Highway and SR-14 Southbound Ramps, Sierra Highway and Placerita Canyon Road, SR-14 Northbound Ramps and Placerita Canyon Road, SR-14 Southbound Ramps and Newhall Avenue. Mitigation measures are necessary to accommodate the anticipated Year 2019 traffic and reduce potential Project impacts.

With mitigation, the Sierra Highway and SR-14 Southbound Ramp intersection (Study Intersection 1) levels of service will increase to LOS B and LOS C during the AM and PM peak hours, respectively. With mitigation, the Sierra Highway and Placerita Canyon Road intersection (Study Intersection 2) level of service will remain the same at LOS C during the AM peak hour and will increase to LOS D during the PM peak hour. With mitigation, the SR-14 Northbound Ramps and Placerita Canyon Road intersection (Study Intersection 3) level of service will remain the same at LOS B during the AM peak hour and will increase to LOS B during the PM peak hour. With mitigation, the SR-14 Southbound Ramps and Newhall Avenue intersection (Study Intersection 5) levels of service will increase to LOS A during both AM and PM peak hours. With the implementation of the mitigation measures summarized at the end of this chapter, the Proposed Project’s impacts during the 2019 build-out year will be less than significant.

**Table 4.9-6  
Intersection Capacity Analysis – Year 2019 with Proposed Project Condition**

Intersection	AM		PM	
	Delay <sup>a</sup>	LOS <sup>b</sup>	Delay <sup>a</sup>	LOS <sup>b</sup>
1. Sierra Highway and SR-14 Southbound Ramps <sup>c</sup>	88.2	F	99.99 <sup>e</sup>	F
Mitigation (Traffic Signal and Lane Modification)	16.7	B	22.9	C
2. Sierra Highway and Placerita Canyon Road	23.1	C	99.99 <sup>e</sup>	F
Mitigation (Lane Modification)	20.6	C	51.8	D
3. SR-14 Northbound Ramps and Placerita Canyon Road <sup>c</sup>	12.8	B	99.99 <sup>e</sup>	F
Mitigation (Traffic Signal)	15.0	B	14.0	B
4. Sierra Highway and Dockweiler Drive	15.5	B	12.5	B
5. SR-14 Southbound Ramps and Newhall Avenue <sup>c</sup>	99.99 <sup>e</sup>	F	99.99 <sup>e</sup>	F
Mitigation (Traffic Signal and Lane Modification)	5.6	A	5.2	A
6. Sierra Highway and Newhall Avenue	26.4	C	29.5	C
7. Valle Del Oro and Newhall Avenue	15.7	B	12.1	B
8. Valle Del Oro and Dockweiler Drive <sup>c</sup>	12.6	B	14.7	B
9. Railroad Avenue and Newhall Avenue	21.4	C	23.4	C
10. Railroad Avenue and Market Street	24.6	C	17.9	B
11. Newhall Avenue and Lyons Avenue	48.2	D	55.5	E
Mitigation (Lane Modification)	28.8	C	33.7	C
12. Railroad Avenue and Lyons Avenue	31.7	C	33.4	C
13. Railroad Avenue and 13 <sup>th</sup> Street	9.5	A	8.3	A
14. Main Street and Lyons Avenue	18.4	B	16.4	B
15. Main Street and Newhall Avenue <sup>d</sup>	20.9	C	17.3	C
16. Arch Street/Dockweiler, 12 <sup>th</sup> Street, Placerita Canyon Road <sup>c</sup>	8.4	A	8.7	A
17. Lyons Avenue and Dockweiler Drive	19.7	B	22.9	B

*Notes:*  
<sup>a</sup> Delay – In Seconds  
<sup>b</sup> LOS – Level of Service  
<sup>c</sup> Un-Signalized Intersection  
<sup>d</sup> Roundabout Intersection  
<sup>e</sup> 99.99 – Intersection Delay Exceeds Level of Service Standard  
 Source: David Evans and Associates, Traffic Impact Analysis: Dockweiler Drive Alignment Project, Santa Clarita, CA, August 8, 2017.



