

AllianceJB

Traffic and Transportation
Planning and Engineering

1992 Terrace Drive
Ventura, CA 93001
(805) 223-1413
www.AllianceJB.com

March 9, 2018

Mr. Greg Grant
Public Works Director/City Engineer
City of Ojai
408 S. Signal Street
Ojai, CA 93024

Subject: **City of Ojai State Route 33 and State Route 150
Pedestrian and Bike Safety Improvements Traffic Impact Study**

Dear Mr. Grant:

AllianceJB is pleased to submit this traffic impact study evaluating the City of Ojai Pedestrian & Bike Safety Improvements Project on Maricopa Highway (SR 33) and Ojai Avenue (SR 150) between El Roblar Drive and Gridley Road. This traffic impact study was prepared to evaluate the potential impacts associated with the proposed project. The AllianceJB scope of services included field reviews, a qualitative evaluation of existing travel patterns, documentation of existing traffic volumes, an estimate of future traffic volumes, coordination with Caltrans, a quantitative evaluation of intersection operational conditions, and response to comments.

Project Description – The proposed City of Ojai SR 33 & SR 150 Pedestrian & Bike Safety Improvements Project includes pedestrian improvements (such as curb extensions, median refuge islands, sidewalk infill, street trees, crosswalk modifications, and RRFB's) and bicycle improvements (such as Class II bike lanes, buffered bike Lanes, Class IV bike Lanes, shared lane markings, and bicycle turn lanes), with the removal of one travel lane in each direction along a portion of Maricopa Highway. The project is intended to improve pedestrian and bicyclist safety on SR 33 & SR 150 in the City of Ojai as defined in the ATP Grant Application and Exhibit A (attached).

Existing Roadway and Intersection Geometric Conditions – Within the City of Ojai Pedestrian & Bike Safety Improvements Project limits, Maricopa Highway (SR 33) and Ojai Avenue (SR 150) serve as primary east-west routes within the City. Each of these roadways, and the related intersections along these roadways, are more particularly described as follows:

- Maricopa Highway (SR 33) – Within the City of Ojai, Maricopa Highway (SR 33) primarily serves as a local east-west arterial route connecting Meiners Oaks to Ojai Avenue (SR 150) with 2/3 of the traffic oriented to/from Downtown Ojai and 1/3 of the traffic oriented to/from Ventura/US 101. Maricopa Highway (SR 33) to the north of the study area provides access into the Los Padres National Forest. The segment of Maricopa Highway (SR 33) between El Roblar Drive and Ojai Avenue (SR 150) is posted 35 mph with 2 vehicle lanes in each direction, a center left turn lane, parking and partial sidewalk connectivity. This roadway segment has fronting land uses that include open space, the high school, the hospital, and other various commercial properties, and is the only 4-lane roadway segment within the Ojai Valley.

- Ojai Avenue (SR 150) – Within the City of Ojai, Ojai Avenue (SR 150) serves as the primary east-west arterial route to/from and through Downtown Ojai. The various segments of Ojai Avenue (SR 150) between Maricopa Highway (SR 33) and Gridley Road are posted 25, 35 & 45 mph with 1 vehicle lane in each direction, left turn lanes, occasional parking and partial sidewalk connectivity. These various segments of Ojai Avenue have fronting land uses that include open space, the Ojai Valley Inn, a private school, the junior high school, various commercial properties, Soule Park, Libbey Park, and Downtown Ojai, and connect as a continuous 2 lane roadway through the Ojai Valley between Carpinteria and Santa Paula (except for intersection approach lanes widening at the SR 33/SR 150 intersections).
- Intersections – The majority of the intersections along Maricopa Highway (SR 33) and Ojai Avenue (SR 150) are controlled by Minor-Street Stop Control. Multi-Way Stop Control is in place at Maricopa Highway (SR 33)/El Roblar Drive-Cuyama Road-Rancho Drive. Traffic Signals are in place at Maricopa Highway (SR 33)/Ojai Avenue (SR 150), Country Club Drive/Ojai Avenue (SR 150), San Antonio Street-Bristol Road/Ojai Avenue (SR 150), Signal Street/Ojai Avenue (SR 150), and Fox Street/Ojai Avenue (SR 150).

