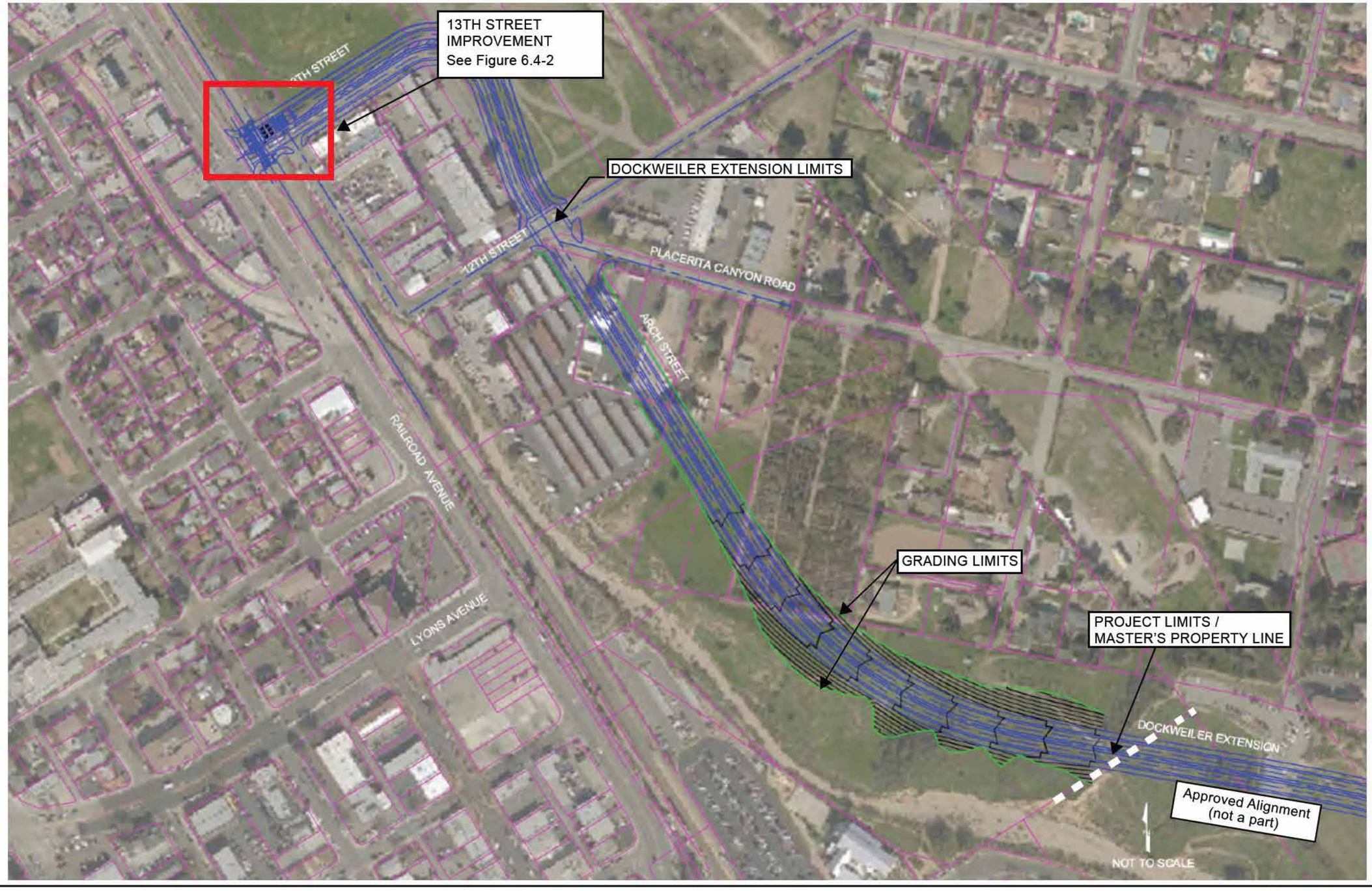
6. PROJECT ALTERNATIVES
4. ALTERNATIVE 2 (PROPOSED ALIGNMENT TO ARCH STREET WITHOUT LYONS AT GRADE CROSSING)

Similar to the Proposed Project, the Alternative 2 Project would involve the development of the proposed roadway alignment and associated infrastructure for Dockweiler Drive, which would extend Dockweiler Drive to Arch Street. The route would continue along Arch Street to 13th Street to link the Railroad Avenue. Unlike the Proposed Project, Alternative 2 does not include the roadway segment between the Dockweiler extension and Lyons Avenue, which spans a portion of the Newhall Creek. Additionally, Alternative 2 proposes to maintain and improve the 13th Street rail crossing. The proposed alignment of Dockweiler Drive under Alternative 2 is illustrated in Figure 6.4-1.

The proposed street improvements at 13th Street are depicted in Figure 6.4-2, Alternative 2 13th Street Improvements. As shown in Figure 6.4-2, the existing westbound travel lanes on 13th Street approaching Railroad Avenue would be improved with two westbound lanes and a median, with one dedicated left turn lane, one shared through lane and left turn lane, and one dedicated right turn lane. The eastbound traffic lanes on 13th Street would be improved to provide two through travel lanes. The existing median nose on Railroad Avenue would be removed to reconfigure the four southbound lanes to provide two protected left turn lanes, one dedicated through lane and one shared right turn lane and through lane. The northbound lanes on Railroad Avenue would provide two through lanes, one protected left turn lane and one protected right turn lane.

Similar to the Proposed Project, the intersection of Arch Street, 12th Street, Placerita Canyon and Dockweiler Drive would be improved with one of three intersection design configurations. For an illustration of the proposed design configurations for Alternative 2, see Figure 6.4-3, Alternative 2 Option A - 5-Legged Intersection, Figure 6.4-4 – Alternative 2 Option B – Traffic Circle, and Figure 6.4-5 Alternative 2 Option C - 3-Legged Intersection, respectively.

The Alternative 2 Project would require improvements to Arch Street and 13th Street to accommodate traffic from the extension of Dockweiler Drive to Arch Street. Roadway improvements would require increasing the width of Arch Street and 13th Street, which would affect several surrounding properties. Figure 6.4-6 depicts the properties that would be impacted at 13th Street at Arch Street under the Alternative 2 Project. The portion of the Project Site to the east of the intersection of Railroad Avenue and 13th Street is bounded by one-story commercial buildings to the west, across Railroad Avenue (See Figure 4.1-3, View 9), industrial and commercial uses to the east (See Figure 2-4, Views 9 and 12), undeveloped land to the north (See Figure 4.1-2, View 5), and Newhall Creek to the south. Photographs of existing surrounding land uses at Railroad Avenue and Lyons Avenue are depicted in Figures 2-3 through 2-4 of the Project Description.



Source: David Evans and Associates, May 2017.

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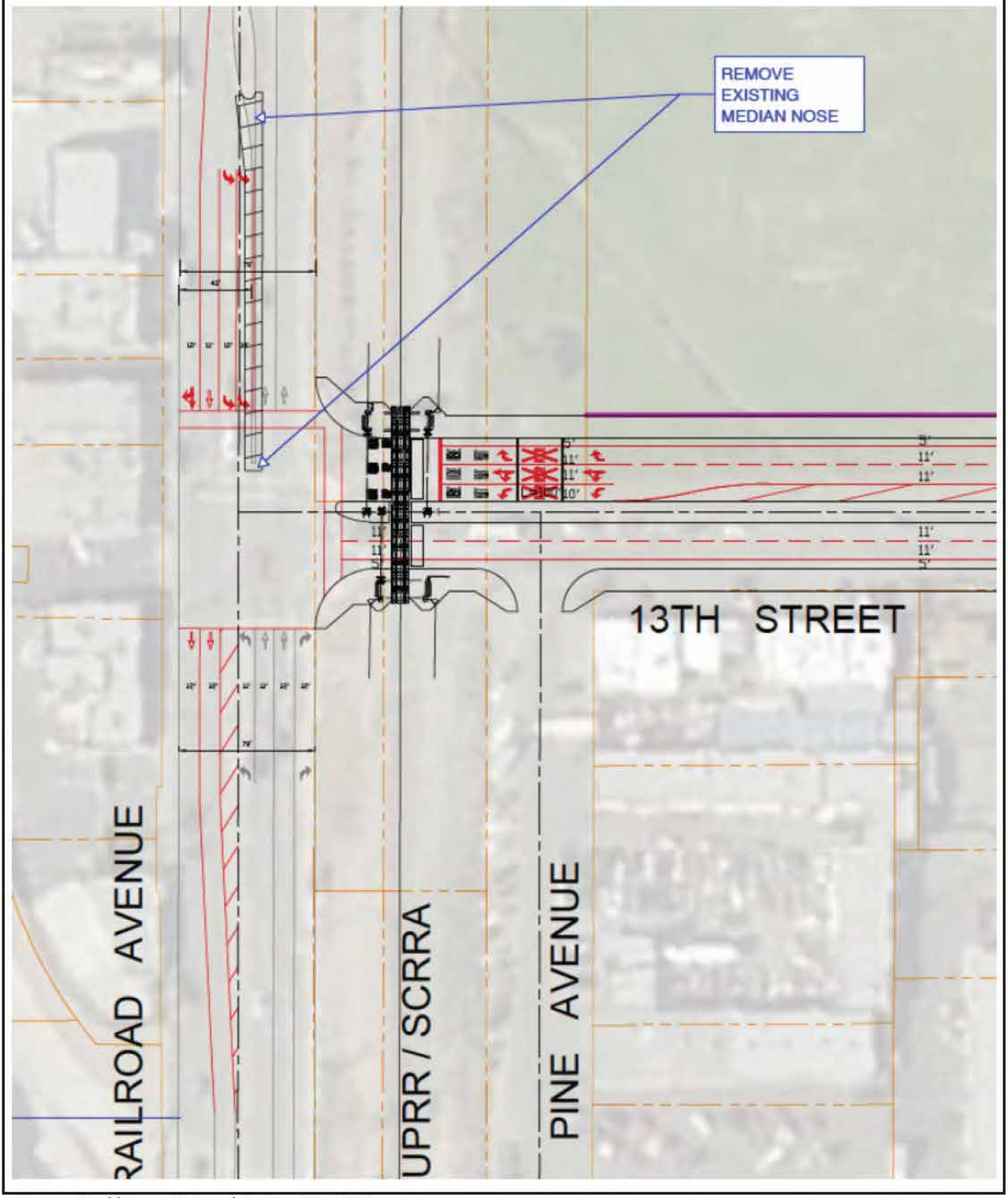
Figure 6.4-1
Alternative 2 Project



Source: David Evans & Associates Inc., May 2017.

