



Vista Soleada (TTM 36590) Traffic Impact Analysis

County of Riverside, California

December 19, 2013



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VISTA SOLEADA (TTM 36590)
TRAFFIC IMPACT ANALYSIS
COUNTY OF RIVERSIDE, CALIFORNIA

December 19, 2013

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**VISTA SOLEADA (TTM 36590) PROJECT
TRAFFIC IMPACT ANALYSIS
COUNTY OF RIVERSIDE, CALIFORNIA**

1.0 INTRODUCTION

This report presents the results of the traffic impact analysis (TIA) for the proposed Vista Soleada Tentative Tract Map No. 36590 (“Project”), which is generally located south of 60th Avenue and 0.25 miles east of Monroe Street in the unincorporated area of Riverside County, adjacent to the City of La Quinta, in the community area of Vista Santa Rosa.

A preliminary site plan for the proposed Project is shown on Exhibit 1-1. Exhibit 1-2 provides an illustrative plan for the overall Project, and Exhibit 1-3 shows the potential equestrian way station which is located at the northeast corner of the Project. The 76-acre Project is characterized by multiple pocket parks, citrus themed country lanes and a 100’ wide perimeter grove of date palm trees. Residential density within the project averages approximately 3 dwelling units per gross acre (du/ac), consisting of 211 residential lots (min. 4,000 s.f., avg. 6,000 s.f.) at the core of the project and 19 estate lots (¾-1 acre) that surround them.

The purpose of this traffic impact analysis is to evaluate the potential impacts to traffic and circulation associated with the development of the proposed Project, and recommend improvements to mitigate impacts considered significant in comparison to established regulatory thresholds.

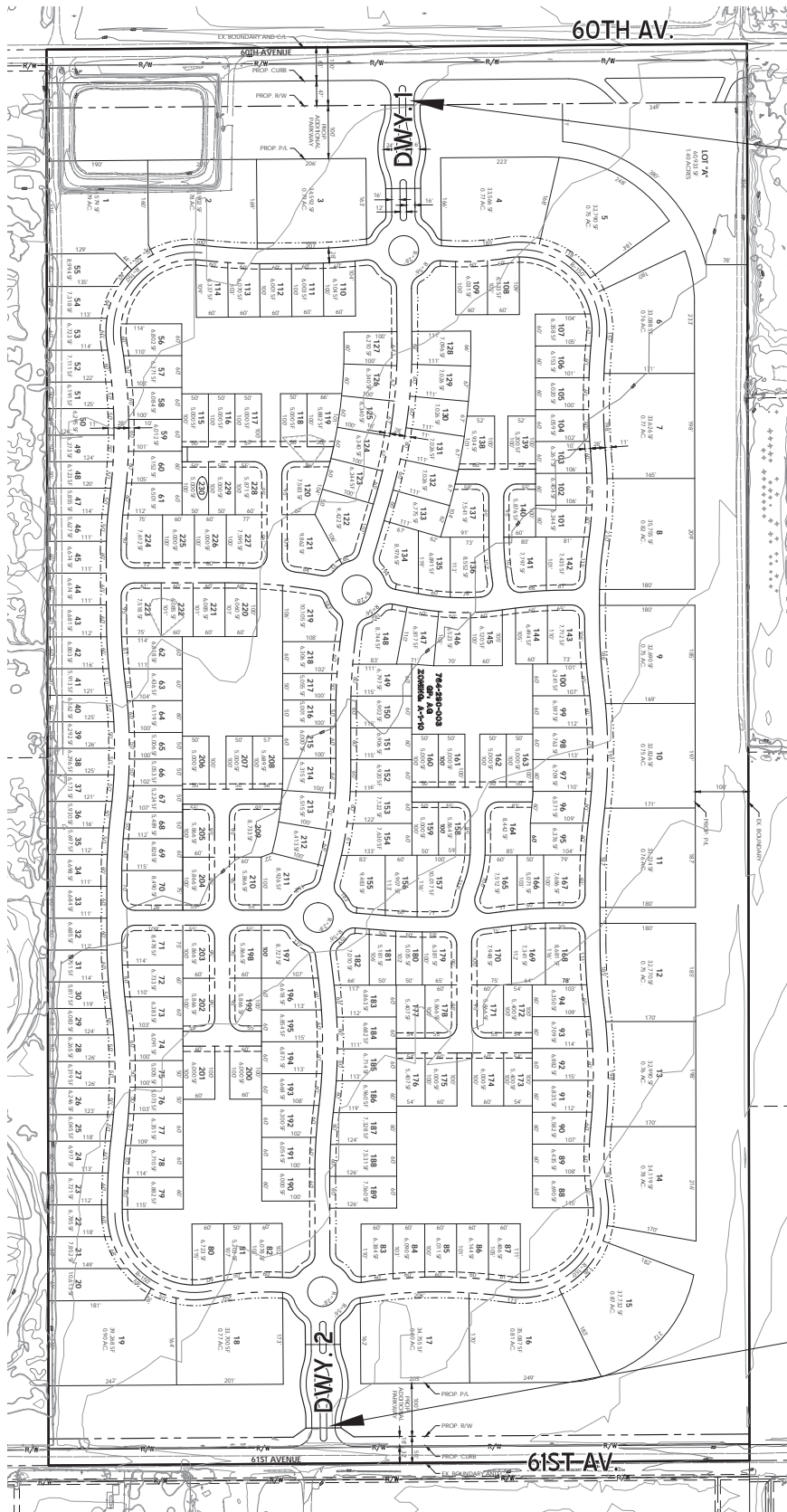
Urban Crossroads, Inc. has prepared this traffic analysis in accordance with the County of Riverside Traffic Impact Analysis Guidelines (dated April 2008) and City of La Quinta’s Engineering Bulletin #06-13 (dated June 29, 2012). In addition, through coordination with County of Riverside and City of La Quinta staff, Urban Crossroads, Inc. has discussed key traffic impact study assumptions to ensure that the jurisdictional requirements are addressed in the report. These assumptions include, but are not limited to, analysis locations, ambient growth, cumulative project traffic and analysis scenarios. The findings and the recommendations in this report adhere to current acceptable engineering practices and reflect Urban Crossroads Inc.’s professional engineering judgment.

1.1 PROJECT OVERVIEW

The proposed Project is to consist of 230 single family homes and a 1.40 acre equestrian way station. For the purpose of this analysis, the Project is anticipated to be developed in a single phase with a projected Opening Year of 2016.

Trips generated by the Project’s proposed land uses have been estimated based on trip generation rates collected by the Institute of Transportation Engineers (ITE) and published in their most current edition of

EXHIBIT 1-1 PRELIMINARY SITE PLAN



20' LANE WIDTH TYPICAL FOR LANES ADJACENT TO RAISED MEDIAN PER FIRE DEPARTMENT.

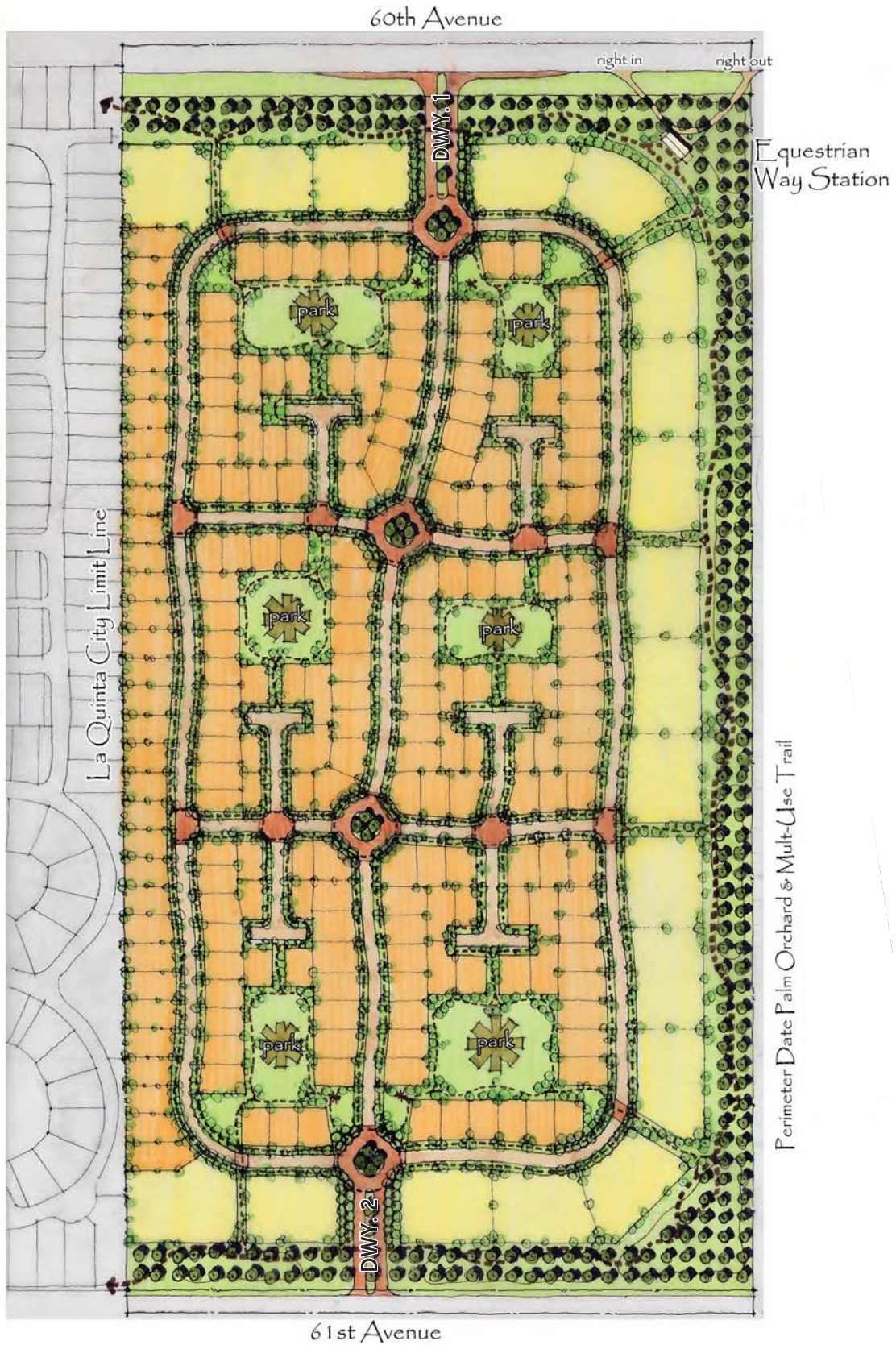
VISTA SOLEADA IS PROPOSED AS A GATED COMMUNITY WITH PRIVATELY MAINTAINED INTERNAL STREETS.

HAMMERHEADS TO BE REVIEWED AND APPROVED BY FIRE DEPARTMENT.

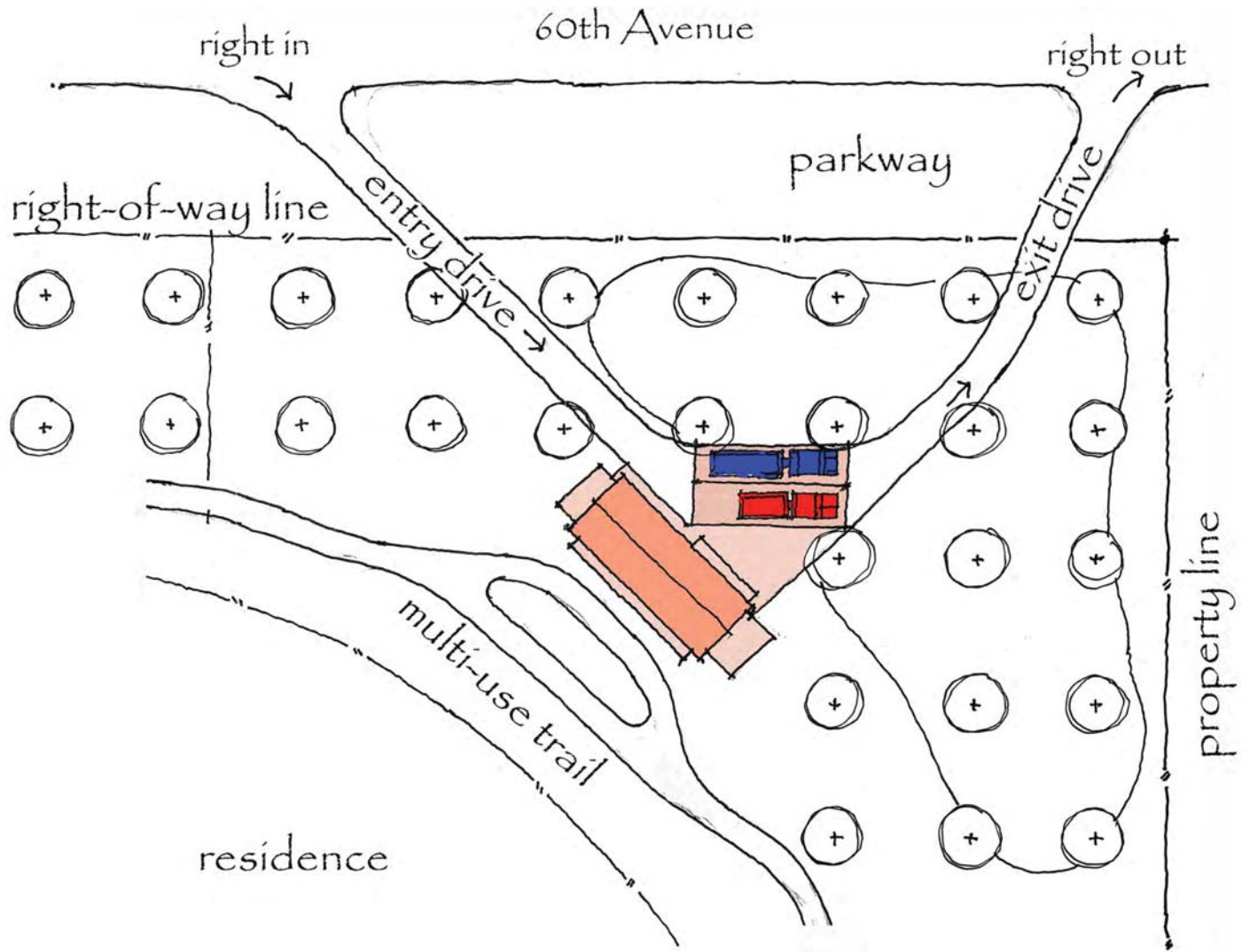
20' LANE WIDTH TYPICAL FOR LANES ADJACENT TO RAISED MEDIAN PER FIRE DEPARTMENT.



EXHIBIT 1-2
PROJECT ILLUSTRATIVE PLAN



POTENTIAL EQUESTRIAN WAY STATION



the *Trip Generation* manual, 9th Edition, 2012. The Project is estimated to generate a total of approximately 2,197 net trip-ends per day on a typical weekday with approximately 175 net weekday AM peak hour trips, 232 net weekday PM peak hour trips. The assumptions and methods used to estimate the Project's trip generation characteristics are discussed in detail in Section 4.1 *Project Trip Generation* of this report.

1.2 ANALYSIS SCENARIOS

Potential impacts to traffic and circulation were assessed for each of the following conditions:

- Existing (2013) Conditions
- Existing plus Project Conditions (E+P)
- Existing plus Ambient Growth plus Project (2016) Conditions – ambient growth only plus Project traffic (EAP)
- Existing plus Ambient Growth plus Project plus Cumulative (2016) Conditions – ambient growth and cumulative development projects plus Project traffic (EAPC)

As the Project proposes a zone change, the following long-range traffic scenarios are also be evaluated:

- Long Range (2035) Conditions Without and With Project – based on data from the Riverside County Transportation and Analysis Model (RivTAM) and City of La Quinta's General Plan Buildout (2035) traffic volume forecasts.

Information for Existing (2013) is disclosed to represent the baseline traffic conditions as they existed at the time this report was prepared.

The Existing plus Project (E+P) analysis is included for information purposes only and to satisfy the CEQA Guideline section 15125(a).

As described by the Riverside County traffic study guidelines, the EAP (2016) analysis scenario determines significant impacts based on a comparison of EAP (2016) traffic conditions to Existing (2013) conditions. The EAP (2016) conditions analysis uniquely identifies the specific traffic impacts associated with the development of the proposed Project projected to its "Opening Year". To account for background traffic during this time, a total ambient growth from Existing (2013) conditions of 6.012% (2% per year over 3 years, compounded annually) is included for EAP (2016) conditions. Cumulative development projects are not included as part of the EAP (2016) analysis. Consistent with the County's traffic study guidelines, the EAP (2016) analysis is intended to identify the project-specific impacts associated solely with the development of the proposed Project based on the expected background growth within the project study area.

The EAPC (2016) conditions analysis will be utilized to determine if improvements funded through local and regional transportation mitigation fee programs can accommodate the cumulative traffic at the

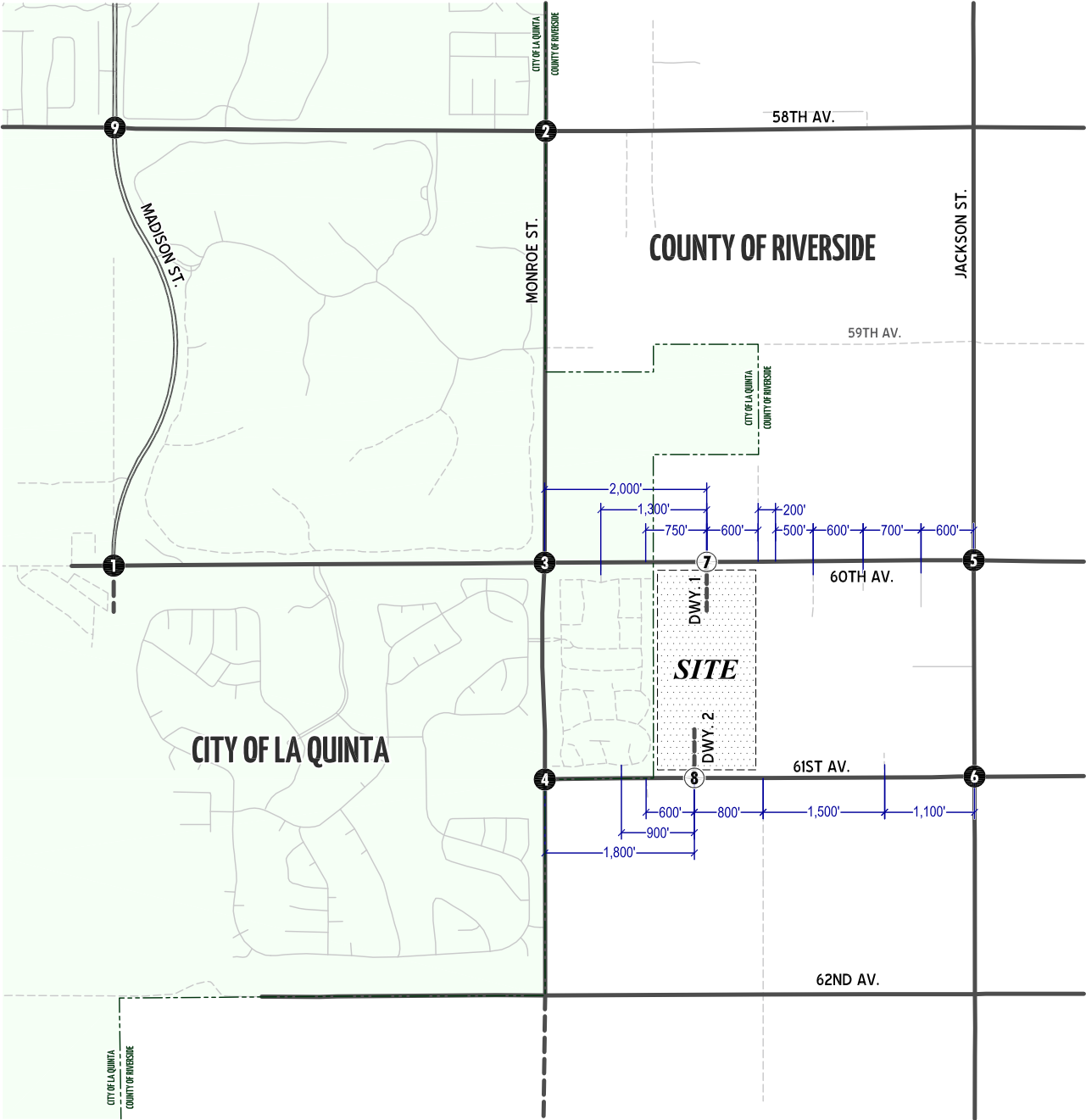
target LOS identified in the County of Riverside traffic analysis guidelines and City of La Quinta Engineering Bulletin #06-13. If the “funded” improvements can provide the target LOS, then the Project’s payment into the TUMF or other approved programs will be considered as cumulative mitigation through the conditions of approval. Other improvements needed beyond the “funded” improvements (such as localized improvements to non-TUMF) are identified as such. To account for background traffic, eight (8) other known cumulative development projects within or in close proximity to the study area were included in addition to 2% of ambient growth. This list was compiled through consultation with County of Riverside and other near-by jurisdictions, such as the City of La Quinta to identify pending development projects in close proximity to the site.

Traffic projections for Long Range (2035) with Project conditions were derived from the Riverside County Transportation and Analysis Model (RivTAM) using accepted procedures for model forecast refinement and smoothing. The traffic forecasts reflect the area-wide growth anticipated between existing conditions and Long Range (2035) conditions. In most instances the zone structure of a regional or sub-regional travel demand model is not designed to provide accurate turning movements at intersections along arterial roadways unless refinement and reasonableness checking is performed. Therefore, the Long Range (2035) peak hour forecasts were refined using the model derived long-range forecasts, along with existing peak hour traffic count data collected at each analysis location in October 2013. Future estimated peak hour traffic data was used for new intersections and intersections with an anticipated change in travel patterns to further refine the Long Range (2035) peak hour forecasts. In addition, Long Range (2035) turning volumes were compared to EAPC (2016) volumes in order to ensure a minimum growth of ten (10) percent as a part of the refinement process. The minimum ten (10) percent growth includes any additional growth between EAPC (2016) and Long Range (2035) traffic conditions that is not accounted for by the traffic generated by cumulative development projects and the ambient growth between existing and EAPC (2016) conditions. Lastly, Long Range (2035) turning volumes were compared to the City of La Quinta’s General Plan Buildout (2035) traffic volume forecasts and were adjusted accordingly. The Long Range (2035) without Project peak hour turning movement estimates was then reviewed by Urban Crossroads for reasonableness at intersections where model results showed unreasonable turning movements. The Long Range (2035) estimates were adjusted to achieve flow conservation (where applicable), reasonable growth, and reasonable diversion between parallel routes.

1.3 STUDY AREA

The traffic impact study area was defined in coordination with the County of Riverside and City of La Quinta. Based on consultation with City staff, the following nine (9) study area intersection locations shown on Exhibit 1-4 and listed on Table 1-1 were selected for this TIA:

EXHIBIT 1-4
STUDY AREA MAP



LEGEND:

- ①** = EXISTING ANALYSIS LOCATION
- ②** = FUTURE ANALYSIS LOCATION
- - - = FUTURE ROADWAY / DIRT
- 100' = INTERSECTION/DRIVEWAY INTERVALS (FUTURE AND EXISTING)



TABLE 1-1: INTERSECTION ANALYSIS LOCATIONS

ID	Intersection Location	Jurisdiction
1	Madison Street / 60th Avenue	City of La Quinta
2	Monroe Street / 58th Avenue	City of La Quinta / County of Riverside
3	Monroe Street / 60th Avenue	City of La Quinta / County of Riverside
4	Monroe Street / 61st Avenue	City of La Quinta / County of Riverside
5	Jackson Street / 60th Avenue	County of Riverside
6	Jackson Street / 61st Avenue	County of Riverside
7	Driveway 1 / 60th Avenue – <i>Future Intersection</i>	County of Riverside
8	Driveway 2 / 61st Avenue– <i>Future Intersection</i>	County of Riverside
9	Madison Street / 58th Avenue	City of La Quinta

To ensure that this TIA satisfies the needs of the County of Riverside and City of La Quinta, Urban Crossroads, Inc. prepared a Project traffic study scoping agreement for review by City staff prior to the preparation of this TIA. The agreement provides an outline of the Project study area, trip generation, trip distribution, and analysis methodology. The agreement approved by the County of Riverside and City of La Quinta is included in Appendix “1.1”.

1.4 SUMMARY OF ANALYSIS RESULTS

The results of the potentially significant project-specific traffic impact for the study area intersections for near-term and long-term traffic conditions are listed as below. The proposed Project is not anticipated to contribute additional traffic resulting in neither a potentially significant project-specific traffic impact nor a cumulative traffic impact.

Based on the assessment of Existing (2013), E+P, EAP (2016), and EAPC (2016) traffic conditions, the study area intersections are currently operating at acceptable level of service (LOS “D” or better) and is anticipated to continue to operate at acceptable LOS with the addition of Project traffic. Therefore, the Project is not anticipated to cause a significant impact at the study area intersections.

For Long Range (2035) without Project traffic conditions, the following intersections are anticipated to operate at unacceptable LOS (i.e., LOS “E” or “F”) during the peak hours:

ID	Intersection Location	Jurisdiction
1	Madison Street / 60th Avenue	City of La Quinta
2	Monroe Street / 58th Avenue	City of La Quinta / County of Riverside
3	Monroe Street / 60th Avenue	City of La Quinta / County of Riverside
4	Monroe Street / 61st Avenue	City of La Quinta / County of Riverside

ID	Intersection Location (Continued)	Jurisdiction
5	Jackson Street / 60th Avenue	County of Riverside
6	Jackson Street / 61st Avenue	County of Riverside
9	Madison Street / 58th Avenue	City of La Quinta

For Long Range (2035) with Project traffic conditions, the following additional intersection is anticipated to operate at unacceptable LOS (i.e., LOS “E” or “F”) during the peak hours:

ID	Intersection Location	Jurisdiction
7	Driveway 1 / 60th Avenue – <i>Future Intersection</i>	County of Riverside

Long Range (2035) recommended improvements are discussed in detail in Section 7.0 *Long Range (2035) Traffic Analysis* of this report.

1.5 ON-SITE ROADWAY AND SITE ACCESS IMPROVEMENTS

The Project is proposed to have access on 60th Avenue and 61st Avenue. Both Project access points are proposed to be full-access. Regional access to the Project site will be provided by the I-10 Freeway (located to the north) via Monroe Street.

As part of the development, the Project will construct improvements on the site adjacent roadways of 60th Avenue and 61st Avenue. Roadway improvements necessary to provide site access and on-site circulation are assumed to be constructed in conjunction with site development and are described below. These improvements should be in place prior to occupancy.

1.5.1 ON-SITE ROADWAY IMPROVEMENTS

The recommended site-adjacent roadway improvements for the Project are described below.

60th Avenue – 60th Avenue is an east-west oriented roadway located along the Project’s northern boundary. Construct 60th Avenue at its ultimate half-section width as an Arterial roadway (128-foot right-of-way) between the Project’s westerly and easterly boundary. It should be noted that 60th Avenue is classified as a 4-Lane Primary Arterial roadway (108’ ROW) within the City of La Quinta (immediately west of Project boundary) and classified as 4-Lane Arterial roadway (128’ ROW) within the County of Riverside along the Project’s frontage. Therefore, a 150-foot transition lane is recommended and discussed in detail in Section 8.1 *On-Site Roadway Improvements*.

61st Avenue – 61st Avenue is an east-west oriented roadway located along the Project’s southern boundary. Construct 61st Avenue at its ultimate half-section width as a Collector roadway (76-foot right-of-way) between the Project’s westerly and easterly boundary.

Wherever necessary, roadways adjacent to the Project, site access points and site-adjacent intersections will be constructed to be consistent with or within the recommended roadway classifications and respective cross-sections in the County of Riverside General Plan Circulation Element.

1.5.2 SITE ACCESS IMPROVEMENTS

The recommended site access driveway improvements for the Project are described below. Construction of on-site and site adjacent improvements shall occur in conjunction with adjacent Project development activity or as needed for Project access purposes.

The recommended site access driveway improvements for the Project are described below.

Driveway 1 / 60th Avenue (#7)

- Install a stop control on the northbound approach.
- Northbound Approach: Construct one left turn lane and one right turn lane.
- Westbound Approach: Construct one left turn lane.

Driveway 2 / 61st Avenue (#8)

- Install a stop control on the northbound approach.
- Southbound Approach: One shared left-through-right turn lane.
- Eastbound Approach: One left turn lane.

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

Sight distance at each project access point should be reviewed with respect to standard Caltrans and County of Riverside sight distance standards at the time of preparation of final grading, landscape and street improvement plans.

2.0 METHODOLOGIES

This section documents the methodologies and assumptions used to perform this TIA.

2.1 LEVEL OF SERVICE

Traffic operations of roadway facilities are described using the term "Level of Service" (LOS). LOS is a qualitative description of traffic flow based on several factors such as speed, travel time, delay, and freedom to maneuver. Six levels are typically defined ranging from LOS "A", representing completely free-flow conditions, to LOS "F", representing breakdown in flow resulting in stop-and-go conditions. LOS "E" represents operations at or near capacity, an unstable level where vehicles are operating with the minimum spacing for maintaining uniform flow.

2.2 INTERSECTION CAPACITY ANALYSIS

The definitions of LOS for interrupted traffic flow (flow restrained by the existence of traffic signals and other traffic control devices) differ slightly depending on the type of traffic control. The LOS is typically dependent on the quality of traffic flow at the intersections along a roadway. The *Highway Capacity Manual* (HCM) (Transportation Research Board 2000) methodology expresses the LOS at an intersection in terms of delay time for the various intersection approaches. The HCM uses different procedures depending on the type of intersection control.

2.2.1 SIGNALIZED INTERSECTIONS

The County of Riverside and City of La Quinta requires signalized intersection operations analysis based on the methodology described in Chapter 16 of the HCM. Intersection LOS operations are based on an intersection's average control delay. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. For signalized intersections LOS is directly related to the average control delay per vehicle and is correlated to a LOS designation as described in Table 2-1.