Average Daily Traffic and Peak Hour Traffic Volumes – The average daily traffic volumes and peak hour traffic volumes on Maricopa Highway (SR 33) and Ojai Avenue (SR 150) were obtained from Caltrans Traffic Census Program data. The one reporting location on Maricopa Highway (SR 33) within the City of Ojai is just south of El Roblar Drive, and the highest reporting location on Ojai Avenue (SR 150) within the City of Ojai is just northeast of Maricopa Highway. The traffic volumes for the previous 5 years of available data at these locations are shown in the following tables. The traffic volumes at these locations have been relatively stable over the past several years with approximately 9500 AADT (1300 peak hour trips) on Maricopa Highway (SR 33) south of El Roblar Drive and 22500 AADT (2250 peak hour trips) on Ojai Avenue (SR 150) northeast of Maricopa Highway. The declining enrollment as has been observed in Ojai Valley Schools also supports the observed gradually declining traffic volumes of recent years:

Maricopa Highway (SR 33) South of El Roblar				Ojai Ave (SR 150) N of Maricopa Hwy (SR 33)			
Year	Peak Hour	Peak Month	AADT	Year	Peak Hour	Peak Month	AADT
2010	1250	10100	9500	2010	2150	23900	22600
2011	1300	10000	9600	2011	2250	23200	22500
2012	1300	10000	9500	2012	2250	23100	22500
2013	1300	10000	9500	2013	2250	23100	22500
2014	1300	10000	9400	2014	2250	23100	22500

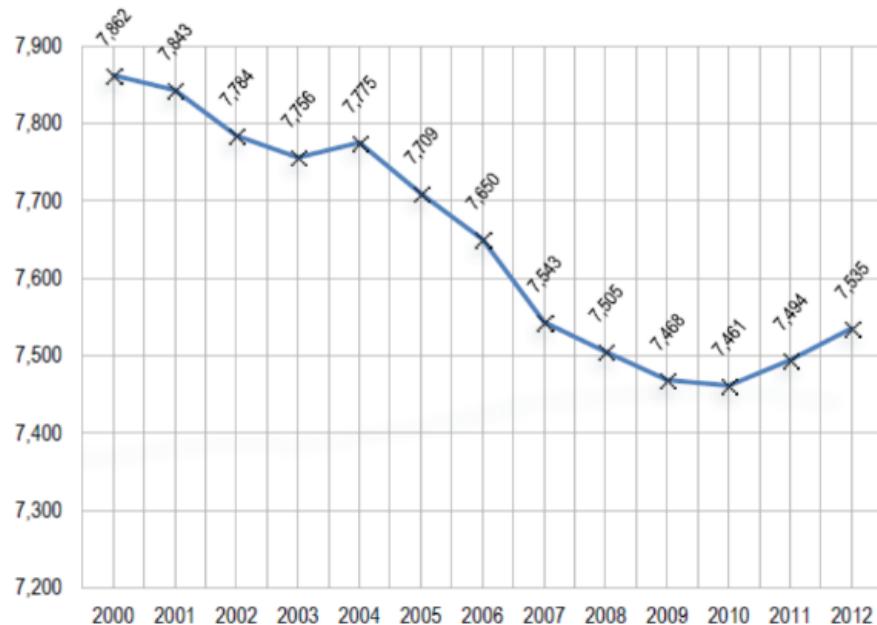
The City of Ojai population growth trends as contained in the City of Ojai 2014-2021 Housing Element also support the observed gradually declining traffic volumes of recent years with the City of Ojai population declining from an estimated 7,862 in 2000 to an estimated 7,535 in 2012 (see excerpted Table II-1 and Figure II-1 from the City of Ojai 2014-2021 Housing Element):

Table II-1
Population Trends 1990-2012

Jurisdiction	1990	2000	2010	2012	Growth 1990-2000	Growth 2000-2012
Ojai	7,613	7,862	7,461	7,535	3.3%	-4.2%
Ventura County	669,016	753,197	823,318	832,970	12.6%	10.6%

Sources: U.S. Census; Calif. Dept. of Finance Table E-5 (2012); SCAG

Figure II-1
Ojai Population 2000-2012



Sources: California Department of Finance, E-5, 2012

Intersection Vehicle Turning Movement Counts – Intersection vehicle turning movement counts for AM, School PM, and Late Afternoon PM peak hour conditions were obtained by collecting count data while schools were in session on Tuesday, April 26, 2016. Intersection vehicle turning movement counts for AM, School PM, and Late Afternoon PM peak hour conditions are displayed on Figure 1 through Figure 6. Observations include the following:

- The highest observed vehicle traffic volumes on Maricopa Highway (SR 33) occur at the approach and departure from Ojai Avenue (SR 150) where peak hour volumes were observed to be 525-610 vehicles per hour in one direction of travel.
- The highest observed vehicle traffic volumes on Ojai Avenue (SR 150) occur between Maricopa Highway (SR 33) and Canada Street where peak hour volumes were observed to be 730-978 vehicles per hour in one direction of travel.
- The lowest observed vehicle traffic volumes on Maricopa Highway (SR 33) occur at the approach and departure from El Roblar Drive-Cuyama Road where peak hour volumes were observed to be 302-467 vehicles per hour in one direction of travel.