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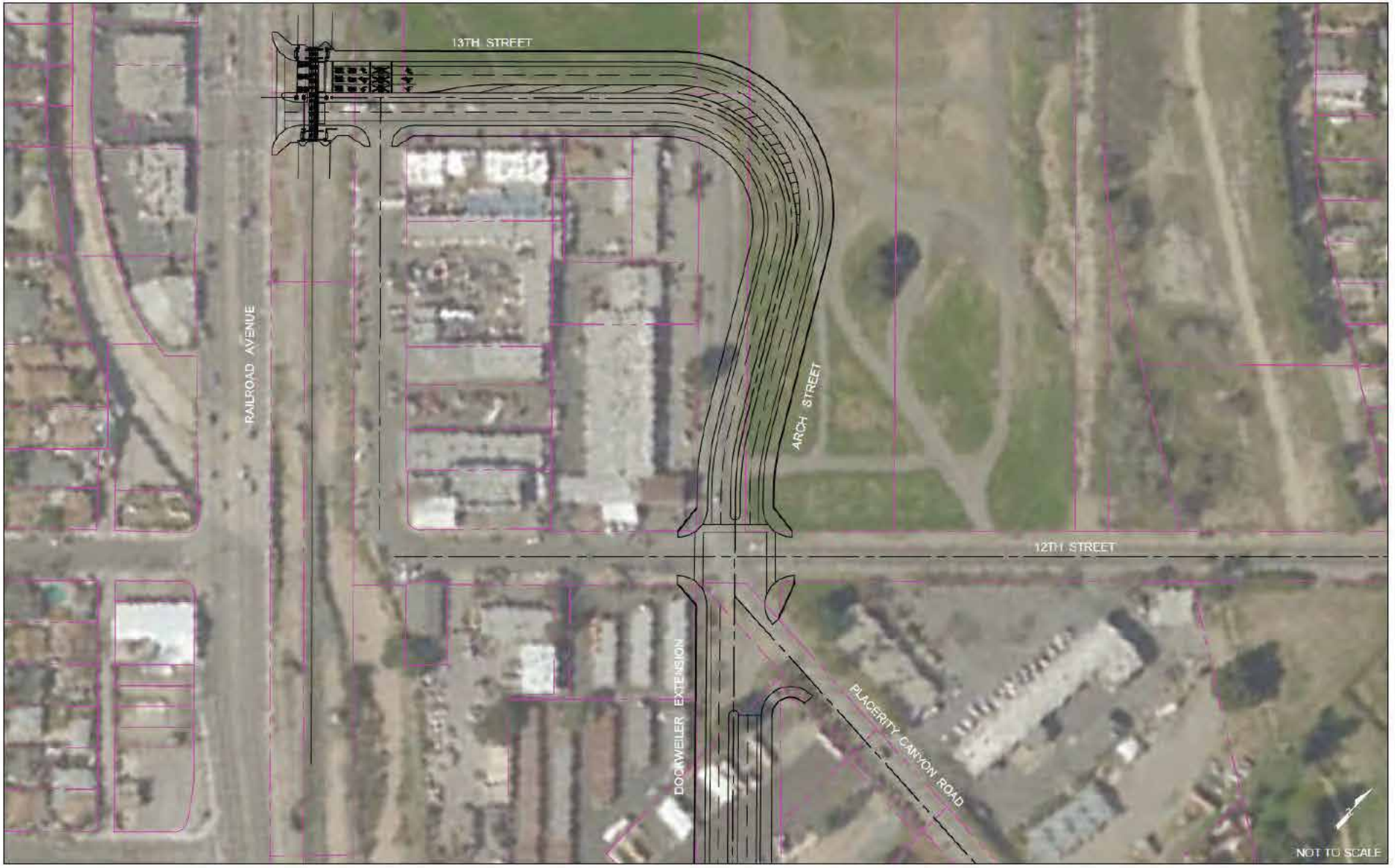
Figure 6.4-2
Alternative 2 13th Street Improvements



Source: David Evans & Associates Inc., May 2017.

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Figure 6.4-3
Alternative 2 Option A - 5 Legged Intersection

Source: David Evans & Associates Inc., May 2017.

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Figure 6.4-4
Alternative 2 Option B - Traffic Circle

Source: David Evans & Associates Inc., May 2017.

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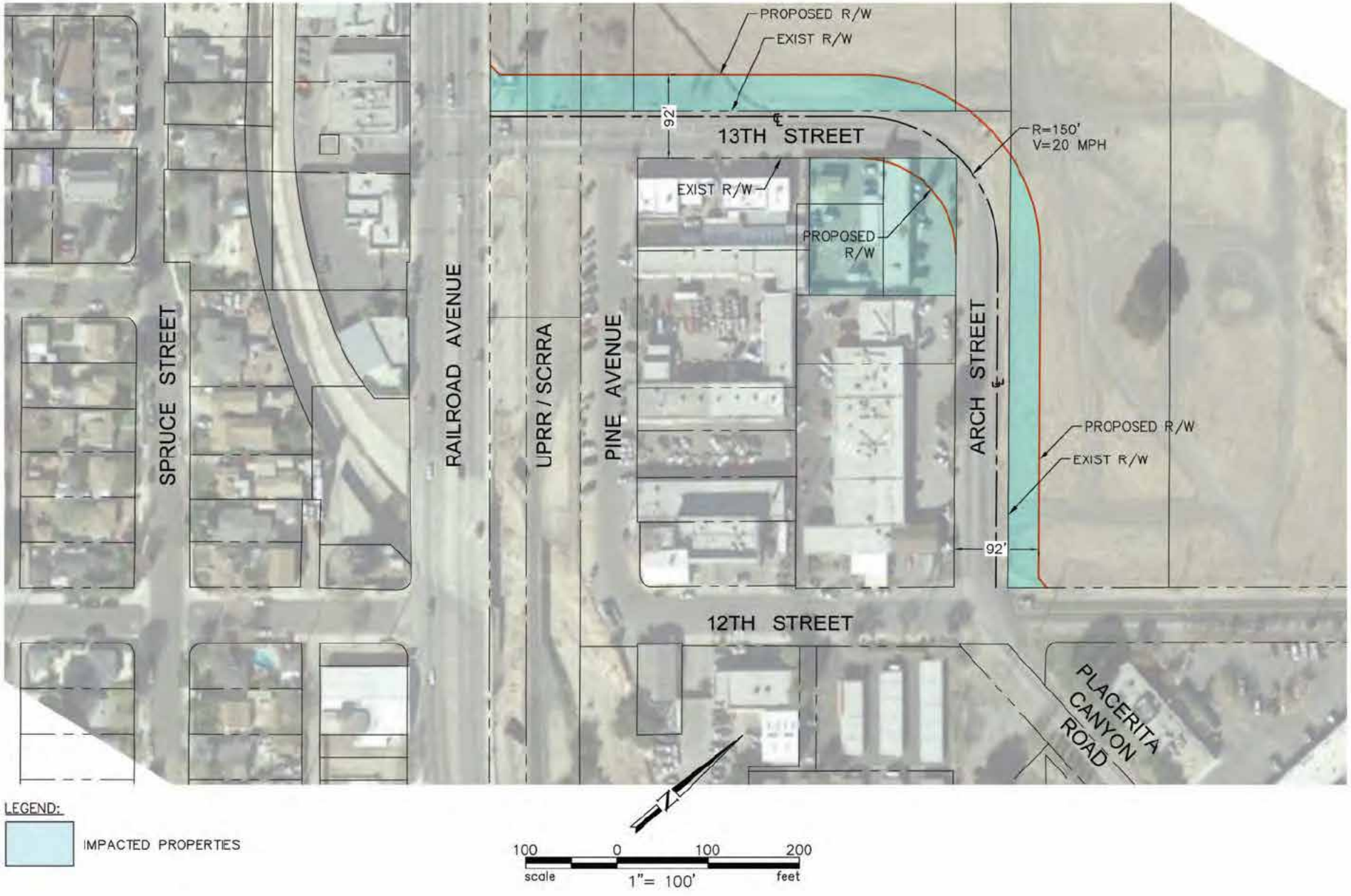
Figure 6.4-5
Alternative 2 Option C - 3 Legged Intersection



Source: David Evans and Associates, August 22, 2016

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Figure 6.4-6
Impacted Properties at 13th Street

Properties to the north of the Project Site at 13th Street and Railroad Avenue are zoned MX-N with a General Plan land use designation of Mixed Use Neighborhood. Properties to the south of this portion of the Project Site are zoned SP with a General Plan land use designation of Specific Plan. Properties to the east of this portion of the Project Site are zoned UR1, UR3 and PI, with a General Plan land use designation of Urban Residential One, Urban Residential Three and Public Institutional, respectively. Properties to the west, across Railroad Avenue are zoned SP with a General Plan land use designation of Specific Plan. (See Figure 2-4, Zoning and Land Use Map of Project Site and Surrounding Area).