TABLE 2-1: SIGNALIZED INTERSECTIONS LOS THRESHOLDS

Level of Service	Description	Average Control Delay (Seconds)
A	Operations with very low delay occurring with favorable progression and/or short cycle length.	0 to 10.00
B	Operations with low delay occurring with good progression and/or short cycle lengths.	10.01 to 20.00
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.01 to 35.00
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	35.01 to 55.00

Level of Service	Description (Continued)	Average Control Delay (Seconds)
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	55.01 to 80.00
F	Operation with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths	80.01 and up

Source: HCM 2000, Chapter 16

The peak hour traffic volumes have been adjusted using a peak hour factor (PHF) to reflect peak 15 minute volumes. Common practice for LOS analysis is to use a peak 15-minute rate of flow. However, flow rates are typically expressed in vehicles per hour. The PHF is the relationship between the peak 15-minute flow rate and the full hourly volume (e.g. $PHF = \frac{\text{Hourly Volume}}{4 \times \text{Peak 15-minute Flow Rate}}$). The use of a 15-minute PHF produces a more detailed analysis as compared to analyzing vehicles per hour. Existing PHFs have been used for Existing, E+P, EAP (2016) and EAPC (2016) traffic conditions. Per Chapter 8 of the HCM 2000, PHF values over 0.95 often are indicative of high traffic volumes with capacity constraints on peak hour flows while lower PHF values are indicative of greater variability of flow during the peak hour. For 2035 conditions, peak hour factors have been adjusted to 0.92 (unless existing PHF value is higher). This adjustment accounts for the effects of congestion on peak spreading under long range conditions. Peak spreading refers to the tendency of traffic to spread more evenly across time as congestion increases.

For intersections within the County of Riverside, a saturation flow rate of 1,900 vehicles per hour of green (vphg) per lane will be utilized based on the County's traffic impact analysis guidelines. For intersections within the City of La Quinta, a saturation flow rate of 1,850 vehicles per hour of green (vphg) per lane will be utilized based on the City's traffic study guidelines (Engineering Bulletin #06-13, dated June 29, 2012). All signalized (future) study area intersections have utilized the Traffix software (Version 8.0 R1, 2008).

2.2.2 UNSIGNALIZED INTERSECTIONS

The County of Riverside and City of La Quinta requires the operations of unsignalized intersections be evaluated using the methodology described in Chapter 17 of the HCM. The LOS rating is based on the weighted average control delay expressed in seconds per vehicle (see Table 2-2).

At two-way or side-street stop-controlled intersections, LOS is calculated for each controlled movement and for the left turn movement from the major street, as well as for the intersection as a whole. For approaches composed of a single lane, the delay is computed as the average of all movements in that lane. For all-way stop controlled intersections, LOS is computed for the intersection as a whole. All unsignalized study area intersections have utilized the Traffix software (Version 8.0 R1, 2008).

TABLE 2-2: UNSIGNALIZED INTERSECTIONS LOS THRESHOLDS

Level of Service	Description	Average Control Per Vehicle (Seconds)
A	Little or no delays.	0 to 10.00
B	Short traffic delays.	10.01 to 15.00
C	Average traffic delays.	15.01 to 25.00
D	Long traffic delays.	25.01 to 35.00
E	Very long traffic delays.	35.01 to 50.00
F	Extreme traffic delays with intersection capacity exceeded.	> 50.00

Source: HCM 2000, Chapter 17

2.3 TRAFFIC SIGNAL WARRANT ANALYSIS METHODOLOGY

The term "signal warrants" refers to the list of established criteria used by Caltrans and other public agencies to quantitatively justify or ascertain the potential need for installation of a traffic signal at an otherwise unsignalized intersection. This TIA uses the signal warrant criteria presented in the latest edition of the Federal Highway Administration's (FHWA) *Manual on Uniform Traffic Control Devices (MUTCD)*, as amended by the *2012 California MUTCD (CA MUTCD)*, for all study area intersections.

The signal warrant criteria for Existing (2013) conditions are based upon several factors, including volume of vehicular and pedestrian traffic, frequency of accidents, and location of school areas. Both the FHWA's *MUTCD* and the *2012 CA MUTCD* indicate that the installation of a traffic signal should be considered if one or more of the signal warrants are met. Specifically, this TIA utilizes the Peak Hour Volume-based Warrant 3 as the appropriate representative traffic signal warrant analysis for Existing (2013) traffic conditions. Warrant 3 criteria are basically identical for both the FHWA's *MUTCD* and the *2012 CA MUTCD*. For the purposes of this study, the speed limit was the basis for determining whether Urban or Rural warrants were used for a given intersection.

For future (new) unsignalized intersections, future traffic conditions have been assessed regarding the potential need for new traffic signals based on future average daily traffic (ADT) volumes, using the Caltrans planning level ADT-based signal warrant analysis worksheets.

Traffic signal warrant analyses were performed for the following unsignalized study area intersections:

ID	Intersection Location	Jurisdiction
1	Madison Street / 60th Avenue	City of La Quinta
2	Monroe Street / 58th Avenue	City of La Quinta / County of Riverside
3	Monroe Street / 60th Avenue	City of La Quinta / County of Riverside
4	Monroe Street / 61st Avenue	City of La Quinta / County of Riverside

ID	Intersection Location (Continued)	Jurisdiction
5	Jackson Street / 60th Avenue	County of Riverside
6	Jackson Street / 61st Avenue	County of Riverside
7	Driveway 1 / 60th Avenue – <i>Future Intersection</i>	County of Riverside
8	Driveway 2 / 61st Avenue– <i>Future Intersection</i>	County of Riverside
9	Madison Street / 58th Avenue	City of La Quinta

The Existing (2013) conditions traffic signal warrant analysis is presented in the subsequent section, Section 3.0 *Area Conditions* of this report. The traffic signal warrant analysis for future conditions is presented in Section 5.0 *Existing plus Project Traffic Analysis*, Section 6.0 *Opening Year (2016) Traffic Analysis*, and Section 7.0 *Long Range (2035) Traffic Analysis*.

It is important to note that a signal warrant defines the minimum condition under which the installation of a traffic signal might be warranted. Meeting this threshold condition does not require that a traffic control signal be installed at a particular location, but rather, that other traffic factors and conditions be evaluated in order to determine whether the signal is truly justified. It should also be noted that signal warrants do not necessarily correlate with level of service. An intersection may satisfy a signal warrant condition and operate at or above LOS “D” or operate below LOS “D” and not meet a signal warrant.

2.4 LOS CRITERIA

Riverside County General Plan Policy C 2.1 states that the County will maintain the following County-wide target level of service (LOS): LOS “C” on all County-maintained roads and conventional State Highways. As an exception, LOS “D” may be allowed in Community Development areas at intersections of any combination of Secondary Highways, Major Highways, Arterial Highways, Urban Arterial Highways, Expressways or conventional State Highways. LOS “E” may be allowed in designated Community Centers to the extent that it would support transit-oriented development and pedestrian communities. As such, LOS “D” will be considered the limit of acceptable operations for all study area intersections.

The City of La Quinta’s required level of service (LOS) has been obtained from the City of La Quinta traffic study guideline (Engineering Bulletin #06-13). The City has established LOS “D” as the minimum level of service for its intersections. Therefore, any intersection operating at LOS “E” or “F” will be considered deficient for the purposes of this analysis. As an exception, LOS “E” is allowable on the side street for two-way (cross-street) stop controlled intersections.

2.5 THRESHOLDS OF SIGNIFICANCE

This section outlines the significance criteria used in this analysis relating to roadway system impacts. The Criteria are based on California Environmental Quality Act (CEQA).

According to CEQA guidelines, a project is considered to cause a significant impact to the transportation system if it:

- Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths and mass transit.
- Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the County congestion management agency for designated roadway or highways.
- Conflicts with adopted policies or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

Based on the County of Riverside's traffic study guidelines, a "significant" direct traffic impact under CEQA occurs when the addition of project traffic as defined by the EAP (2016) scenario causes an intersection that operates at an acceptable level of service under Existing (2013) traffic conditions (i.e., LOS "D" or better) to fall to an unacceptable level of service (i.e., LOS "E" or "F"). Therefore, EAP (2016) traffic conditions are compared to Existing (2013) traffic conditions to identify significant project-related impacts according to the following criteria:

- If an intersection is projected to operate at an acceptable level of service (i.e., LOS "D" or better) under Existing (2012) traffic conditions and the addition of project traffic, as measured by 50 or more peak hour trips, is expected to cause the intersection to operate at an unacceptable level of service (i.e., LOS "E" or "F"), the impact is considered a significant direct impact.
- If an intersection is projected to operate at an unacceptable level of service (i.e., LOS "E" or "F") without the project, and the project contributes 50 or more peak hour trips, the impact is considered a significant direct impact.

A significant cumulative impact is identified when a facility is projected to operate below the level of service standards due to cumulative future traffic AND a project-related traffic increase as measured by 50 or more peak hour trips. Cumulative traffic impacts are created as a result of a combination of the proposed project together with other future developments contributing to the overall traffic impacts requiring additional improvements to maintain acceptable level of service operations with or without the project.

Per City of La Quinta’s EB #06-13, a potentially significant Project specific traffic impact is defined to occur at signalized intersections if the Project trips will result in the LOS for that intersection exceeding the criteria in Table 2-3.

TABLE 2-3: THRESHOLDS OF SIGNIFICANCE

Pre-Project LOS	Project-Related Delay Increase	Mitigation Measure
E	2.0 Seconds or More	Achieve pre-project delay or better
F	1.0 Second or More	Achieve pre-project delay or better

For unsignalized study intersections, a potentially significant Project specific impact is defined to occur when, with project traffic included, an intersection has a projected LOS ‘F’ on a side street for two-way stop control or LOS ‘E’ or worse for the intersection at an all-way stop controlled intersection and the addition of project traffic results in an addition of 3 seconds or more of delay for any movement. Delay shall be calculated for all unsignalized study intersections to demonstrate this condition.

In addition, the City of La Quinta indicates that a cumulative impact is defined to occur at any signalized intersection if the project trips will result in the LOS for that intersection exceeding the criteria established in Table 2-3 for cumulative growth volumes. A potentially significant impact at an unsignalized study intersection is defined to occur when, with the addition of project traffic included, an intersection has a projected LOS ‘F’ on a side street for two-way stop control or LOS ‘E’ or worse for the intersection at an all-way stop control at City build-out and the addition of project traffic results in an addition of 3 seconds or more of delay for any movement. Delay shall be calculated for all unsignalized intersections in the study area to demonstrate this.

The Project’s fair share contribution toward a cumulatively impacted facility not found to be covered by a pre-existing fee program should be considered sufficient to address the Project’s fair share toward a mitigation measure or measures designed to alleviate the cumulative impact. In other words, the Project’s contribution to a significant cumulative impact will be rendered less than cumulatively considerable and thus is not significant.

3.0 AREA CONDITIONS

This section provides a summary of the existing circulation network, the County of Riverside General Plan Circulation Network and nearby jurisdictions, and a review of existing peak hour intersection operations, roadway analyses and traffic signal warrants.

3.1 EXISTING CIRCULATION NETWORK

Pursuant to the Traffic Study Scoping Agreement (Appendix “1.1”) and discussion with the County of Riverside and City of La Quinta staff, the study area includes a total of nine (9) existing and future intersections as shown on Exhibit 1-4.

Exhibit 3-1 illustrates the study area intersections located near the proposed Project and identifies the number of through traffic lanes for existing roadways and intersection traffic controls.

3.2 GENERAL PLAN CIRCULATION ELEMENT

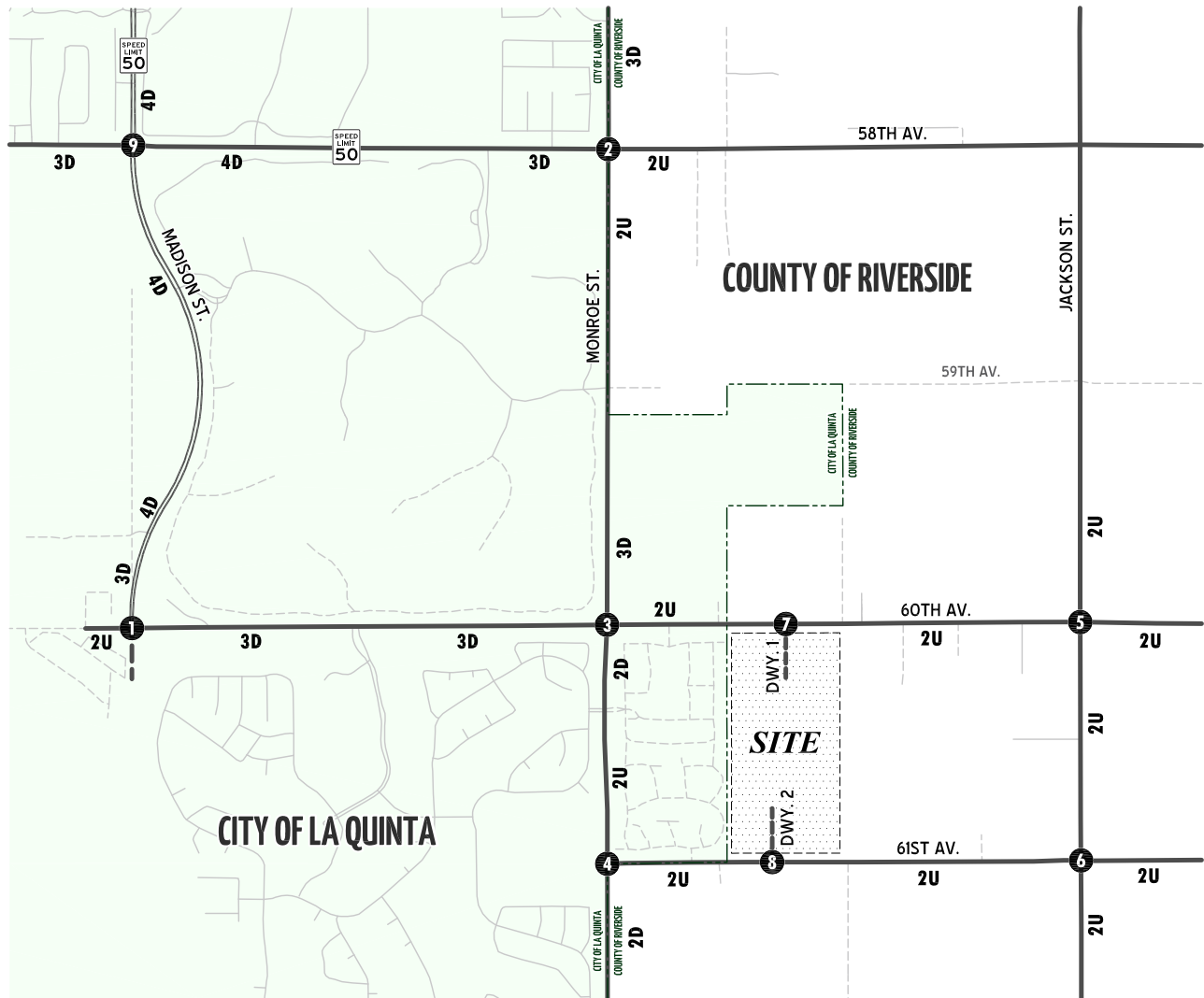
As previously noted, the Project site is located within the unincorporated area of Riverside County, adjacent to the City of La Quinta, in the community area of Vista Santa Rosa.

Since the County of Riverside has not yet included the circulation network map in the recently updated County of Riverside General Plan Circulation Element, the proposed roadway classification within the study area based on the draft South Valley Parkway Traffic Study, dated October 2006. The 2003 adopted Riverside County General Plan Circulation Element is shown on Exhibit 3-2. The Draft South Valley Road and Bridge District Proposed Roadway Network is presented on Exhibit 3-3. Exhibit 3-4 includes the County of Riverside General Plan Roadway Cross-Sections.

As shown on Exhibit 3-2, 60th Avenue is classified as an Expressway and 62nd Avenue as a Secondary roadway. However, the proposed roadway network shown on Exhibit 3-3 indicates a classification change for both 60th Avenue and 62nd Avenue, wherein 60th Avenue is proposed as an Arterial roadway and 62nd Avenue is proposed as an Expressway. Per County of Riverside staff, the proposed changes in roadway classification have not been adopted by the County and the status of the South Valley Road and Bridge Benefit District has no definitive timing.

The City of La Quinta General Plan Roadway Classification is shown on Exhibit 3-5. Exhibit 3-6 presents the City of La Quinta’s General Plan Street Cross-Sections. As shown on Exhibit 3-5, Avenue 60 is classified as a Primary Arterial roadway, east of Monroe Street. This is consistent with the proposed roadway network shown previously on Exhibit 3-3. However, Avenue 62 is still shown as a Secondary roadway. Per County of Riverside staff, these differences still remain between City and County classifications.

EXISTING NUMBER OF THROUGH LANES AND INTERSECTION CONTROLS



LEGEND:

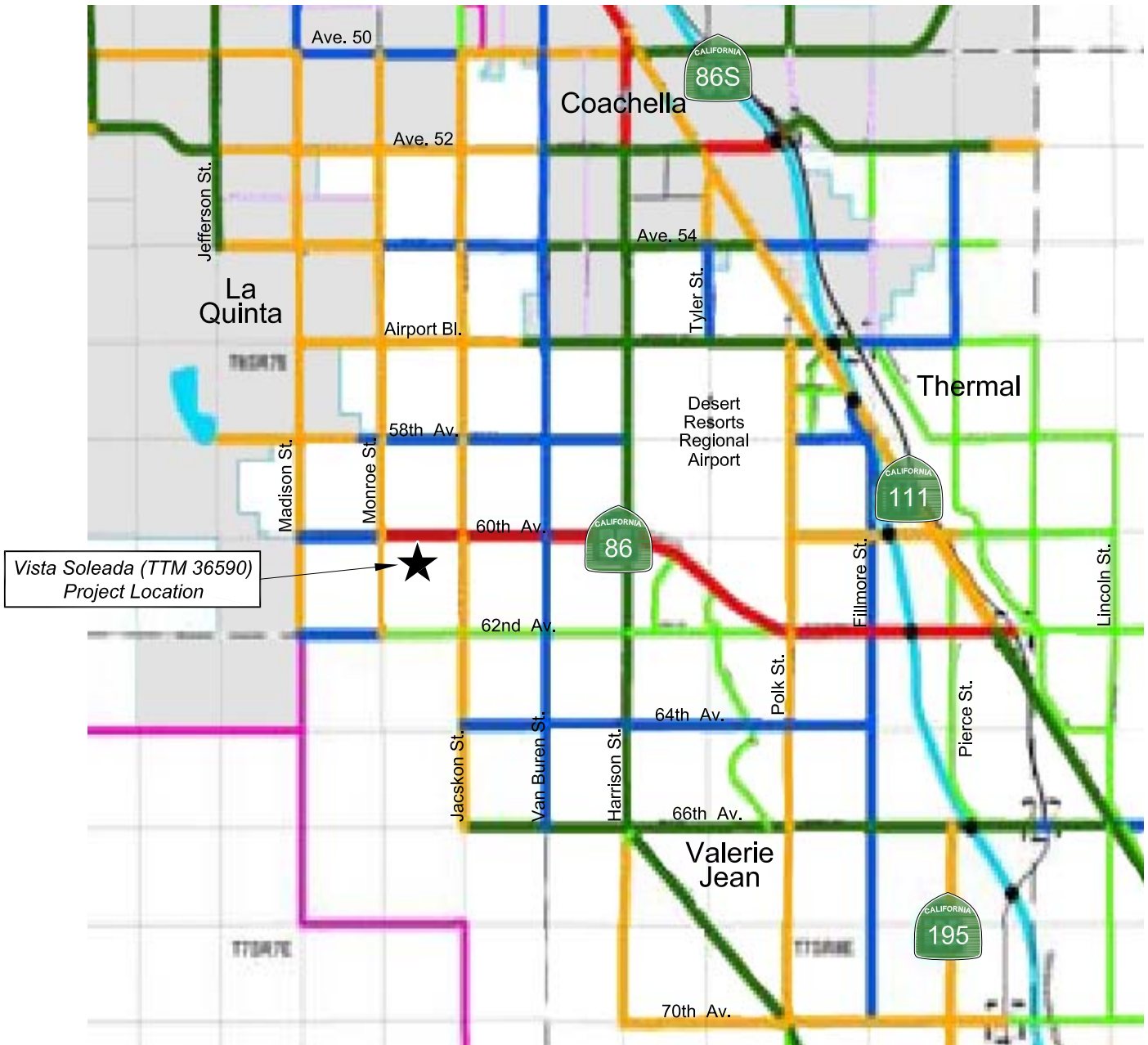
- Ⓢ = ALL WAY STOP
- Ⓢ = STOP SIGN
- 4 = NUMBER OF LANES
- D = DIVIDED
- U = UNDIVIDED
- DEF = DEFACTO RIGHT TURN LANE
- ⑨ = INTERSECTION ID

<p>1 Madison St. & 60th Av.</p>	<p>2 Monroe St. & 58th Av.</p>	<p>3 Monroe St. & 60th Av.</p>	<p>4 Monroe St. & 61st Av.</p>	
<p>5 Jackson St. & 60th Av.</p>	<p>6 Jackson St. & 61st Av.</p>	<p>7 Dwy. 1 & 60th Av.</p> <p>INTERSECTION DOES NOT EXIST</p>	<p>8 Dwy. 2 & 61st Av.</p> <p>INTERSECTION DOES NOT EXIST</p>	<p>9 Madison St. & 58th Av.</p>



EXHIBIT 3-2

2003 RIVERSIDE COUNTY GENERAL PLAN CIRCULATION ELEMENT

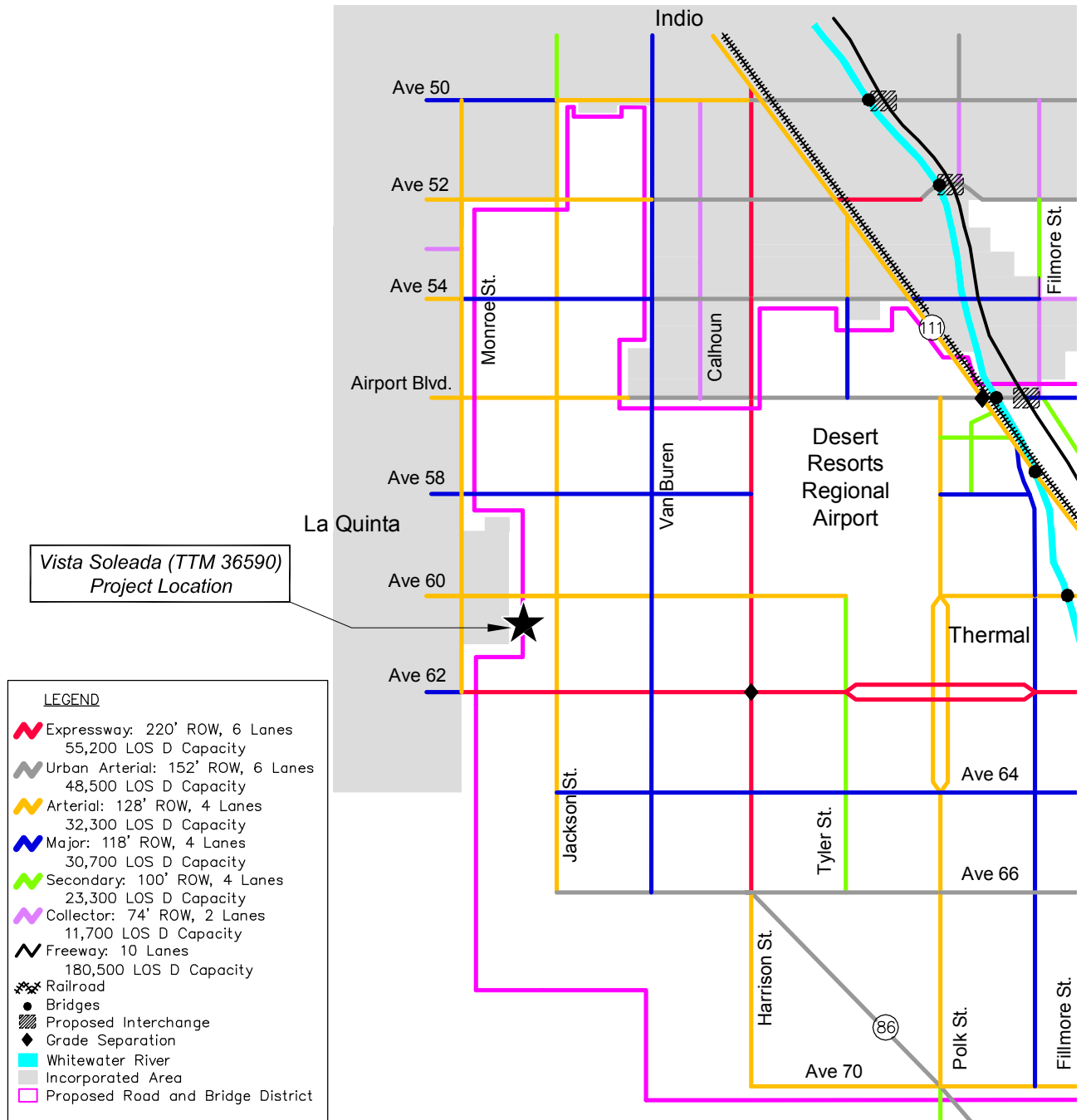


SOURCE: Riverside County Integrated Project (October 2003)

- | | | |
|------------------------------|-------------------------------------------------------|--------------------|
| Expressway (184' ROW) | Bridges | Area Plan Boundary |
| Urban Arterial (152' ROW) | Moreno Valley to San Bernardino Corridor Alternatives | Township |
| Arterial (128' ROW) | Hemet to Corona/Lake Elsinore Corridor Alternatives | Section |
| Major (118' ROW) | SR-79 Re-alignment Alternatives | Water |
| Secondary (100' ROW) | Proposed Interchange | City |
| Collector (74' ROW) | Existing Interchange | |
| Mountain Arterial (110' ROW) | | |
| Freeway | | |
| Railroad | | |



DRAFT SOUTH VALLEY ROAD AND BRIDGE DISTRICT PROPOSED ROADWAY NETWORK

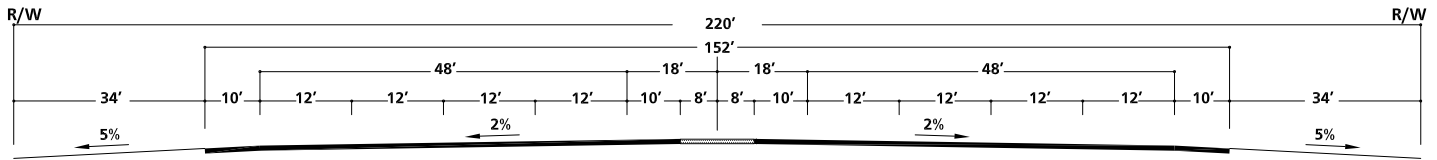


SOURCE: South Valley Parkway Traffic Study and Roadway Phasing Plan (October 2006)

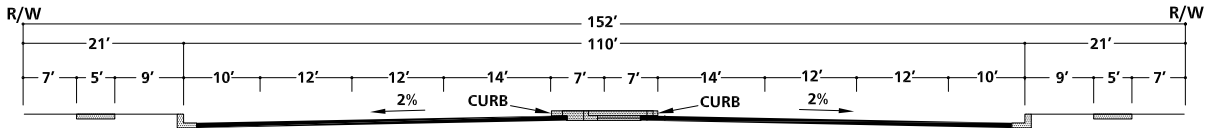


EXHIBIT 3-4

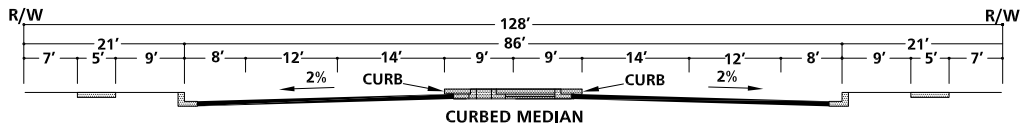
COUNTY OF RIVERSIDE GENERAL PLAN ROADWAY CROSS-SECTIONS



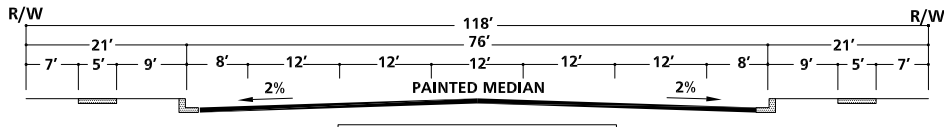
EXPRESSWAY - 8 LANES



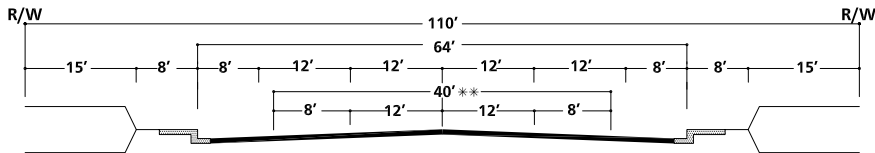
URBAN ARTERIAL HIGHWAY *



ARTERIAL HIGHWAY *

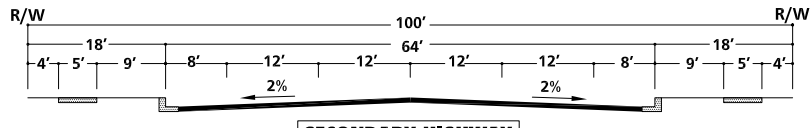


MAJOR HIGHWAY - 4 LANES

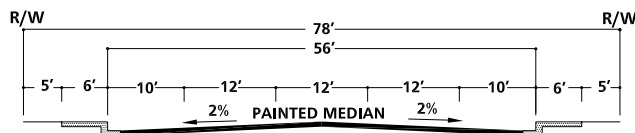


MOUNTAIN ARTERIAL - 2 TO 4 LANES

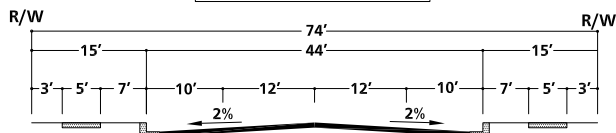
** 2 LANE SECTION



SECONDARY HIGHWAY



INDUSTRIAL COLLECTOR



COLLECTOR

* IMPROVEMENTS MAY BE RECONFIGURED TO ACCOMMODATE EXCLUSIVE TRANSIT LANES OR ALTERNATIVE LANE ARRANGEMENTS. ADDITIONAL RIGHT OF WAY MAY BE REQUIRED AT INTERSECTIONS TO ACCOMMODATE ULTIMATE IMPROVEMENTS FOR STATE HIGHWAYS. SHALL CONFORM TO CALTRANS DESIGN STANDARDS.