- The lowest observed vehicle traffic volumes on Ojai Avenue (SR 150) occur at the east end of the City at Bryant Street where peak hour volumes were observed to be 437-511 vehicles per hour in one direction of travel.

Intersection Pedestrian and Bicyclist Traffic Counts – Intersection pedestrian and bicyclist traffic counts for AM, School PM, and Late Afternoon PM peak hour conditions were obtained by collecting intersection pedestrian and bicyclist turning movement count data while schools were in session on Tuesday, April 26, 2016. Intersection pedestrian and bicyclist crosswalk counts for AM, School PM, and Late Afternoon PM peak hour conditions are displayed on Figure 7 through Figure 12. Comments and Observations include the following:

- The pedestrian and bicyclist crosswalk counts shown on Figure 7 through Figure 12 include the number of pedestrians and bicyclists that were observed to use all marked crosswalks along with the unmarked crosswalks at the counted intersections.
- The Junior Class (170 students) at Nordhoff High School (total enrolment of 718 students) was let out early at about 1:00 PM on the day of the pedestrian and bicyclist counts, so the actual pedestrian and bicyclist traffic counts on Maricopa Highway during the School PM peak hour are estimated to be approximately 24% higher than shown in Figure 8 ($170/718=24\%$).
- It is estimated that the highest number of pedestrians and bicyclists crossing Maricopa Highway (SR 33) at the high school would be approximately 24 per hour.
- The highest observed pedestrians-bicyclists volumes crossing Maricopa Highway (SR 33) were observed to occur at the approach and departure from Ojai Avenue (SR 150) where peak hour volumes were observed to be 30 per hour.
- The highest volume locations with 20 per hour or more observed pedestrians-bicyclists crossing Ojai Avenue (SR 150) were observed to occur at Maricopa Highway (26 per hour), Country Club Drive (33 per hour), Blanche Street (24 per hour), Ventura Street (33 per hour), Signal Street (100 per hour), Arcade Crosswalk (51 per hour), Montgomery Street West (91 per hour), Montgomery Street East (24 per hour), Fox Street (24 per hour), and Parker Road (20 per hour).

Pedestrian, Bicyclist and Motorist Safety Improvements – The proposed project will provide substantial roadway safety benefits to pedestrians and bicyclists, along with ancillary benefits for vehicular traffic, in several ways:

- Pedestrian Facility Safety Improvements – The primary pedestrian benefits of the project will be the provision of improved pedestrian sidewalks and improved pedestrian crossings. The project will close gaps in the existing sidewalks system to provide a continuous length sidewalk with street trees and ADA accessible curb ramps within the project limits (giving pedestrians a safer area to walk away from vehicular traffic, and improving pedestrian appeal). The project will also provide enhanced pedestrian crossings at intersections (reducing pedestrian crossing distances with the installation of curb extensions and center median refuge islands; along with improving the visibility of pedestrian crossing locations with improved signage, markings, rectangular rapid flashing beacons and/or other treatments). Each of the pedestrian facility improvements will result in significant pedestrian safety improvements with no significant impacts to bicycle or vehicular traffic.