ENVIRONMENTAL ANALYSIS

Aesthetics

Temporary Construction Impacts

The Alternative 2 Project would similarly impact existing views and aesthetic character of the area by grading, stockpiles or debris and soil, building materials and construction equipment, all of which could occupy the field of view of passing motorists, pedestrians and nearby residents. The construction site would continue to be visible from the residential properties on Aden Avenue and from passing motorists on Lyons Avenue, Railroad Avenue, Market and Race Streets, and at the Arch Street/12th Street/Placerita Canyon intersection with the development of the Alternative 2 Project. Thus, the existing visual character of the Project Site would be adversely impacted throughout the duration of the construction period. Therefore, impacts related to aesthetic character of the area during construction would be the same as compared to the Proposed Project, where impacts would be considered significant but temporary. Implementation of Mitigation Measure 4.1-1 would also be recommended for the Alternative 2 Project.

Long Term Operational Impacts

Upon completion of the Alternative 2 Project the aesthetic character of the Project Site and its immediate surroundings would be permanently altered, but to a lesser extent than the Proposed Project. Views of the hillside on the southeast portion of the Project Site would be similarly altered by grading for the proposed roadway extension.

Views of the Project Site at the intersection of Railroad Avenue and 13th Street would be similar to existing views of the intersection, since the Alternative 2 Project includes the improvement of the at-grade railroad crossing. A visual simulation of the views at the Arch Street/12th Street/Placerita Canyon/Dockweiler Drive Intersection is depicted in Figure 4.1-6 in Section 4.1, Aesthetics. The resulting aesthetic impacts under the Alternative 2 Project would be similar to the proposed project and would be as shown in Figure 4.1-6. As the proposed infrastructure improvements would be made in accordance with the City's roadway standards and would be attractively landscaped, aesthetic impacts would be less than significant. Additionally, as noted in Section 2.0, Project Description, the loss of the oak tree at this location (See Figure 4.1-6, Before View, Looking South) would require an oak tree permit and would require replacement tree to be planted as part of the permit approval process, aesthetic impacts associated with the loss of oak trees would be reduced to less than significant levels.

As the Alternative 2 Project does not include the roadway extension between Dockweiler Drive and Lyons Avenue, views of this intersection would largely remain unchanged, as compared to the Proposed Project. Like the Proposed Project, the roadway extension would be developed in accordance with the City's roadway standards and design guidelines to ensure the graded hillsides, medians, and walkways are landscaped in a manner that maintains the visual aesthetic quality and character of the City's roadway infrastructure. Therefore, impacts related to long-term operation would be the same as compared to the less than significant impact anticipated for the Proposed Project.

Alteration of A Significant Ridgeline

Similar to the Proposed Project, construction of the proposed roadway alignment between Dockweiler Drive and Arch Street would permanently alter a significant ridgeline as designated in the City of Santa Clarita General Plan. However, as noted in Section 4.1, Aesthetics, the eastern segment of the Dockweiler alignment was previously approved under a separate project entitlement for The Master's University in 2009, which included a Ridgeline Alteration Permit for the eastern segment of this ridgeline.[1] As part of the approved entitlements for The Master's University Master Plan in 2009, the irreversible grading and re-contouring of the ridgeline was approved to the western limit of the Master's University Campus. As shown in Figure 4.1-1, the grading limits of the Proposed Project (which would be the same under this Alternative) would retain the gradual elevation profile of the base of the ridgeline leading to the Master's University Campus. Limited views of the altered portion of the ridgeline within the Proposed Project limits would be partially visible from the public rights-of-way along Market Street and Race Street to the south of the Project Site (see Figure 4.1-5 in Section 4.1, Aesthetics). As a project design feature under this Alternative the grading plan would incorporate landform grading practices to blend the manufactured slopes and required drainage benches into the natural topography to the maximum extent feasible. Plant materials will be utilized to protect slopes from slippage and soil erosion and minimize the visual effects of grading and construction on a hillside area. With approval of a Hillside Review Permit, aesthetic impacts associated with the grading of Alternative 2 would be reduced to less than significant levels.

Visual Character

Similar to the Proposed Project, the Alternative 2 Project would not introduce buildings or development that would block existing views or substantially degrade the visual character of the existing site. The Alternative 2 Project also includes pedestrian, equestrian, and bicycle improvements to Dockweiler Drive that would include wide sidewalks, Class II bike lanes on each side, and a multi-purpose trail on the east side. Class II bike routes will provide a striped lane for one-way bike travel and will be marked with signs and pavement striping. Multi-purpose trails are to be unpaved and will be available for equestrian, hiking, and mountain bike use. These project features would increase accessibility to scenic natural resources including the Newhall Creek and surrounding ridgelines and mountains. Therefore, impacts related to visual character would be the less than significant.

[1] *Ibid.*

Roadway Light and Glare

Ambient nighttime lighting for the Alternative 2 Project would be similar to that of the Proposed Project. The Alternative 2 Project would introduce nighttime lighting to the Project Area, which will include pole-mounted streetlights at intersections and lighted bollards along Dockweiler Drive, and would contribute to additional light and glare from the headlights of vehicles utilizing the roadway. Compared to the Proposed Project, Alternative 2 would introduce less lighting and glare sources, as Alternative 2 does not include the roadway connection between Dockweiler Drive and Lyons Avenue.

Lighting uses associated with the Alternative 2 Project are not anticipated to substantially impact any surrounding sensitive uses as the streetlights would be installed with downward directional fixtures and would not create light trespass onto any adjacent properties. Light emanating from the Alternative 2 Project would be a relatively low-level indirect source of light illuminating the roadway and pedestrian walkways and would not adversely impact other properties in the immediate area. Additionally, the steep terrain and orientation of the southeastern portion of the Project Site would shield vehicle headlights, signage lighting and streetlights from impacting the residential properties within the Placerita Canyon community to the east and along Market and Race Streets to the west. Overall, the Alternative 2 Project would be expected to slightly increase ambient lighting in the area, but compliance with the design standards and requirements established in the Santa Clarita Municipal Code Section 17.51.050 would mitigate lighting impacts to a less than significant level. Therefore, impacts related to roadway light and glare would be less than significant.

Air Quality

Construction

Construction of the Alternative 2 Project would occur over an approximately 12-month timeframe and would involve clearing, grading, excavation, trenching, and asphalt paving. Sources of emissions during construction include: stationary and mobile uses of construction equipment, construction vehicles (heavy-duty construction vehicles and worker vehicles), and energy use. Additionally, earthwork and construction activities would generate fugitive dust emissions. These construction-related emissions and their associated air quality impacts would be short-term in nature and limited only to the period when construction activity is actively taking place. The Alternative 2 Project's construction emissions would similar to the emissions generated under the Proposed Project, but slightly reduced as this alternative would involve less mass grading. The increased emissions associated with the Arch Street to 13th Street improvements would be offset by the avoidance of grading associated with the Dockweiler to Lyons connection. As the Proposed Project emissions would be below SCAQMD's significance thresholds for all criteria pollutants, the Alternative 2 regional construction air quality emissions would be less than significant.

AQMP Consistency

The Alternative 2 Project would not exceed the AQMD's significance thresholds for regional construction emissions and thus would not increase the frequency or severity of existing air quality violations or cause or contribute to new air quality violations within the Basin. The Alternative 2 Project is consistent with

the AQMP and would not interfere with attainment of air quality levels identified in the AQMP. Similar to the Proposed Project, the Alternative 2 Project would help reduce congestion and vehicles per miles travelled by providing sidewalks and bicycle lanes and by providing direct access from the residential area and Master's University area to the Jan Heidt Newhall Metrolink Station and Old Town Newhall. The Alternative 2 Project encourages alternative modes of transportation other than motor vehicles and would be consistent with the goals and objectives of the AQMP to reduce vehicle emissions throughout the Basin.

Localized Construction Emissions

Similar to the Proposed Project, the Alternative 2 Project would result in significant localized air emissions in close proximity to residential land uses within 100 meters of the Project Site on a temporary and intermittent basis during construction. Localized NOx and CO emissions would be below the significance thresholds at all sensitive receptor locations. However, localized thresholds would be exceeded for PM_{10} and $PM_{2.5}$ emissions at two locations: (1) the single family residential land uses located immediately north of the Project Site (within a proximity of 100 meters) and (2) the residential land uses within 100 meters south of the Project Site in the vicinity of Market Street and Race Street. Localized emissions would be below the stated thresholds for any land use located further than 100 meters from the Project Site. Therefore, notwithstanding implementation of mitigation measures 4.2-1 through 4.2-4, localized air quality impacts resulting from construction activities would be considered significant and unavoidable.

Operational Emissions

Although the Alternative 2 Project would not directly generate any new vehicle trips, it would result in changes to the traffic circulation in the vicinity and would alter the average daily traffic volumes and peak hour traffic volumes at local intersections. A CO hotspot analysis was conducted for the Proposed Project, and as the Alternative 2 Project is within the same envelope as the Proposed Project, it was found that, under worst-case conditions, future CO concentrations at each intersection would not exceed the state 1-hour and 8-hour standards with or without the development of the Proposed Project. Therefore, no significant project-related impact would occur relative to future carbon monoxide concentrations of the Alternative 2 Project. The Alternative 2 Project would have a less than significant impact with respect to this criterion.

Biological Resources

Habitat Modification

Vegetation

The Alternative 2 Project Site grading plans for the roadway extension of Dockweiler Drive to the to Arch Street would be similar to the Proposed Project; however, the Alternative 2 Project would not include the roadway extension of Lyons Avenue to Dockweiler Drive. As such, the Alternative 2 Project would be within the envelope of the Project Site analyzed for the Proposed Project; however, less acres of

vegetation would be removed as compared to the Proposed Project. Of the vegetation communities impacted by the Alternative 2 Project, Disturbed California Sagebrush-California Buckwheat Scrub would be the dominant plant community present by area and approximately less than 0.63 acre of this habitat would be lost through site grading and project implementation. The loss of less than 2 acres of vegetation is considered adverse; although, due to the Site's disturbance history, its small size, the lack of sensitive plant communities, the lack of structure for wildlife, and high percentage of invasive and non-native plant species generally associated with disturbed areas, impacts associated with the loss of less than 2 acres of vegetation present on-site is considered less than significant. The only special-status plants observed during the field investigation were two coast live oaks. No other special-status plants are considered to have a high potential for occurrence within the Project Site. A permit is required for the encroachment into the Protected Zone.