NOT TO SCALE

SOURCE: COUNTY OF RIVERSIDE

CITY OF LA QUINTA GENERAL PLAN ROADWAY CLASSIFICATIONS

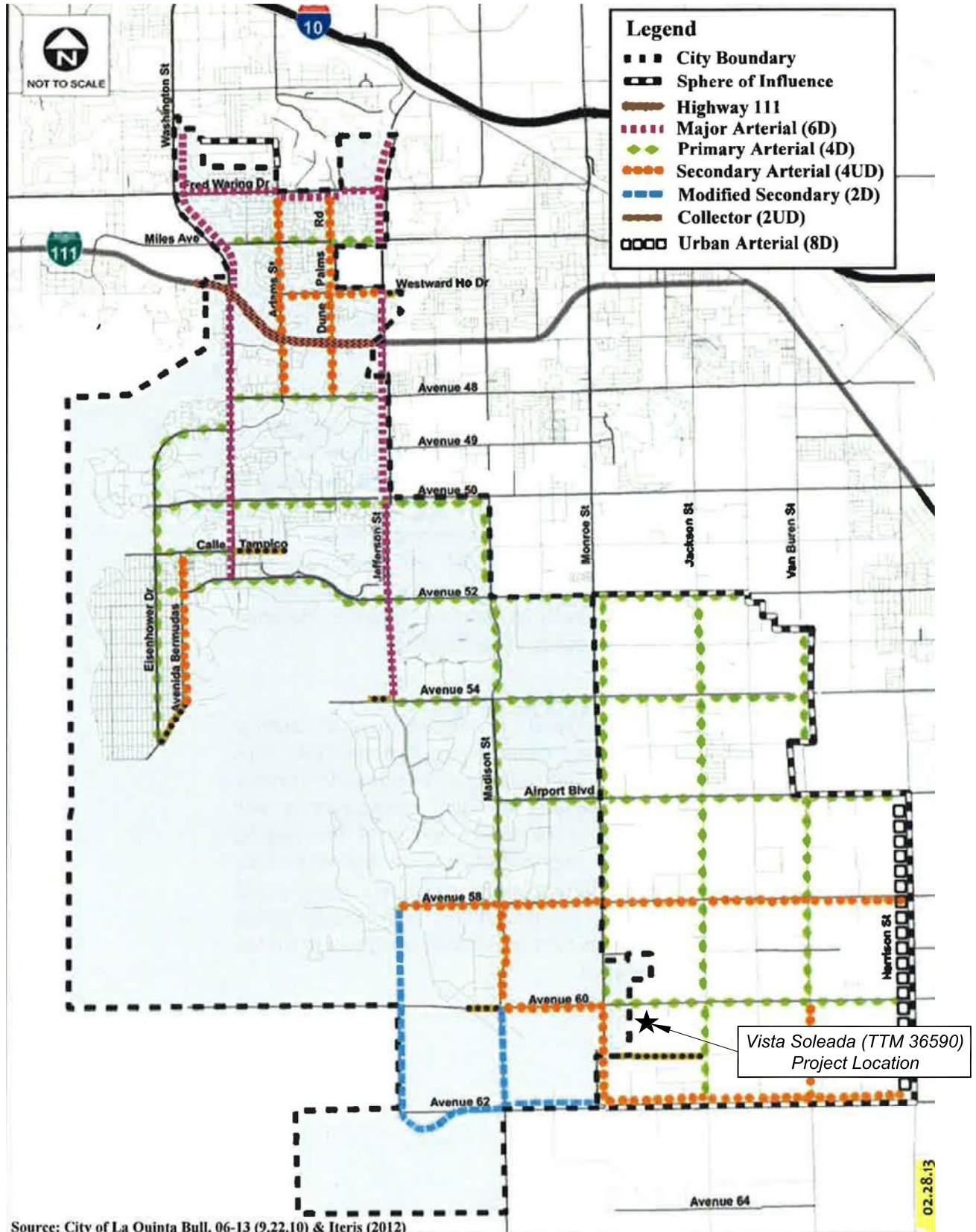
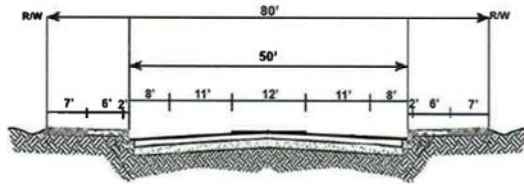
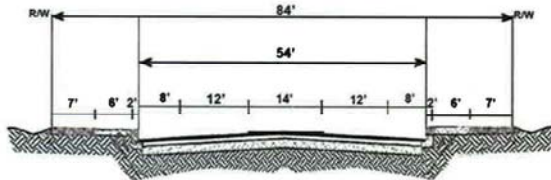


EXHIBIT 3-6

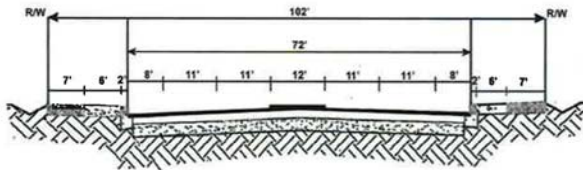
CITY OF LA QUINTA GENERAL PLAN STREET CROSS-SECTIONS



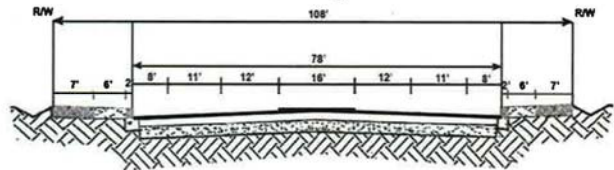
80' Collector



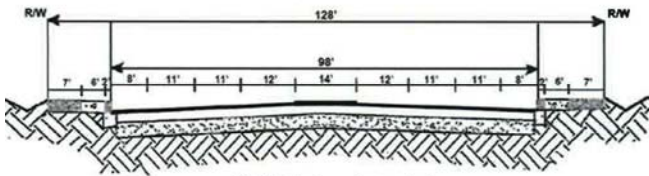
84' Modified Secondary Arterial



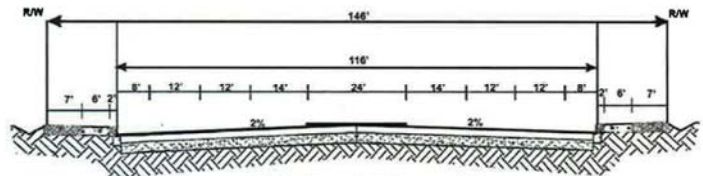
102' Secondary Arterial



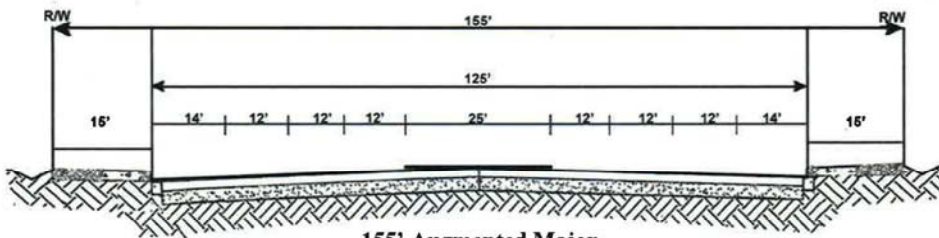
108' Primary Arterial



128' Major Arterial



146' State Highway 111



155' Augmented Major

03.11.13

3.3 INTERSECTION INTERVALS

Table 3-1 includes the County of Riverside intersection interval requirements. The City of La Quinta's intersection interval requirements are shown on Table 3-2. Table 3-2 also indicates the Project's driveway distances from Monroe Street.

Exhibit 1-4 (shown previously), depicts the Project's driveway distances from other existing / future driveways along 60th Avenue and 61st Avenue.

60th Avenue is classified as a 4-lane Arterial roadway (128' ROW) in the proposed roadway network for Riverside County with a minimum interval of one-quarter mile (1,320 ft.) between other streets or highways. For the City of La Quinta, 60th Avenue is classified as a 4-Lane Primary Arterial roadway (108' ROW) with a minimum interval of 1,060 feet between intersections and more than 275 feet between driveways.

61st Avenue is not shown in the County's circulation network. For the City of La Quinta, 61st Avenue is classified as a 2-Lane Collector roadway (80' ROW) with a minimum interval of 300 feet between intersections and more than 250 feet between driveways.

As shown on Exhibit 1-4, the Project driveways at 60th Avenue and 61st Avenue fall within the allowed intersection intervals.

3.4 TRAILS

The CVAG Non-Motorized Transportation Plan Update (2010) produced a comprehensive network of hiking and equestrian trails in the Coachella and Palo Verde Valleys. As shown on the Exhibit 3-7, an equestrian trail is proposed along 60th Avenue adjacent to the Project. The Vista Santa Rosa Community Plan map also shows a trail along 61st Avenue (see Exhibit 3-8). The Project incorporates a perimeter date palm orchard and multi-use trail, with equestrian way station.

3.5 PEDESTRIAN AND BICYCLE FACILITIES

Existing pedestrian and bicycle facilities (e.g., crosswalks, sidewalks, bike lanes, etc.) within the study area are shown on Exhibit 3-9. As shown in Exhibit 3-9, Madison Street, Monroe Street, 58th Avenue, and 60th Avenue currently have an existing bike lane (partially built) within the study area.

3.6 TRANSIT SERVICE

Sunline Transit Agency currently provides service to the Eastern Riverside area. However, there are currently no Sunline bus routes servicing the study area.

TABLE 3-1

COUNTY OF RIVERSIDE INTERSECTION INTERVALS

Street Classification as identified in the city Transportation Department Standards and Specifications

Classification	Definition	Minimum Right-of-Way Width Required	Number of Lanes Required (Approximate)
<i>Freeway</i>	Highway upon which the abutter's rights of access are controlled and which provides separated grades at intersecting streets.	To be determined by Caltrans	To be determined by Caltrans
<i>Expressway</i>	Multi-modal highway corridor for through traffic to which access from abutting property is restricted. Intersections with other streets or highways shall be limited to approximately one-half mile intervals.	220 to 184 feet	6 or 8 lanes, additional rights-of-way may be needed at intersections
<i>Urban Arterial</i>	Highway primarily for through traffic where anticipated traffic volumes exceed four-lane capacity. Access from other streets or highways shall be limited to approximately one-quarter mile intervals.	152 feet	6 or 8 lanes, additional rights-of-way may be required, at intersections
<i>Arterial Highway</i>	Divided highway primarily for through traffic to which access from abutting property shall be kept at a minimum. Intersections with other streets or highways shall be limited to approximately one-quarter mile intervals.	128 feet	4 or 6 lanes, additional right of way may be required at intersections
<i>Arterial Mountain Highway</i>	Highway intended to serve through traffic in mountainous areas zoned for low density residential development. Access from abutting property shall be kept at a minimum. Intersections with other streets or highways shall be limited to approximately 330-foot intervals.	110 feet	2 to 4 lanes, additional right-of-way may be required at intersections.
<i>Major Highway</i>	Highway intended to serve property zoned for major industrial and commercial uses, or to serve through traffic. Intersections with other streets or highways may be limited to approximately 660-foot intervals.	118 feet	4 lanes, additional rights-of-way may be required at intersections
<i>Secondary Highway</i>	Highway intended to serve through traffic along longer routes between major traffic generating areas or to serve property zoned for multiple residential, secondary industrial or commercial uses. Intersections with other streets and highways may be limited to 330-foot intervals.	100 feet	4 lanes, generally no turn lanes, and additional right-of-way may be required at intersections
<i>Collector Street</i>	Street intended to serve intensive residential land use, multiple-family dwellings, or to convey traffic through an area to roads of equal or similar classification or higher. It may also serve as a cul-de-sac in industrial or commercial use areas but shall not exceed 660 feet in length when so used.	74 feet	2 lanes
<i>Industrial Collector</i>	A circulatory street with a continuous left-turn lane with at least one end connecting to a road of equal or greater classification.	78 feet	2 lanes

TABLE 3-2

CITY OF LA QUINTA INTERSECTION INTERVALS

Roadway Classification	Design Speed (mph)	Intersection Spacing (ft.)				
		Residential	Commercial	Access (measured between the curb returns)		
				Approach leg to a full turn intersection	On the exit leg from a full turn intersection	Between Driveways
Major Arterial	55	2,600	1,060	>250	>150	>275
Primary Arterial	45	1,060	1,060	>250	>150	>275
Secondary Arterial	40	600	600	>250	>150	>250
Collectors	30	300	300	>250	>150	>250
Local	25	250	250	-	-	-

* Source: La Quinta General Plan (2012 update). Chapter 2 - Community Development (Pages 120-122)

Vista Soleada (Residential) Project Driveway Intervals			
Roadway	Road Segment	Roadway Classification	Distance
60th Avenue	From Monroe Street to Driveway 1	Primary Arterial	2,000
61st Avenue	From Monroe Street to Driveway 2	Collector	1,800

EXISTING AND PROPOSED HIKING AND EQUESTRIAN TRAIL FACILITIES SOUTH COACHELLA VALLEY



SOURCE: Coachella Valley Association of Governments (CVAG) Non-Motorized Transportation Plan Update (September 2010)

Legend

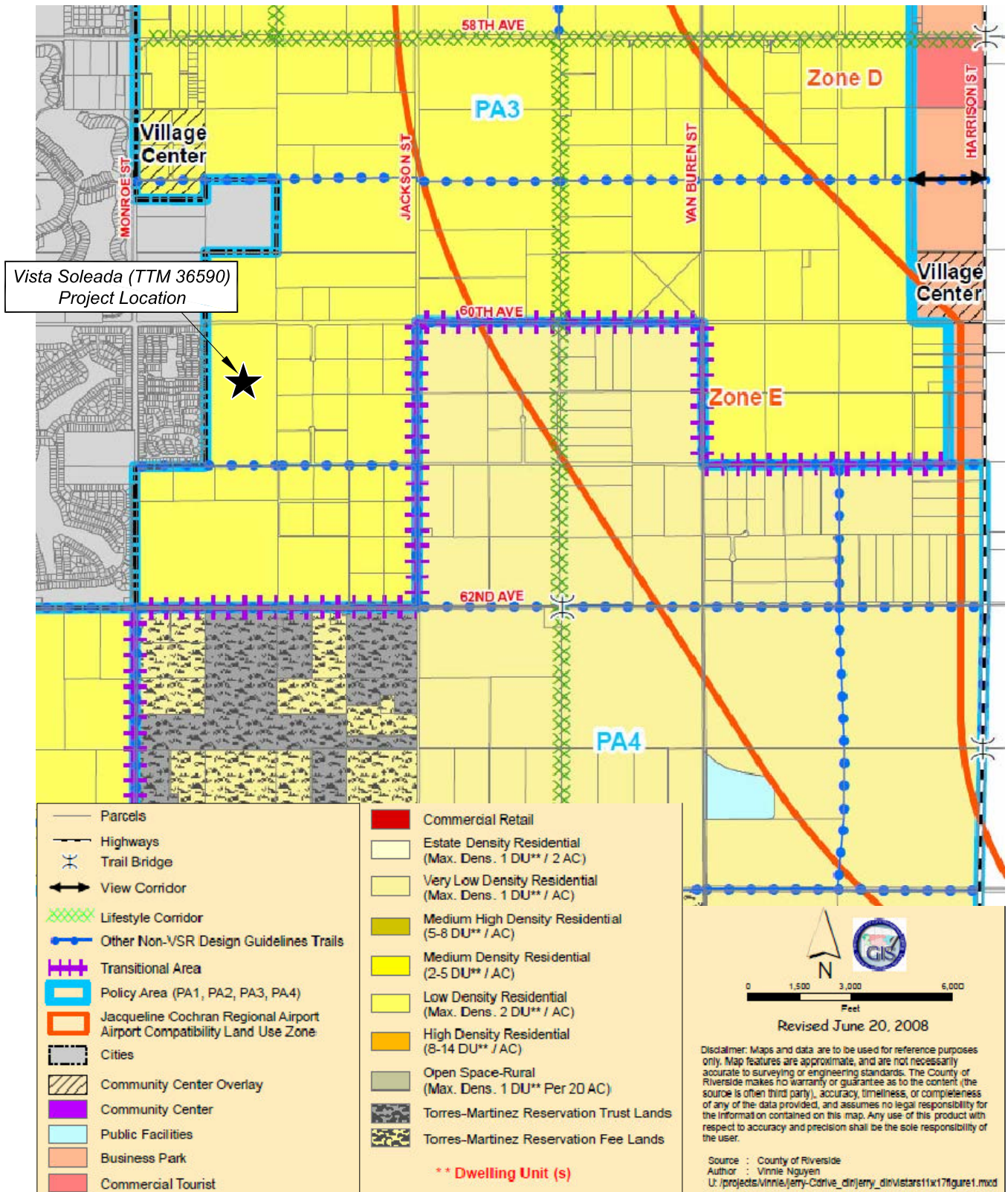
Trail Facilities
CLASS, STATUS

<ul style="list-style-type: none"> Hiking & Equestrian Trail, Existing Hiking & Equestrian Trail, Proposed 	<ul style="list-style-type: none"> Trailhead, Existing Trailhead, Proposed
-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

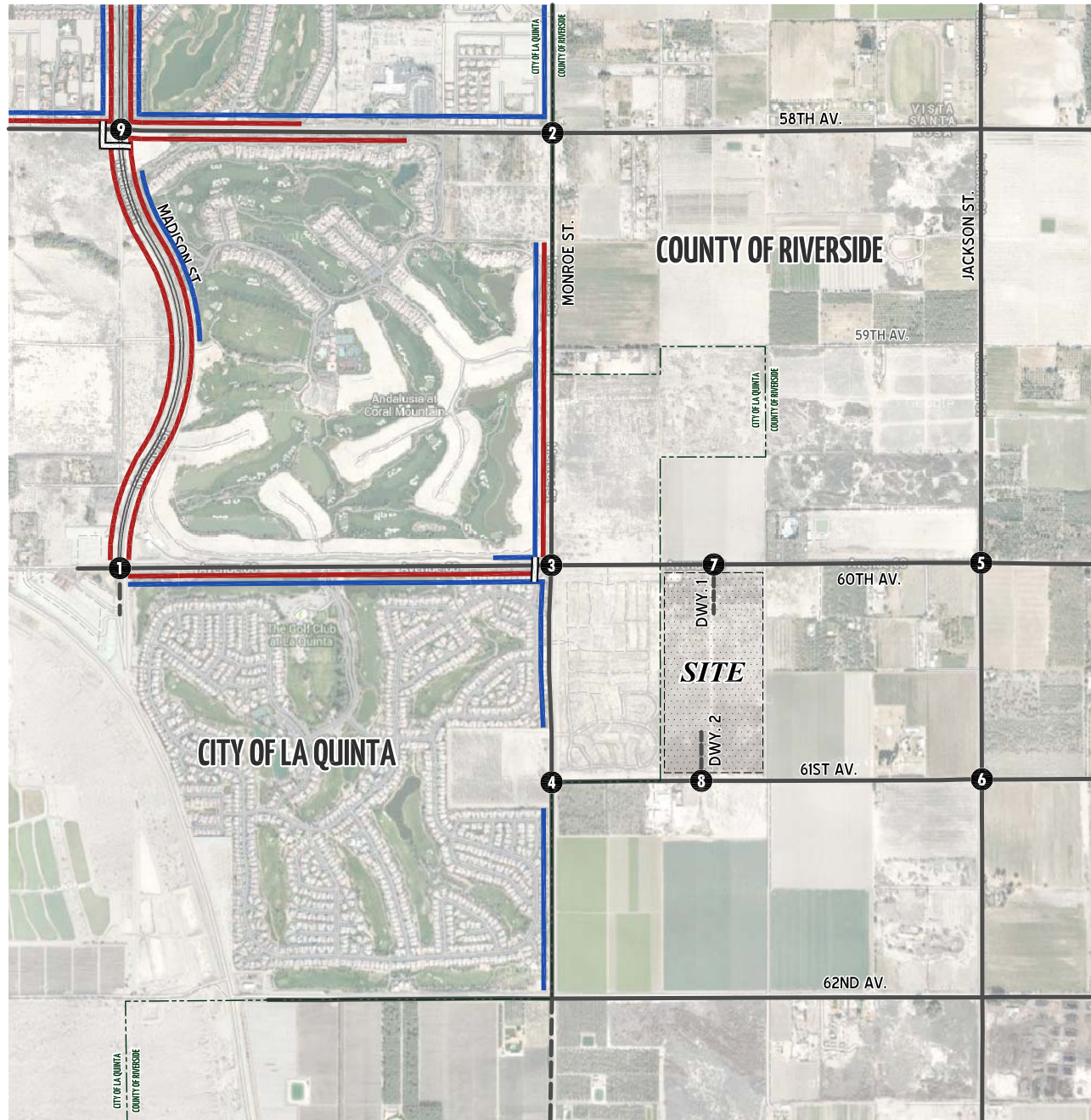
June 2018







VISTA SANTA ROSA COMMUNITY LAND USE CONCEPT PLAN MAP



BICYCLE AND EXISTING PEDESTRIAN FACILITIES



LEGEND:

-  = INTERSECTION ID
-  = BIKE LANE
-  = SIDEWALK
-  = CROSSWALK



Transit service is reviewed and updated by Sunline Transit Agency periodically to address ridership, budget and community demand needs. Changes in land use can affect these periodic adjustments which may lead to either enhanced or reduced service where appropriate.

3.7 EXISTING TRAFFIC COUNTS

The City of La Quinta's traffic study guidelines (Engineering Bulletin #06-13), requires the morning peak volumes to be measured between 6:00 & 8:30 am and afternoon peak volumes between 2:30 & 5:30 pm. The County of Riverside normally measures peak volumes between 7:00 & 9:00 am and 4:00 & 6:00 pm. For the purpose of this report, the following peak hours were selected for analysis:

- Weekday AM Peak Hour (peak hour between 6:00 AM and 9:00 AM)
- Weekday PM Peak Hour (peak hour between 2:30 PM and 6:00 PM)

Manual weekday AM and PM and peak hour turning movement counts were conducted in October 2013. The weekday AM and PM peak hour count data is representative of typical weekday peak hour traffic conditions in the study area. There were no observations made in the field that would indicate atypical traffic conditions on the count dates, such as construction activity or detour routes. The raw manual peak hour turning movement traffic count data sheets are included in Appendix "3.1". It should be noted that the City of La Quinta requires seasonal adjustments to consider the seasonal population variations within the City. Consistent with the City of La Quinta's EB #06-13, a 10% seasonal growth increase is applied to October counts for the intersections located within the City of La Quinta

Existing (2013) average daily traffic (ADT) volumes on arterial highways throughout the study area are shown on Exhibit 3-10. The ADT volumes are either based on traffic counts or have been estimated by factoring up peak hour counts. The following formula was used to estimate the daily volume for each intersection leg if daily traffic counts were not available:

$$\frac{(AM\ Peak\ Hour\ (Link\ Volume) + PM\ Peak\ Hour\ (Link\ Volume))}{AM\ Link\ Volume\ \%\ of\ Daily\ Volume + PM\ Link\ Volume\ \%\ of\ Daily\ Volume}$$

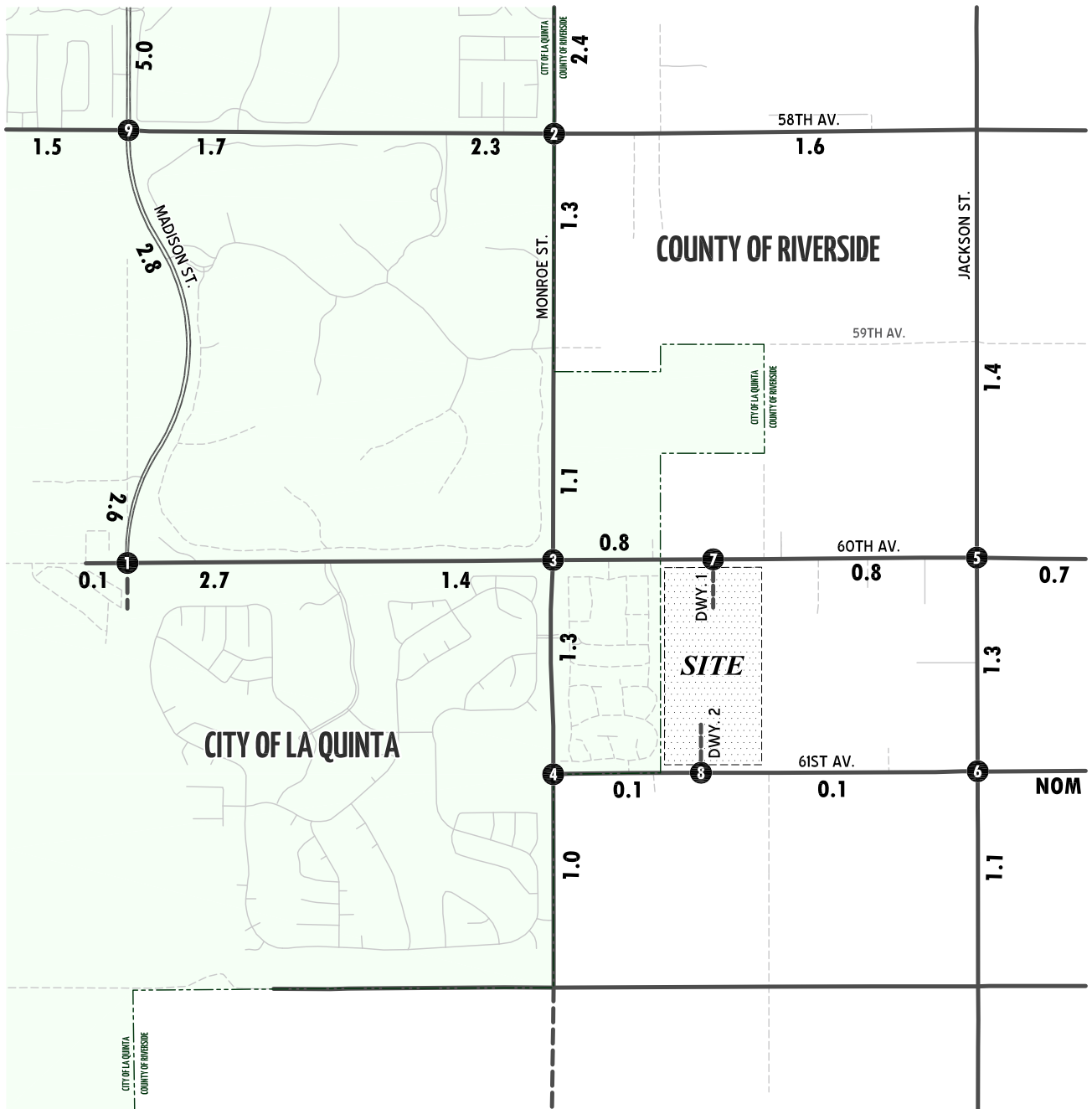
The daily traffic volume count worksheets and peak hour to daily traffic calculations are also included in Appendix "3.1". The resulting (combined AM and PM) ADT calculation factor is 5.714.

Existing (2013) weekday AM and PM peak hour intersection volumes are shown on Exhibit 3-11 and Exhibit 3-12, respectively.

3.8 EXISTING CONDITIONS INTERSECTION OPERATIONS ANALYSIS

Existing (2013) peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2.2 *Intersection Capacity Analysis* of this report.

EXHIBIT 3-10
EXISTING (2013)
AVERAGE DAILY TRAFFIC (ADT)



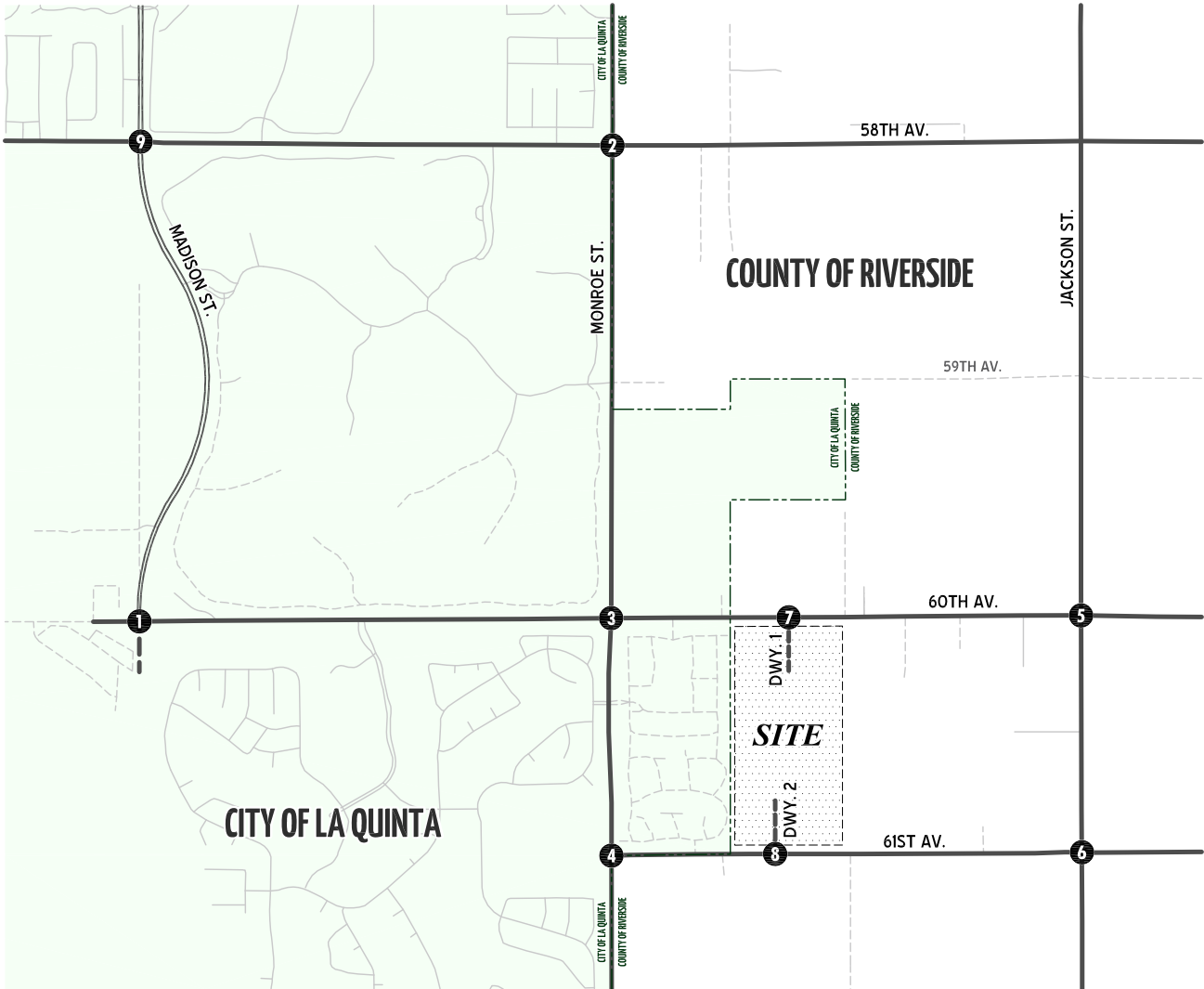
LEGEND:

10.0 = VEHICLES PER DAY (1000'S)

NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY



EXHIBIT 3-11
EXISTING (2013)
AM PEAK HOUR INTERSECTION VOLUMES



1 Madison St. & 60th Av.	2 Monroe St. & 58th Av.	3 Monroe St. & 60th Av.	4 Monroe St. & 61st Av.	
				<p>LEGEND:</p> <p>⑨ = INTERSECTION ID</p> <p>--- = FUTURE ROADWAY / DIRT</p>
		<p style="text-align: center;">INTERSECTION DOES NOT EXIST</p>	<p style="text-align: center;">INTERSECTION DOES NOT EXIST</p>	



The intersection operations analysis results are summarized in Table 3-3. The Existing (2013) conditions operations analysis shows that all study area intersections appear to currently operate at acceptable LOS (i.e., LOS “D” or better) during the peak hours.