- *Bicyclist Facility Safety Improvements* – The primary bicyclist benefits of the project will be the provision of Class II Bike Lanes, Class IV Bike Lanes, Buffered Bike Lanes and/or Shared Lane Markings. The project will convert unused and/or unnecessary shoulder and roadway pavement width into a continuous length bicycle facility within the project limits (providing designated and/or separated bicycle facilities; along with improving the visibility of bicyclists' facilities with improved signage, markings, and/or roadways lane configurations. Each of the bicycle facility improvements will result in significant bicyclist safety improvements with no significant impact to pedestrian or vehicular traffic.
- *Ancillary Motorists Safety Improvements* – The provision of sidewalks and bike lanes will serve to provide an improved visibility area along the roadways, thereby providing improved visibility and improved safety for motorists entering onto the roadways from various side streets and driveways.
- *Reduction of Multiple Threat* – The reduction of travel lanes from 2 lanes in each direction to 1 lane in each direction is offered as a preferred project component along Maricopa Highway and would eliminate what is known as the "multiple threat crash risk". This risk occurs when a motorist in one lane stops for a crossing pedestrian and, in the process, visually screens the pedestrian from the view of motorists in the other lane. This situation is a contributing factor to many pedestrian/vehicle crashes at mid-block and uncontrolled intersections.
- *Reduction of Vehicular Speeds* – One of the primary safety benefits associated with the installation of narrower travel Lanes, and/or the reduction in the number of travel lanes, and/or the addition of street trees, is the overall reduction of excessive speeds. On Maricopa Highway and Ojai Avenue, the critical, or 85% percentile speed, of vehicles establishes most of the existing speed limits at 35mph. The critical speed is the benchmark speed used in traffic engineering to set speed limits on roadways. Reducing the width and/or number of lanes, where traffic analysis shows it to be feasible, is an effective and inexpensive method of reducing speeds to more closely match the lower nearby vehicle speeds desired by pedestrians and bicyclists, thereby increasing safety and reducing risk of injury for all transportation modes. Lower overall speeds have a significant benefit toward reducing the severity of pedestrian and bicyclist collisions.
- *Additional Buffer Space* – The provision of a wide bike lane with an adjacent buffer area provides an enhanced separated area for bicyclists to ride away from motor vehicle traffic and also provides an area for pedestrians to approach the vehicular travel portion of the roadway and be seen by motorists before crossing into traffic.

Intersection Traffic Operational Analyses – As discussed earlier, average daily traffic volumes were obtained from Caltrans Traffic Census Program data for the past 5 years; and vehicle, pedestrian and bicycle traffic volumes were collected at key intersections within the project limits in April 26, 2016. The stability of the AADT traffic volumes on Maricopa Highway (SR 33) and Ojai Avenue (SR 150) during the past several years indicate that there is essentially no traffic growth along these corridors, thereby resulting in traffic projections indicating that future intersection traffic volumes along these corridors will be essentially unchanged from the observed existing intersection traffic volumes along these corridors. Additionally, because the project only has components that would modify

travel lanes along Maricopa Highway and at the Maricopa Highway/Ojai Avenue intersection (where the project proposes to reduce the number of travel lanes from 2 lanes in each direction to 1 lane in each direction), the only potential intersection locations where the project could affect vehicle traffic operational conditions would be along Maricopa Highway and at the Maricopa Highway/Ojai Avenue intersection. Traffic operational analysis results for AM, School and PM peak hour conditions (representing existing conditions and future conditions) are provided in Table 1, 2, and 3, and discussed as follows:

- Evaluation of Intersection Traffic Operational Analysis Results – It is City of Ojai General Plan Circulation Element policy that the intersections along Maricopa Highway (SR 33) and Ojai Avenue (SR 150) should perform at Level of Service (LOS) C or better for the overall intersection operational condition of each intersection. The term LOS generally measures motorist delay and designates the level of service of a facility with a letter, A to F, with A representing the most free flowing operating conditions. However, the Highway Capacity Manual LOS calculation for unsignalized side-street stop controlled intersections assigns the overall LOS at an intersection to be that of the worst-case LOS experienced by the movement or movements from a single traffic lane. For this reason, as an example, the Church Street/Maricopa Highway intersection is shown as operating at LOS F during the school peak hour with or without the project, even though the LOS F is only experienced by 218 vehicles per hour in the single lane northbound shared left-through movement exiting from the school driveway. Although these 218 vehicles per hour experience LOS F, the reality is that there are 859 vehicles per hour on the Maricopa Highway eastbound-westbound approaches experience LOS A with or without the project.
- Pedestrian and Bicyclists Perception of Intersection Operational Conditions – Although the term LOS generally measures motorist delay and designates the level of service A to F for motorists, pedestrians and bicyclists experience the same intersection quite differently. A designation of LOS A for motorists is not necessarily the overall ideal condition for an intersection, and in fact may indicate that an intersection is overbuilt with resultant higher speeds, thereby resulting in a negative impact for pedestrians and bicyclists safety at the intersection. The intersection traffic operational analysis results also focus on individual intersections rather than the operations of the corridors relating to the interaction of vehicles, bicycles and pedestrians. In any case, the traffic analysis shows that all of the intersections along Maricopa Highway (SR 33) and Ojai Avenue (SR 150) will operate at similar LOS conditions under both existing and project conditions.
- Intersection Operational Analysis Conclusions – Under proposed project conditions, the traffic operational analyses indicates a reduction of travel lanes on Maricopa Highway (SR 33) and at the Maricopa Highway/Ojai Avenue intersection will have minimal impact on delay for motorists; the majority of the study intersections are expected to have changes in average critical delay of less than 1.1 seconds during weekday AM, School and PM peak conditions. The intersection at Church Street/ Maricopa Highway is expected to experience the largest increase in average critical delay at 16.6 seconds for the northbound shared left-through school driveway exit movement during the School peak hour. This 16.6 seconds of average critical delay could be mitigated for the most part by reconfiguring the northbound school exit driveway to include a shared left-through lane and a right

turn only lane; however, this driveway reconfiguration would still result in an additional average critical delay of 2.2 seconds for the northbound shared left-through lane. The traffic operations results, with this driveway adjustment, would indicate that the study intersections will continue to operate at similar levels of service in consideration of the City of Ojai's performance thresholds if the project is implemented.