Wildlife

Similar to the Proposed Project, construction activity and grading operations of the Project Site for the Alternative 2 Project would disturb and/or threaten the survival of common wildlife species present on-site. It is expected that species of low mobility, particularly small mammals, amphibians, and reptiles, would be lost during site preparation, grading, and construction. Site grading and project implementation would eliminate approximately less than approximately 2 acres of natural habitat present on-site, and would result in an incremental reduction in native wildlife species abundance and diversity. However, due to nearby urban development and the associated human disturbance, field investigations indicate wildlife diversity and abundance on the Project Site is relatively low. Most the species of mammals, birds, and reptiles observed on-site or thought to occur on-site are relatively common. Project implementation is not expected to cause current wildlife population of common species on or adjacent to the Project Site to drop below self-sustaining levels. Therefore, impacts to common wildlife species are not considered significant.

Project-related activities associated with site preparation and construction could result in the direct loss of individuals of one special-status wildlife species (the silvery legless lizard) and of active nests or the abandonment of active nests by adult birds should grading occur during nesting season. The loss of a California species of special concern and active bird nests would be a considered significant without mitigation. Implementation of mitigation measures 4.3-2 and 4.3-3 would reduce impacts to the silvery legless lizard and nesting birds to a less than significant level.

Federally Protected Wetlands

Based on field investigations, two CDFW jurisdictional features occur within the Project Site for the Proposed Project, the Newhall Creek and a small ephemeral drainage that is a tributary to Newhall Creek. There is also a small area of narrow-leaf willow thicket, which probably does not qualify as a Federally jurisdictional wetland. As the Alternative 2 Project does not include the extension of Lyons Avenue to Dockweiler Drive, the Alternative 2 Project would not result in either temporary or permanent impacts to the areas of the Newhall Creek and its associated tributary and are classified as "riverine and related

permanent water, with continuous flow at least seasonally." As such no impacts to jurisdictional resources would occur.

Wildlife Movement and Corridors

Similar to the Proposed Project, the Project Site for Alternative 2 is generally surrounded on three sides by development and road networks. Although the Newhall Creek is located to the west of the Project Site for the Alternative 2 Project, the Project would not would not result in any barrier to wildlife movement and would not impede the ability of Newhall Creek to function as a wildlife movement corridor. The Alternative 2 Project as proposed would not result in significant impacts to wildlife movement.

Construction Activity

Similar to the Proposed Project, construction-related activities, particularly site clearing, grading, and the implementation of the road surface, could have adverse effects on plant and wildlife habitat, and together, would be considered a significant impact. Implementation of Mitigation Measure 4.3-4 would reduce these construction-related impacts to a less than significant level.

Operation

Increase in Populations of Non-Native Species

Similar to the Proposed Project, non-native plants and wildlife are expected to increase on-site, because these species are more adapt to urban environments and can out-compete native species. Historical and ongoing development in the vicinity of the Project Site has already supported continual and ongoing increase and proliferation of non-native plant and wildlife species in the vicinity of the Project Site. Development of the Alternative 2 Project is not expected to substantially increase the distribution of non-native plants and wildlife. With compliance to Mitigation Measure 4.3-5, Alternative 2 Project impacts would be less than significant.

Increased Light and Glare

Similar to the Proposed Project, it is anticipated that nighttime lighting would increase in areas adjacent to the Project Site, which can disturb breeding and foraging behavior, movement, and can potentially alter breeding cycles of birds, mammals, and nocturnal invertebrates. Because of surrounding development around the Project Site, nearby natural areas already receive some nighttime lighting. The Alterantive 2 Project would increase light and glare effects near to the Newhall Creek corridor. Implementation of Mitigation Measure 4.3-6 would decrease this impact to a less than significant level.

Stormwater and Urban Runoff

Similar to the Proposed Project, it is expected that stormwater runoff would be limited to pavement runoff during periodic storm events. It is reasonable to assume runoff could substantially affect special-status species potentially occurring downstream from the Project Site (i.e. Newhall Creek), incrementally diminish habitat, and degrade the quality of the environment. With the compliance to City's standard

stormwater requirements and required design criteria, impacts to Newhall Creek resulting from Stormwater runoff would be less than significant.

Cultural Resources

Cultural and Historic Resources

No cultural or historic habitable structures are located on-site, and as such, similar to the Proposed Project the Alternative 2 Project would not have the potential to adversely impact any historic or cultural resources.

Archaeological Resources

No known archeological sites are identified within the Project Site for the Alternative 2 Project. While, portions of the Project Site are improved with roadways, the Alternative 2 Project will consist of earthwork activities, such as grading and excavation, in areas that are currently undeveloped. Construction-related earthwork activities may result in the accidental discovery of prehistoric or historic archaeological resources or Native American burial sites. Implementation of mitigation measures 4.4-1 will reduce impacts to a less than significant level.

Paleontological Resources

The Alternative 2 Project is within the envelope of the Project Site for the Proposed Project. The records search conducted by the Vertebrate Paleontology Department of the Natural History Museum of Los Angeles County yielded no known fossil localities within the Project Site for the Proposed Project. The closest vertebrate fossil localities are from the Saugus Formation, located directly north of the Project Site. While it is possible that fossilized materials may be discovered during site preparation and construction, specifically grading and excavation activities, precautionary measures set forth in mitigation measure 4.4-2 would reduce any potential adverse impacts to paleontological resources to a less than significant level.

Tribal Cultural Resources

Similar to the Proposed Project, Alternative 2 would not have a direct impact upon known tribal cultural resources. Nevertheless, provisions for the identification and evaluation of accidentally discovered archeological resources would be implemented in accordance with mitigation measure 4.4-1. With the incorporation of mitigation measure 4.4-1, impacts upon tribal resources would be less than significant.

Geology And Soils

The Project Site is underlain by Saugus Formation, Pacoima Formation, Quaternary alluvium and artificial fill and has historic high groundwater elevations greater than 50 feet in depth. The Project Site is located in the State of California Seismic Hazard Zone map for the Newhall Quadrangle. Hazards related to seismic-related ground failures (including ground rupture and liquefaction) are considered low.

All slopes should be evaluated by the Project Geotechnical engineer at the planning and design stages. The hillside area of the site is designated on the State of California Seismic Hazard Zone Map to have earthquake-induced slope instability. No landslides have been mapped on the Project Site. Remedial measures will be required where ascending or descending cut slopes are not stable as determined by geologic or geotechnical stability analyses. The potential for earthquake-induced slope failures is considered low provided that future geologic and geotechnical evaluations and recommendations for slope stability is incorporated into design and construction.

Additionally, specific recommendations for design and construction should be provided to address soil stability, including: hydro-compression, expansive soils, rippability, the handling of oversized material, soil corrosivity, shirking and bulking of materials, and the handling of the need for retaining wall.

No oil wells have been drilled on or immediately adjacent to the Project Site. If any undocumented oil wells are encountered during future construction operations at the site, their location(s) should be surveyed and the current well conditions evaluated. Water wells have been drilled in the vicinity of the proposed road alignments. If one of these water well is within the proposed road alignment, or if a water well is encountered during future construction operations at the site, the location should be surveyed and the potential impacts to well conditions should be evaluated. The implementation of mitigation measure 4.5-1 would insure that potential Alternative 2 Project impacts would be reduced to a less than significant level.

Hydrology And Water Quality

Construction

During the construction phase, the typical pollutants that affect surface water quality are: sediment from soil erosion, petroleum products (gasoline, diesel, kerosene, oil and grease), hydrocarbons from asphalt paving, construction equipment leaks, paints and solvents, detergents, fertilizers, and pesticides. Similar to the Proposed Project, the Alternative 2 Project would be required to prepare and implement a SWPPP prior to earthwork activities that will put best management practices and erosion control measures to prevent pollution in stormwater discharge. All project construction activities would comply with the City's grading permit regulations, which require the implementation of grading and dust control measures, including a wet weather erosion control plan if construction occurs during rainy season, as well as inspections to ensure that sedimentation and erosion is minimized. Therefore, through compliance with NPDES requirements and City grading regulations, the Alternative 2 Project's construction impacts related to water quality would not violate any water quality standards or waste discharge requirements or otherwise substantially degrade water quality. Construction-related impacts to hydrology and water quality would therefore be less than significant.

Operation

Once the Alternative 2 Project has been constructed, urban runoff could include the aforementioned contaminants, trace metals, landscape maintenance debris, dry product spills, and "nuisance flows" from landscape irrigation during the dry-season. In accordance with NPDES requirements, the Project Applicant would be required to have a Project-specific SUSMP in place during the operational life of the Project to address the management of runoff from the proposed roadway extension. The SUSMP would include site design, source control, low-impact development, and best management practices. Therefore, implementation of the storm water quality plan would reduce water quality impacts during the Alternative 2 Project's operation to less than significant.

Inundation and Flooding

Unlike the Proposed Project, the Alternative 2 Project does include the roadway extension from Lyons Avenue to Dockweiler Drive, which spans a portion of the Newhall Creek. As such, the Alternative 2 Project would not include the development of a new bridge across Newhall Creek or require embankment protection to the roadway and creek and this alternative would not have any impacts upon hydrologic flows within Newhall Creek.

Land Use And Planning

Implementation of the Alternative 2 Project would not disrupt or physically divide an established community. Monument signage will properly guide traffic and identify the entrance to the Placerita Canyon community as a residential community with no through access. Additionally, similar to the Proposed Project, the Alternative 2 Project will provide increased pedestrian and vehicular access in the area.