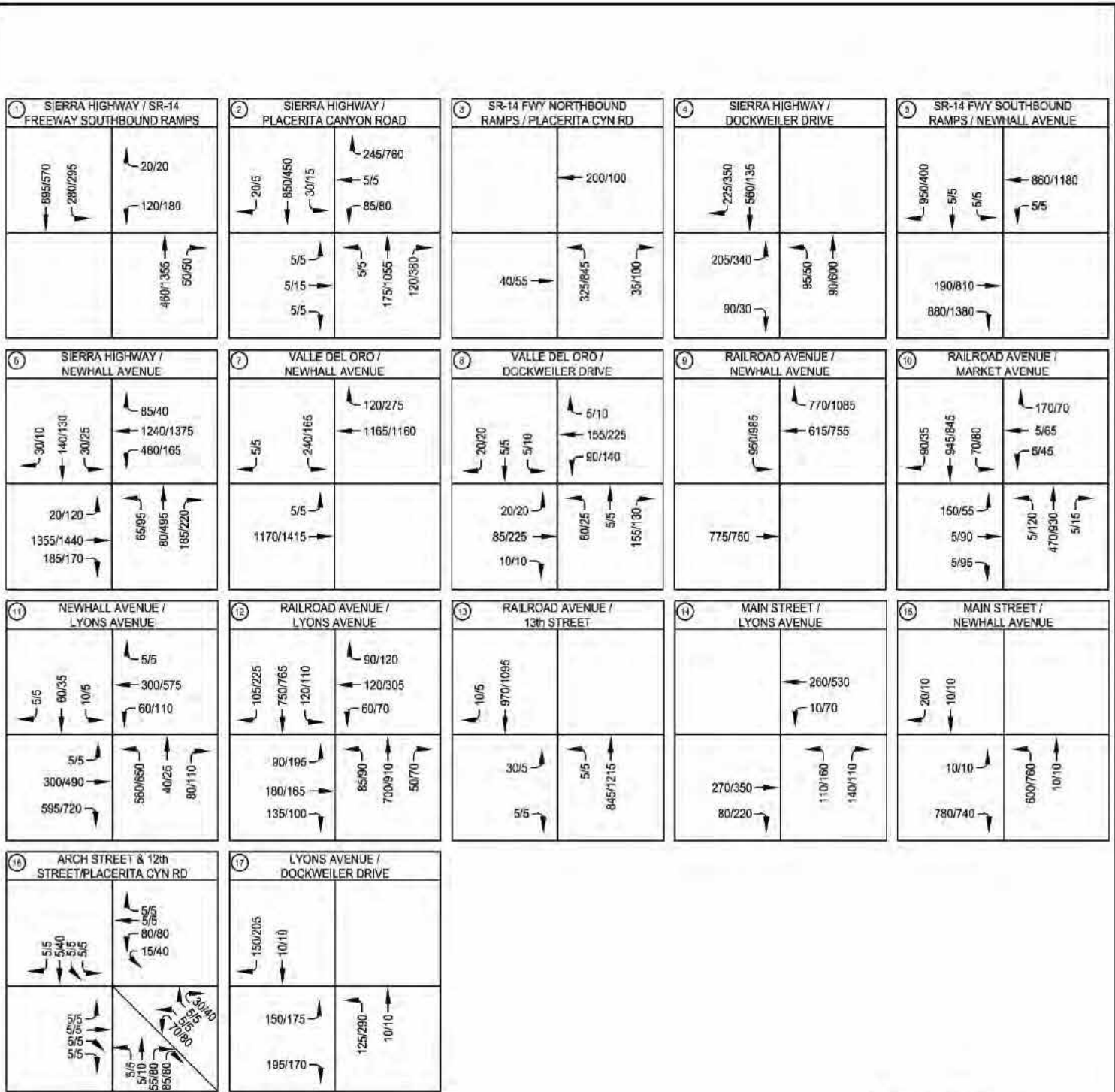
**LEGEND**

- Ⓝ - STUDY INTERSECTIONS
- X,XXX - AVERAGE DAILY TRAFFIC

Source: David Evans and Associates Inc, August 8, 2017.



Figure 4.9-12  
Project Year 2019 with Project Study Intersections



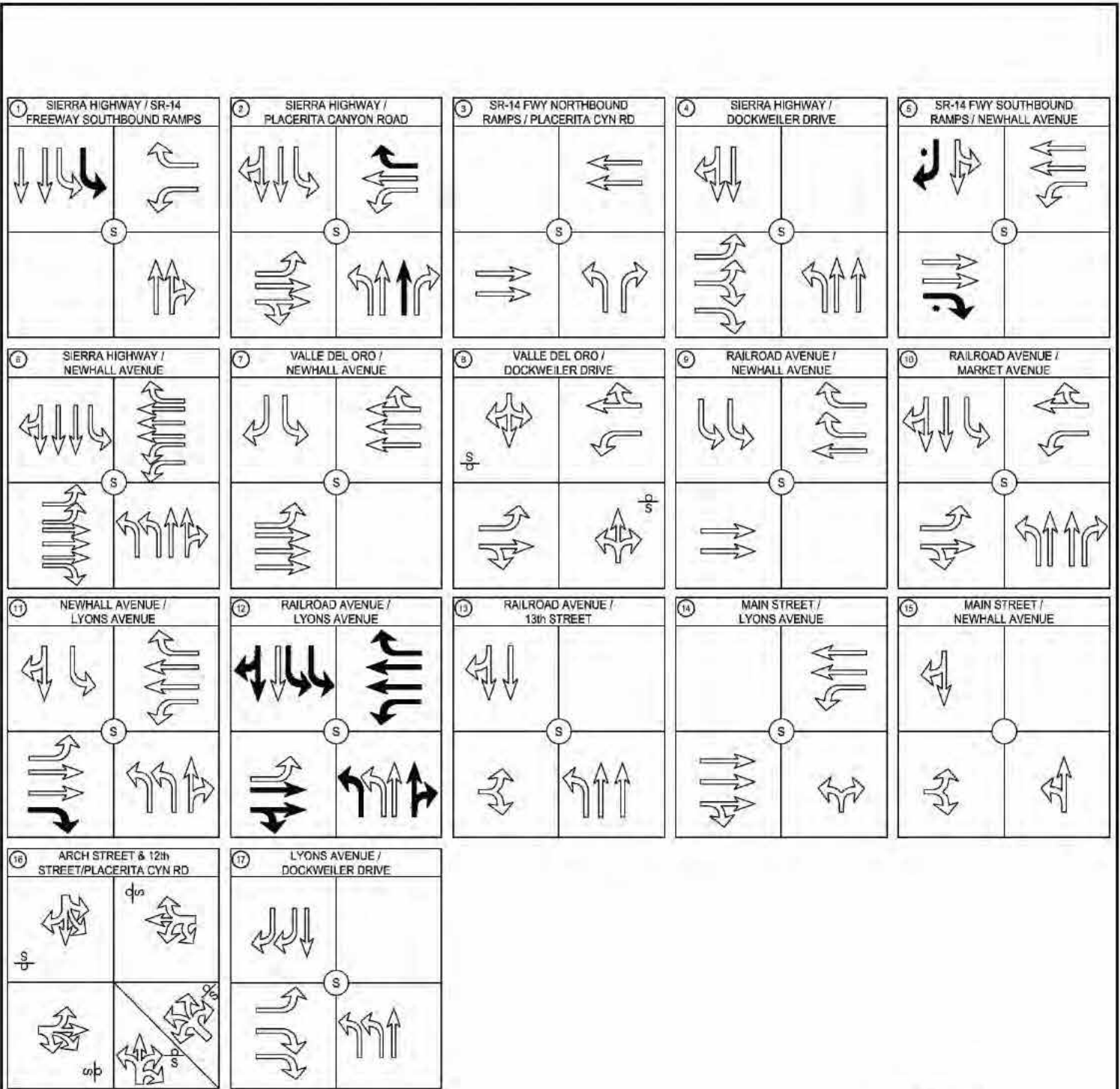
### LEGEND

- Ⓝ - STUDY INTERSECTIONS
- XX/XX - AM/PM PEAK HOUR VOLUMES







Source: David Evans and Associates Inc, August 8, 2017.



Figure 4.9-13  
Project Year 2019 with Project Traffic Volumes



**LEGEND**

-  - ROUNDABOUT INTERSECTION
-  - SIGNALIZED INTERSECTION
-  - UNSIGNALIZED INTERSECTION
-  - FREE RIGHT TURN
-  - EXISTING GEOMETRICS
-  - PROPOSED GEOMETRICS

Source: David Evans and Associates Inc, August 8, 2017.