The intersection operations analysis worksheets are included in Appendix “3.2” of this TIA.

3.9 EXISTING CONDITIONS TRAFFIC SIGNAL WARRANTS ANALYSIS

Traffic signal warrants for Existing traffic conditions are based on existing peak hour intersection volumes. For Existing (2013) conditions, there are no study area intersections that currently appear to warrant a traffic signal (see Appendix “3.3”).

**TABLE 3-3
INTERSECTION ANALYSIS FOR EXISTING (2013) CONDITIONS**

#	Intersection	Traffic Control ³	Intersection Approach Lanes ¹									Delay ² (secs.)		Level of Service ²				
			Northbound			Southbound			Eastbound			Westbound			AM	PM	AM	PM
			L	T	R	L	T	R	L	T	R	L	T	R				
1	Madison St. / 60th Av.	CSS	0	0	0	1	1	0	0	1	0	0	1	d	8.8	9.4	A	A
2	Monroe St. / 58th Av.	AWS	0	1!	0	0	1	1	0	1!	0	0	1!	0	7.8	8.7	A	A
3	Monroe St. / 60th Av.	AWS	1	1	0	1	1	1	0.5	0.5	1	0	1!	0	7.7	7.8	A	A
4	Monroe St. / 61st Av.	CSS	0	1	0	0.5	0.5	0	0	0	0	0	1!	0	8.5	8.9	A	A
5	Jackson St. / 60th Av.	AWS	0	1!	0	0	1!	0	0	1!	0	0	1!	0	7.3	7.3	A	A
6	Jackson St. / 61st Av.	CSS	0	1!	0	0	1!	0	0	1!	0	0	1!	0	9.1	9.4	A	A
7	Dwy. 1 / 60th Av.	-	Intersection Does Not Exist									-	-	-	-			
8	Dwy. 2 / 61st Av.	-	Intersection Does Not Exist									-	-	-	-			
9	Madison St. / 58th Av.	AWS	1	2	1	1	2	d	1	1	1	1	2	1	8.7	8.6	A	A

¹ When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; 1! = Shared Left-Through-Right Turn Lane; d = Defacto Right Turn Lane

² Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all-way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

³ CSS = Cross-Street Stop; AWS = All-Way Stop

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4.0 PROJECTED FUTURE TRAFFIC

This section presents the traffic volumes estimated to be generated by the Project, as well as the Project's trip assignment onto the study area roadway network. The Project is proposed to consist of 230 single family homes and a 1.40 acre equestrian way station. For the purpose of this analysis, the Project is anticipated to be developed in a single phase with a projected Opening Year of 2016.

The Project is proposed to have access on 60th Avenue and 61st Avenue. Both Project access points are proposed to be full-access. Regional access to the Project site will be provided by the I-10 Freeway (located to the north) via Monroe Street.

4.1 PROJECT TRIP GENERATION

Trip generation represents the amount of traffic which is both attracted to and produced by a development. Determining traffic generation for a specific project is therefore based upon forecasting the amount of traffic that is expected to be both attracted to and produced by the specific land uses being proposed for a given development.

In order to estimate the traffic characteristics of the proposed Project, trip-generation statistics published in the Institute of Transportation Engineers (ITE) Trip Generation (9th Edition, 2012) manual for the proposed land use (ITE Land Use Code 210 Single Family Detached Residential) were used. For the equestrian way station, ITE Trip Generation Manual does not include comprehensive trip rates, and therefore SANDAG's daily trip rate for neighborhood/county (undeveloped) park is utilized. For the equestrian way station (a staging area for loading/unloading of horses and access to trails) peak hour rates, SANDAG's trip generation peak to daily percentage and in/out ratio for City (developed) park is applied.

Trip generation rates used to estimate Project traffic and summary of the Project's trip generation are shown on Table 4-1. As shown in Table 4-1, the Project is estimated to generate a total of approximately 2,197 net trip-ends per day on a typical weekday with approximately 175 net weekday AM peak hour trips, 232 net weekday PM peak hour trips.

4.2 PROJECT TRIP DISTRIBUTION

The project trip distribution and assignment process represents the directional orientation of traffic to and from the project site. Trip distribution is heavily influenced by the geographical location of the site, the location of surrounding uses, and surface roadway characteristics such as proximity to the regional highway/freeway system. The travel patterns were developed in coordination with City staff when determining the limits of the study area. The project traffic distribution pattern is shown on Exhibit 4-1.

**TABLE 4-1
VISTA SOLEADA (TTM 36590) PROJECT TRIP GENERATION SUMMARY**

TRIP GENERATION RATES ¹										
Land Use	ITE CODE	Quantity	Units ²	Weekday AM Peak Hour			Weekday PM Peak Hour			Weekday Daily
				In	Out	Total	In	Out	Total	
Single Family Detached	210	230	DU	0.19	0.56	0.75	0.63	0.37	1.00	9.52
Equestrian Way Station	. ³	1.40	AC	0.33	0.32	0.65	0.23	0.22	0.45	5.00

TRIP GENERATION RESULTS										
Land Use	ITE CODE	Quantity	Units ¹	Weekday AM Peak Hour			Weekday PM Peak Hour			Weekday Daily
				In	Out	Total	In	Out	Total	
Single Family Detached	210	230	DU	44	129	173	145	85	230	2,190
Equestrian Way Station	. ³	1.40	AC	1	1	2	1	1	2	7
TOTAL				45	130	175	146	86	232	2,197

¹ Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, 9th Edition (2012).

² DU = Dwelling Unit; AC = Acre

³ Since ITE does not have trip rates for an equestrian way station, similar use based on SANDAG's neighborhood/county (undeveloped) park daily rates are utilized. For the peak hour rates, SANDAG's in/out ratio for City (developed) park is applied.

EXHIBIT 4-1 PROJECT TRIP DISTRIBUTION



LEGEND:

- 10 = PERCENT TO/FROM PROJECT
- NOM = NOMINAL, LESS THAN 1 PERCENT TO/FROM PROJECT



4.3 MODAL SPLIT

The traffic reducing potential of public transit, walking or bicycling have not been considered in this TIA. Essentially, the traffic projections are "conservative" in that these alternative travel modes might be able to reduce the forecasted traffic volumes.

4.4 PROJECT TRIP ASSIGNMENT

The assignment of traffic from the Project area to the adjoining roadway system is based upon the Project trip generation, trip distribution, and the arterial highway and local street system improvements that would be in place by the time of initial occupancy of the Project. Based on the identified Project traffic generation and trip distribution patterns, Project (2016) average daily traffic (ADT) volumes for the weekday are shown on Exhibit 4-2. Project (2016) weekday AM and PM peak hour volumes are shown on Exhibit 4-3 and Exhibit 4-4, respectively.

4.5 BACKGROUND TRAFFIC

Future year traffic forecasts have been based upon three (3) years of background (ambient) growth at 2% per year for 2016 traffic conditions. The ambient growth factor is intended to approximate regional traffic growth. The total ambient growth is 6.012% for 2016 traffic conditions (compounded growth of two percent per year over two years or 1.02^3 years). This ambient growth rate is added to existing traffic volumes to account for area-wide growth not reflected by cumulative development projects. Ambient growth has been added to daily and peak hour traffic volumes on surrounding roadways, in addition to traffic generated by the development of future projects that have been approved but not yet built and/or for which development applications have been filed and are under consideration by governing agencies.

4.6 CUMULATIVE DEVELOPMENT TRAFFIC

CEQA guidelines require that other reasonably foreseeable development projects which are either approved or being processed concurrently in the study area also be included as part of a cumulative analysis scenario. A cumulative project list was developed for the purposes of this analysis through consultation with planning and engineering staff from the County of Riverside and City of La Quinta. Exhibit 4-5 illustrates the cumulative development location map. The cumulative data trip distribution patterns are included in Appendix 4.1.

Trip generation rates used to estimate cumulative development traffic are shown on Table 4-2. Table 4-3 presents the cumulative development trip generation summary. As shown in Table 4-3, the cumulative development projects are estimated to generate a total of approximately 9,918 net trip-ends per day on a typical weekday with approximately 781 net weekday AM peak hour trips, 1033 net weekday PM peak hour trips

**TABLE 4-2
CUMULATIVE DEVELOPMENT TRIP GENERATION RATES**

Land Use ²	ITE CODE	Quantity	Units ³	AM Peak Hour			PM Peak Hour			Daily
				In	Out	Total	In	Out	Total	
COUNTY OF RIVERSIDE										
SFDR	210	Varies	DU	0.19	0.56	0.75	0.63	0.37	1.00	9.52
CITY OF LA QUINTA⁴										
SFDR - 472 DU	210	472	DU	0.19	0.54	0.73	0.57	0.32	0.89	9.28
SFDR - 94 DU	210	94	DU	0.22	0.61	0.83	0.69	0.39	1.08	10.55
SFDR - 392 DU	210	392	DU	0.19	0.54	0.73	0.58	0.33	0.91	9.41
SFDR - 326 DU	210	326	DU	0.19	0.55	0.74	0.59	0.33	0.92	9.55

¹ Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, 9th Edition (2012).

² SFDR = Single Family Detached Residential

³ DU = Dwelling Unit

⁴ It should be noted that the City of La Quinta utilizes the ITE average rate of the peak hour of the generator NOT the peak hour of adjacent street. In accordance with the City of La Quinta's Engineering Bulletin #06-13, trip generation rates with a good regression curve fit to the data points ($R^2 > 0.7$) will be utilized rather than the average rate.

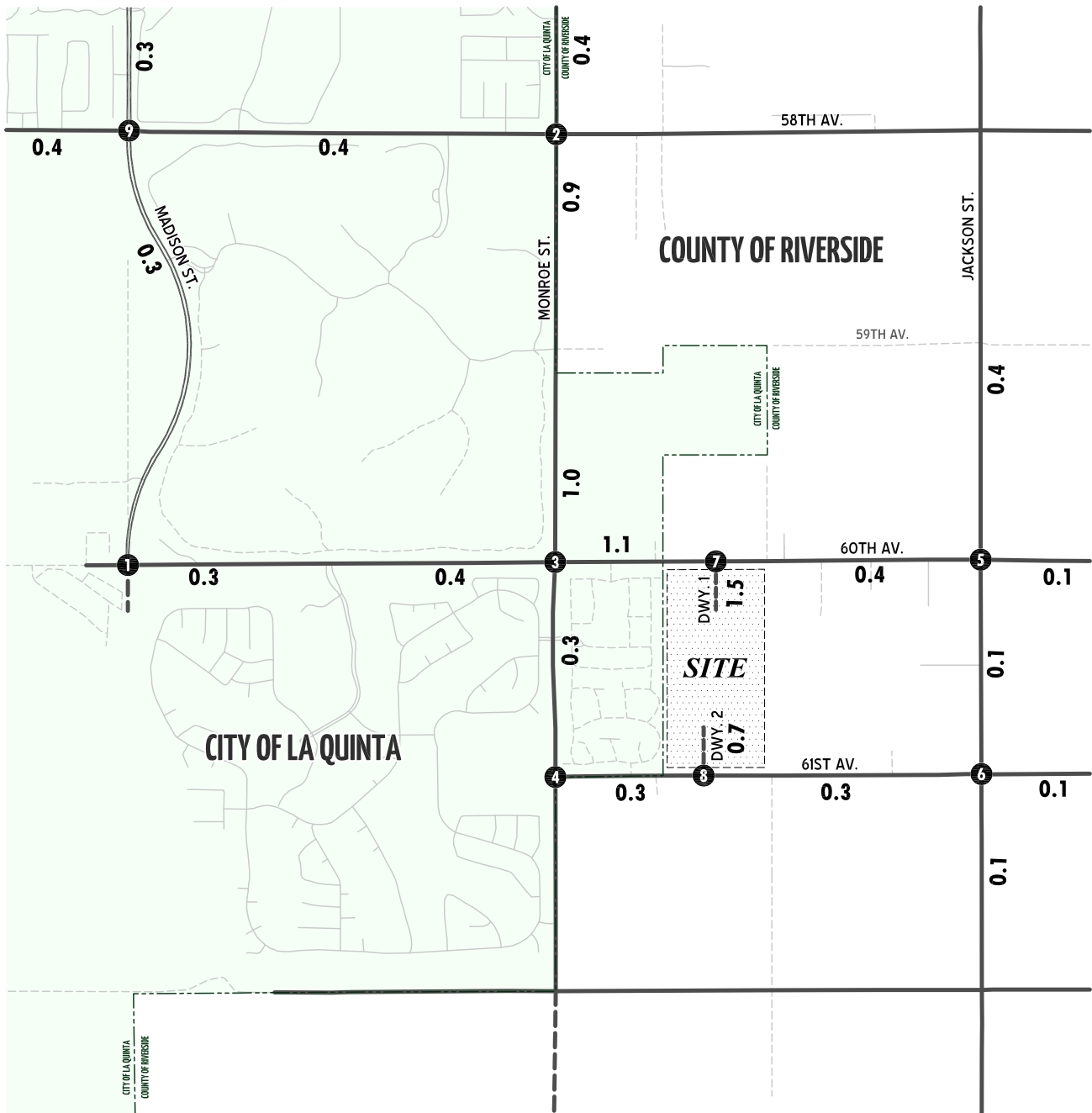
**TABLE 4-3
CUMULATIVE DEVELOPMENT TRIP GENERATION SUMMARY**

TAZ ID	Project Name	Land Use ¹	Quantity	Units ²	AM Peak Hour			PM Peak Hour			Daily
					In	Out	Total	In	Out	Total	
COUNTY OF RIVERSIDE											
1	TR 34302	SFDR	56	DU	11	31	42	35	21	56	533
2	TR 36234	SFDR	90	DU	17	50	67	57	33	90	857
3	TR 32693	SFDR	228	DU	43	128	171	144	84	228	2,171
4	TR 32694	SFDR	547	DU	104	306	410	345	202	547	5,207
COUNTY OF RIVERSIDE TOTAL					175	515	690	581	340	921	8,768
CITY OF LA QUINTA											
5	SP 2003-067 (Andalusia)	SFDR	472	DU	90	255	345	269	151	420	4,380
	- Completed by 2016	SFDR	220	DU	42	119	161	125	70	195	2,042
	- Currently Built	SFDR	(160)	DU	(30)	(86)	(116)	(91)	(51)	(142)	(1,485)
	TAZ 5 Total (Opening Year 2016)					12	33	45	34	19	53
6	TM 31434	SFDR	94	DU	21	57	78	65	37	102	992
	- Completed by 2016	SFDR	20	DU	4	12	16	14	8	22	211
	TAZ 6 Total (Opening Year 2016)					4	12	16	14	8	22
7	SP 2004-072 (Schumacher)	SFDR	392	DU	74	212	286	227	129	356	3,689
	- Completed by 2016	SFDR	0	DU	--	--	--	--	--	--	--
	TAZ 7 Total (Opening Year 2016)					n/a	n/a	n/a	n/a	n/a	n/a
8	TT 31732 & 31733 (Palizada)	SFDR	326	DU	62	179	241	192	108	300	3,113
	- Completed by 2016	SFDR	40	DU	8	22	30	24	13	37	382
	TAZ 8 Total (Opening Year 2016)					8	22	30	24	13	37
CITY OF LA QUINTA TOTAL					24	67	91	72	40	112	1,150
TOTAL CUMULATIVE PROJECTS					199	582	781	653	380	1,033	9,918

¹ SFDR = Single Family Detached Residential

² DU = Dwelling Unit

EXHIBIT 4-2
PROJECT ONLY
AVERAGE DAILY TRAFFIC (ADT)



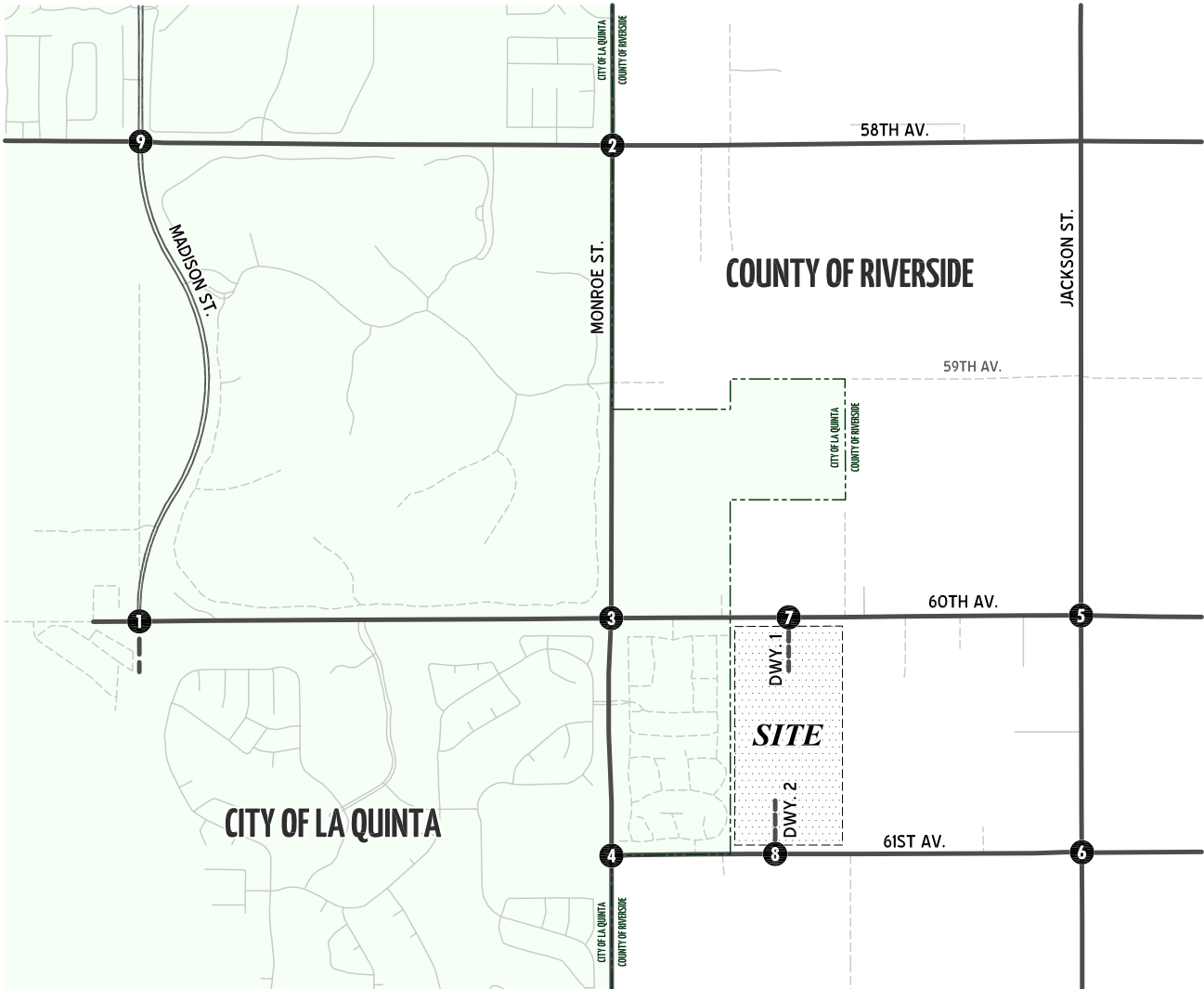
LEGEND:

10.0 = VEHICLES PER DAY (1000'S)

NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY



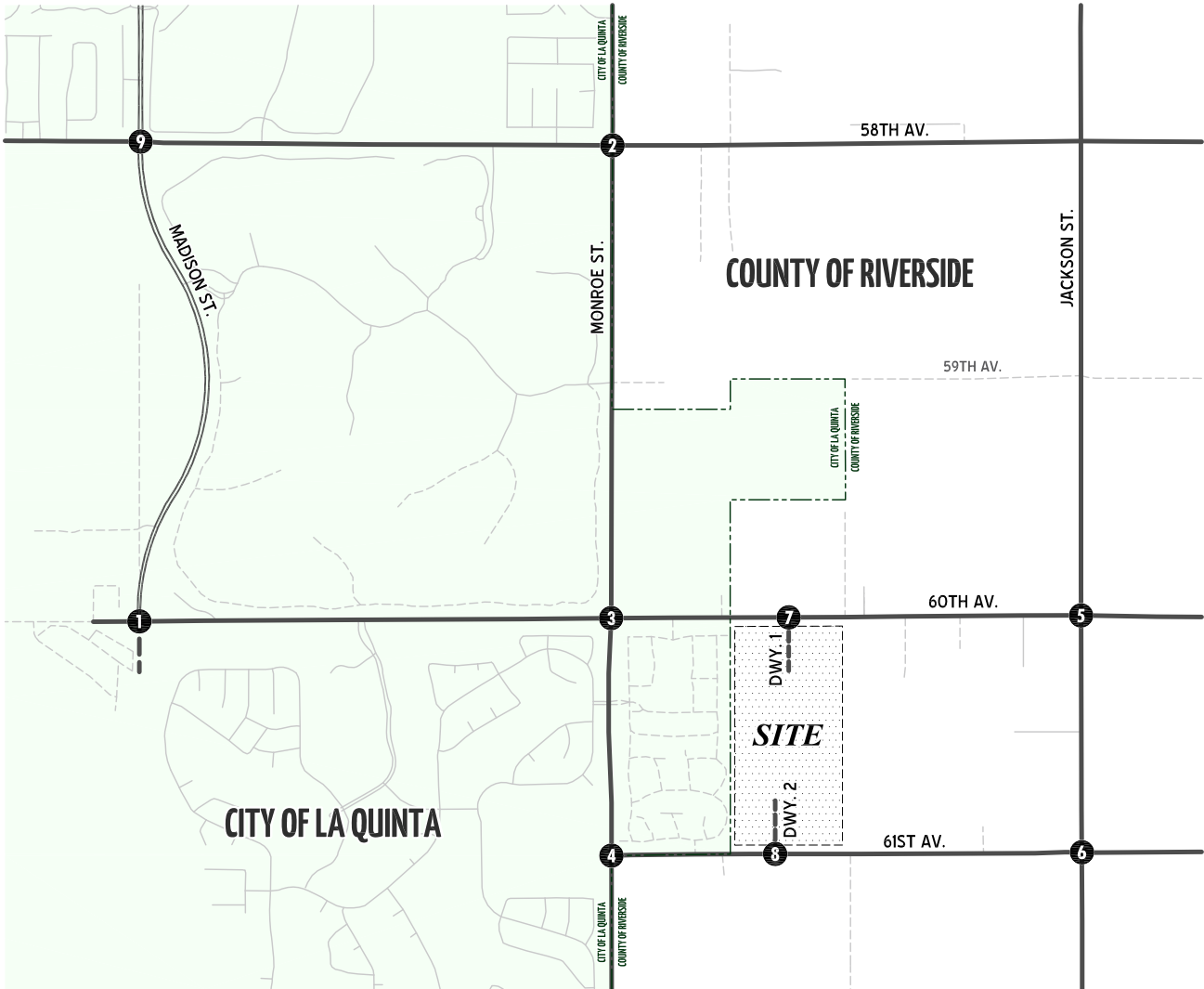
EXHIBIT 4-3
PROJECT ONLY
AM PEAK HOUR INTERSECTION VOLUMES



1 Madison St. & 60th Av.	2 Monroe St. & 58th Av.	3 Monroe St. & 60th Av.	4 Monroe St. & 61st Av.	LEGEND:				
				9 = INTERSECTION ID	--- = FUTURE ROADWAY / DIRT			
5 Jackson St. & 60th Av.	6 Jackson St. & 61st Av.	7 Dwy. 1 & 60th Av.	8 Dwy. 2 & 61st Av.	9 Madison St. & 58th Av.				



EXHIBIT 4-4
PROJECT ONLY
PM PEAK HOUR INTERSECTION VOLUMES



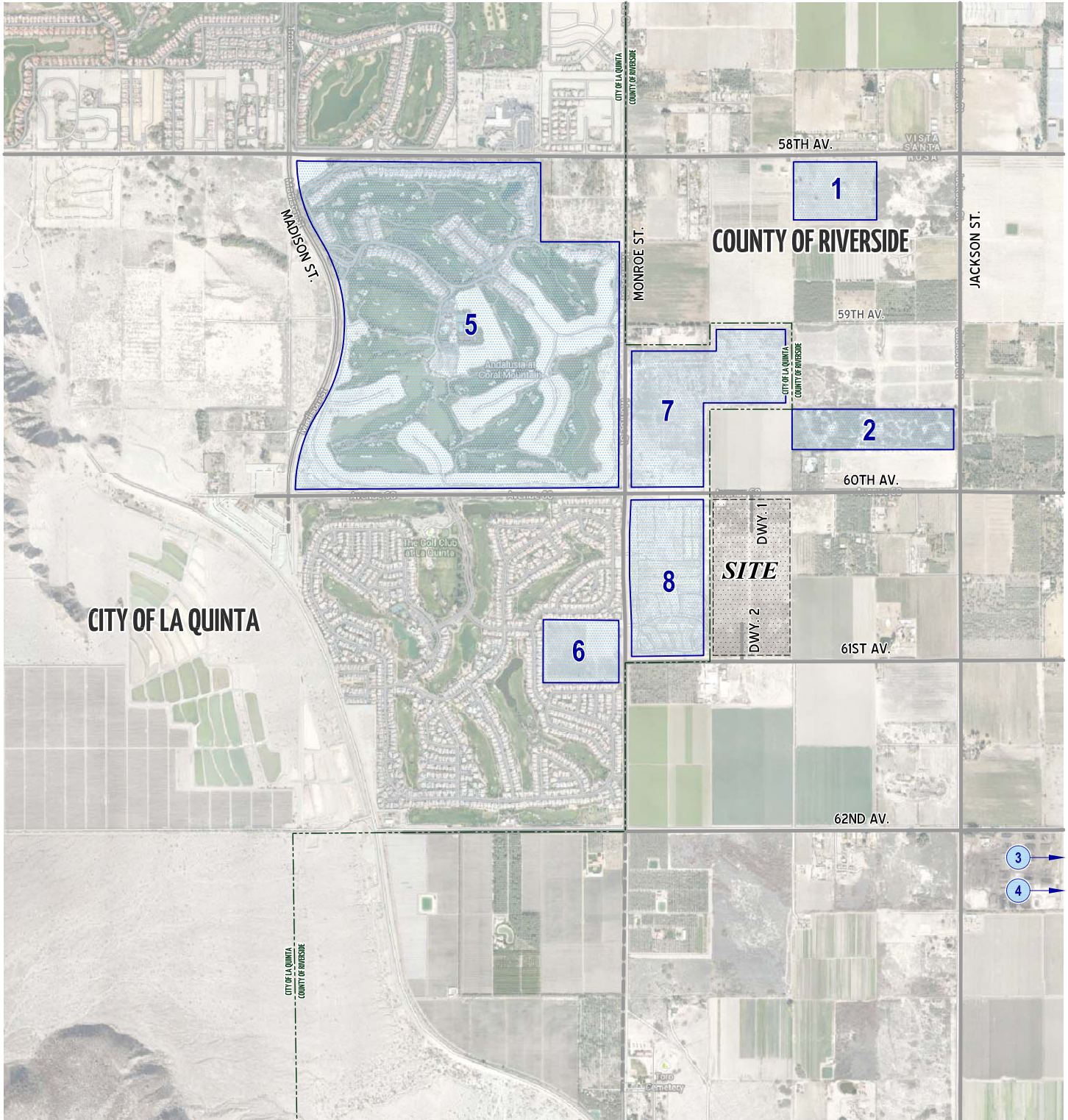
1 Madison St. & 60th Av.	2 Monroe St. & 58th Av.	3 Monroe St. & 60th Av.	4 Monroe St. & 61st Av.	
5 Jackson St. & 60th Av.	6 Jackson St. & 61st Av.	7 Dwy. 1 & 60th Av.	8 Dwy. 2 & 61st Av.	9 Madison St. & 58th Av.

LEGEND:

- = INTERSECTION ID
- = FUTURE ROADWAY / DIRT



CUMULATIVE DEVELOPMENT LOCATION MAP



LEGEND:

1 = CUMULATIVE DEVELOPMENT PROJECTS
(SEE TABLE 4-3)

Based on the identified cumulative development traffic generation and trip distribution patterns, Cumulative Development average daily traffic (ADT) volumes for the weekday are shown on Exhibit 4-6. Cumulative Development weekday AM and PM peak hour volumes are shown on Exhibit 4-7 and Exhibit 4-8, respectively.

4.7 TRAFFIC FORECASTS

To provide a comprehensive assessment of the potential project-related and cumulative traffic impacts, two types of analyses, “buildup” and “buildout”, were performed in support of this work effort. The “buildup” method was used to approximate the EAP traffic conditions for the study year of 2016, and is intended to identify the project-related impacts on both the existing and planned near-term circulation system. The EAP (2016) traffic condition includes background traffic in addition to the traffic generated by the proposed Project. The “buildup” method was also utilized to approximate the EAPC conditions for the study year of 2016, and is intended to identify the cumulative impacts on both the existing and planned near-term circulation system. The EAPC (2015) traffic condition includes background traffic, traffic generated by other cumulative development projects within the study area and the traffic generated by the proposed Project. The “buildout” approach is used to forecast the Long-Range (2035) conditions.