The Alternative 2 Project would not conflict with any applicable land use plans, policies, or regulations, including: the Regional Transportation Plan / Sustainable Communities Strategy, City of Santa Clarita Municipal Code, City of Santa Clarita General Plan (including the Circulation Element), the Placerita Canyon Special Standards District and North Newhall Area, Old Town Newhall Specific Plan, and the Compass Blueprint Concept Plan. As such, implementation of Project Alternative 2 would create a less than significant impact with regards to land use and planning.

Similar to the Proposed Project, Alternative 2 would require an oak tree permit for the loss of two oak trees that are located within the proposed grading limits and right-of-way alignment and a Hillside Review Permit for the grading of an existing hillside. Approval of the Oak Tree Permit and Hillside Review Permit would reduce land use impacts to less than significant levels.

Noise

Construction

Similar to the Proposed Project, construction of the Alternative 2 Project would require the use of heavy equipment for ground clearing, site grading, and roadway construction. Several pieces of construction equipment operating simultaneously would generate a noise level of approximately 94.6 dBA. The estimated construction noise levels impacting sensitive receptors are expected to exceed the City's daytime noise standards for residential uses (see Table 4.8-8). The construction noise levels would therefore constitute a significant impact.

Operational

Similar to the Proposed Project, the Alternative 2 Project is anticipated to alter roadway traffic volumes as the Proposed Project would create a new roadway segment connecting Lyons Avenue to Dockweiler Drive. Locations in the vicinity of the Project Site could experience slight changes in noise levels as a result of the change in traffic patterns. The changes in future noise levels along the study-area roadway segments in the project vicinity are for the Proposed Project's near term (Year 2019) impacts would increase local noise levels by a maximum of 2.7 dBA CNEL (at the location of Dockweiler Drive (between Sierra Highway and Valle del Oro). This increase would be below the identified thresholds of significance. At all other roadway segments, the resulting noise levels are anticipated to decrease. As such the Alternative 2 Project's potential to generate a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project would be less than significant.

The Future (2019) With Project noise levels on the new roadway segment from Lyons Avenue to Valle del Oro are expected to be 63.3 dBA (CNEL) within 50 feet of the centerline of the roadway. The resulting noise levels at the three identified sensitive receptors would be below 52.9 dBA. Thus, the anticipated with project noise levels at all off-site receptor locations would be within the "normally acceptable" range of noise for residential areas. Therefore, the Alternative 2 Project's noise impacts would be less than significant.

The Alternative 2 Project would direct more traffic through Arch Street and 13th Street in lieu of the Dockweiler/Lyons Extension, which would not be constructed as part of this alternative. The land uses along Arch Street and 13th Street are commercial properties and are not considered sensitive land uses for purposes of evaluating noise impacts. Thus noise impacts associated with the change of traffic flows under this alternative would be less than significant.

Transportation and Traffic

Alternative 2 to the Proposed Project utilizes the City of Santa Clarita's General Plan proposed alignment for Dockweiler Drive, which identifies the connection of Dockweiler Drive to extend to Arch Street. The route will continue along Arch Street to 13th Street to link to Railroad Avenue. Unlike the Proposed Project, Alternative 2 does not include the roadway segment between the Dockweiler extension and Lyons Avenue. Additionally, Alternative 2 proposes to maintain and improve the 13th Street rail crossing.

Compared to the Proposed Project, the Alternative 2 Project includes sixteen study intersections and does not contain Intersection 17, which is Lyons Avenue and Dockweiler Drive. Alternative 2 is illustrated in Figure 6.4-1.

The following section addresses Alternative 2 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 complete Traffic Study is included in Appendix H to this Draft EIR.

Opening Year (2019) Conditions With Alternative 2 Project

The Santa Clarita Valley Consolidated Traffic Model (SCVCTM) for Interim Year provided traffic volumes for the Project Year 2019 with Alternative 2 Project Condition. The model plots outlined the distribution of future traffic with the construction of the Alternative 2 Project. The Project Year 2019 Alternative 2 study intersections are provided in Figure 6.4-7, and the volumes provided in Figure 6.4-8.

The analysis for the intersection of Arch Street/Dockweiler Drive and 12th Street/Placerita Canyon Road was conducted as a 5-leg all way stop controlled intersection.

The intersections were analyzed using the capacity analysis methodology. The analysis was conducted with the Project Year 2019 with Alternative 2 Project existing and mitigated study intersection geometrics illustrated in Figure 6.4-9. The LOS for the study intersections presented in Table 6.4-1 represents the LOS for the critical movement. This is typically the stop controlled left turn from the minor street.

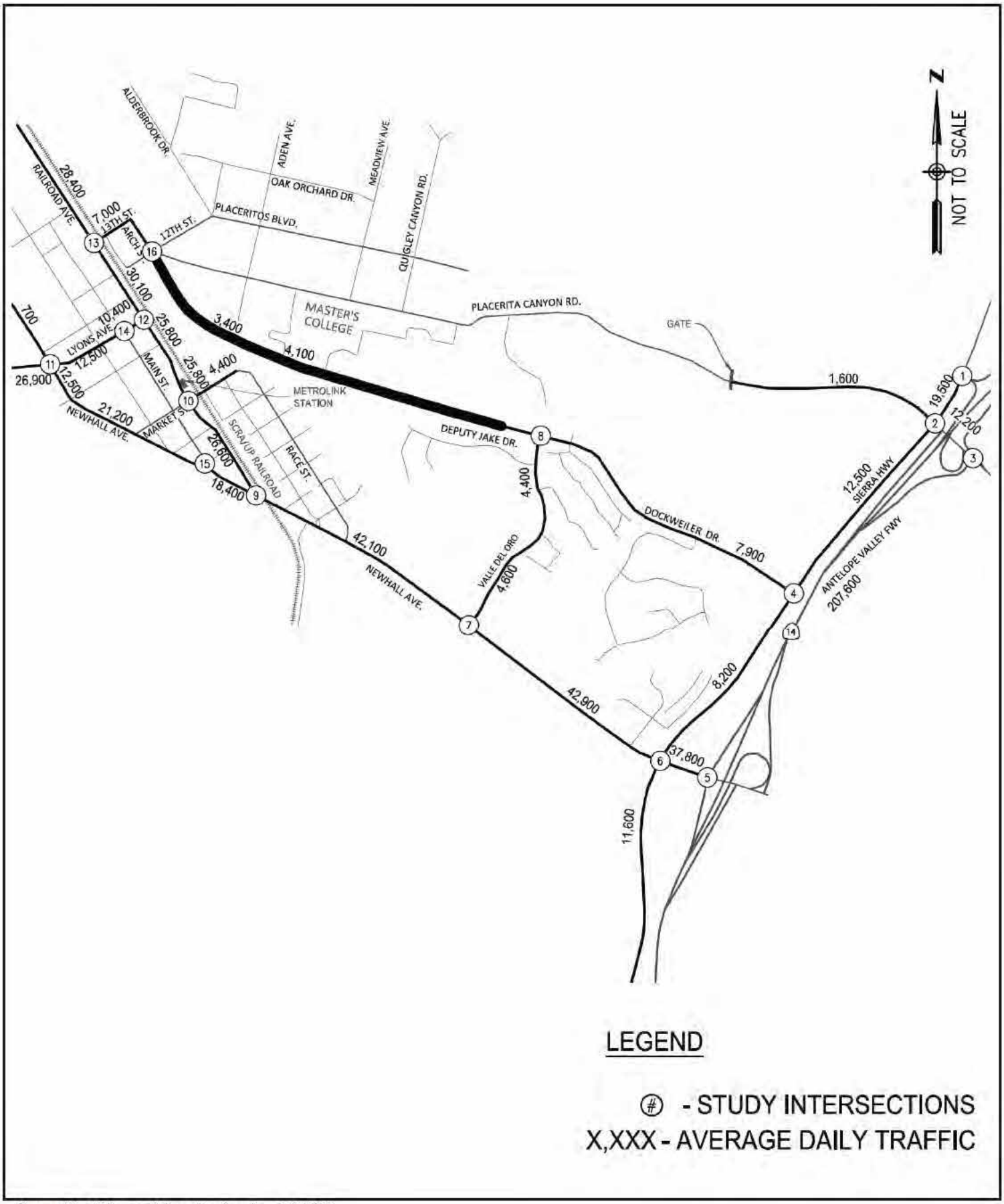
As presented in Table 6.4-1 under Year 2019 with Alternative 2 Condition, most of the study intersections are anticipated to continue to operate at LOS E or better. Four intersections are anticipated to operate at LOS F, they are: Sierra Highway and SR-14 Southbound Ramps, Sierra Highway and Placerita Canyon Road, SR-14 Northbound Ramps and Placerita Canyon Road, SR-14 Southbound Ramps and Newhall Avenue. The same mitigation measures presented for the Proposed Project would generally be necessary to accommodate the anticipated Year 2019 traffic and reduce potential impacts for the Alternative 2 Project.

Table 6.4-1
Intersection Capacity Analysis – Year 2019 with Alternative 2 Project Condition

Intersection	AM		PM	
	Delay [a]	LOS [b]	Delay [a]	LOS [b]
1. Sierra Highway and SR-14 Southbound Ramps [c]	89.7	F	99.99 [e]	F
Mitigation (Traffic Signal and Lane Modification)	16.6	B	21.1	C
2. Sierra Highway and Placerita Canyon Road	23.1	C	99.99 [e]	F
Mitigation (Lane Modification)	23.1	C	51.5	D
3. SR-14 Northbound Ramps and Placerita Canyon Road [c]	12.9	B	99.99 [e]	F
Mitigation (Traffic Signal)	15.0	B	15.1	B
4. Sierra Highway and Dockweiler Drive	17.3	B	13.6	B
5. SR-14 Southbound Ramps and Newhall Avenue [c]	99.99 [e]	F	99.99 [e]	F
Mitigation (Traffic Signal and Lane Modification)	5.6	A	5.1	A
6. Sierra Highway and Newhall Avenue	28.5	C	30.9	C
7. Valle Del Oro and Newhall Avenue	15.8	B	12.2	B
8. Valle Del Oro and Dockweiler Drive [c]	14.2	B	17.1	C
9. Railroad Avenue and Newhall Avenue	20.7	C	23.5	C
10. Railroad Avenue and Market Street	26.7	C	18.0	B
11. Newhall Avenue and Lyons Avenue	58.5	E	74.2	E
Mitigation (Lane Modification)	29.5	C	35.3	D
12. Railroad Avenue and Lyons Avenue	16.7	B	18.5	B
13. Railroad Avenue and 13th Street	18.2	B	24.4	C
14. Main Street and Lyons Avenue	18.3	B	17.6	B
15. Main Street and Newhall Avenue [d]	23.8	C	23.0	C
16. Arch Street/Dockweiler, 12th Street, Placerita Canyon Road [c]	10.1	B	10.5	B

Notes:
[a] *Delay – In Seconds*
[b] *LOS – Level of Service*
[c] *Un-Signalized Intersection*
[d] *Roundabout Intersection*
[e] *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.