Figure 4.9-14  
Project Year 2019 with Project Intersection Configurations



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***Future (2035) Conditions With Proposed Project***

The Santa Clarita Valley Consolidated Traffic Model (SCVCTM) for Build-Out Year provided traffic volumes for the Future Year 2035 with Proposed Project Condition. The model plots outlined the distribution of future traffic with the construction of the Proposed Project. The analysis of Proposed Project utilizes the traffic volume projections for the City of Santa Clarita's traffic model together with the existing traffic flow data. The traffic projections are based on the General Plan Buildout. The buildout includes construction of future roadways Dockweiler Drive between Railroad Avenue and Valle Del Oro,, Magic Mountain Parkway from Railroad Avenue to Via Princessa, and Via Princessa between Claibourne Lane and Sheldon Avenue. This also includes the proposed conceptual development of the North Newhall area (809 dwelling unit plus an approximate 11-acre commercial land use). The Future Year 2035 Proposed Project study intersections provided in Figure 4.9-15, the volumes provided in Figure 4.9-16.

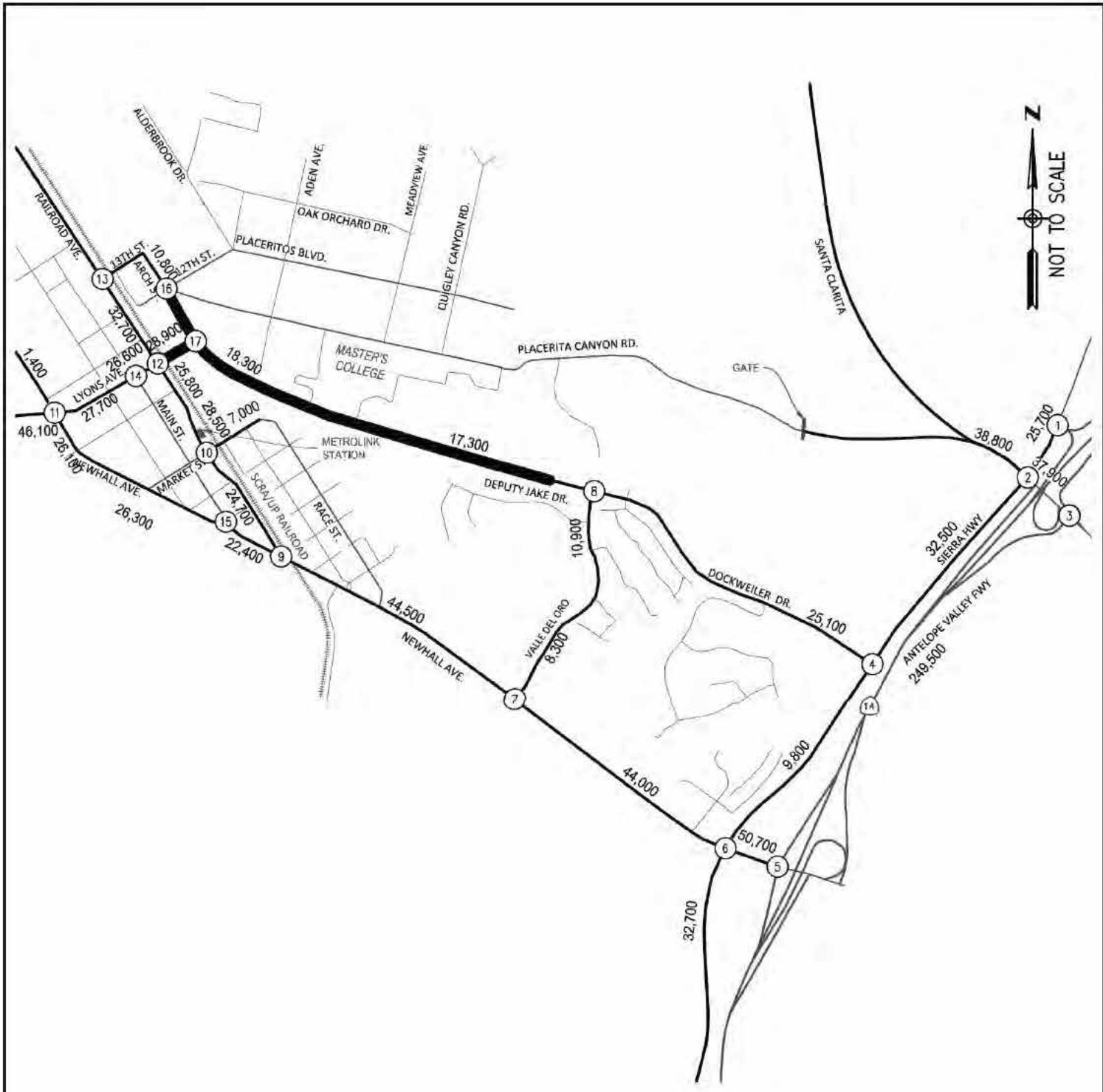
The intersections were analyzed using the capacity analysis methodology described above. The analysis was conducted with the Future Year 2035 Proposed Project Condition existing and mitigated study intersection geometrics illustrated in Figure 4.9-17. The LOS for the study intersections presented in Table 4.9-7 represents the LOS for the critical movement. This is typically the stop controlled left turn from the minor street.

As presented in Table 4.9-7 under Future Year 2035 with Proposed Project Condition, most of the study intersections are anticipated to continue to operate at LOS E or better. There are four intersections that are anticipated to operate at LOS F, they are: Sierra Highway and Placerita Canyon Road, Sierra Highway and Newhall Avenue, Valle Del Oro and Dockweiler Drive, and Main Street and Newhall Avenue. Mitigation measures are necessary to accommodate the anticipated Future Year 2035 traffic and reduce potential Project impacts.

With mitigation, the Sierra Highway and Placerita Canyon Road intersection (Study Intersection 2) levels of service will increase to LOS D during both AM and PM peak hours. With mitigation, the Sierra Highway and Newhall Avenue intersection (Study Intersection 6) levels of service will increase from LOS E to LOS D during the AM peak hour and LOS F to LOS D during the PM peak hour. With mitigation, the Valle Del Oro and Dockweiler Drive intersection (Study Intersection 8) levels of service will increase to LOS C and LOS D during the AM and PM peak hours, respectively. With mitigation, the Main Street and Newhall Avenue intersection (Study Intersection 15) levels of service will increase from LOS F to LOS B during the AM peak hour and LOS E to LOS A during the PM peak hour. With the implementation of the mitigation measures summarized at the end of this chapter, the Proposed Project's impacts during the 2035 year will be less than significant.