4.8 OPENING YEAR (2016) CONDITIONS

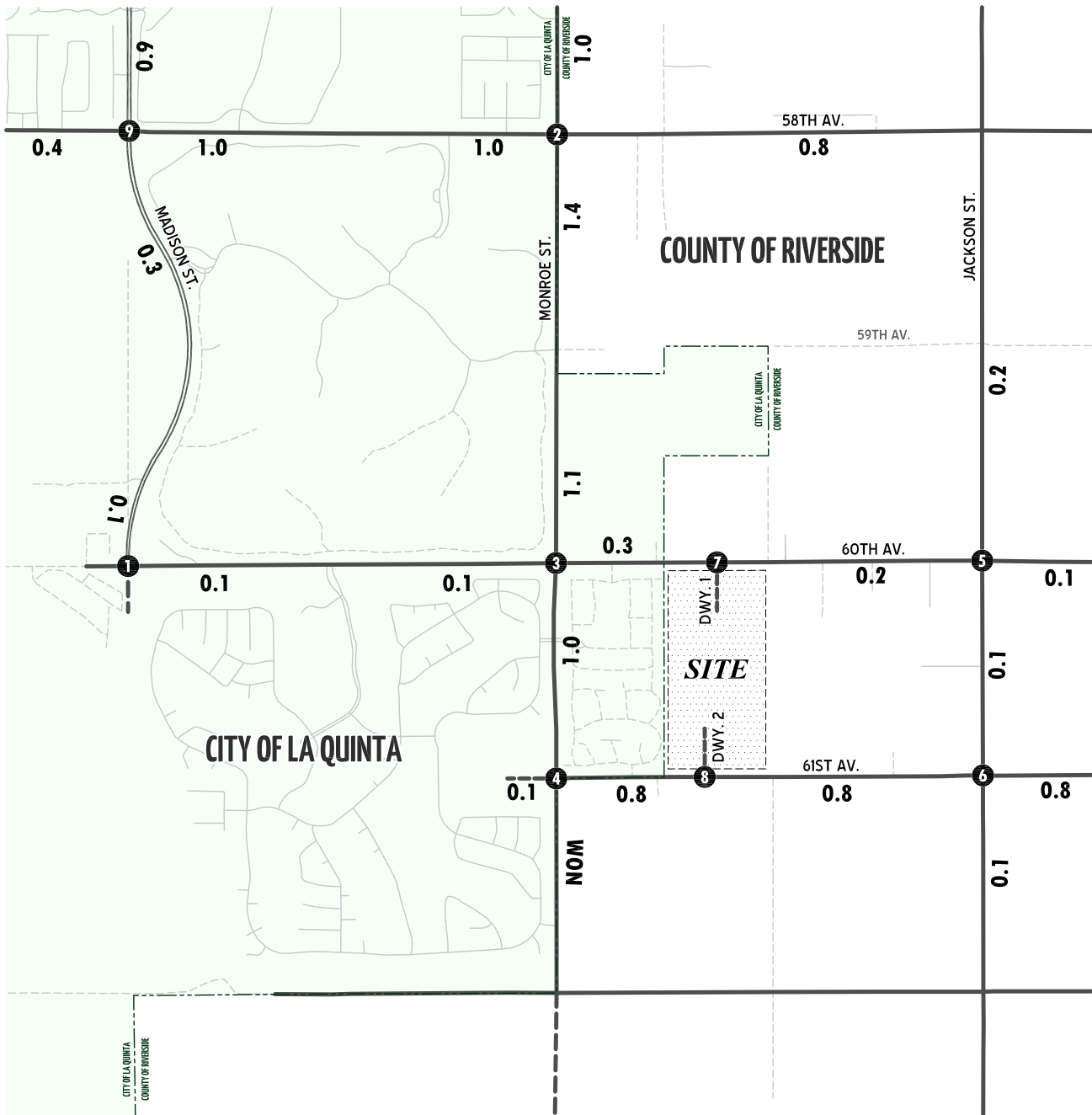
The “buildup” approach combines existing traffic counts with a background ambient growth factor to forecast the Opening Year (2016) traffic conditions. An ambient growth factor of 6.012% accounts for background (area-wide) traffic increases that occur over time up to the year 2016 from the year 2013. Traffic volumes generated by the Project are then added to assess the EAP (2016) traffic conditions. The 2016 roadway network is similar to the Existing conditions roadway network, with the exception of future roadways proposed to be developed by the Project.

The Opening Year traffic analysis includes the following traffic conditions, with the various traffic components:

- Existing Plus Ambient Growth Plus Project (EAP)
 - Existing 2013 counts
 - Ambient growth traffic (6.012%)
 - Project traffic

- Existing Plus Ambient Growth Plus Project Plus Cumulative (EAPC)
 - Existing 2013 counts
 - Ambient growth traffic (6.012%)
 - Project traffic
 - Cumulative Development traffic

EXHIBIT 4-6
CUMULATIVE ONLY
AVERAGE DAILY TRAFFIC (ADT)



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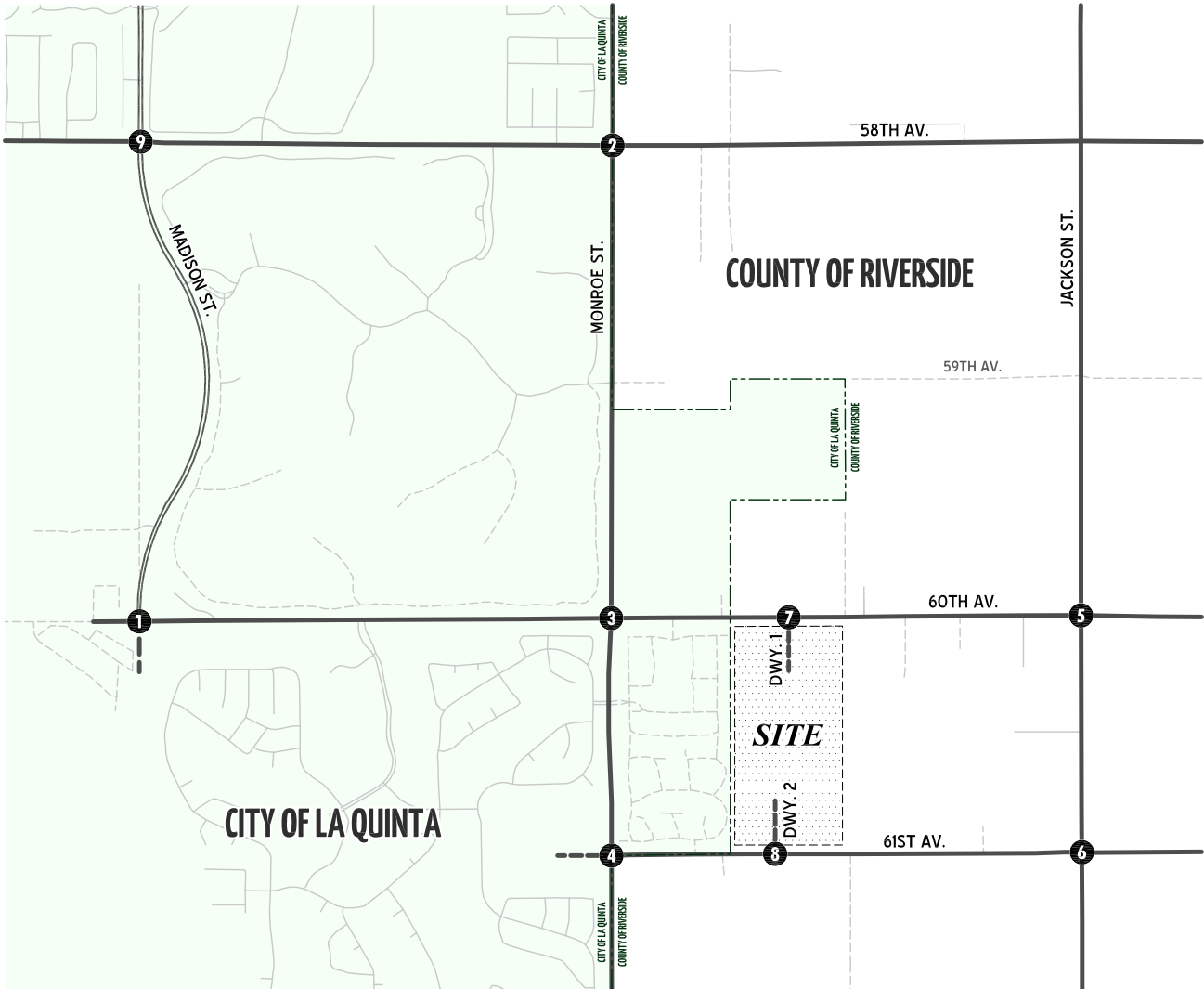
10.0 = VEHICLES PER DAY (1000'S)

NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY



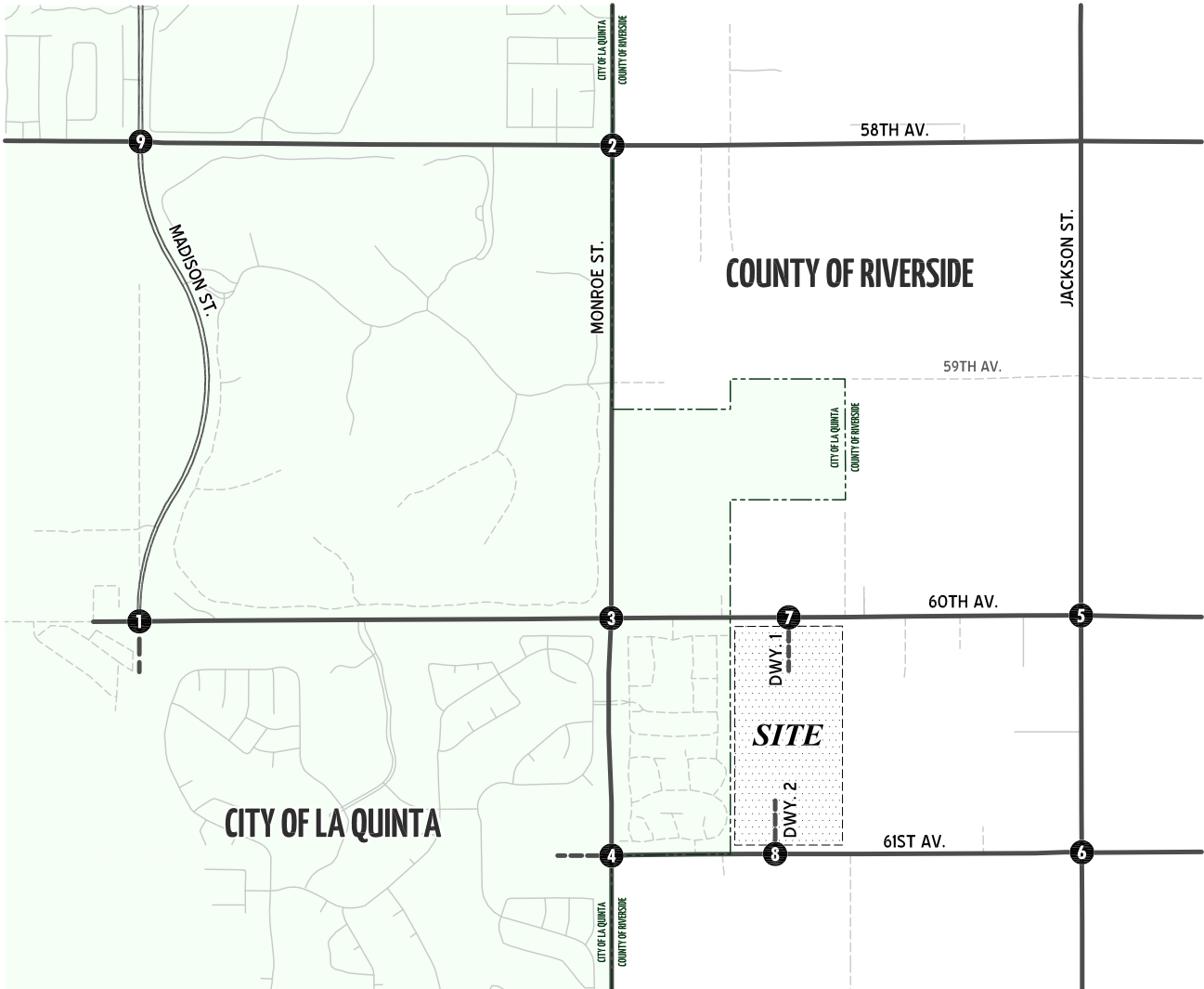
EXHIBIT 4-7

CUMULATIVE ONLY AM PEAK HOUR INTERSECTION VOLUMES



1 Madison St. & 60th Av.	2 Monroe St. & 58th Av.	3 Monroe St. & 60th Av.	4 Monroe St. & 61st Av.	LEGEND:	
				<p>⑨ = INTERSECTION ID</p> <p>--- = FUTURE ROADWAY / DIRT</p>	
5 Jackson St. & 60th Av.	6 Jackson St. & 61st Av.	7 Dwy. 1 & 60th Av.	8 Dwy. 2 & 61st Av.	9 Madison St. & 58th Av.	
		<p>INTERSECTION DOES NOT EXIST</p>	<p>INTERSECTION DOES NOT EXIST</p>		

CUMULATIVE ONLY PM PEAK HOUR INTERSECTION VOLUMES



1 Madison St. & 60th Av.	2 Monroe St. & 58th Av.	3 Monroe St. & 60th Av.	4 Monroe St. & 61st Av.	
				<p>LEGEND:</p> <p>⑨ = INTERSECTION ID</p> <p>--- = FUTURE ROADWAY / DIRT</p>
		<p>INTERSECTION DOES NOT EXIST</p>	<p>INTERSECTION DOES NOT EXIST</p>	
<p>5 Jackson St. & 60th Av.</p>	<p>6 Jackson St. & 61st Av.</p>	<p>7 Dwy. 1 & 60th Av.</p> <p>INTERSECTION DOES NOT EXIST</p>	<p>8 Dwy. 2 & 61st Av.</p> <p>INTERSECTION DOES NOT EXIST</p>	<p>9 Madison St. & 58th Av.</p>



4.9 LONG RANGE (2035) CONDITIONS

Traffic projections for Long Range (2035) with Project conditions were derived from the Riverside County Transportation and Analysis Model (RivTAM) using accepted procedures for model forecast refinement and smoothing. The traffic forecasts reflect the area-wide growth anticipated between existing conditions and Long Range (2035) conditions. In most instances the zone structure of a regional or sub-regional travel demand model is not designed to provide accurate turning movements at intersections along arterial roadways unless refinement and reasonableness checking is performed. Therefore, the Long Range (2035) peak hour forecasts were refined using the model derived long-range forecasts, along with existing peak hour traffic count data collected at each analysis location in October 2013. Future estimated peak hour traffic data was used for new intersections and intersections with an anticipated change in travel patterns to further refine the Long Range (2035) peak hour forecasts. In addition, Long Range (2035) turning volumes were compared to EAPC (2016) volumes in order to ensure a minimum growth of ten (10) percent as a part of the refinement process. The minimum ten (10) percent growth includes any additional growth between EAPC (2016) and Long Range (2035) traffic conditions that is not accounted for by the traffic generated by cumulative development projects and the ambient growth between existing and EAPC (2016) conditions. Lastly, Long Range (2035) turning volumes were compared to the City of La Quinta's General Plan Buildout (2035) traffic volume forecasts from the La Quinta General Plan Circulation Element Update Traffic Impact Analysis (prepared by ITERIS, May 2012) and were adjusted accordingly. The Long Range (2035) without Project peak hour turning movement estimates was then reviewed by Urban Crossroads for reasonableness at intersections where model results showed unreasonable turning movements. The Long Range (2035) estimates were adjusted to achieve flow conservation (where applicable), reasonable growth, and reasonable diversion between parallel routes.

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5.0 EXISTING PLUS PROJECT TRAFFIC ANALYSIS

In an effort to satisfy the CEQA Guideline section 15125(a), an analysis of existing traffic volumes plus traffic generated by the proposed Project (E+P) has been included in this analysis. This section discusses the traffic forecasts for Existing plus Project (E+P) conditions and the resulting intersection operations and traffic signal warrants.

5.1 ROADWAY IMPROVEMENTS

The lane configurations and traffic controls assumed to be in place for E+P conditions are consistent with those shown previously on Exhibit 3-1, with the exception of the following:

- At project driveways and those facilities assumed to be constructed by the Project to provide site access are also assumed to be in place for E+P conditions only (e.g., intersection turn lane improvements at the Project driveways).

5.2 EXISTING PLUS PROJECT TRAFFIC VOLUME FORECASTS

This scenario includes Existing (2013) traffic volumes plus Project traffic. Exhibit 5-1 shows the ADT volumes which can be expected for E+P traffic conditions. E+P AM and PM peak hour intersection turning movement volumes are shown on Exhibit 5-2 and Exhibit 5-3, respectively.

5.3 INTERSECTION OPERATIONS ANALYSIS

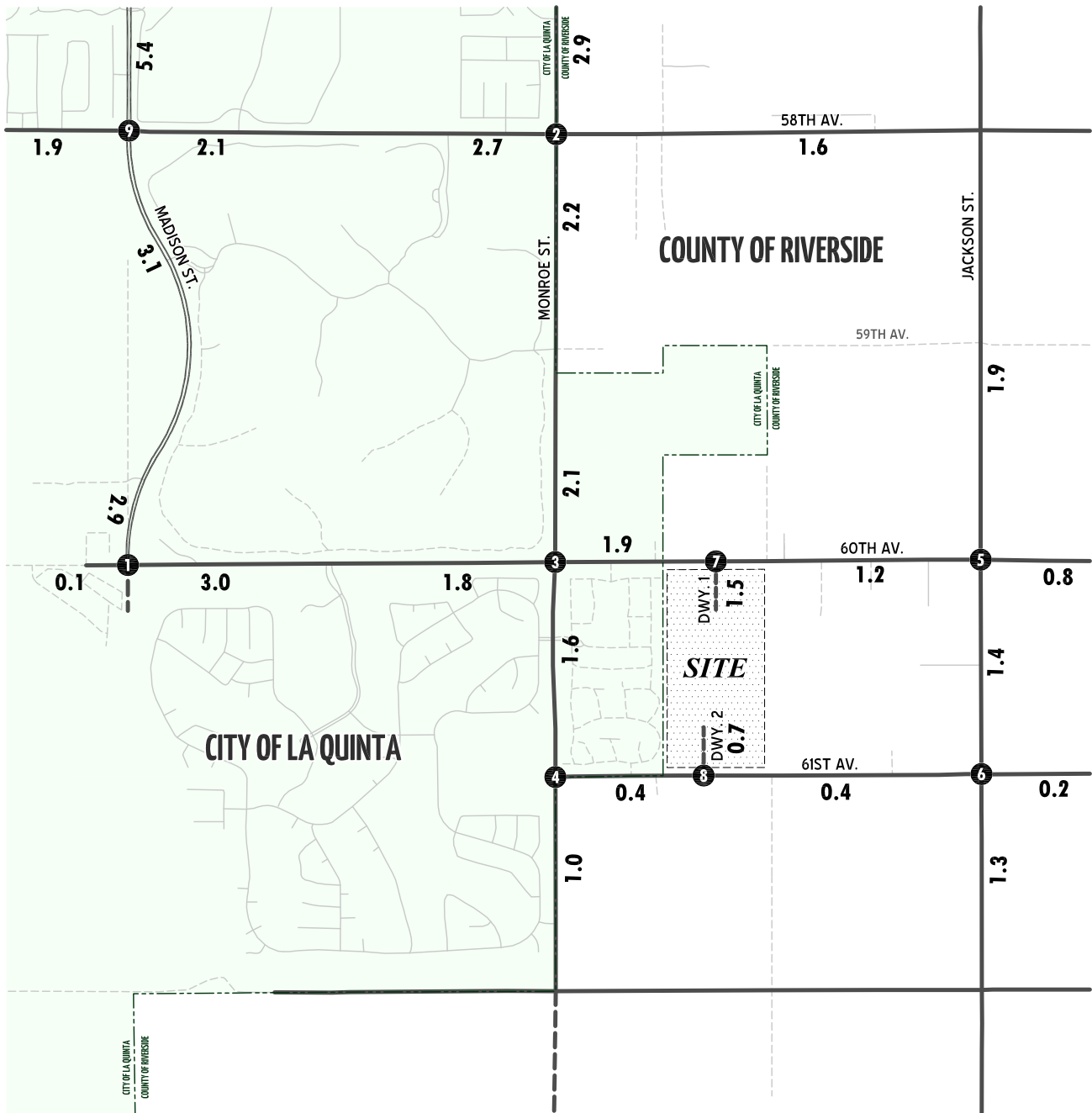
E+P peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2.0 *Methodologies* of this TIA. The intersection analysis results are summarized in Table 5-1, which indicates that the study area intersections are anticipated to operate at acceptable LOS (LOS “D” or better) during the Peak Hours.

The intersection operations analysis worksheets for E+P conditions are included in Appendix “5.1” of this TIA.

5.4 TRAFFIC SIGNAL WARRANTS ANALYSIS

Traffic signal warrants for E+P traffic conditions are based on E+P ADT volumes. For E+P conditions, there are no study area intersections that are anticipated to warrant a traffic signal (see Appendix “3.3”).

EXHIBIT 5-1
**EXISTING PLUS PROJECT
 AVERAGE DAILY TRAFFIC (ADT)**

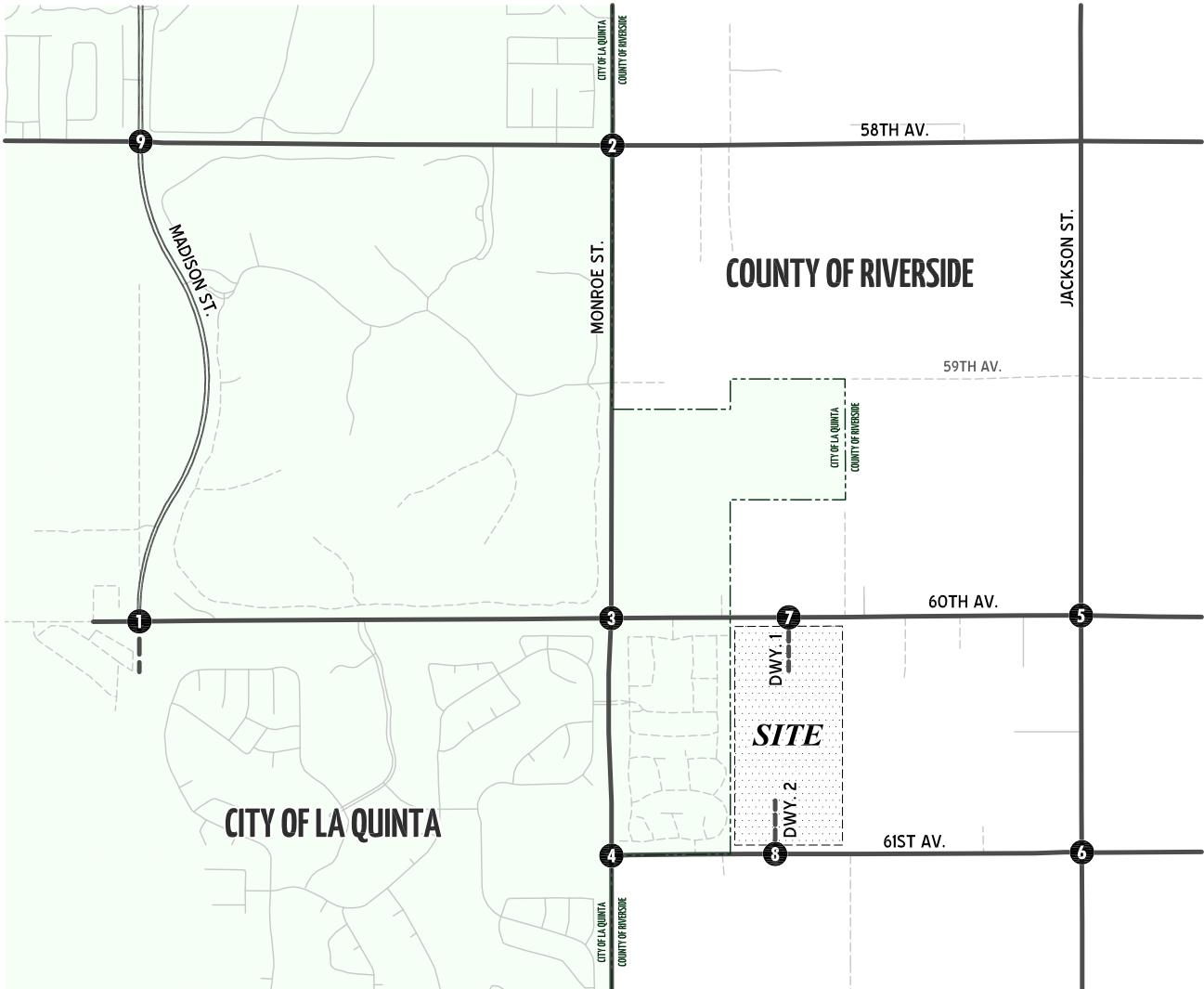


LEGEND:

10.0 = VEHICLES PER DAY (1000'S)



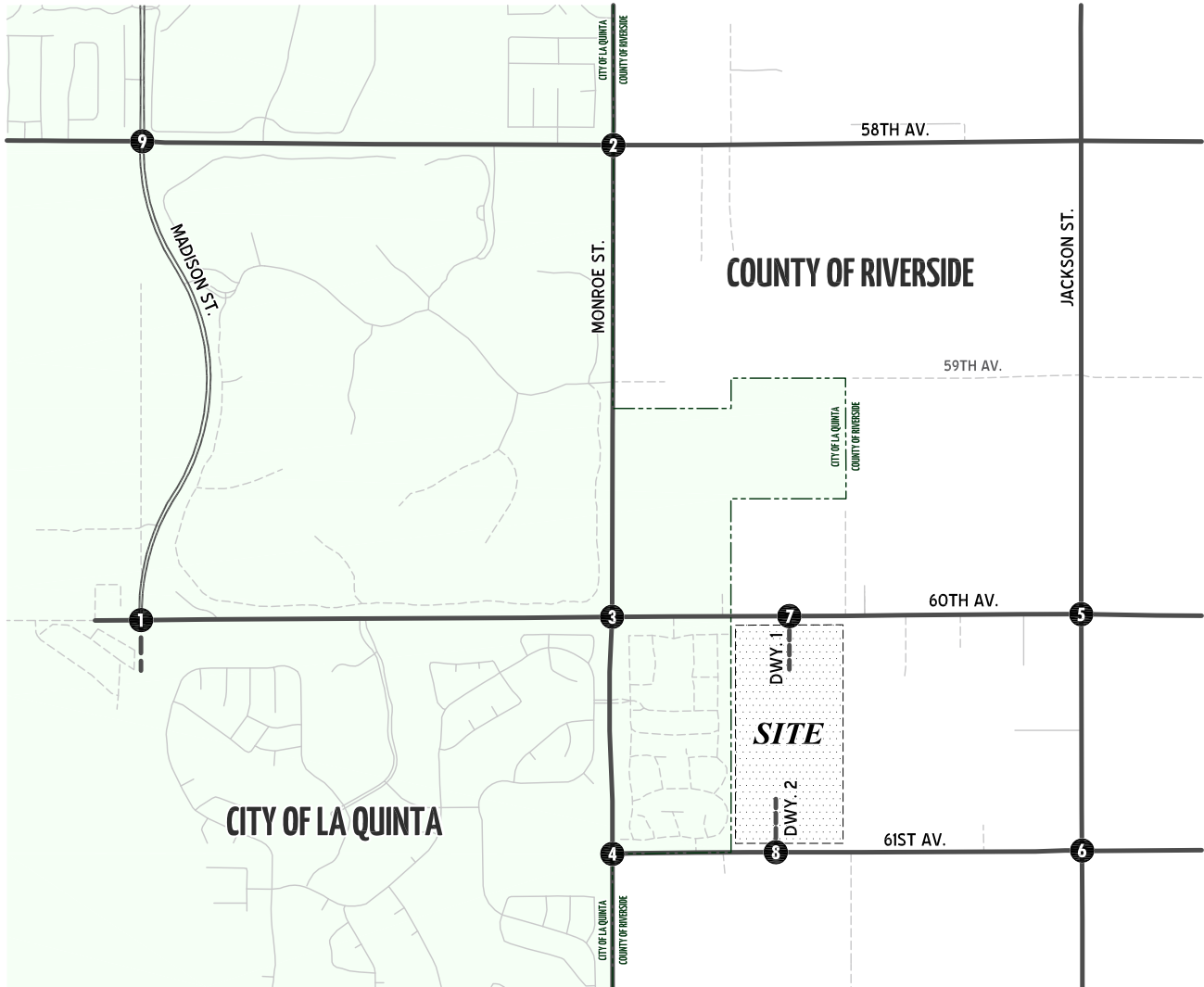
EXISTING PLUS PROJECT AM PEAK HOUR INTERSECTION VOLUMES



1 Madison St. & 60th Av.	2 Monroe St. & 58th Av.	3 Monroe St. & 60th Av.	4 Monroe St. & 61st Av.	LEGEND:					
				9 = INTERSECTION ID	- - - = FUTURE ROADWAY / DIRT				
5 Jackson St. & 60th Av.	6 Jackson St. & 61st Av.	7 Dwy. 1 & 60th Av.	8 Dwy. 2 & 61st Av.	9 Madison St. & 58th Av.					



EXISTING PLUS PROJECT PM PEAK HOUR INTERSECTION VOLUMES



1 Madison St. & 60th Av.	2 Monroe St. & 58th Av.	3 Monroe St. & 60th Av.	4 Monroe St. & 61st Av.	
				<p>LEGEND:</p> <p>⑨ = INTERSECTION ID</p> <p>--- = FUTURE ROADWAY / DIRT</p>
5 Jackson St. & 60th Av.	6 Jackson St. & 61st Av.	7 Dwy. 1 & 60th Av.	8 Dwy. 2 & 61st Av.	
9 Madison St. & 58th Av.				



Table 5-1

INTERSECTION ANALYSIS FOR EXISTING PLUS PROJECT CONDITIONS

#	Intersection	Traffic Control ³	Intersection Approach Lanes ¹												Existing (2013)				Existing Plus Project							
			Northbound				Southbound				Eastbound				Delay ² (secs.)		Level of Service ²		Delay ² (secs.)		Level of Service ²					
			L	T	R		L	T	R		L	T	R		L	T	R		AM	PM	AM	PM	AM	PM	AM	PM
1	Madison St. / 60th Av.	CSS	0	0	0		1	1	0		0	1	0		0	1	d		8.8	9.4	A	A	8.8	9.5	A	A
2	Monroe St. / 58th Av.	AWS	0	1!	0		0	1	1		0	1!	0		0	1!	0		7.8	8.7	A	A	8.2	9.4	A	A
3	Monroe St. / 60th Av.	AWS	1	1	0		1	1	1		0.5	0.5	1		0	1!	0		7.7	7.8	A	A	8.3	8.5	A	A
4	Monroe St. / 61st Av.	CSS	0	1	0		0.5	0.5	0		0	0	0		0	1!	0		8.5	8.9	A	A	8.6	8.7	A	A
5	Jackson St. / 60th Av.	AWS	0	1!	0		0	1!	0		0	1!	0		0	1!	0		7.3	7.3	A	A	7.5	7.5	A	A
6	Jackson St. / 61st Av.	CSS	0	1!	0		0	1!	0		0	1!	0		0	1!	0		9.1	9.4	A	A	9.7	10.0	A	A
7	Dwy. 1 / 60th Av.	CSS	1	1	0		0	0	0		0	1	0		1	1	0		Intersection Does Not Exist				9.3	9.7	A	A
8	Dwy. 2 / 61st Av.	CSS	0	0	0		0	1!	0		1	1	0		0	1	0		Intersection Does Not Exist				8.6	8.7	A	A
9	Madison St. / 58th Av.	AWS	1	2	1		1	2	d		1	1	1		1	2	1		8.7	8.6	A	A	8.9	8.9	A	A

¹ When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; 1! = Shared Left-Through-Right Turn Lane; d = Defacto Right Turn Lane; **1** = Improvement (Project Access)

² Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all-way stop control. For intersections with cross street stop control, see subsequent footnotes.