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

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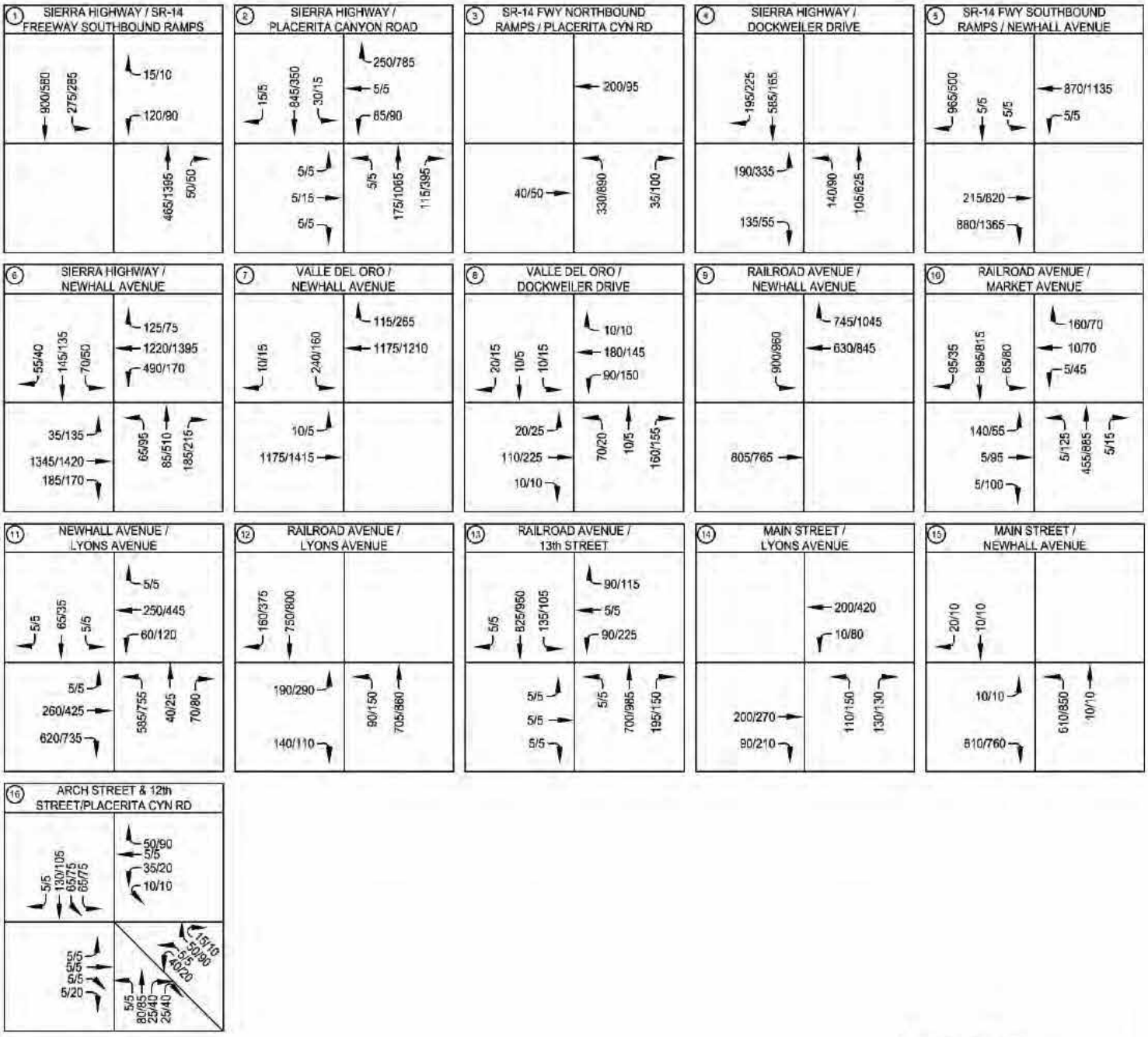
Figure 6.4-7
Project Year 2019 Alternative 2 Study Intersections



LEGEND

(#) - STUDY INTERSECTIONS

XX/XX - AM/PM PEAK HOUR VOLUMES

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

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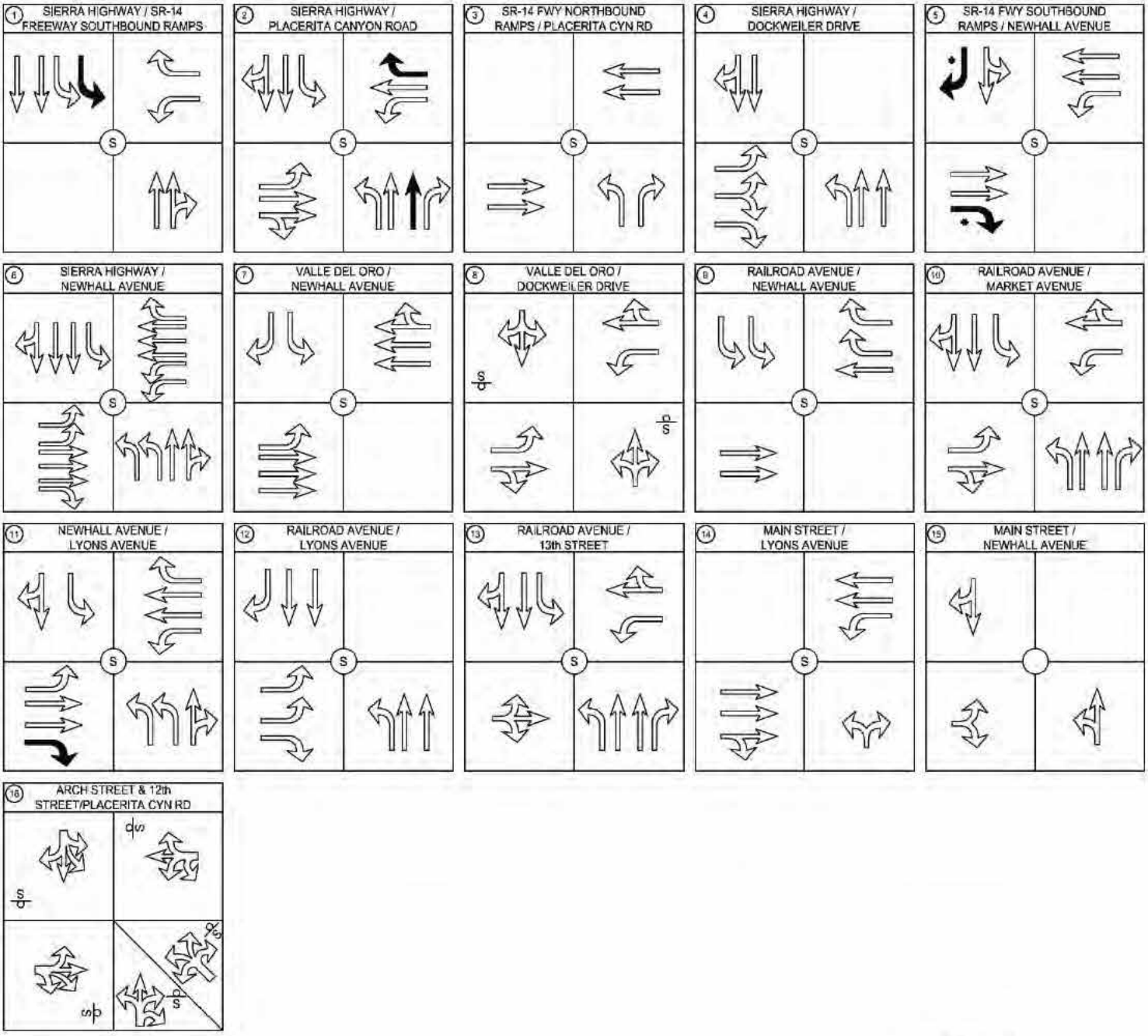
Figure 6.4-8
Project Year 2019 Alternative 2 Traffic Volumes



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

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Figure 6.4-9
Project Year 2019 Alternative 2 Intersection Configurations

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 in Section 4.9, Traffic and Circulation, Alternative 2 Project's impacts during the 2019 build-out year would also be less than significant. However, Alternative 2 would not require implementation of mitigation measures 4.92-2. 4.9-4 and 4.9-5, as compared to the Proposed Project. Therefore, the Proposed Project and the Alternative 2 Project would both result in a less than significant impact after mitigation.

Future (2035) Conditions With Alternative 2 Project

The Santa Clarita Valley Consolidated Traffic Model (SCVCTM) for Build-Out Year provided traffic volumes for the Future Year 2035 with Alternative 2 Condition. The model plots outlined the distribution of future traffic with the construction of the Alternative 2 Project. The analysis of Alternative 2 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 13th Street 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 Alternative 2 study intersections provided in Figure 6.4-10, the volumes provided in Figure 6.4-11.

The intersections were analyzed using the capacity analysis methodology. The analysis was conducted with the Future Year 2035 Alternative 2 Project Condition existing and mitigated study intersection geometrics illustrated in Figure 6.4-12. The LOS for the study intersections presented in Table 6.4-2 represents the LOS for the critical movement. This is typically the stop controlled left turn from the minor street.