**Table 4.9-7  
Intersection Capacity Analysis – Year 2035 with Proposed Project Condition**

Intersection	AM		PM	
	Delay <sup>a</sup>	LOS <sup>b</sup>	Delay <sup>a</sup>	LOS <sup>b</sup>
1. Sierra Highway and SR-14 Southbound Ramps <sup>c</sup>	15.4	B	59.5	E
2. Sierra Highway and Placerita Canyon Road Mitigation (Lane Modification)	99.99 <sup>e</sup> 53.5	F D	99.99 <sup>e</sup> 51.1	F D
3. SR-14 Northbound Ramps and Placerita Canyon Road <sup>c</sup>	26.2	C	18.4	B
4. Sierra Highway and Dockweiler Drive	18.9	B	78.0	E
5. SR-14 Southbound Ramps and Newhall Avenue <sup>c</sup>	6.4	A	6.3	A
6. Sierra Highway and Newhall Avenue Mitigation (Lane Modification)	63.1 53.6	E D	99.99 <sup>e</sup> 39.2	F D
7. Valle Del Oro and Newhall Avenue	16.1	B	14.6	B
8. Valle Del Oro and Dockweiler Drive <sup>c</sup> Mitigation (Traffic Signal and Lane Modification)	99.99 <sup>e</sup> 22.9	F C	99.99 <sup>e</sup> 37.7	F D
9. Railroad Avenue and Newhall Avenue	19.1	B	23.9	C
10. Railroad Avenue and Market Street	26.0	C	20.7	C
11. Newhall Avenue and Lyons Avenue	41.4	D	53.5	D
12. Railroad Avenue and Lyons Avenue	42.3	D	54.2	D
13. Railroad Avenue and 13 <sup>th</sup> Street	12.1	B	10.1	B
14. Main Street and Lyons Avenue	16.3	B	17.1	B
15. Main Street and Newhall Avenue <sup>d</sup> Mitigation (Lane Modification)	54.8 10.7	F B	44.3 8.9	E A
16. Arch Street/Dockweiler, 12 <sup>th</sup> Street, Placerita Canyon Road <sup>c</sup>	21.0	C	39.4	E
17. Lyons Avenue and Dockweiler Drive	25.7	C	35.9	D
<p><i>Notes:</i></p> <p><sup>a</sup> Delay – In Seconds</p> <p><sup>b</sup> LOS – Level of Service</p> <p><sup>c</sup> Un-Signalized Intersection</p> <p><sup>d</sup> Roundabout Intersection</p> <p><sup>e</sup> 99.99 – Intersection Delay Exceeds Level of Service Standard</p> <p>Source: David Evans and Associates, Traffic Impact Analysis: Dockweiler Drive Alignment Project, Santa Clarita, CA, August 8, 2017.</p>				



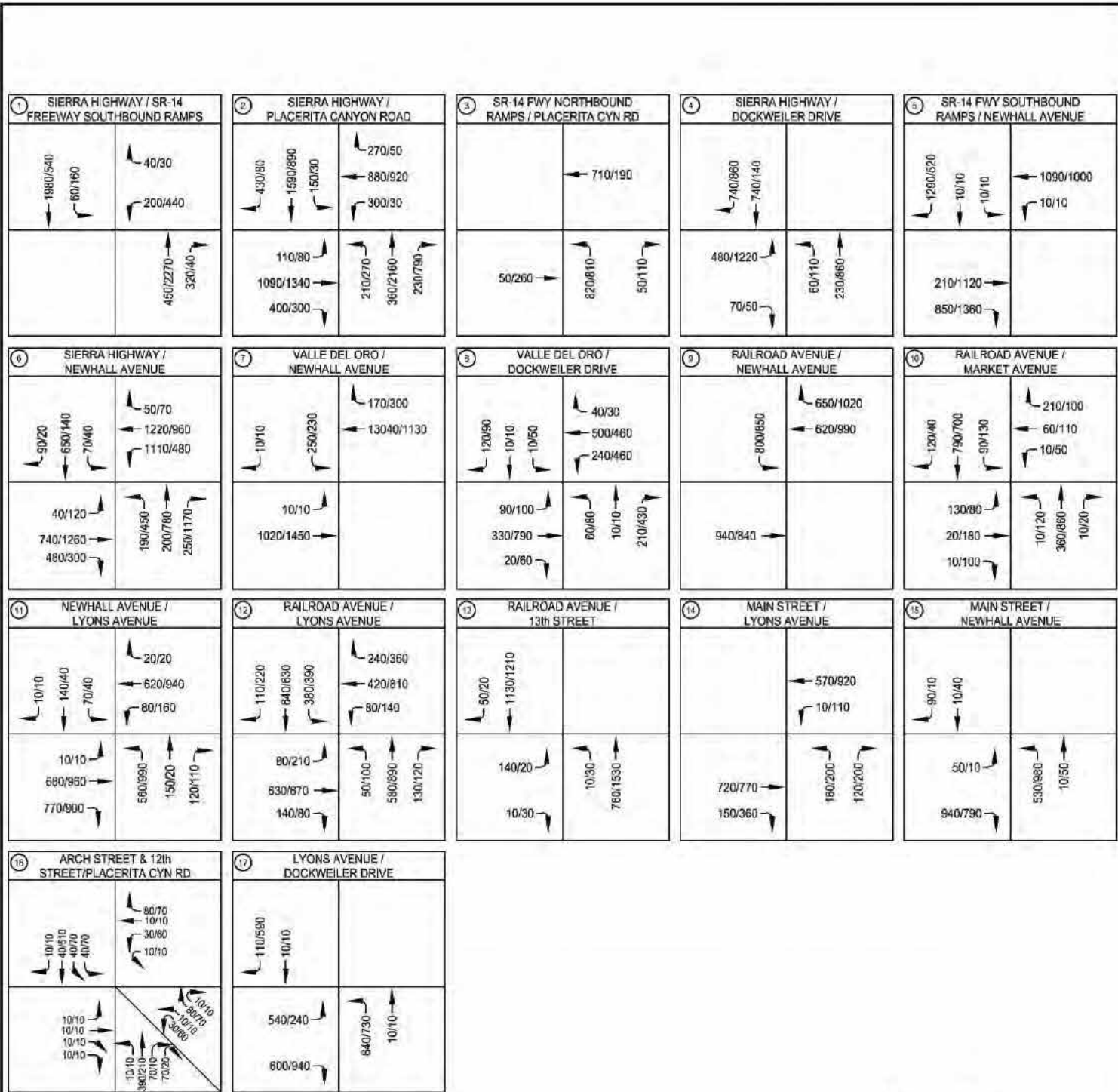
**LEGEND**

- # - STUDY INTERSECTIONS
- X,XXX - AVERAGE DAILY TRAFFIC

Source: David Evans and Associates Inc, August 8, 2017.