³ CSS = Cross-Street Stop; AWS = All-Way Stop

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6.0 OPENING YEAR (2016) TRAFFIC ANALYSIS

This section discusses the methods used to develop Opening Year (2016) traffic forecasts for EAP and EAPC (2016) traffic conditions, and the resulting intersection and roadway operations and traffic signal warrants.

6.1 ROADWAY IMPROVEMENTS

The lane configurations and traffic controls assumed to be in place for Opening Year (2016) conditions are consistent with those shown previously on Exhibit 3-1, with the exception of the following:

- At project driveways and those facilities assumed to be constructed by the Project to provide site access are also assumed to be in place for Opening Year (2016) With Project conditions only (e.g., intersection turn lane improvements at the Project driveways).

6.2 EAP (2016) TRAFFIC VOLUME FORECASTS

This scenario includes Existing (2013) traffic volumes plus an ambient growth factor of 6.012% and the addition of Project traffic. The weekday ADT volumes which can be expected for EAP (2016) traffic conditions are shown on Exhibit 6-1. Exhibit 6-2 and Exhibit 6-3, shows the AM and PM peak hour intersection turning movement volumes for EAP (2016) traffic conditions.

6.3 EAPC (2016) TRAFFIC VOLUME FORECASTS

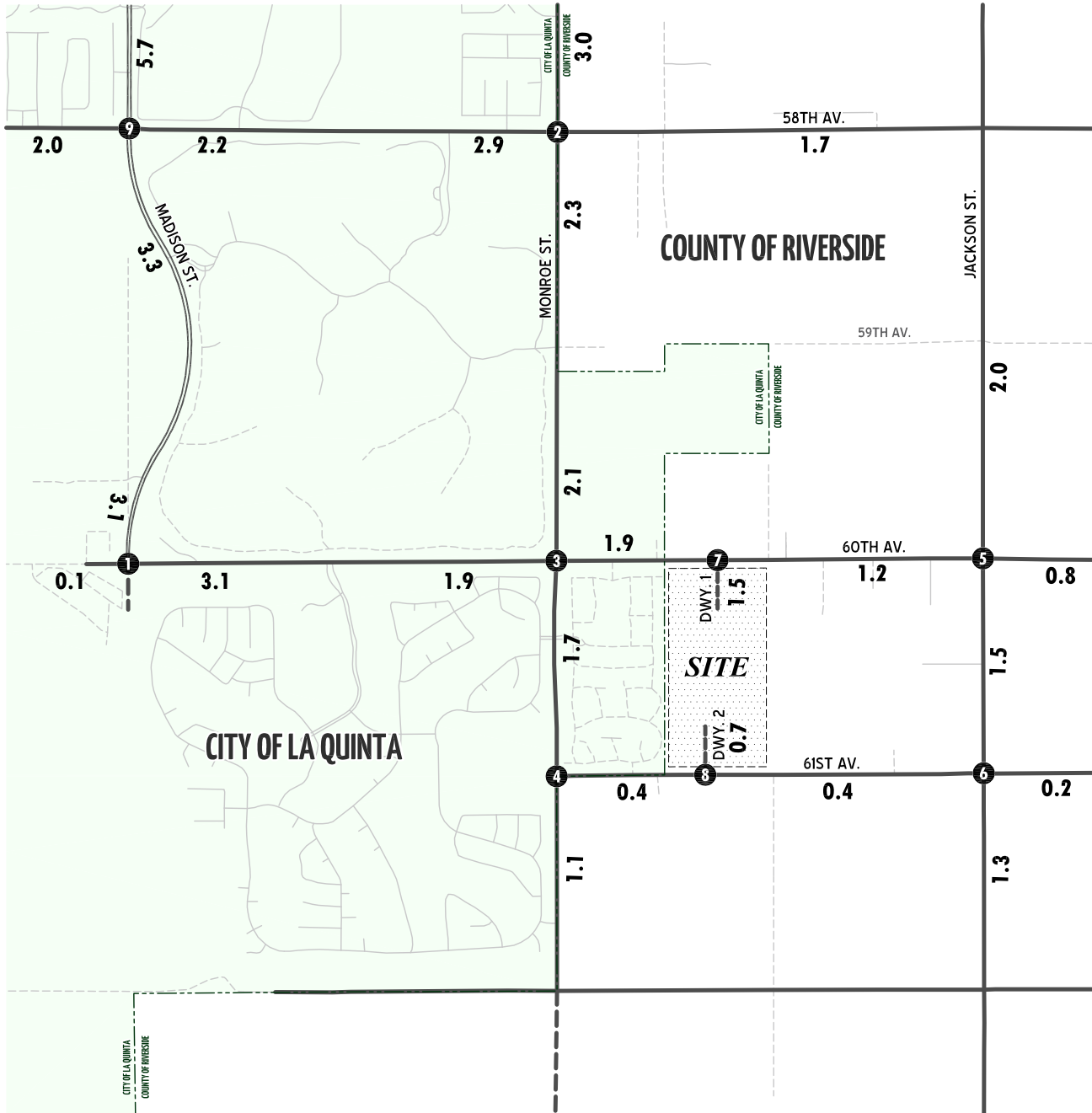
This scenario includes Existing (2013) traffic volumes, an ambient growth factor of 6.012%, traffic from pending and approved but not yet constructed known development projects in the area, and Project traffic. The weekday ADT volumes which can be expected for EAPC (2016) traffic conditions are shown on Exhibit 6-4. Exhibit 6-5 and Exhibit 6-6, shows the AM and PM peak hour intersection turning movement volumes for EAPC (2016) traffic conditions.

6.4 INTERSECTION OPERATIONS ANALYSIS

6.4.1 INTERSECTION OPERATIONS ANALYSIS FOR EAP (2016) CONDITIONS

Level of service calculations were conducted for the study intersections to evaluate their operations under EAP (2016) conditions. Consistent with Existing (2013) conditions, the intersection analysis results summarized in Table 6-1 indicate that the study area intersections are anticipated to operate at acceptable LOS (i.e., LOS "D" or better)

EXISTING PLUS AMBIENT PLUS PROJECT (2016) AVERAGE DAILY TRAFFIC (ADT)

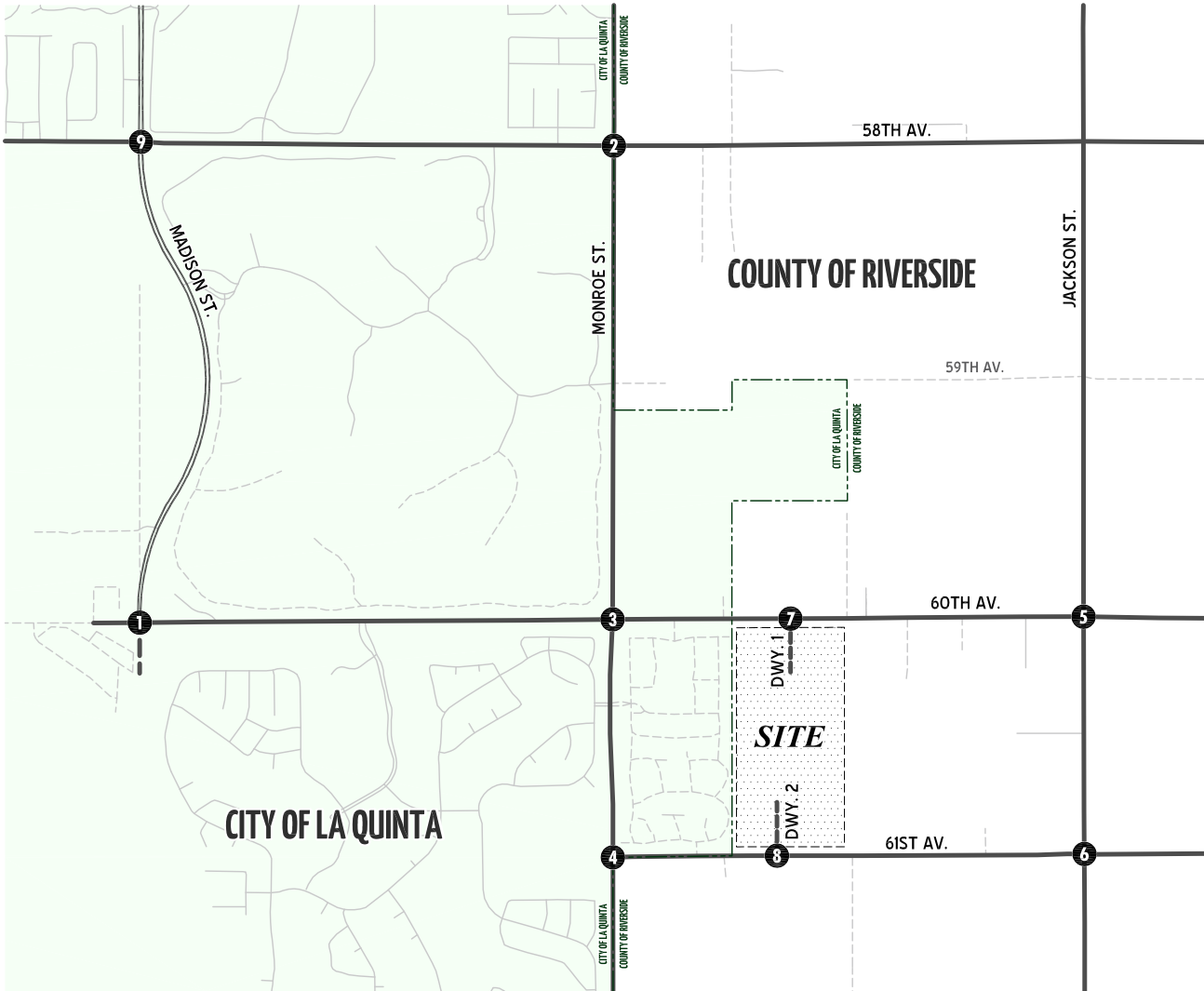


LEGEND:

10.0 = VEHICLES PER DAY (1000'S)

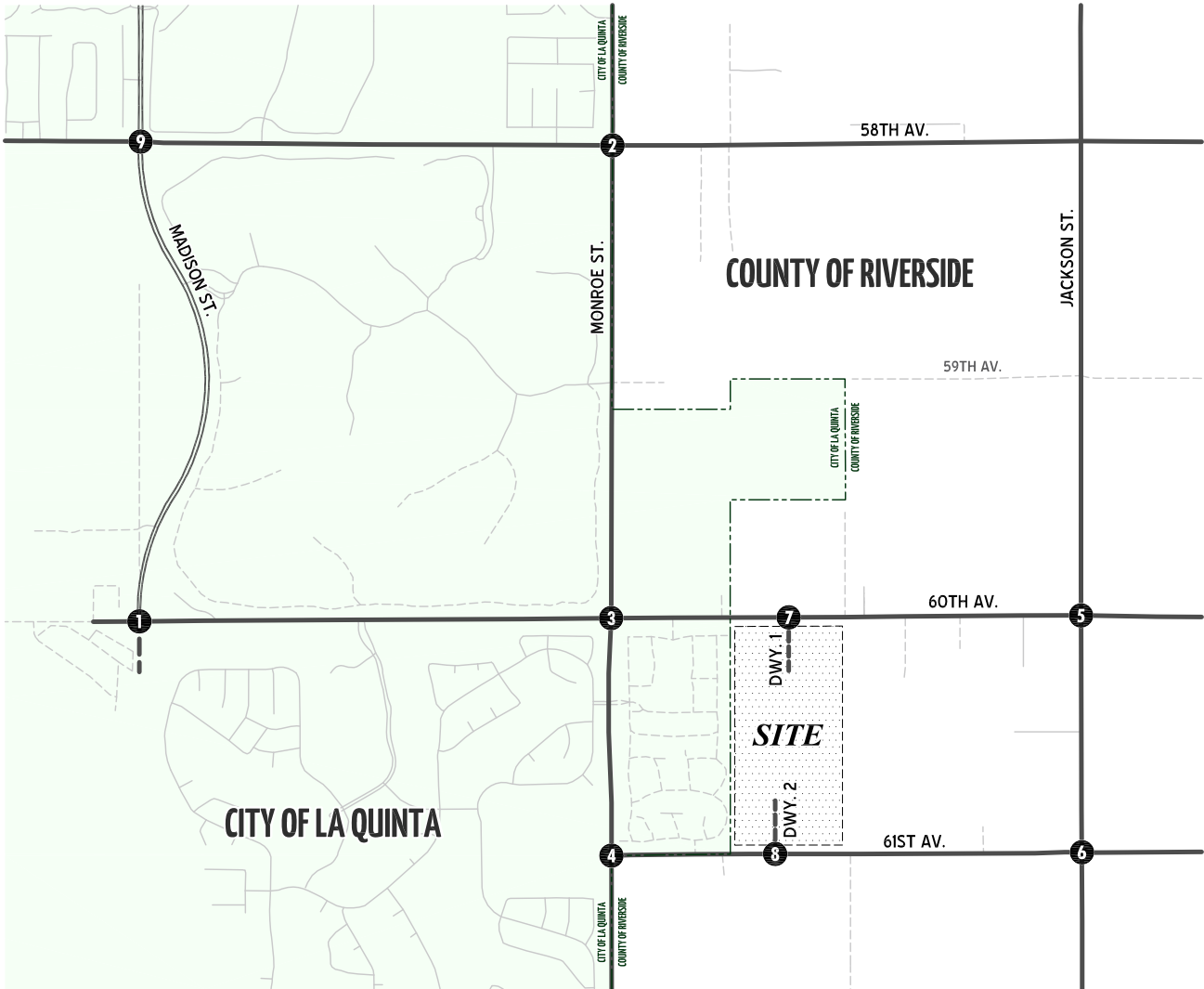


EXISTING PLUS AMBIENT PLUS PROJECT (2016) AM PEAK HOUR INTERSECTION VOLUMES



1 Madison St. & 60th Av.	2 Monroe St. & 58th Av.	3 Monroe St. & 60th Av.	4 Monroe St. & 61st Av.	LEGEND:					
				<p>LEGEND:</p> <p>⑨ = INTERSECTION ID</p> <p>--- = FUTURE ROADWAY / DIRT</p>					
5 Jackson St. & 60th Av.	6 Jackson St. & 61st Av.	7 Dwy. 1 & 60th Av.	8 Dwy. 2 & 61st Av.	9 Madison St. & 58th Av.					

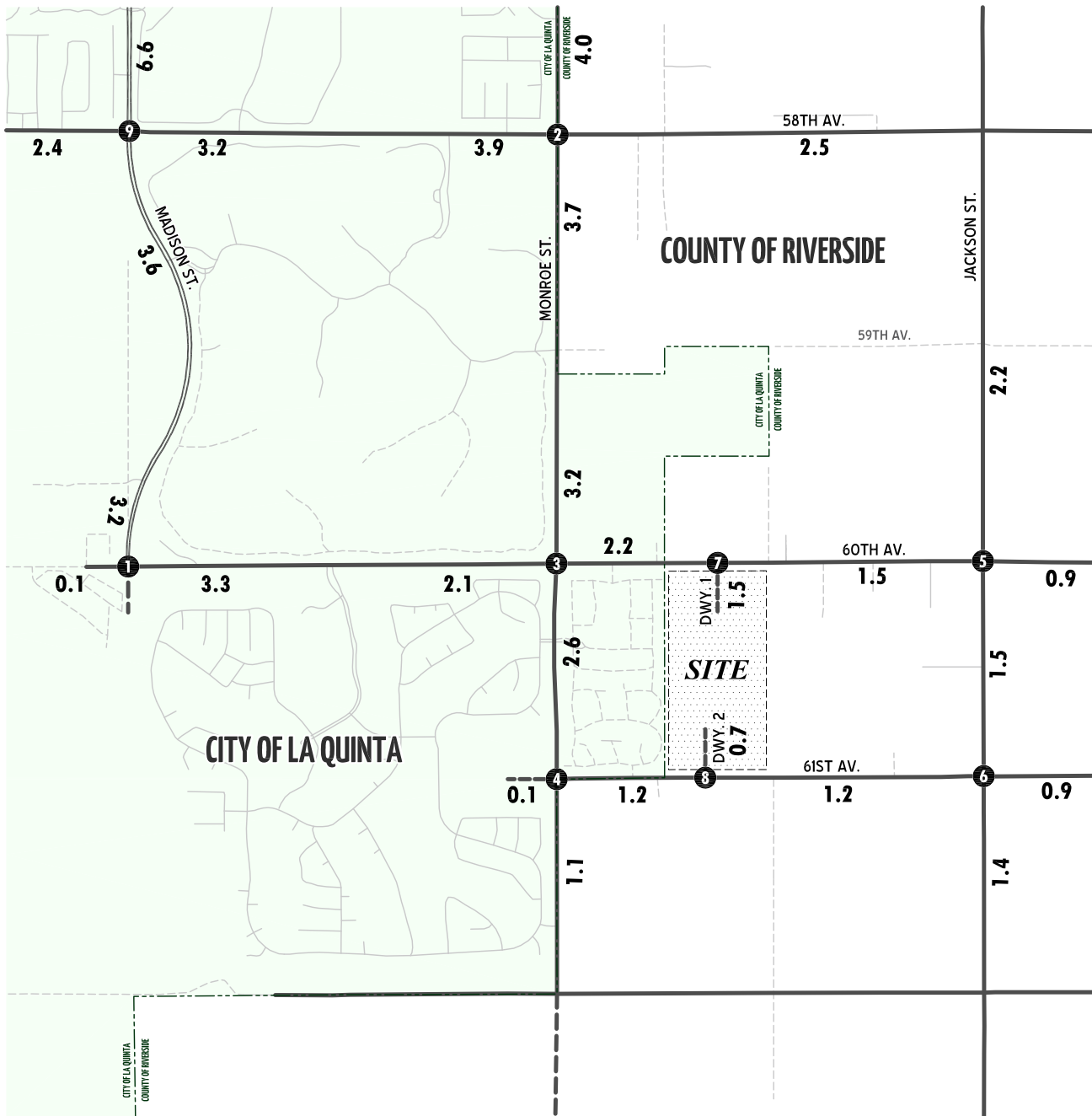
EXISTING PLUS AMBIENT PLUS PROJECT (2016) PM PEAK HOUR INTERSECTION VOLUMES



1 Madison St. & 60th Av.	2 Monroe St. & 58th Av.	3 Monroe St. & 60th Av.	4 Monroe St. & 61st Av.	LEGEND:					
				9 = INTERSECTION ID	- - - = FUTURE ROADWAY / DIRT				
5 Jackson St. & 60th Av.	6 Jackson St. & 61st Av.	7 Dwy. 1 & 60th Av.	8 Dwy. 2 & 61st Av.	9 Madison St. & 58th Av.					



EXISTING + AMBIENT + PROJECT + CUMULATIVE (2016) AVERAGE DAILY TRAFFIC (ADT)

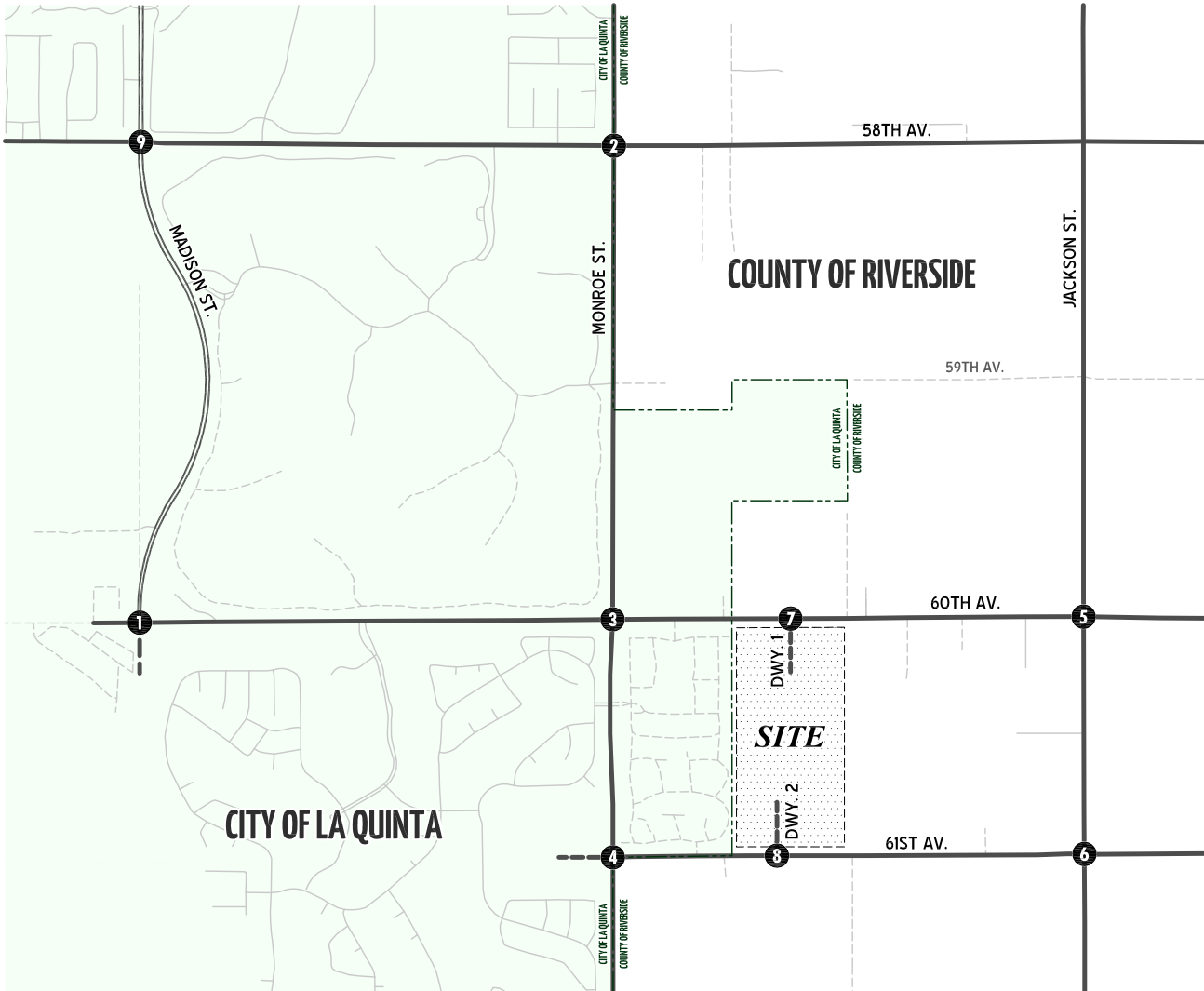


LEGEND:

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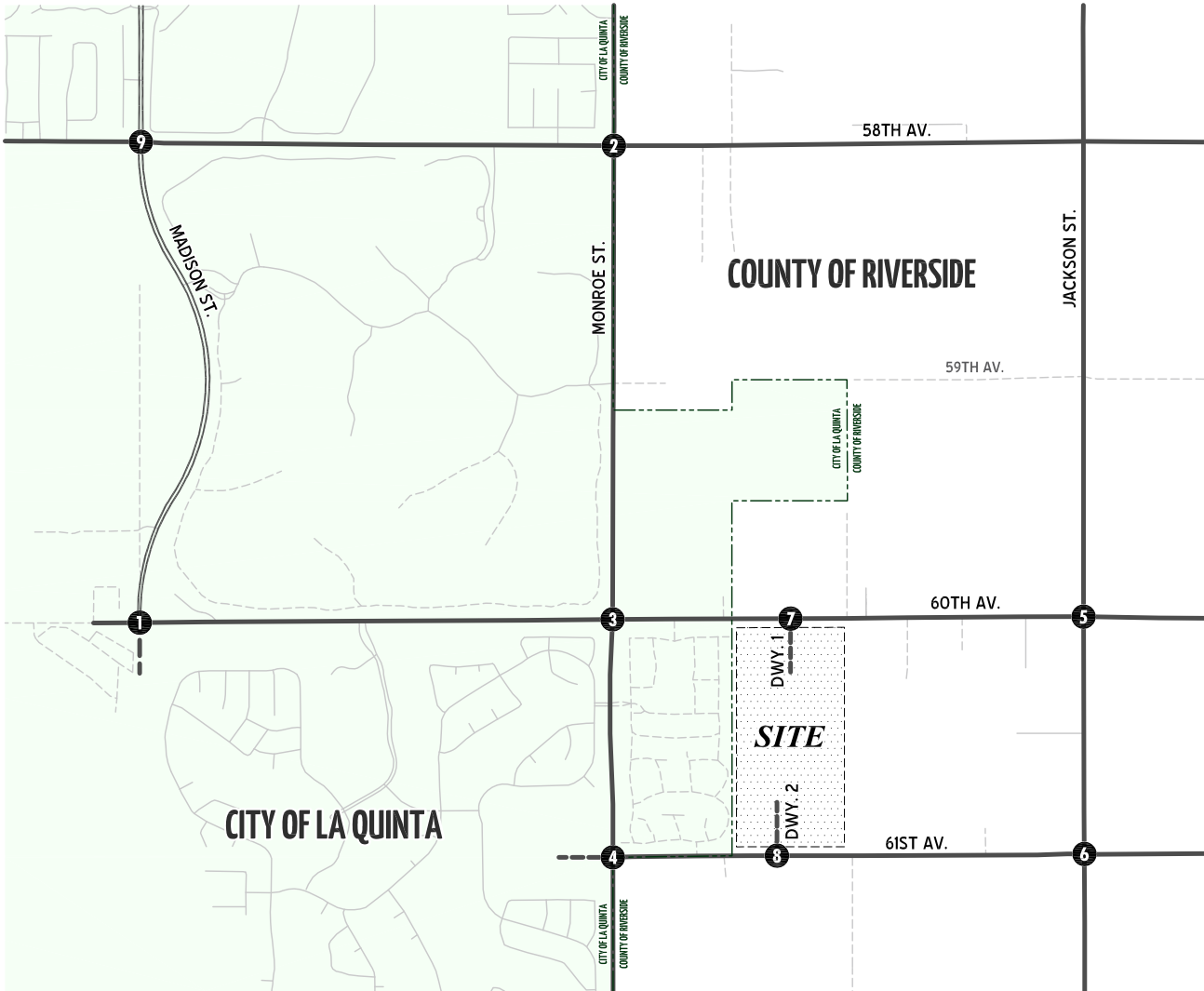
EXISTING + AMBIENT + PROJECT + CUMULATIVE (2016) AM PEAK HOUR INTERSECTION VOLUMES



1 Madison St. & 60th Av.	2 Monroe St. & 58th Av.	3 Monroe St. & 60th Av.	4 Monroe St. & 61st Av.	
				<p>LEGEND:</p> <p>⑨ = INTERSECTION ID</p> <p>--- = FUTURE ROADWAY / DIRT</p>
5 Jackson St. & 60th Av.	6 Jackson St. & 61st Av.	7 Dwy. 1 & 60th Av.	8 Dwy. 2 & 61st Av.	
9 Madison St. & 58th Av.				



EXISTING + AMBIENT + PROJECT + CUMULATIVE (2016) PM PEAK HOUR INTERSECTION VOLUMES



1 Madison St. & 60th Av.	2 Monroe St. & 58th Av.	3 Monroe St. & 60th Av.	4 Monroe St. & 61st Av.	LEGEND:					
				9 = INTERSECTION ID	- - - = FUTURE ROADWAY / DIRT				
5 Jackson St. & 60th Av.	6 Jackson St. & 61st Av.	7 Dwy. 1 & 60th Av.	8 Dwy. 2 & 61st Av.	9 Madison St. & 58th Av.					



Table 6-1

INTERSECTION ANALYSIS FOR OPENING YEAR (2016) CONDITIONS

#	Intersection	Traffic Control ³	Intersection Approach Lanes ¹												EAP (2016)				EAPC (2016)			
			Northbound				Southbound				Eastbound				Delay ² (secs.)		Level of Service ²		Delay ² (secs.)		Level of Service ²	
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM	AM	PM	AM	PM
1	Madison St. / 60th Av.	CSS	0	0	0	1	1	0	0	1	0	0	1	d	8.8	9.6	A	A	8.9	9.6	A	A
2	Monroe St. / 58th Av.	AWS	0	1!	0	0	1	1	0	1!	0	0	1!	0	8.3	9.6	A	A	9.4	12.1	A	B
3	Monroe St. / 60th Av.	AWS	1	1	0	1	1	1	0.5	0.5	1	0	1!	0	8.4	8.6	A	A	8.9	9.2	A	A
4	Monroe St. / 61st Av.	CSS	0	1	0	0.5	0.5	0	0	1!	0	0	1!	0	8.6	8.7	A	A	10.5	11.7	B	B
5	Jackson St. / 60th Av.	AWS	0	1!	0	0	1!	0	0	1!	0	0	1!	0	7.5	7.5	A	A	7.6	7.6	A	A
6	Jackson St. / 61st Av.	CSS	0	1!	0	0	1!	0	0	1!	0	0	1!	0	9.8	10.0	A	A	10.2	11.0	B	B
7	Dwy. 1 / 60th Av.	<u>CSS</u>	<u>1</u>	<u>1</u>	0	0	0	0	0	1	0	<u>1</u>	1	0	9.4	9.8	A	A	9.5	9.9	A	A
8	Dwy. 2 / 61st Av.	<u>CSS</u>	0	0	0	0	<u>1!</u>	0	<u>1</u>	1	0	0	1	0	8.6	8.7	A	A	8.9	9.1	A	A
9	Madison St. / 58th Av.	AWS	1	2	1	1	2	d	1	1	1	1	2	1	9.1	9.0	A	A	9.6	9.6	A	A

¹ When a right turn is designated, the lane can either be striped or unstriped. To function as a right turn lane there must be sufficient width for right turning vehicles to travel outside the through lanes.

L = Left; T = Through; R = Right; 1! = Shared Left-Through-Right Turn Lane; d = Defacto Right Turn Lane; 1 = Improvement (Project/Cumulative Access)

² Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all-way stop control. For intersections with cross street stop control, see subsequent footnotes.

³ CSS = Cross-Street Stop; AWS = All-Way Stop

The intersection operations analysis worksheets for EAP (2016) traffic conditions are included in Appendix “6.1” of this TIA.

6.4.2 INTERSECTION OPERATIONS ANALYSIS FOR EAPC (2016) CONDITIONS

Level of service calculations were conducted for the study intersections to evaluate their operations under EAPC (2016) conditions. Consistent with Existing (2013) conditions, the intersection analysis results summarized in Table 6-1 indicate that the study area intersections are anticipated to operate at acceptable LOS (i.e., LOS “D” or better)

The intersection operations analysis worksheets for EAPC (2016) traffic conditions are included in Appendix “6.2” of this TIA.

6.5 TRAFFIC SIGNAL WARRANTS ANALYSIS

For EAP (2016) and EAPC (2016) conditions, there are no study area intersections that are anticipated to warrant a traffic signal (see Appendix “3.3”).

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7.0 LONG RANGE (2035) TRAFFIC ANALYSIS

This section discusses the methods used to develop Long Range (2035) traffic forecasts for without and with Project conditions and the resulting intersection and roadway operations and traffic signal warrants. Assessment of Long Range (2035) without and with Project traffic conditions will determine if the County of Riverside Circulation Element is adequate to accommodate future traffic at the target LOS, or if additional mitigation is necessary.