As presented in Table 6.4-2 under Future Year 2035 with Alternative 2 Project Condition, several of the study intersections are anticipated to operate at LOS F. There are five 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, Railroad Avenue and 13th Street, and Main Street and Newhall Avenue. Mitigation measures are necessary to accommodate the anticipated Future Year 2035 traffic and reduce potential Alternative 2 Project impacts.

With mitigation, the Sierra Highway and Placerita Canyon Road intersection (Study Intersection 2) levels of service will increase from a LOS F 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

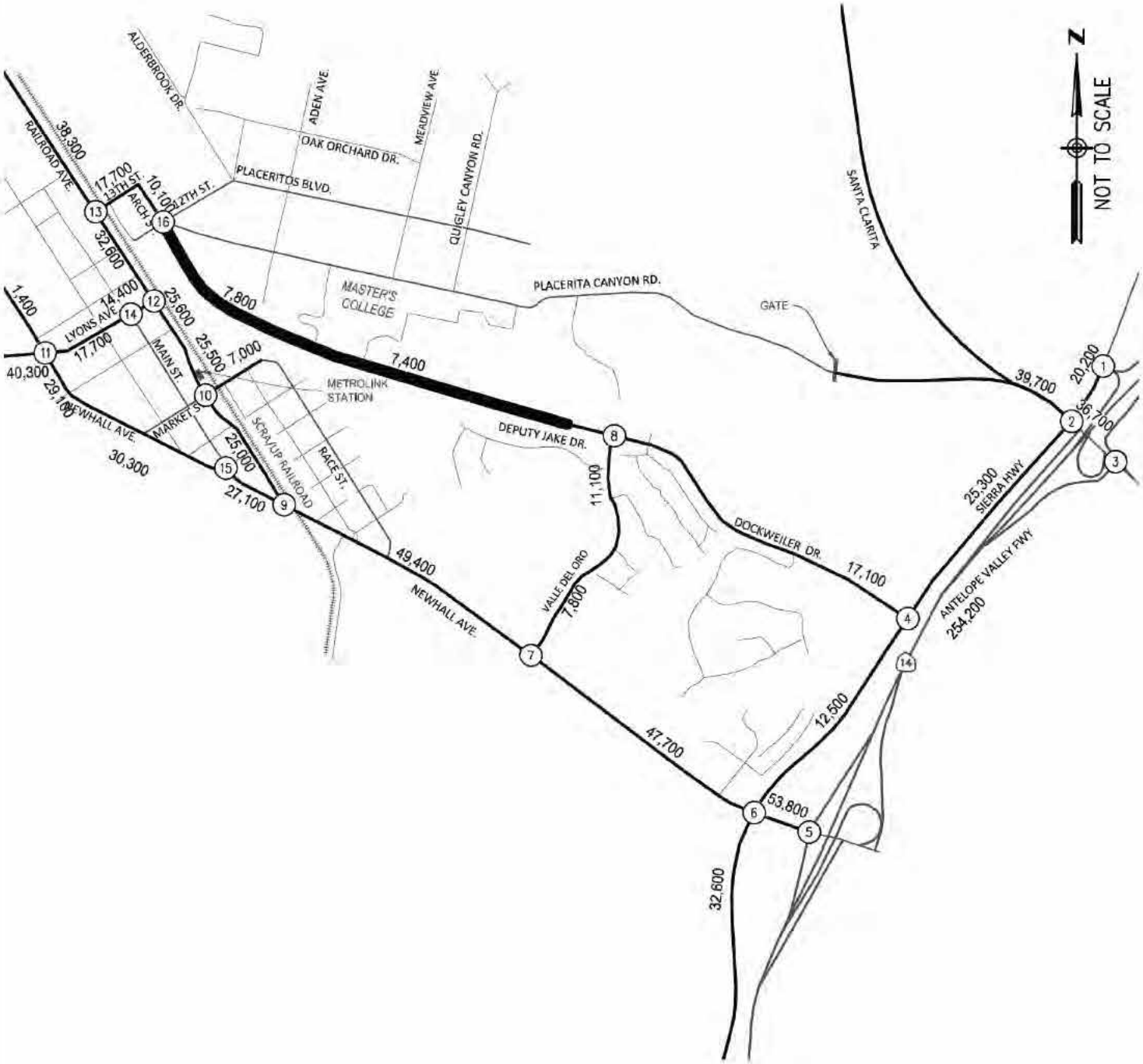
mitigation, the Valle Del Oro and Dockweiler Drive intersection (Study Intersection 8) levels of service will increase from a LOS F to LOS C during the AM peak hour and remain at a LOS C during the PM peak hour. With mitigation, the Railroad Avenue and 13th Street intersection (Study Intersection 13) levels of service will remain at a LOS D during the AM peak hour and increase from an LOS F to LOS D during the PM peak hour. With mitigation, the Main Street and Newhall Avenue intersection (Study Intersection 15) levels of service will increase from LOS F to LOS A during the AM peak hour and LOS F to LOS B during the PM peak hour. With the implementation of the mitigation measures identified in Section 4.9, Traffic and Circulation, the Alternative 2 Project's impacts during the 2035 year will be less than significant. Therefore, the Proposed Project and the Alternative 2 Project would both result in a less than significant impact after mitigation.

Table 6.4-2
Intersection Capacity Analysis – Year 2035 with Alternative 2 Project Condition

Intersection	AM		PM	
	Delay [a]	LOS [b]	Delay [a]	LOS [b]
1. Sierra Highway and SR-14 Southbound Ramps [c]	14.2	B	40.6	D
2. Sierra Highway and Placerita Canyon Road	99.99 [e]	F	99.99 [e]	F
Mitigation (Lane Modification)	51.8	D	43.4	D
3. SR-14 Northbound Ramps and Placerita Canyon Road [c]	26.5	C	18.6	B
4. Sierra Highway and Dockweiler Drive	19.1	B	22.7	C
5. SR-14 Southbound Ramps and Newhall Avenue [c]	6.3	A	6.5	A
6. Sierra Highway and Newhall Avenue	61.6	E	99.99 [e]	F
Mitigation (Lane Modification)	54.4	D	44.2	D
7. Valle Del Oro and Newhall Avenue	16.2	B	14.1	B
8. Valle Del Oro and Dockweiler Drive [c]	99.99 [e]	F	17.3	C
Mitigation (Traffic Signal and Lane Modification)	27.0	C	25.1	C
9. Railroad Avenue and Newhall Avenue	23.8	C	36.4	D
10. Railroad Avenue and Market Street	27.8	C	21.4	C
11. Newhall Avenue and Lyons Avenue	71.4	E	67.9	E
12. Railroad Avenue and Lyons Avenue	18.8	B	17.7	B
13. Railroad Avenue and 13th Street	50.5	D	99.99 [e]	F
Mitigation (Lane Modification)	55.0	D	43.4	D
14. Main Street and Lyons Avenue	17.2	B	19.3	B
15. Main Street and Newhall Avenue [d]	63.9	F	99.99 [e]	F
Mitigation (Lane Modification)	9.8	A	11.1	B
16. Arch Street/Dockweiler, 12th Street, Placerita Canyon Road [c]	18.4	C	39.1	E

Notes:
- [a] *Delay – In Seconds*
- [b] *LOS – Level of Service*
- [c] *Un-Signalized Intersection*
- [d] *Roundabout Intersection*
- [e] *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.



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

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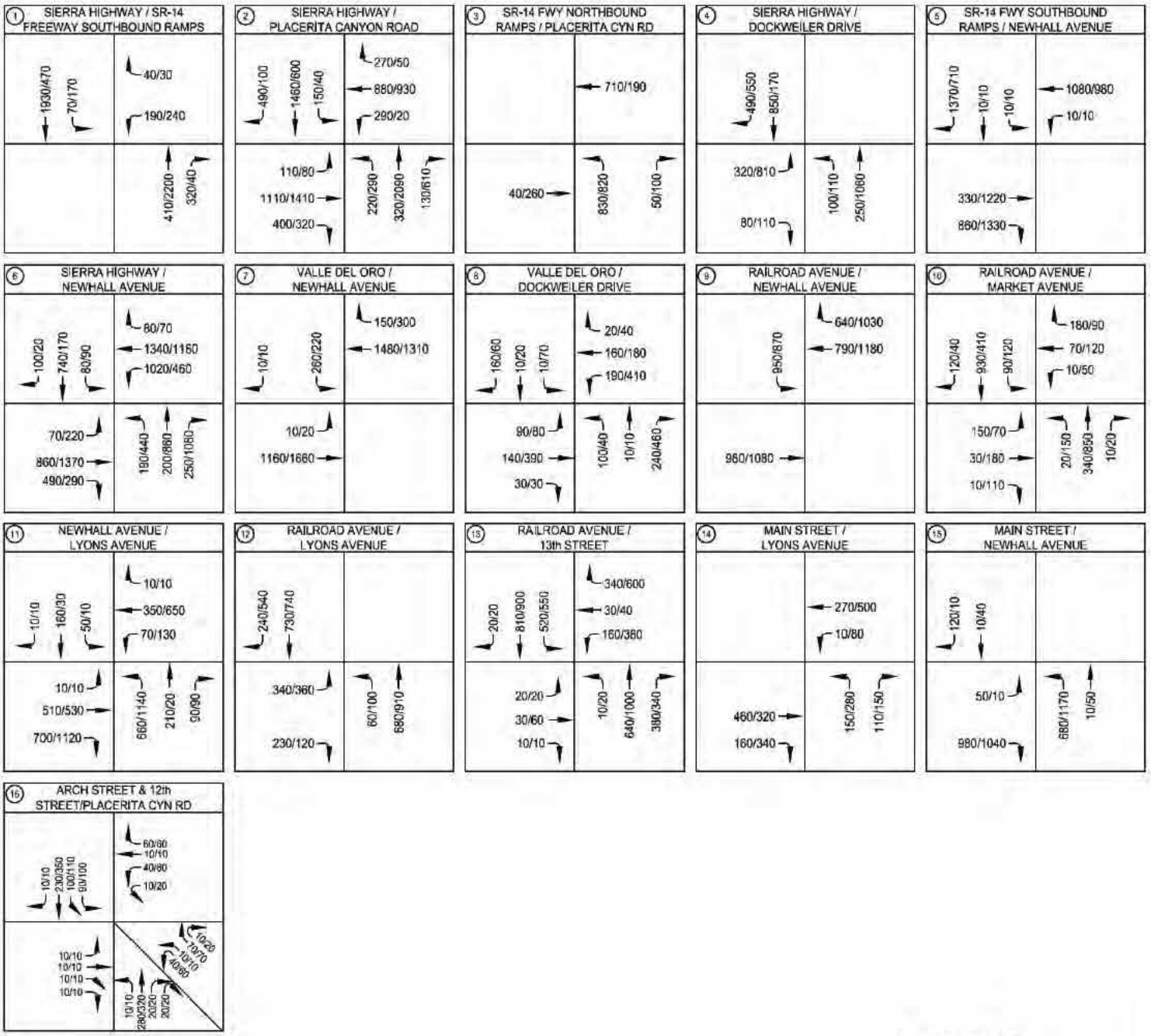
Figure 6.4-10
Project Year 2035 Alternative 2 Study Intersections