Figure 4.9-15  
Project Year 2035 with Project Study Intersections



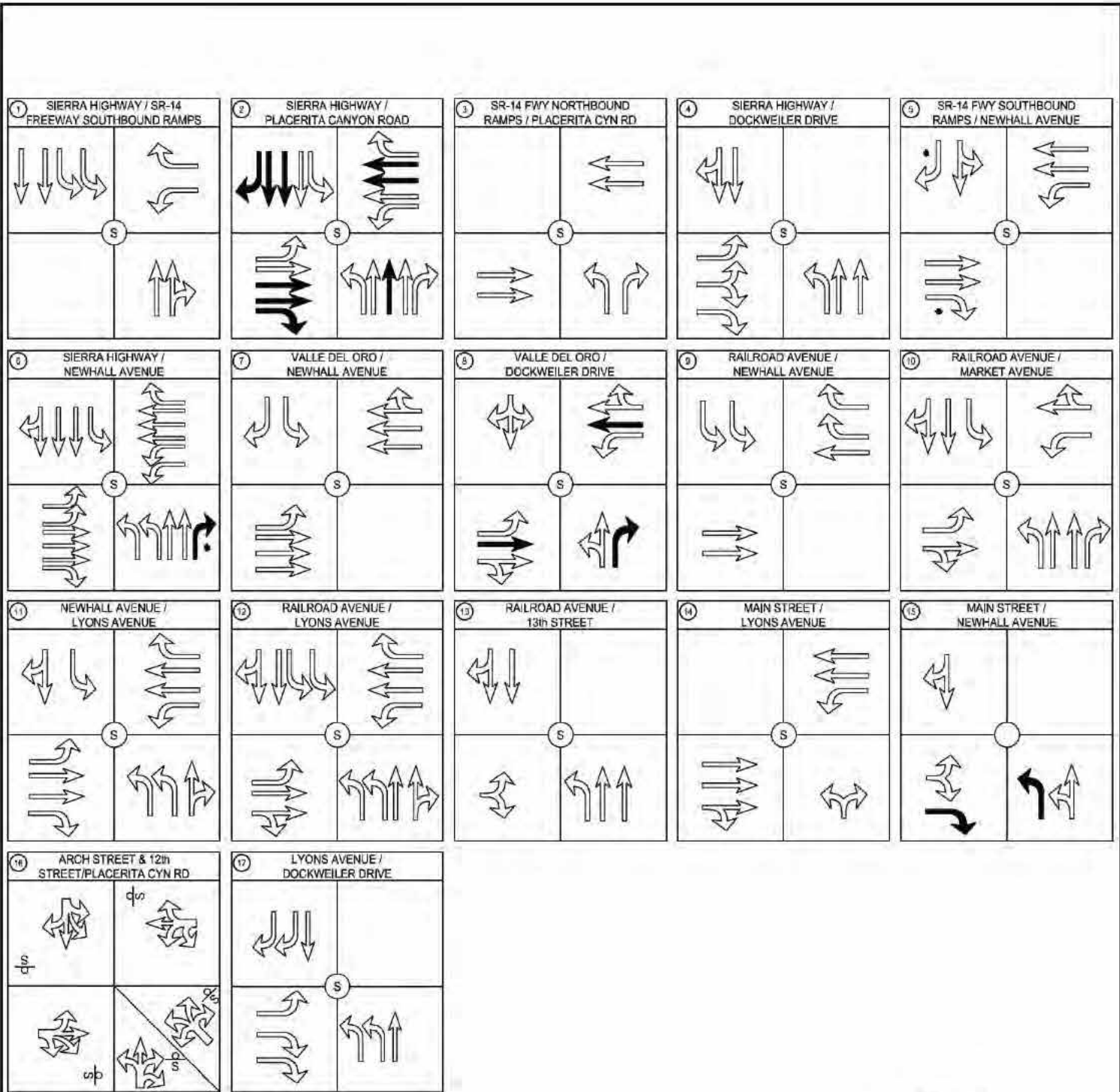
### LEGEND

- # - STUDY INTERSECTIONS
- XX/XX - AM/PM PEAK HOUR VOLUMES

Source: David Evans and Associates Inc, August 8, 2017.



Figure 4.9-16  
Project Year 2035 with Project Traffic Volumes



**LEGEND**

- ROUNDABOUT INTERSECTION
- SIGNALIZED INTERSECTION
- UNSIGNALIZED INTERSECTION
- UNSIGNALIZED INTERSECTION
- FREE RIGHT TURN
- EXISTING GEOMETRICS
- PROPOSED GEOMETRICS

Source: David Evans and Associates Inc, August 8, 2017.



Figure 4.9-17  
Project Year 2035 with Project Intersection Configurations

**Railroad Crossing Analysis**

The existing Union Pacific/Metrolink rail line currently extends through the City of Santa Clarita, and is shared by both freight (Union Pacific) and passenger (Metrolink Antelope Valley line) trains. The nearest Metrolink train station to the Proposed Project is the Jan Heidt Newhall Station located at Railroad Avenue and Market Street, approximately 0.25 mile south of Lyons Avenue. Currently the rail line serves approximately eight freight trains per day with thirty Metrolink commuter trains per weekday; twelve on Saturday and six trains Sunday. Passenger service from the Newhall station southbound to Los Angeles is provided by fourteen trains per weekday starting at approximately 5:00 AM and ending at 7:30 PM. Passenger service northbound to Lancaster from the Newhall station is also provided by nine trains starting at 7:00 AM until approximately 10:00 PM.

Traffic Counts were compiled for the existing railroad crossings at 13<sup>th</sup> Street, Market Street, and Newhall Avenue. AM and PM peak hour traffic counts included the existing vehicles, pedestrians, and bicycle volumes. Table 4.9-8 presents the existing traffic counts.

For a comparison of the No Build scenario and the Proposed Project scenario, Daily and AM and PM Peak hour traffic volumes were compiled for the Year 2019 and 2035 conditions as presented in Table 4.9-9 and Table 4.9-10, respectively.

**Table 4.9-8  
Railroad Crossing Analysis – Existing Condition Traffic Impact Analysis**

Existing Condition	1	2	3	4	Total
	13 <sup>th</sup> Street	Lyons Avenue	Market Street	Newhall Avenue	
ADT <sup>a</sup>	9,200	N/A <sup>e</sup>	4,000	43,350	56,550
AUTO <sup>b</sup> (AM)	555		320	3,140	4,015
AUTO <sup>b</sup> (PM)	665		485	3,925	5,075
PED <sup>c</sup> (AM)	6	N/A <sup>e</sup>	47	11	64
PED <sup>c</sup> (PM)	5		59	15	79
Bicycles <sup>d</sup> (AM)	3	N/A <sup>e</sup>	5	3	11
Bicycles <sup>d</sup> (PM)	8		15	4	27

**Notes:**

(-) – Data not available.