7.1 ROADWAY IMPROVEMENTS

The lane configurations and traffic controls assumed to be in place for Long Range (2035) without and with Project conditions are consistent with those shown previously on Exhibit 3-1, with the exception of the following:

- Project driveways and those facilities assumed to be constructed by the Project or cumulative development projects to provide site access are also assumed to be in place for Long Range (2035) with Project traffic conditions.

7.2 LONG RANGE (2035) WITHOUT PROJECT TRAFFIC VOLUME FORECASTS

This scenario includes the refined post-processed volumes based on the Riverside County Transportation and Analysis Model (RivTAM) (see Section 4.9 *Long Range (2035) Conditions* of this TIA for a detailed discussion on the post-processing methodology). The weekday ADT volumes which can be expected for Long Range (2035) without Project traffic conditions are shown on Exhibit 7-1. Exhibits 7-2 and 7-3 show the AM and PM peak hour intersection turning movement volumes for Long Range (2035) without Project traffic conditions.

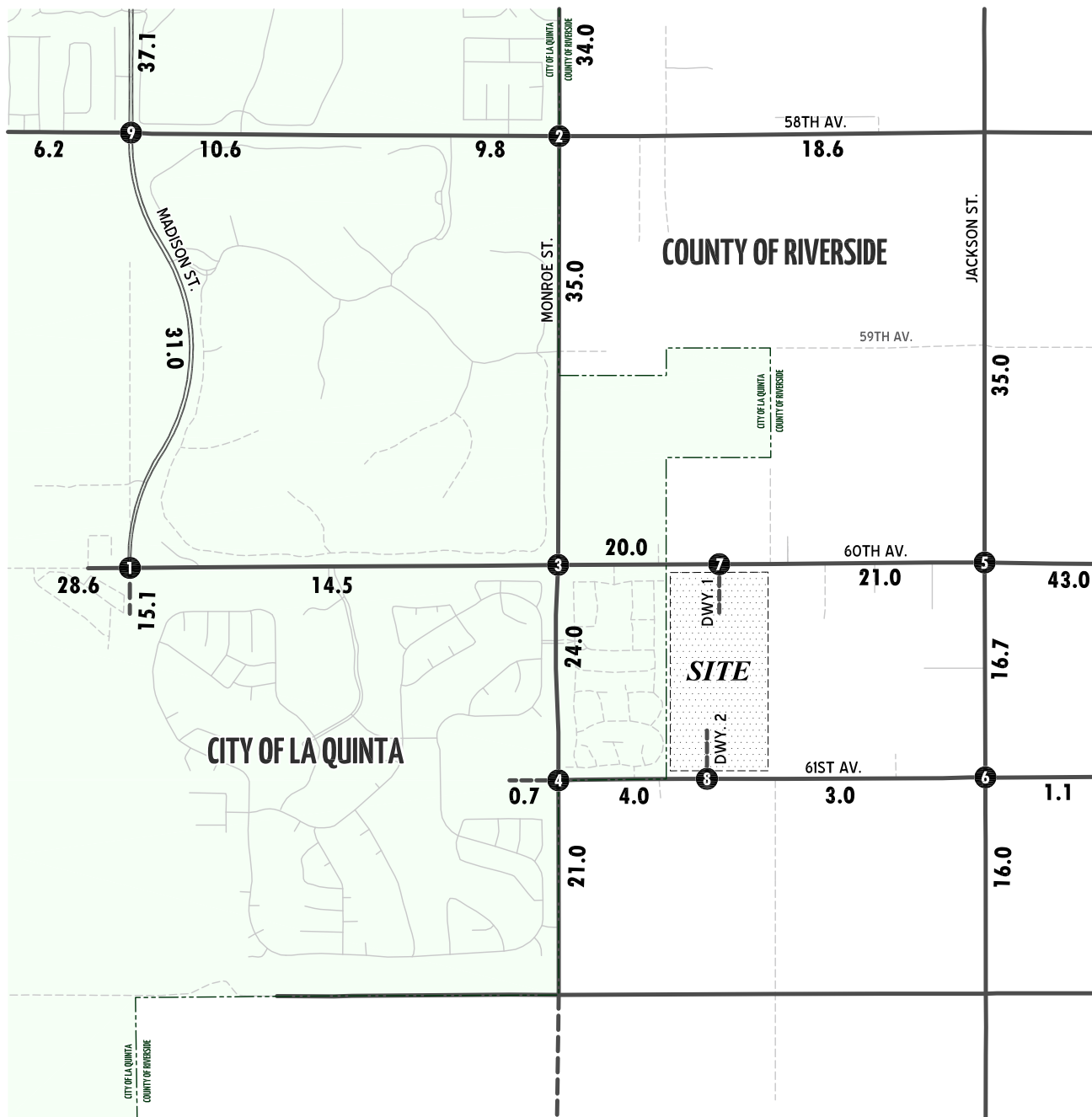
7.3 LONG RANGE (2035) WITH PROJECT TRAFFIC VOLUME FORECASTS

This scenario includes the refined post-processed volumes based on the Riverside County Transportation and Analysis Model (RivTAM) (see Section 4.9 *Long Range (2035) Conditions* of this TIA for a detailed discussion on the post-processing methodology) with the addition of Project traffic. The weekday ADT volumes which can be expected for Long Range (2035) with Project traffic conditions are shown on Exhibit 7-4. Exhibits 7-5 and 7-6 show the AM and PM peak hour intersection turning movement volumes for Long Range (2035) with Project traffic conditions.

7.4 INTERSECTION OPERATIONS ANALYSIS

LOS calculations were conducted for the study intersections to evaluate their operations under Long Range (2035) without and with Project conditions. The intersection analysis results for Long Range (2035) Without Project traffic conditions are summarized in Table 7-1 which indicates that the following

LONG RANGE (2035) WITHOUT PROJECT AVERAGE DAILY TRAFFIC (ADT)

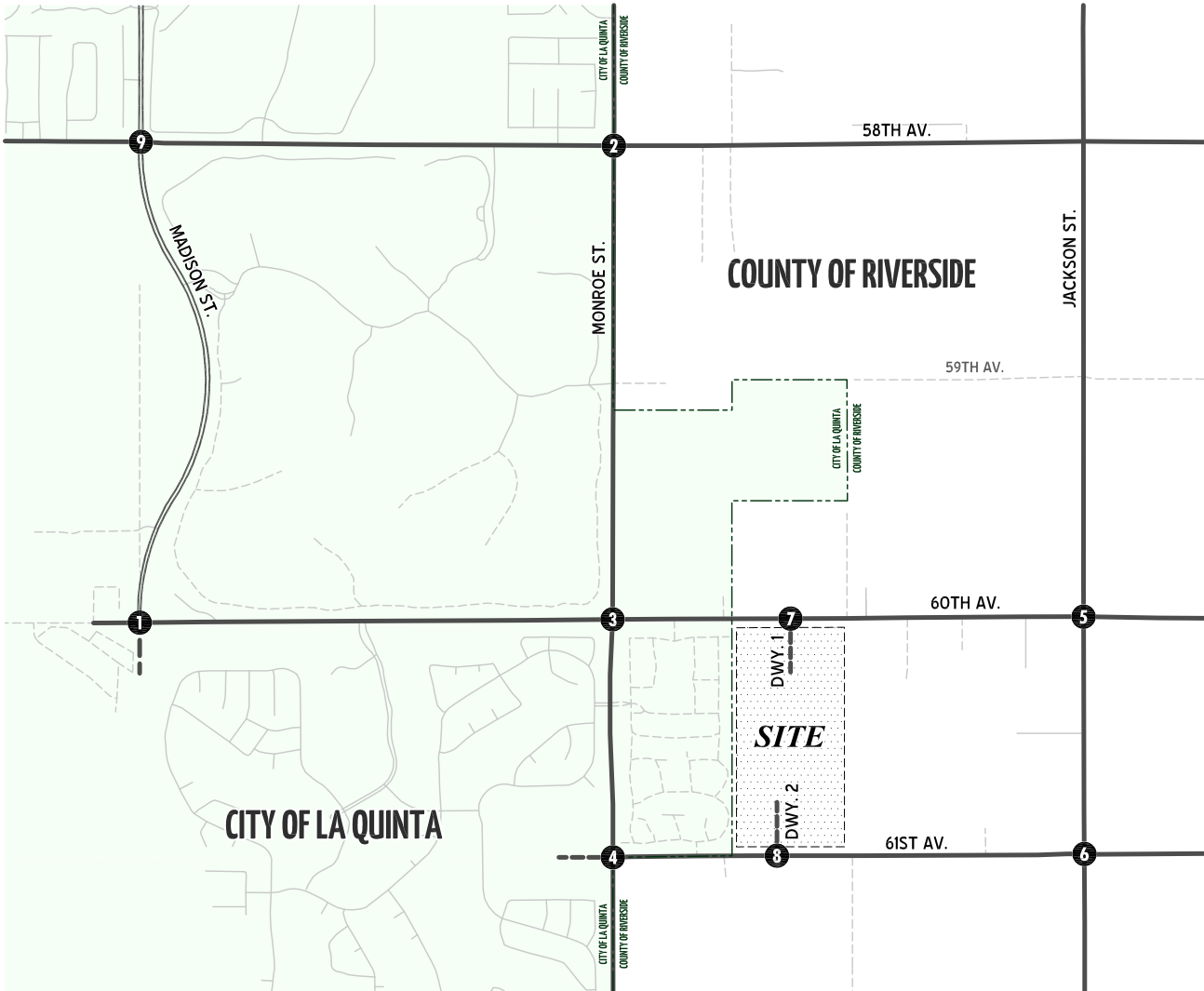


LEGEND:

10.0 = VEHICLES PER DAY (1000'S)



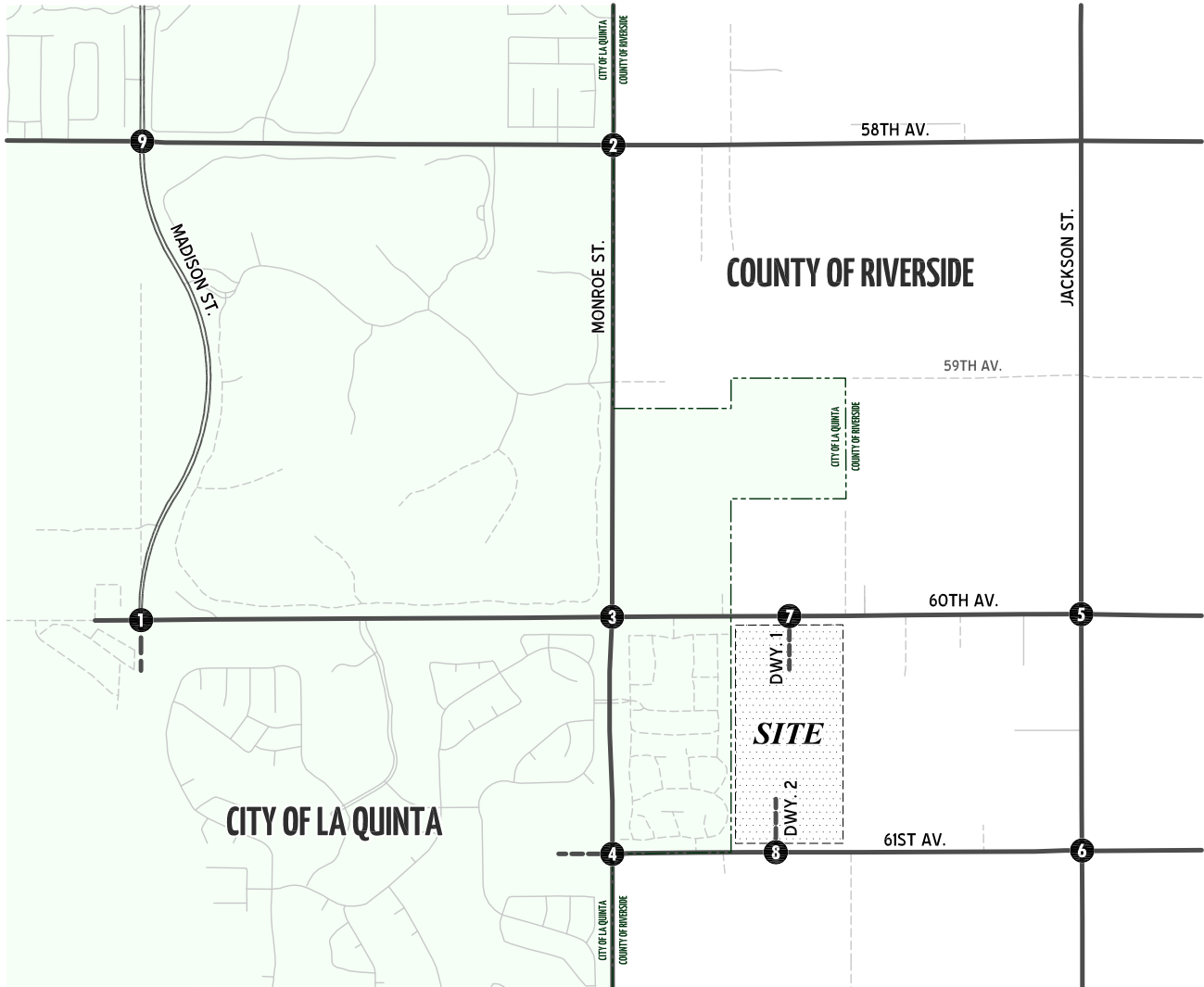
LONG RANGE (2035) WITHOUT PROJECT AM PEAK HOUR INTERSECTION VOLUMES



1	Madison St. & 60th Av.	2	Monroe St. & 58th Av.	3	Monroe St. & 60th Av.	4	Monroe St. & 61st Av.	LEGEND:	
									<p>9 = INTERSECTION ID</p> <p>--- = FUTURE ROADWAY / DIRT</p>
5	Jackson St. & 60th Av.	6	Jackson St. & 61st Av.	7	Dwy. 1 & 60th Av.	8	Dwy. 2 & 61st Av.	9	Madison St. & 58th Av.
					<p>INTERSECTION DOES NOT EXIST</p>		<p>INTERSECTION DOES NOT EXIST</p>		



LONG RANGE (2035) WITHOUT PROJECT PM PEAK HOUR INTERSECTION VOLUMES

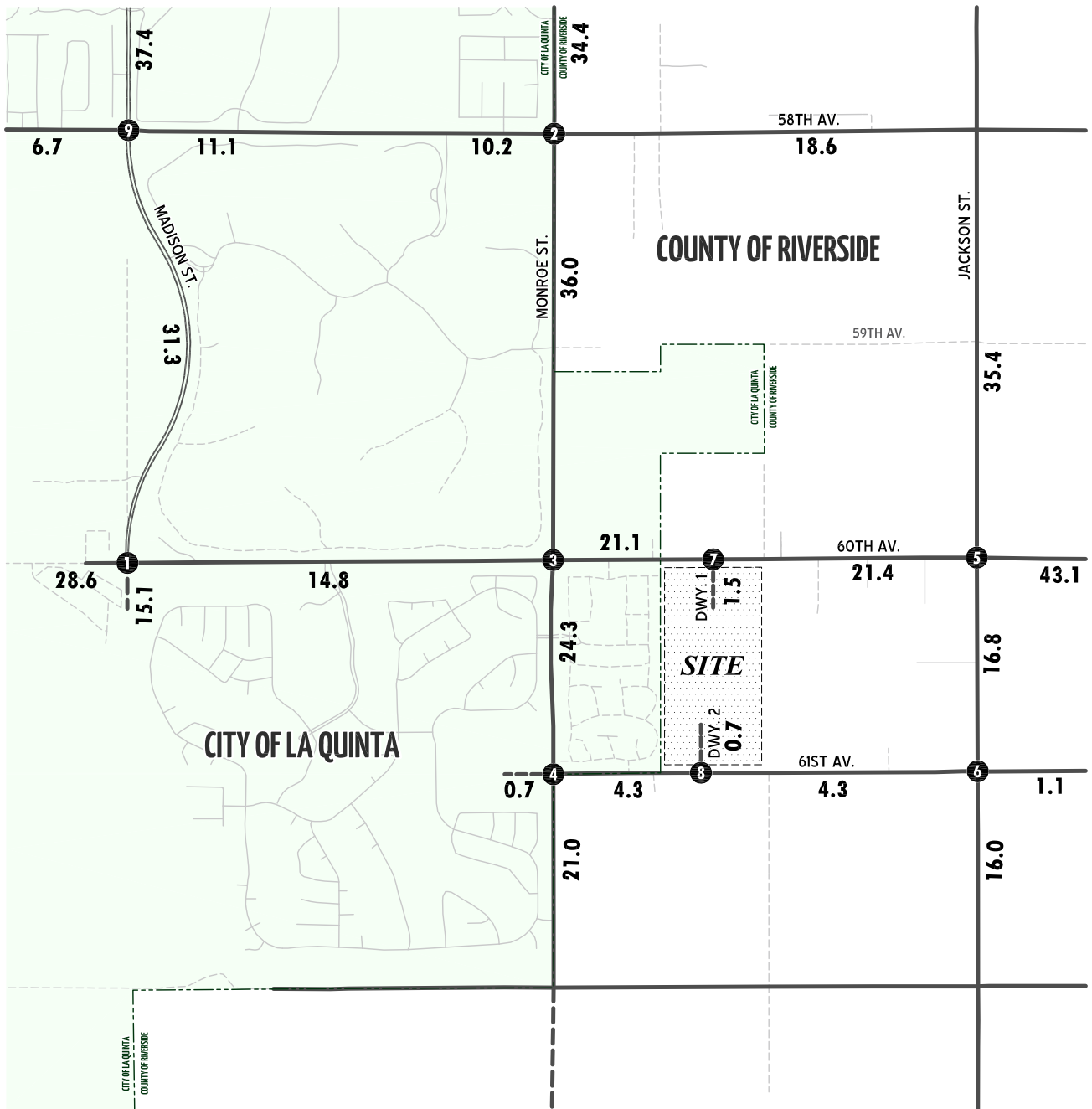


1	Madison St. & 60th Av.	2	Monroe St. & 58th Av.	3	Monroe St. & 60th Av.	4	Monroe St. & 61st Av.	LEGEND:			
5	Jackson St. & 60th Av.	6	Jackson St. & 61st Av.	7	Dwy. 1 & 60th Av.	8	Dwy. 2 & 61st Av.	9	Madison St. & 58th Av.		
			<p style="text-align: center;">INTERSECTION DOES NOT EXIST</p>	<p style="text-align: center;">INTERSECTION DOES NOT EXIST</p>							



EXHIBIT 7-4

LONG RANGE (2035) WITH PROJECT AVERAGE DAILY TRAFFIC (ADT)

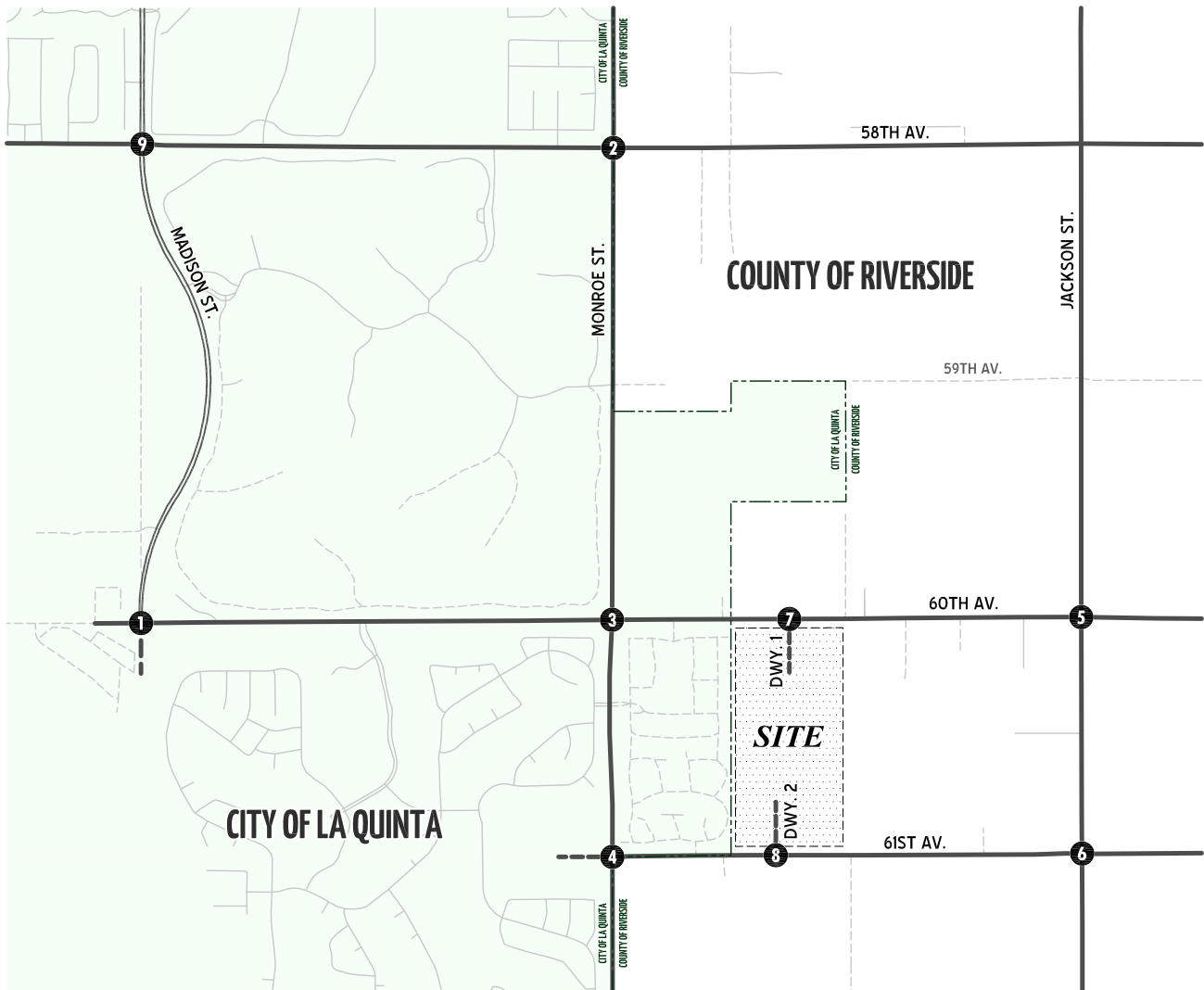


LEGEND:

10.0 = VEHICLES PER DAY (1000'S)



LONG RANGE (2035) WITH PROJECT AM PEAK HOUR INTERSECTION VOLUMES



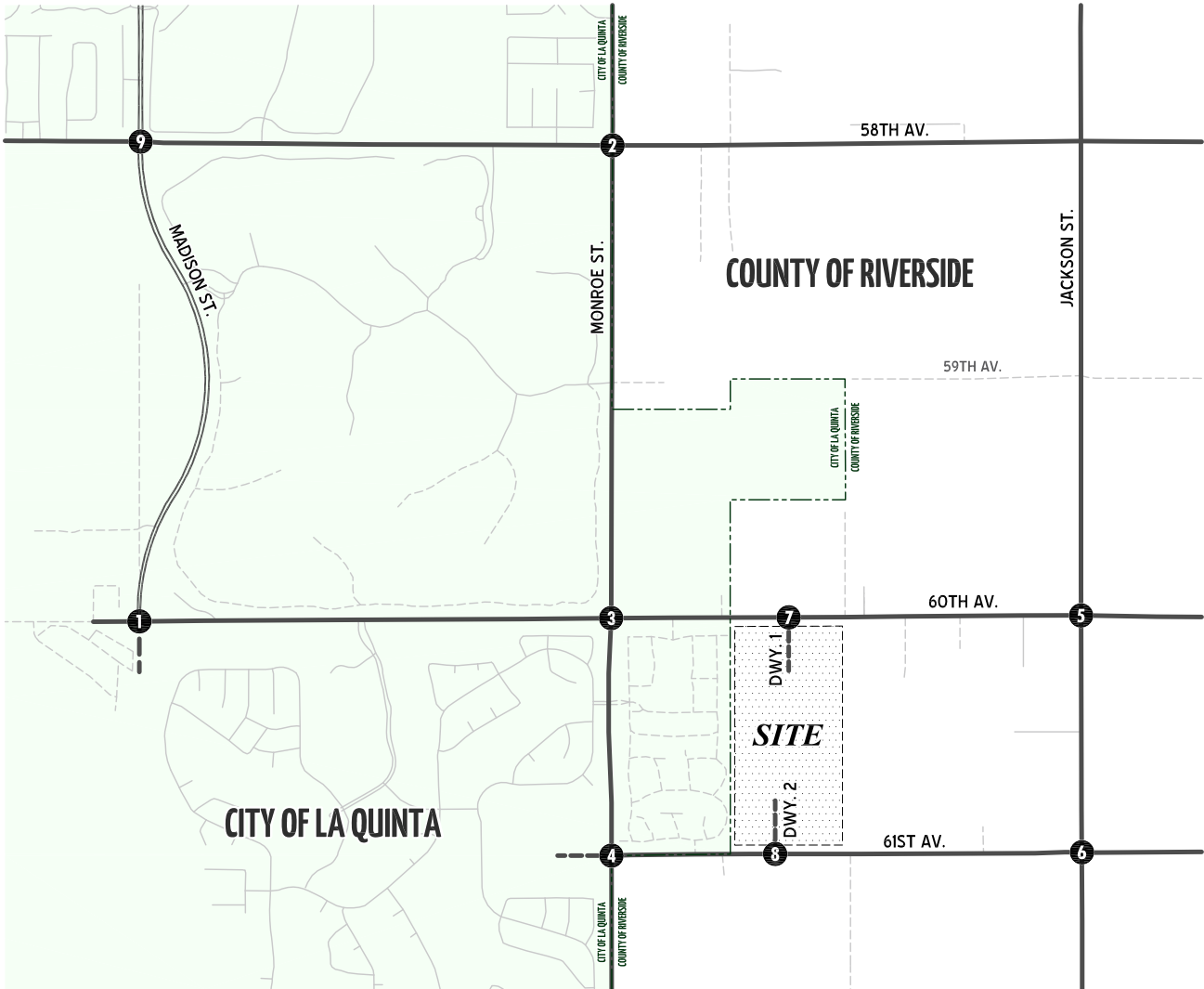
1	Madison St. & 60th Av.	2	Monroe St. & 58th Av.	3	Monroe St. & 60th Av.	4	Monroe St. & 61st Av.		
5	Jackson St. & 60th Av.	6	Jackson St. & 61st Av.	7	Dwy. 1 & 60th Av.	8	Dwy. 2 & 61st Av.	9	Madison St. & 58th Av.

LEGEND:

- = INTERSECTION ID
- = FUTURE ROADWAY / DIRT



LONG RANGE (2035) WITH PROJECT PM PEAK HOUR INTERSECTION VOLUMES



1	Madison St. & 60th Av.	2	Monroe St. & 58th Av.	3	Monroe St. & 60th Av.	4	Monroe St. & 61st Av.		
5	Jackson St. & 60th Av.	6	Jackson St. & 61st Av.	7	Dwy. 1 & 60th Av.	8	Dwy. 2 & 61st Av.	9	Madison St. & 58th Av.

LEGEND:

- = INTERSECTION ID
- = FUTURE ROADWAY / DIRT



Table 7-1

INTERSECTION ANALYSIS FOR LONG RANGE (2035) CONDITIONS

#	Intersection	Traffic Control ³	Intersection Approach Lanes ¹								2035 Without Project				2035 With Project							
			Northbound			Southbound			Eastbound		Westbound		Delay ² (secs.)		Level of Service ²		Delay ² (secs.)		Level of Service ²			
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM	AM	PM	AM	PM
1	Madison St. / 60th Av. - Without Improvements - With Improvements ⁵	CSS TS	0	0	0	1	1	0	0	1	0	0	1	d	>80	>80	F	F	>80	>80	F	F
2	Monroe St. / 58th Av. - Without Improvements - With Improvements ^{5,6}	AWS TS	0	1!	0	0	1	1	0	1!	0	0	1!	0	>80	>80	F	F	>80	>80	F	F
3	Monroe St. / 60th Av. - Without Improvements - With Improvements	AWS TS	1	1	0	1	1	1	0.5	0.5	1	0	1!	0	>80	>80	F	F	>80	>80	F	F
4	Monroe St. / 61st Av. - Without Improvements - With Improvements	CSS TS	0	1	0	0.5	0.5	0	0	1!	0	0	1!	0	43.1	78.2	E	F	67.1	72.2	F	F
5	Jackson St. / 60th Av. - Without Improvements - With Improvements	AWS TS	0	1!	0	0	1!	0	0	1!	0	0	1!	0	>80	49.5	F	F ⁴	>80	62.0	F	F
6	Jackson St. / 61st Av. - Without Improvements - With Improvements	CSS TS	0	1!	0	0	1!	0	0	1!	0	0	1!	0	>80	24.9	F	C	>80	50.6	F	F
7	Dwy. 1 / 60th Av. - With Project Access (2016) - With Improvements (2035)	CSS CSS	1	0	1	0	0	0	0	1	0	1	1	0	Intersection Does Not Exist				19.4	38.3	C	E
8	Dwy. 2 / 61st Av. - With Project Access	CSS	0	0	0	0	1!	0	1	1	0	0	1	0	Intersection Does Not Exist				10.7	9.9	B	A
9	Madison St. / 58th Av. - Without Improvements - With Improvements ⁵	AWS TS	1	2	1	1	2	d	1	1	1	1	2	1	>80	>80	F	F	>80	>80	F	F

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

² Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all-way stop control. For intersections with cross street stop control, see subsequent footnotes.
BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

³ CSS = Cross-Street Stop; AWS = All-Way Stop

⁴ Volume-to-capacity ratio is greater than 1.00; Intersection unstable; Level of Service "F".

⁵ Pedestrian phase not anticipated in every cycle.



intersection locations are anticipated to experience unacceptable LOS (i.e., LOS “E” or LOS “F”) during one or both of the peak hours:

ID	Intersection Location	Type of Warrant
1	Madison Street / 60th Avenue	City of La Quinta
2	Monroe Street / 58th Avenue	City of La Quinta / County of Riverside
3	Monroe Street / 60th Avenue	City of La Quinta / County of Riverside
4	Monroe Street / 61st Avenue	City of La Quinta / County of Riverside
5	Jackson Street / 60th Avenue	County of Riverside
6	Jackson Street / 61st Avenue	County of Riverside
9	Madison Street / 58th Avenue	City of La Quinta

The intersection operations analysis worksheets for Long Range (2035) Without Project traffic conditions are included in Appendix “7.1” of this TIA.