LEGEND

(#) - STUDY INTERSECTIONS

XX/XX - AM/PM PEAK HOUR VOLUMES

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

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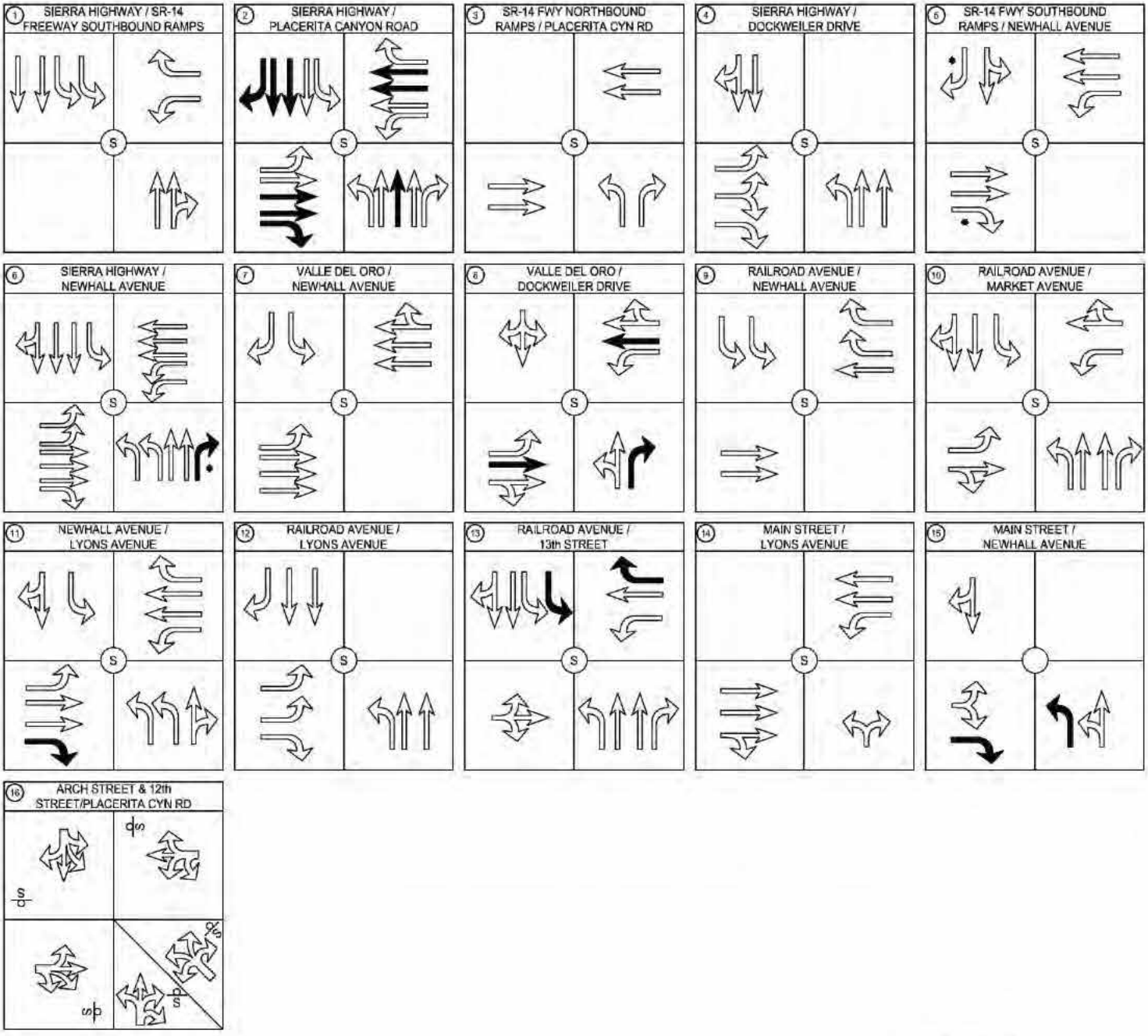
Figure 6.4-11
Project Year 2035 Alternative 2 Traffic Volumes



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

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Figure 6.4-12
Project Year 2035 Alternative 2 Intersection Configurations

Railroad Crossing Analysis

Similar to the Proposed Project, a comparison of the No Build scenario, the Proposed Project scenario, and the Alternative 2 Project scenario for Daily, AM and PM Peak hour traffic volumes were compiled for the Year 2019 and 2035 conditions as presented in Table 6.4-3 and Table 6.4-4, respectively. Existing conditions remain the same as the ones reported in Section 4.9, Traffic and Circulation.

Table 6.4-3
Railroad Crossing Analysis –Year 2019 Condition

Existing Condition		1	2	3	4	Total
		13th Street	Lyons Avenue	Market Street	Newhall Avenue	
No Build	ADT [a]	10,850	N/A [c]	4,410	47,550	**62,810**
	AM [b]	955		185	3,370	**4,510**
	PM [b]	1,050		375	3,860	**5,285**
Proposed Project	ADT [a]	N/A [c]	8,060	4,390	44,790	**57,240**
	AM [b]		620	185	3,115	**3,920**
	PM [b]		840	370	3,580	**4,790**
Alternative 2	ADT [a]	6,990	N/A [c]	4,420	45,010	**56,420**
	AM [b]	530		180	3,085	**3,795**
	PM [b]	650		380	3,615	**4,645**

Notes:
[a] *ADT – Average Daily Traffic*
[b] *AUTO – Peak Hour Auto Traffic (Both Directions)*
[c] *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.

Table 6.4-4
Railroad Crossing Analysis – Future Year 2035 Condition

Year 2035		1	2	3	4	Total
		13th Street	Lyons Avenue	Market Street	Newhall Avenue	
No Build	ADT [a]	16,940	N/A [c]	6,920	56,300	**80,160**
	AM [b]	1,170		325	3,735	**5,230**
	PM [b]	1,525		575	4,605	**6,705**
Proposed Project	ADT [a]	N/A [c]	28,870	7,050	47,100	**83,020**
	AM [b]		1,880	330	3,015	**5,225**
	PM [b]		2,495	590	3,695	**6,780**
Alternative 2	ADT [a]	17,670	N/A [c]	6,980	52,140	**76,790**
	AM [b]	1,295		330	3,370	**4,995**
	PM [b]	1,585		580	4,165	**6,330**

Notes:
[a] *ADT – Average Daily Traffic*
[b] *AUTO – Peak Hour Auto Traffic (Both Directions)*
[c] *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 6.4-3 under Alternative 2 Year 2019, the total average daily traffic is anticipated to be higher under the No Build Condition as compared to the Proposed Project and Alternative 2. Alternative 2's total average daily railroad crossings would result in 6,390 fewer crossings as compared to the No Build condition and 820 fewer railroad crossings as compared to the Proposed Project condition. For the Year 2035 Condition, the total average daily traffic is anticipated to be highest under the Proposed Project Condition. Alternative 2 would result in 3,370 fewer crossings under Alternative 2 as compared to the No Build condition and 6,230 fewer crossings than the Proposed Project condition. As such, Alternative 2 would be preferable over the No Build and Proposed Project scenarios.

Bicycle and Pedestrian Facilities

Similar to the Proposed Project, the Alternative 2 would comply with Santa Clarita's circulation goals and enhancing the circulation system by providing bicycle lanes and accessibility to bicycle paths that are fundamental for a comprehensive transportation network.

MITIGATION MEASURES (ALTERNATIVE 2)

Year 2019 Project Mitigation Measures

6.4-1 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.

6.4-2 Arch Street (north leg) / Dockweiler Drive (south leg) / 12th 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 (12th 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 (12th Street). The east leg (12th Street) will include a shared left-through-right lane accommodating left turning movements to Placerita Canyon Road and Dockweiler Drive. The west leg (12th 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 (12th Street) and right turning movements to the east leg (12th Street) and Arch Street.

Year 2019 Regional Mitigation Measures

6.4-3 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.

6.4-4 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.

6.4-5 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.

6.4-6 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.

6.4-7 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 Mitigations

6.4-8 Railroad Avenue (North-South) and 13th Street (East-West): The intersection modifications include widening the south and westbound direction to include a left turn lane. The northbound direction will include a left turn lane, two through lanes and a right turn lane. The southbound direction will include two left turn lanes, through lane, and a shared through-right turn lane. The eastbound direction will include a shared left-through-right turn lane. The westbound direction will include a left turn lane, a through, and a right turn lane.

Year 2035 Regional Mitigations

6.4-9 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.

6.4-10 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.

6.4-11 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.