<sup>a</sup> ADT – Average Daily Traffic

<sup>b</sup> AUTO – Peak Hour Auto Traffic (Both Directions)

<sup>c</sup> PED – Peak Hour Pedestrian Traffic

<sup>d</sup> Bicycles – Peak Hour Bicycle Traffic

<sup>e</sup> N/A – Not Applicable Future Railroad Crossing

Source: David Evans and Associates, Traffic Impact Analysis: Dockweiler Drive Alignment Project, Santa Clarita, CA, August 8, 2017.

**Table 4.9-9  
Railroad Crossing Analysis – Project Year 2019 Condition**

Year 2019		1	2	3	4	Total
		13 <sup>th</sup> Street	Lyons Avenue	Market Street	Newhall Avenue	
No Build	ADT <sup>a</sup>	10,850	N/A <sup>c</sup>	4,410	47,550	<b>62,810</b>
	AM <sup>b</sup>	955		185	3,370	<b>4,510</b>
	PM <sup>b</sup>	1,050		375	3,860	<b>5,285</b>
Proposed Project	ADT <sup>a</sup>	N/A <sup>c</sup>	8,060	4,390	44,790	<b>57,240</b>
	AM <sup>b</sup>		620	185	3,115	<b>3,920</b>
	PM <sup>b</sup>		840	370	3,580	<b>4,790</b>

*Notes:*  
<sup>a</sup> ADT – Average Daily Traffic  
<sup>b</sup> AUTO – Peak Hour Auto Traffic (Both Directions)  
<sup>c</sup> N/A – Railroad Crossing Not Applicable to the Condition  
 Source: David Evans and Associates, Traffic Impact Analysis: Dockweiler Drive Alignment Project, Santa Clarita, CA, August 8, 2017.

As presented in Table 4.9-9 under Project Year 2019, the total average daily traffic is anticipated to be highest for the No Build Condition.

**Table 4.9-10  
Railroad Crossing Analysis – Future Year 2035 Condition**

Year 2035		1	2	3	4	Total
		13 <sup>th</sup> Street	Lyons Avenue	Market Street	Newhall Avenue	
No Build	ADT <sup>a</sup>	16,940	N/A <sup>c</sup>	6,920	56,300	<b>80,160</b>
	AM <sup>b</sup>	1,170		325	3,735	<b>5,230</b>
	PM <sup>b</sup>	1,525		575	4,605	<b>6,705</b>
Proposed Project	ADT <sup>a</sup>	N/A <sup>c</sup>	28,870	7,050	47,100	<b>83,020</b>
	AM <sup>b</sup>		1,880	330	3,015	<b>5,225</b>
	PM <sup>b</sup>		2,495	590	3,695	<b>6,780</b>

*Notes:*  
<sup>a</sup> ADT – Average Daily Traffic  
<sup>b</sup> AUTO – Peak Hour Auto Traffic (Both Directions)  
<sup>c</sup> N/A – Railroad Crossing Not Applicable to the Condition  
 Source: David Evans and Associates, Traffic Impact Analysis: Dockweiler Drive Alignment Project, Santa Clarita, CA, August 8, 2017.

As presented in Table 4.9-10 under Project Year 2035, the total average daily traffic is anticipated to be highest for the Proposed Project.

***Bicycle and Pedestrian Facilities***

The California State Government Code outlines that a city must develop a Circulation Plan included in its General Plan that shall include the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals and other local public utilities and facilities. Furthermore the City and County must coordinate with regional transportation plans. Regional plans affecting the Santa Clarita Valley included the California Department of Transportation (Caltrans) plan; the Regional Mobility Plan, prepared by the Southern California Association of Governments (SCAG); the Los Angeles Metropolitan Transportation Authority’s (MTA or Metro) Congestion Management Program and bicycle way strategic plan; the Santa Clarita Transit’s Transportation Development Plan (TDP); and the Los Angeles County’s Airport Land Use Plan.

The Santa Clarita Valley's circulation system provides vital connections linking neighborhoods, services, and employment centers throughout the community and the region. A comprehensive transportation network of roadways, multi-use trails and bicycle paths, bus transit, and commuter rail provides mobility options to Valley residents and businesses. Planning for the ultimate location and capacity of circulation improvements will also enhance economic strength and quality of life in the Valley.

Consideration to the Santa Clarita Valley's continued development of efficient, cost-effective and comprehensive transportation systems that are consistent with regional plans, and local needs. The Circulation Plan identifies and promotes a variety of techniques for improving mobility that go beyond planning for construction of new streets and highways. A major component in the development of the Santa Clarita Valley is the inclusion of alternative travel modes and support facilities. These facilities increase efficiency and capacity of existing systems, by promoting mixed-use development near transit facilities. Bicycle lanes and accessibility to bicycle paths are fundamental to a comprehensive transportation network. The Santa Clarita Valley's Bicycle and Pedestrian Facilities is provided in Figure 4.9-18.