The intersection analysis results for Long Range (2035) With Project traffic conditions are also summarized in Table 7-1 which indicates that the following intersection locations are anticipated to experience unacceptable LOS (i.e., LOS “E” or LOS “F”) during one or both of the peak hours, in addition to those previously identified under Long Range (2035) Without Project conditions:

ID	Intersection Location	Jurisdiction
7	Driveway 1 / 60th Avenue – <i>Future Intersection</i>	County of Riverside

This intersection that is an additional deficiency is a Project driveway; no other additional deficiencies are identified. The intersection operations analysis worksheets for Long Range (2035) With Project traffic conditions are included in Appendix “7.2” of this TIA.

7.5 TRAFFIC SIGNAL WARRANTS ANALYSIS

For Long Range (2035) Without Project conditions, the following intersections appear to warrant traffic signals based on the future Peak Hour and ADT traffic volumes (see Appendix “3.3”):

ID	Intersection Location	Type of Warrant
1	Madison Street / 60th Avenue	City of La Quinta
2	Monroe Street / 58th Avenue	City of La Quinta / County of Riverside
3	Monroe Street / 60th Avenue	City of La Quinta / County of Riverside
4	Monroe Street / 61st Avenue	City of La Quinta / County of Riverside
5	Jackson Street / 60th Avenue	County of Riverside
6	Jackson Street / 61st Avenue	County of Riverside
9	Madison Street / 58th Avenue	City of La Quinta

For Long Range (2035) With Project conditions, there are no new study area intersections that are anticipated to warrant a traffic signal, in addition to those previously identified under Long Range (2035) Without Project conditions (see Appendix “3.3”).

7.6 LONG RANGE (2035) IMPACTS AND RECOMMENDED IMPROVEMENTS

Improvements have been recommended at intersections that have been identified as cumulatively impacted to reduce each location’s peak hour delay and improve the associated LOS grade to LOS “D” or better. The effectiveness of the recommended improvements discussed below to address Long Range (2035) cumulative traffic impacts are also presented in Table 7-1.

The following improvements are recommended to reduce cumulative impacts identified at transportation facilities under Long Range (2035) to less-than-significant (See Exhibit 7-7):

Madison Street / 60th Avenue (#1)

- Install a traffic Signal
- Northbound Approach: Construct one left turn lane, one through lane, and one shared through-right turn lane.
- Southbound Approach: Construct a 2nd left turn lane, 2nd through lane, and one right turn lane with overlap phasing.
- Eastbound Approach: Construct two left turn lane, 2nd through lane, and one right turn lane with overlap phasing.
- Westbound Approach: Construct one left turn lane, 2nd through lane, and one right turn lane with overlap phasing.

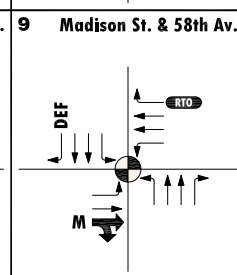
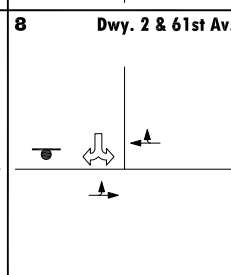
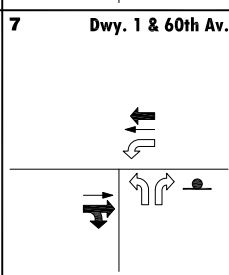
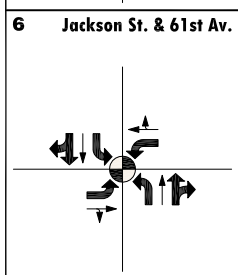
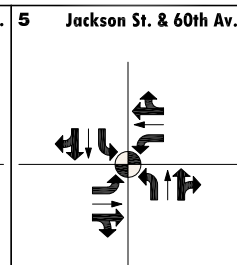
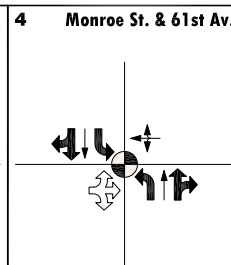
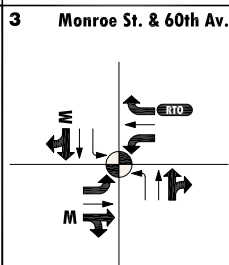
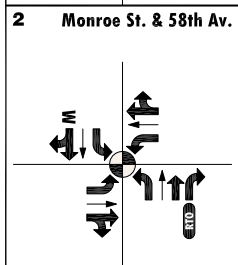
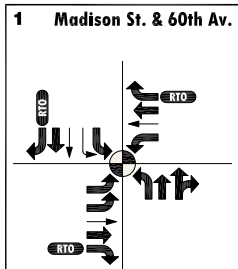
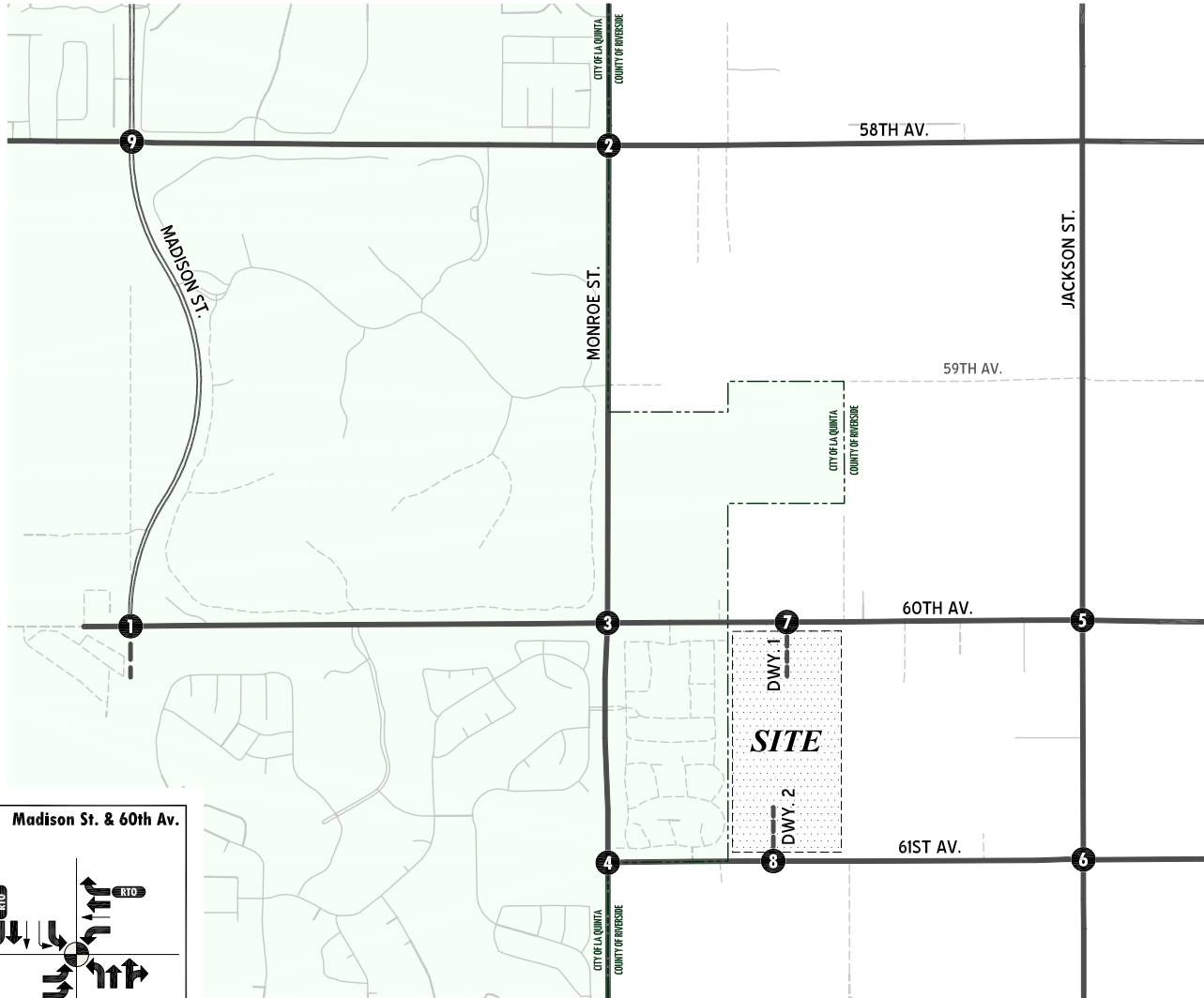
Monroe Street / 58th Avenue (#2)

- Install a traffic Signal
- Northbound Approach: Construct one left turn lane, 2nd through lane, and one right turn lane with overlap phasing.
- Southbound Approach: Construct one left turn lane and modify existing right turn lane to a shared through-right turn lane.
- Eastbound Approach: Construct one left turn lane and one shared through-right turn lane.
- Westbound Approach: Construct one left turn lane and one shared through-right turn lane.

Monroe Street / 60th Avenue (#3)

- Install a traffic Signal
- Northbound Approach: Construct one shared through-right turn lane.
- Southbound Approach: Construct a 2nd left turn lane and modify existing right turn lane to a shared through-right turn lane.
- Eastbound Approach: Construct a dedicated left turn lane and modify existing right turn lane to a shared through-right turn lane.
- Westbound Approach: Construct one left turn lane and one right turn lane with overlap phasing

LONG RANGE (2035) RECOMMENDED IMPROVEMENTS



LEGEND:

- = NEW TRAFFIC SIGNAL
- = NEW STOP SIGN
- = EXISTING LANE
- = CURRENT LANE IMPROVEMENT
- = PREVIOUS (2016) LANE IMPROVEMENT
- = EXISTING DEFACTO RIGHT TURN LANE
- = EXISTING LANE RE-STRIPED/MODIFIED
- = RIGHT TURN OVERLAP PHASING IMPROVEMENT
- = INTERSECTION ID



Monroe Street / 61st Avenue (#4)

- Install a traffic Signal
- Northbound Approach: Construct one left turn lane and one shared through-right turn lane.
- Southbound Approach: Construct one left turn lane and one shared through-right turn lane.
- Eastbound Approach: Construct one shared left-through-right turn lane (Cumulative TAZ 6 - TM 31434 Driveway).
- Westbound Approach: n/a

Jackson Street / 60th Avenue (#5)

- Install a traffic Signal
- Northbound Approach: Construct one left turn lane and one shared through-right turn lane.
- Southbound Approach: Construct one left turn lane and one shared through-right turn lane.
- Eastbound Approach: Construct one left turn lane and one shared through-right turn lane.
- Westbound Approach: Construct one left turn lane and one shared through-right turn lane.

Jackson Street / 61st Avenue (#6)

- Install a traffic Signal
- Northbound Approach: Construct one left turn lane and one shared through-right turn lane.
- Southbound Approach: Construct one left turn lane and one shared through-right turn lane.
- Eastbound Approach: Construct one left turn lane.
- Westbound Approach: Construct one left turn lane.

Driveway 1 / 60th Avenue (#7)

- Install a stop control on the northbound approach (Project Driveway).
- Northbound Approach: Construct one left turn lane and one right turn lane (Project Driveway).
- Southbound Approach: n/a
- Eastbound Approach: Construct one shared through-right turn lane.
- Westbound Approach: Construct one left turn lane (for Project) and 2nd through lane.

Driveway 2 / 61st Avenue (#8)

- Install a stop control on the southbound approach (Project Driveway).
- Northbound Approach: n/a
- Southbound Approach: Construct one shared left-through-right turn lane (Project Driveway).
- Eastbound Approach: Construct one left turn lane (for Project).
- Westbound Approach: n/a

Madison Street / 58th Avenue (#9)

- Install a traffic Signal
- Northbound Approach: n/a
- Southbound Approach: n/a
- Eastbound Approach: Modify existing right turn lane to a shared though-right turn lane.
- Westbound Approach: Provide right turn overlap phasing.

8.0 LOCAL CIRCULATION AND SITE ACCESS

This section summarizes Project site access and on-site circulation recommendations.

The Project is proposed to have access on 60th Avenue and 61st Avenue. Both Project access points are proposed to be full-access. Regional access to the Project site will be provided by the I-10 Freeway (located to the north) via Monroe Street.

8.1 ON-SITE ROADWAY IMPROVEMENTS

The recommended site access driveway improvements for the Project are described below. Exhibit 8-1 illustrates the on-site recommended roadway lane improvements. Construction of on-site improvements shall occur in conjunction with adjacent Project development activity or as needed for Project access purposes. These improvements should be in place prior to occupancy.

60th Avenue – 60th Avenue is an east-west oriented roadway located along the Project's northern boundary. Construct 60th Avenue at its ultimate half-section width as an Arterial roadway (128-foot right-of-way) between the Project's westerly and easterly boundary. It should be noted that 60th Avenue is classified as a 4-Lane Primary Arterial roadway (108' ROW) within the City of La Quinta (immediately west of Project boundary) and classified as 4-Lane Arterial roadway (128' ROW) within the County or Riverside along the Project's frontage. Therefore, a 150-foot transition lane is recommended, east of the Project's westerly boundary as shown on Exhibit 8-2.

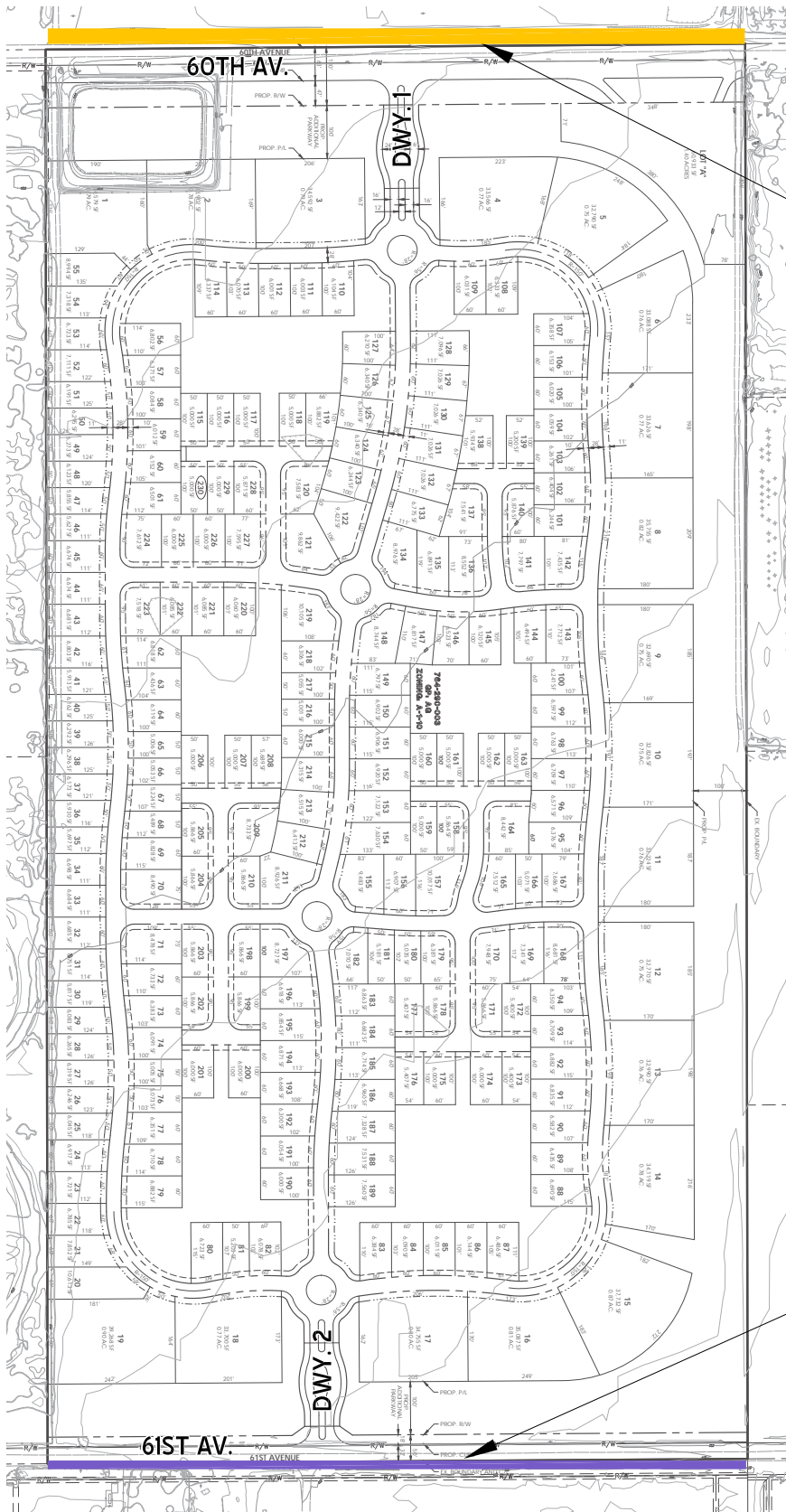
61st Avenue – 61st Avenue is an east-west oriented roadway located along the Project's southern boundary. Construct 61st Avenue at its ultimate half-section width as a Collector roadway (74-foot right-of-way) between the Project's westerly and easterly boundary.

Wherever necessary, roadways adjacent to the Project, site access points and site-adjacent intersections will be constructed to be consistent with or within the recommended roadway classifications and respective cross-sections in the County of Riverside General Plan Circulation Element.

8.2 SITE ACCESS IMPROVEMENTS

The recommended site access driveway improvements for the Project are described below. Exhibit 8-3 illustrates the on-site and site adjacent recommended roadway lane improvements. Construction of on-site and site adjacent improvements shall occur in conjunction with adjacent Project development activity or as needed for Project access purposes.

SITE ADJACENT ROADWAY RECOMMENDATIONS



60TH AVENUE IS AN EAST-WEST ORIENTED ROADWAY LOCATED ALONG THE PROJECT'S NORTHERN BOUNDARY. CONSTRUCT 60TH AVENUE AT ITS ULTIMATE HALF-SECTION WIDTH AS AN ARTERIAL ROADWAY (128-FOOT RIGHT-OF-WAY) BETWEEN THE PROJECT'S WESTERLY AND EASTERLY BOUNDARY. IN ADDITION, A 150-FOOT TRANSITION LANE IS ALSO RECOMMENDED, EAST OF THE PROJECT'S WESTERLY BOUNDARY (SHOWN ON EXHIBIT 8-2).

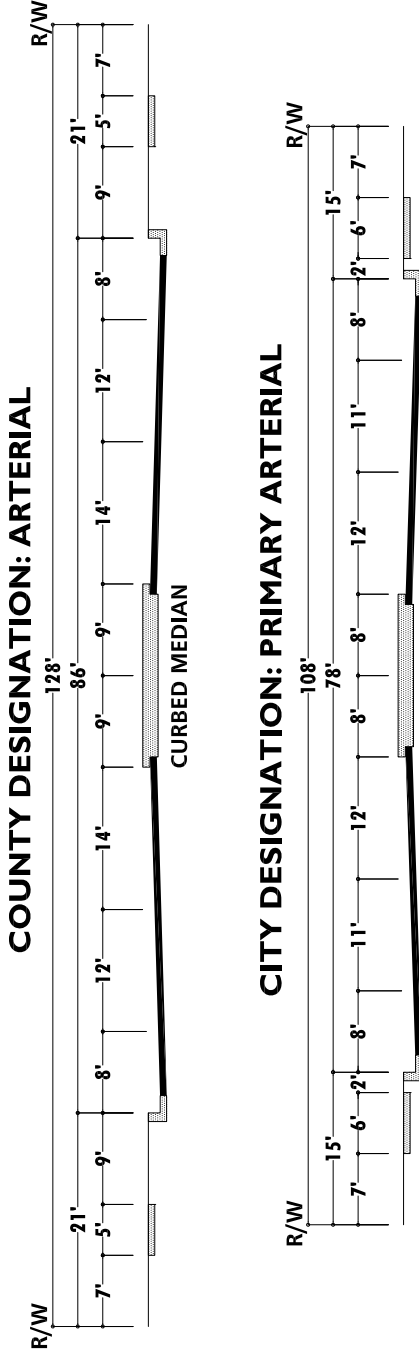
LEGEND:

- = ARTERIAL (128-FOOT R.O.W)
- = COLLECTOR (74-FOOT R.O.W)

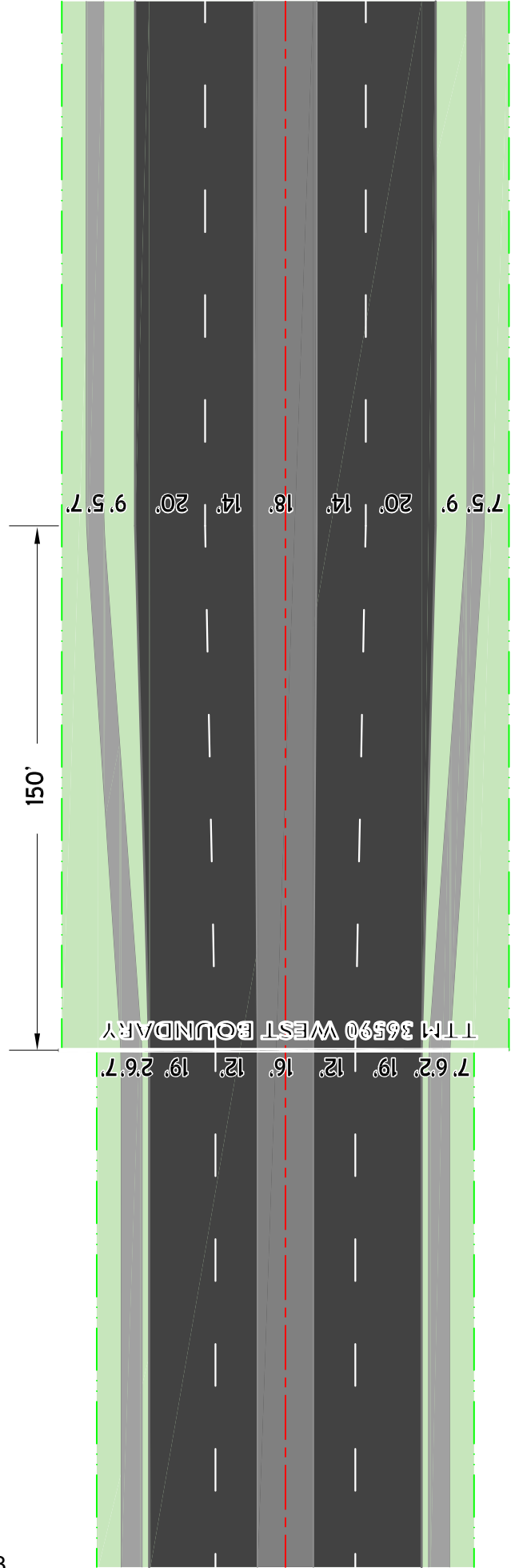
61ST AVENUE IS AN EAST-WEST ORIENTED ROADWAY LOCATED ALONG THE PROJECT'S SOUTHERN BOUNDARY. CONSTRUCT 61ST AVENUE AT ITS ULTIMATE HALF-SECTION WIDTH AS A COLLECTOR ROADWAY (74-FOOT RIGHT-OF-WAY) BETWEEN THE PROJECT'S WESTERLY AND EASTERLY BOUNDARY.



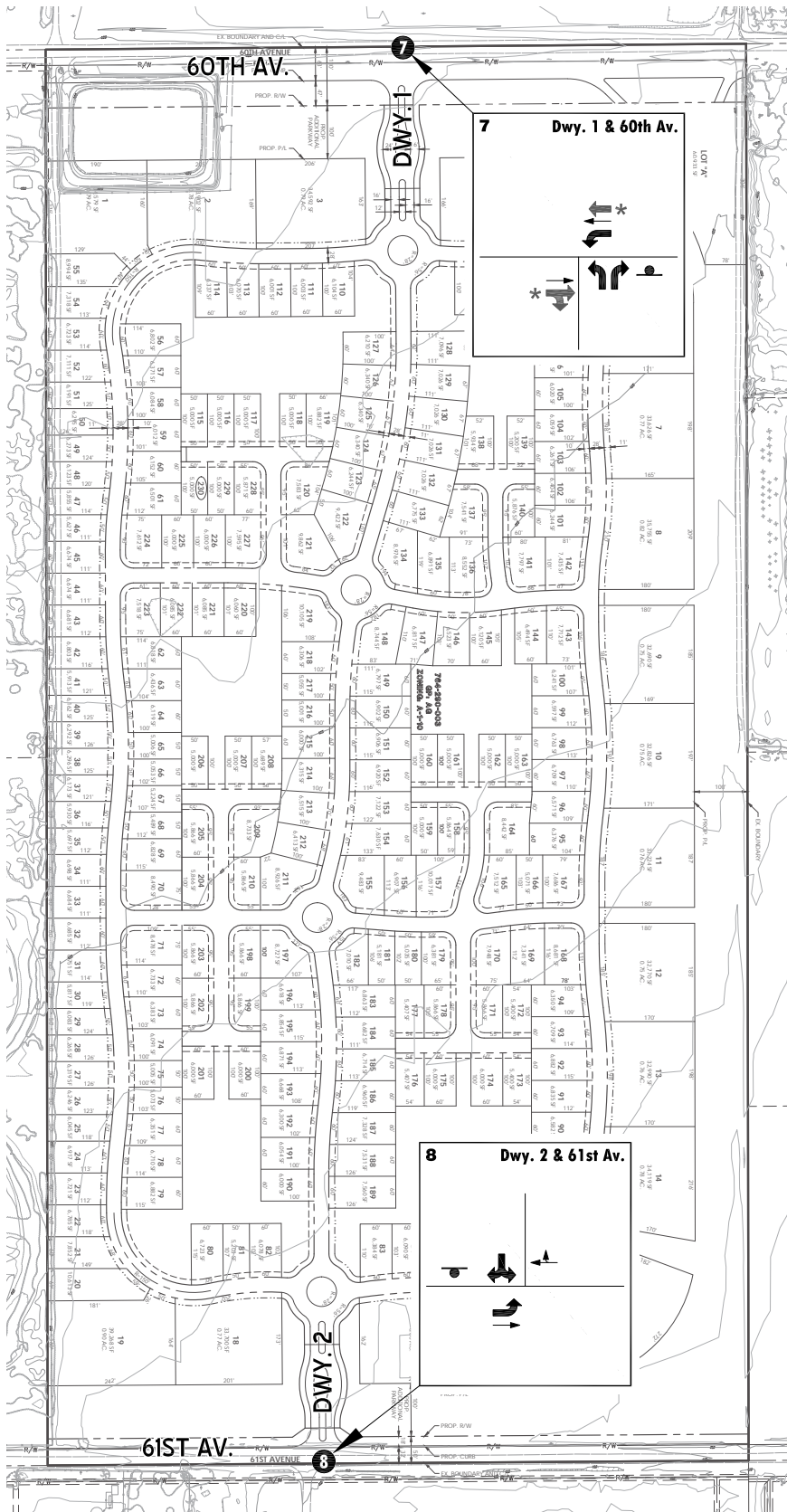
EXHIBIT 8-2
**AVENUE 60 CROSS SECTION RECONCILIATION
 ADJACENT TO VISTA SOLEADA (TTM 36590)**



EAST/WEST TRANSITION RECOMMENDED AT CITY BOUNDARY



ON-SITE CIRCULATION RECOMMENDATIONS



LEGEND:

- = NEW STOP SIGN
- = EXISTING LANE
- = 2016 LANE IMPROVEMENT
- = 2035 LANE IMPROVEMENT
- = INTERSECTION ID

ON-SITE TRAFFIC SIGNING AND STRIPING SHOULD BE IMPLEMENTED IN CONJUNCTION WITH DETAILED CONSTRUCTION PLANS FOR THE PROJECT SITE.

SIGHT DISTANCE AT EACH PROJECT ACCESS POINT SHOULD BE REVIEWED WITH RESPECT TO STANDARD CALTRANS AND COUNTY OF RIVERSIDE SIGHT DISTANCE STANDARDS AT THE TIME OF PREPARATION OF FINAL GRADING, LANDSCAPE AND STREET IMPROVEMENT PLANS.



The recommended site access driveway improvements for the Project are described below.

Driveway 1 / 60th Avenue (#7)

- Install a stop control on the northbound approach.
- Northbound Approach: Construct one left turn lane and one right turn lane.
- Westbound Approach: Construct one left turn lane.

It should be noted that for Long Range (2035) conditions, a 2nd eastbound and westbound through lane is also recommended.

Driveway 2 / 61st Avenue (#8)

- Install a stop control on the southbound approach.
- Southbound Approach: One shared left-through-right turn lane.
- Eastbound Approach: One left turn lane.

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

Sight distance at each project access point should be reviewed with respect to standard Caltrans and County of Riverside sight distance standards at the time of preparation of final grading, landscape and street improvement plans.

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9.0 LOCAL AND REGIONAL FUNDING MECHANISMS

Transportation improvements throughout Riverside County are funded through a combination of direct project mitigation, fair share contributions or development impact fee programs. Identification and timing of needed improvements is generally determined through local jurisdictions based upon a variety of factors. Discussion of the relevant pre-existing transportation impact fee programs within the study area is provided below.

The Project's contribution to one of the aforementioned transportation impact fee programs or as a fair share contribution toward a cumulatively impacted facility not found to be covered by a pre-existing fee program should be considered sufficient to address the Project's fair share toward a mitigation measure or measures designed to alleviate the cumulative impact. In other words, the Project's contribution to a significant cumulative impact will be rendered less than cumulatively considerable and thus is not significant. If an impacted facility was found to require improvements beyond those already identified within one of the pre-existing regional or local fee programs, the Project may be required to contribute the associated intersection or roadway fair-share percentage toward the costs of the recommended improvements. Additional discussion of the relevant pre-existing transportation impact fee programs is provided below.

9.1 TRANSPORTATION UNIFORM MITIGATION FEE (TUMF) PROGRAM

The TUMF program is administered by Coachella Valley Association of Governments (CVAG) based upon a regional Nexus Study completed in early 2003 and updated in 2009 to address major changes in right of way acquisition and improvement cost factors. TUMF identifies a network of backbone and local roadways that are needed to accommodate growth through 2035. This regional program was put into place to ensure that development pays its fair share and that funding is in place for construction of facilities needed to maintain the requisite level of service and critical to mobility in the region. TUMF is a truly regional mitigation fee program, and is imposed and implemented in every jurisdiction in the Coachella Valley.

TUMF fees are imposed on new residential, industrial, and commercial development through application of the TUMF fee ordinance and fees are collected at the building or occupancy permit stage.

A number of the facilities forecast to be impacted by the Project are programmed for improvements through the TUMF program. The project applicant will be subject to the TUMF fee program and will pay the requisite TUMF fees at the rates then in effect pursuant to the TUMF Ordinance. The facilities planned through the TUMF program are constructed prior to the time at which the identified facility is expected to deteriorate to an inadequate level of service. WRCOG has a successful track record funding and overseeing the construction of improvements funded through the TUMF program. In total, the TUMF program is anticipated to generate nearly \$5 billion in transportation projects for the Coachella Valley. The project's payment of TUMF fees appear to be sufficient to mitigate its impacts to TUMF-funded facilities.

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