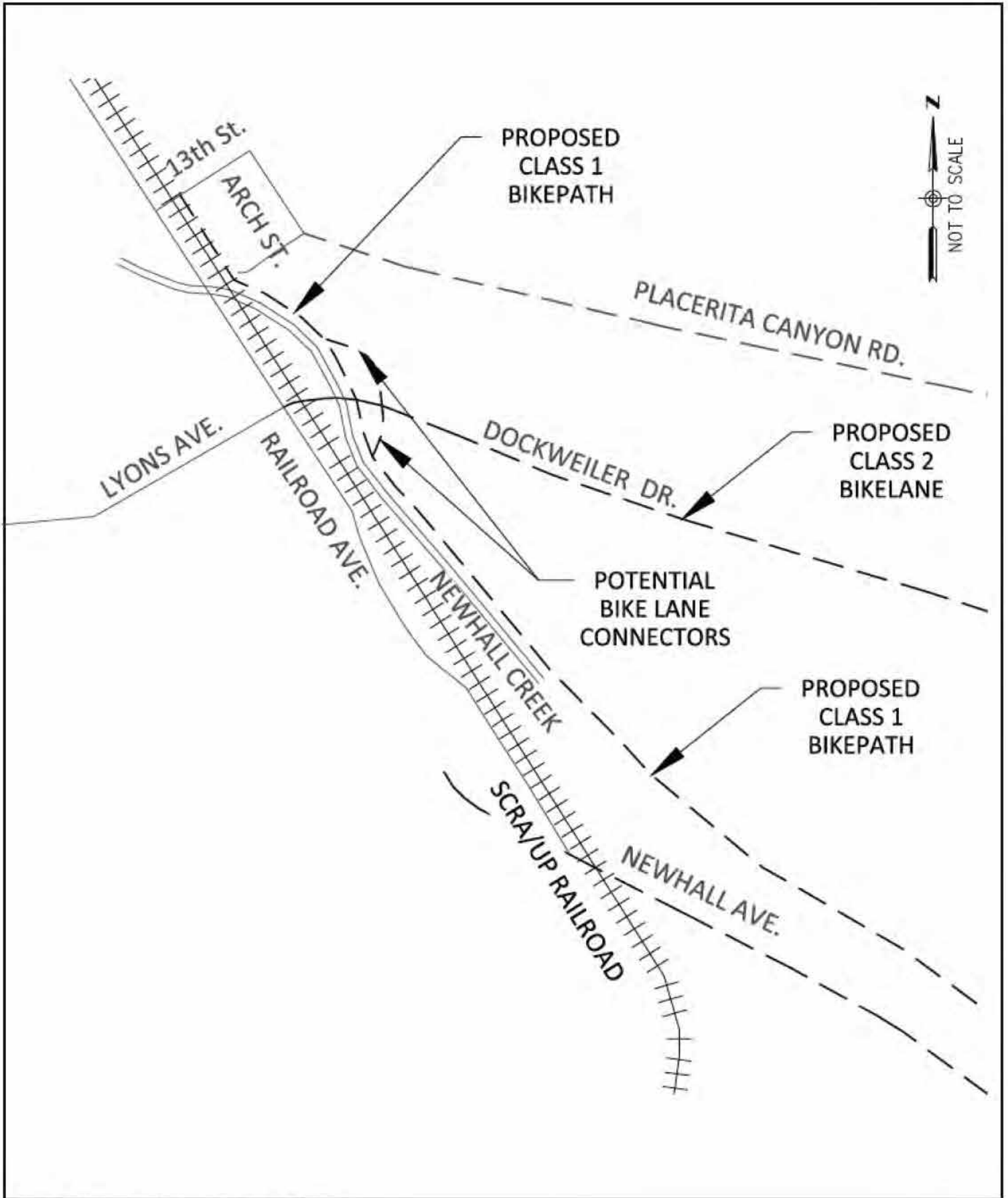
As illustrated in Figure 4.9-18, Potential Bike Lane connectors are proposed from Dockweiler Drive to connect to the Proposed Class I Bike Path along Railroad Avenue and the Proposed Class II Bike Path along Dockweiler Drive.

### **Vehicle Miles Traveled**

California's Sustainable Communities and Climate Protection Act, also referred to as Senate Bill 375 (SB 375) became effective January 1, 2009. The goal of SB 375 is to help achieve AB 32's GHG emissions reduction goals by aligning the planning processes for regional transportation, housing, and land use. SB 375 requires CARB to develop regional reduction targets for GHGs, and prompts the creation of regional plans to reduce emissions from vehicle use throughout the state. California's 18 Metropolitan Planning Organizations (MPOs) have been tasked with creating "Sustainable Community Strategies" (SCS) in an effort to reduce the region's vehicle miles traveled (VMT) in order to help meet AB 32 targets through integrated transportation, land use, housing and environmental planning.

On April 6, 2016, SCAG's Regional Council adopted the 2016-2040 Regional Transportation Plan/Sustainable Communities Strategy: Towards a Sustainable Future (2016-2040 RTP/SCS). The SCAG 2016 RTP/SCS is an update to the 2012-2035 RTP/SCS that further integrates land use and transportation in certain areas so that the region as a whole can grow smartly and sustainably. Between 2015 and 2040, the SCAG region is anticipated to experience increases in population, households and jobs. The 2016 RTP/SCS includes land use strategies, based on local general plans, as well as input from local governments, to achieve the AB 32 state-mandated reductions in GHG emissions through decreases in regional per capita VMT. As part of the 2016-2040 RTP/SCS, transportation network improvements would be included, and more compact, infill, walkable and mixed-use development strategies to accommodate new region's growth would be encouraged to accommodate increases in population, households, employment, and travel demand.





Source: David Evans and Associates Inc, August 8, 2017.



Figure 4.9-18  
Santa Clarita Valley's Existing Bicycle and Pedestrian Facilities

The Proposed Dockweiler Drive Extension Project is identified as one of the financially constrained projects within the RTP/SCS, as shown in Appendix B, 2016 RTP/SCS Project List.<sup>1</sup> As such, the project is recognized as part of the regional strategy that is consistent with SCAG's policies to reduce VMTs. The Proposed Project is also identified in the City's Circulation Element as an addition route of travel connecting Lyons Avenue to Dockweiler Drive. Because no new land uses are being proposed, the Proposed Project would not generate any new vehicle trips and thus would not have the potential to increase VMTs on a per capita basis.

#### **4.9.4 CUMULATIVE IMPACT**

Development of the Proposed Project in conjunction with the related projects would increase the amount of traffic in the Proposed Project area within the City of Santa Clarita. Cumulative traffic impacts are addressed by comparing the Existing Conditions as presented in the "Environmental Setting" portion of this Section, to the Future with Project for 2019 and 2035 (which includes the Proposed Project plus ambient and related project growth), as presented in the "Project Impacts" portion of this Section. As discussed under "Project Impacts," the Proposed Project would not result in a significant impact at any of the analyzed intersections in the study area with the incorporation of mitigation measures.

With respect to traffic from each of the related projects, mitigation measures for each related project would be implemented individually in coordination with the Lead Agency. The Proposed Project would not result in a significant impact related to traffic, emergency access, design hazards, or alternative modes of transportation that currently serve the Project area. With respect to each of these areas, the design of each related project would be evaluated individually in coordination with the appropriate Lead Agency department to minimize any potential impacts. Overall, the Proposed Project's cumulative transportation and traffic impacts would be less than significant.

#### **4.9.5 MITIGATION MEASURES**

##### **Year 2019 Project Mitigation Measures**

- 4.9-1 Dockweiler Drive extension: Construct to full Secondary Highway Pavement width, from Aden Avenue to west of Valle Del Oro, providing two lanes eastbound (uphill) and one lane westbound (downhill), as necessary. May be striped for parking lane on both sides of roadway in interim condition. Class II Bike lanes and Pedestrian Sidewalks to be provided.
- 4.9-2 Railroad Avenue (North-South) and Lyons Avenue (East-West): Construct the railroad crossing and improve the intersection. The intersection improvements will include widening the northbound direction to accommodate an additional left turn lane and convert a through lane to a shared through-right lane and southbound direction to accommodate an additional left turn lane and convert the right turn lane to a shared through-right turn lane. The north and southbound directions will include two left turn lanes, a through lane, and a shared through-right turn lane. The eastbound direction will provide a left turn lane, a through lane, and a shared through-right turn lane. The westbound direction will provide a left turn lane, two through lanes and a right turn lane.

<sup>1</sup> See 2016-20440 RTP/SCS, Appendix B, Table 2, at page 151.

- 4.9-3 Arch Street (north leg) / Dockweiler Drive (south leg) / 12<sup>th</sup> Street (east and west legs) / Placerita Canyon Road (southeast leg): Convert intersection to a 5-leg all way stop controlled intersection including Dockweiler Drive as the 5th leg. Arch Street will include a shared left-through-right lane accommodating left turning movements to the west leg (12<sup>th</sup> Street) and Placerita Canyon Road. Dockweiler Drive will include a shared left-through right lane accommodating right turning movements to Placerita Canyon Road and the west leg (12<sup>th</sup> Street). The east leg (12<sup>th</sup> Street) will include a shared left-through-right lane accommodating left turning movements to Placerita Canyon Road and Dockweiler Drive. The west leg (12<sup>th</sup> Street) will include a shared left-through-right lane accommodating right turning movements to Dockweiler Drive and Placerita Canyon Road. Placerita Canyon Road will include a shared left-right lane accommodating left turning movements to Dockweiler Drive and west leg (12<sup>th</sup> Street) and right turning movements to the east leg (12<sup>th</sup> Street) and Arch Street.
- 4.9-4 Lyons Avenue (North-South) and Dockweiler Drive (East-West): Extend Lyons Avenue to intersect with Dockweiler Drive as a signalized T-intersection. The northbound direction will include two left turn lanes and a through lane. The southbound direction will include a through and two right turn lanes. The eastbound direction will include a left turn lane and two right turn lanes.
- 4.9-5 Railroad Avenue (North-South) and 13<sup>th</sup> Street (East-West): The railroad crossing to be closed. The intersection modifications include removing the northbound right turn lane and southbound left turn lane and restricting the eastbound through movement. The northbound direction will include a left turn lane and two through lanes. The southbound direction will include a through lane and a shared through-right turn lane. The eastbound direction will include a shared left-right turn lane.

### **Year 2019 Regional Mitigation Measures**

- 4.9-6 Sierra Highway (North-South) and SR-14 Freeway Southbound Ramps (East-West): The intersection modifications include installing a traffic signal and widening the southbound direct to provide an additional left turn lane. The northbound direction will include a through lane, and a shared through-right turn lane. The southbound direction will include two left turn lanes, and two through lanes. The eastbound direction will include a left turn lane and a right turn lane.
- 4.9-7 Sierra Highway (North-South) and Placerita Canyon Road (East-West): The intersection modifications include lane modifications to provide an exclusive right turn westbound lane and right turn northbound lane. The northbound direction will include a left turn lane, two through lanes, and a right turn lane. The south and eastbound directions will include a left turn lane, a through lane, and a shared through-right turn lane. The westbound direction will include a left turn lane, a through lane, and a right turn lane.
- 4.9-8 SR-14 Freeway Northbound Ramps (North-South) and Placerita Canyon Road (East-West): The intersection modifications include installing a traffic signal. The northbound direction will include a left turn lane and a right turn lane. The east and westbound directions will include two through lanes.

- 4.9-9 SR-14 Freeway Southbound Ramps (North-South) and Newhall Avenue (East-West): The intersection modifications include converting the east and southbound right turn lanes to free right turns and signalizing the intersection. The eastbound direction will include two through lanes and a free right turn lane. The southbound direction will include a shared through-left turn lane and a free right turn lane. The westbound direction will include a left turn lane and two through lanes.
- 4.9-10 Newhall Avenue (North-South) and Lyons Avenue (East-West): The intersection modifications include converting the eastbound through-right lane to a right turn lane. The northbound direction will include two left turn lanes and a shared through-right lane. The southbound direction will include a left turn lane and a shared through-right lane. The east and westbound directions will include a left turn lane, two through lanes, and a right turn lane.

### **Year 2035 Project Mitigation Measures**

- 4.9-11 Valle Del Oro (North-South) and Dockweiler Drive (East-West): Install a traffic signal. The Intersection modifications include signalizing the intersection and widening the east and west bound direction to accommodate an additional through lane and widening the northbound direction to accommodate an exclusive right turn lane. The northbound direction will include a shared left-through lane and a right turn lane. The southbound direction will include a shared left-through-right turn lane. The east and westbound directions will include a left turn lane, a through, and a shared through-right turn lane.

### **Year 2035 Regional Mitigation Measures**

- 4.9-12 Sierra Highway (North-South) and Placerita Canyon Road (East-West): The Intersection modifications include widening to accommodate lane modifications to all approaches. Widen the northbound direction to accommodate an additional through lane. Widen the east and southbound directions to accommodate two additional through lanes and restripe the shared through-right lane to a right turn only lane. Widen the westbound direction to accommodate two additional through lanes. The north, east, south, and westbound direction will include a left turn lane, three through lanes, and a right turn lane.
- 4.9-13 Sierra Highway (North-South) and Newhall Avenue (East-West): Intersection modifications include converting the northbound through-right turn lane to a through lane and widening to accommodate a free right turn. The northbound direction will include two left turn lanes, two through lanes, and a free right turn. The southbound direction will include a left turn lane, two through lanes, and a shared through-right turn lane. The east and westbound directions will include two left turn lane, three through lanes, and a right turn lane.
- 4.9-14 Main Street (north leg) / Newhall Avenue (south leg) / Newhall Avenue (west leg): The intersection modifications include widening the northbound direction to accommodate a left turn lane and the eastbound direction to accommodate a right turn lane. Newhall Avenue (south leg) will include a left turn lane and a shared left-through lane. Main Street will include a shared right-through lane. Newhall Avenue (east leg) will include a shared left-right lane and a right

turn lane.

#### **4.9.6 LEVEL OF SIGNIFICANCE AFTER MITIGATION**

With the incorporation of mitigation measures, impacts upon transportation and circulation system would be less than significant.