Transit Operations – This segments of Maricopa Highway (SR 33) and Ojai Avenue (SR 150) are served by VCTC busses and the Ojai Valley Trolley, which provides local service to Downtown Ojai and to the neighboring City of Ventura, thereby connecting to other cities throughout the County of Ventura. The project will not affect the number of bus stops along the corridors, and will in fact improve access to several bus stops. Although there could be minimal increases in travel times along the Maricopa Highway (SR 33) corridor, which will affect transit and other motorized vehicles, the buses will no longer need to share their bus stop portion of the roadway with bicycles due to the addition of a separate bicycle lane. No significant changes to transit operations are anticipated as a result of the proposed project.

On-Street Parking – Parking within the project limits exists as parallel parking stalls along certain portions of the Maricopa Highway (SR 33) and Ojai Avenue (SR 150) corridors. No significant changes in the amount of parking are proposed as part of the project. There would only be a minor reduction in the availability of parking along the northwestern portion of Maricopa Highway (SR 33) and along Ojai Avenue (SR 150) associated with a project component that adds street trees between each parking space. There would also be a minor increase in the available parking along Ojai Avenue (SR 150) that could occur with a project component that adds parking along the north side of Ojai Avenue between Canada Street and Ventura Street. The layout of intersection curb extensions were also developed in consideration of existing and appropriate no parking locations within intersection sight distance visibility triangles. The proposed restriping of lanes along Maricopa Highway (SR 33) will create a 3-foot buffer area between the parking stalls and the proposed bike lanes, which offers an additional measure of safety for cyclists.

Alternatives Considered – As the result of the project conceptual design review process, a number of alternative project features were considered. These alternative project features included considerations for additional street trees, additional curb extensions, additional median refuge islands, and additional pedestrian crosswalk locations. None of the alternative project features result in any significant impacts to intersection operational conditions.

Overall Project Conclusions – Based on a review of existing and future traffic conditions, pedestrian safety enhancement improvements, bicyclists safety enhancement improvements, and estimated intersection operational conditions along the Maricopa Highway (SR 33) and Ojai Avenue (SR 150) corridors, it is estimated that the proposed City of Ojai SR 33 & SR 150 Pedestrian & Bike Safety Improvements project as defined in the attached ATP Grant Application and Exhibit A will not result in any significant traffic impacts. If appropriate pedestrian improvements (such as curb extensions, median refuge islands, sidewalk infill, street trees, crosswalk modifications, and RRFB's) and bicycle improvements (such as Class II bike lanes, buffered bike Lanes, Class IV bike Lanes, shared lane markings, and bicycle turn lanes) are installed, along with the removal of one travel lane in each direction along a portion of Maricopa Highway, the project will improve pedestrian and bicyclist safety on SR 33 & SR 150 in the City of Ojai as intended.

Thank you for the opportunity to provide traffic engineering services to the City of Ojai. If you have any questions, or need additional information, please contact me at (805)-223-1413.

Respectfully submitted,

ALLIANCEJB



James A. Biega, P.E.
President, AllianceJB, Inc.

Attachments:

Exhibit A - Ojai Avenue and Maricopa Highway Pedestrian and Bike Safety Improvements
Figures 1-6 - Vehicle Turning Movement Counts (AM, School PM, and Afternoon PM)
Figures 7-12 - Pedestrian and Bicyclist Crosswalk Counts (AM, School PM, and Afternoon PM)
Tables 1-3 - Intersection Level of Service Without/With Project (AM, School PM, & Afternoon PM)





LEGEND

- SCHOOL
- SIDEWALK INFILL/REPAIR
- PEDESTRIAN COMMERCIAL/CULTURAL ZONE
- BUS AND TROLLEY STOPS
- PROPOSED BIKE LANES
- CONVERT 4 LANES TO 2 LANES
- PROPOSED PEDESTRIAN CROSSING IMPROVEMENTS LOCATION

OJAI AVENUE:

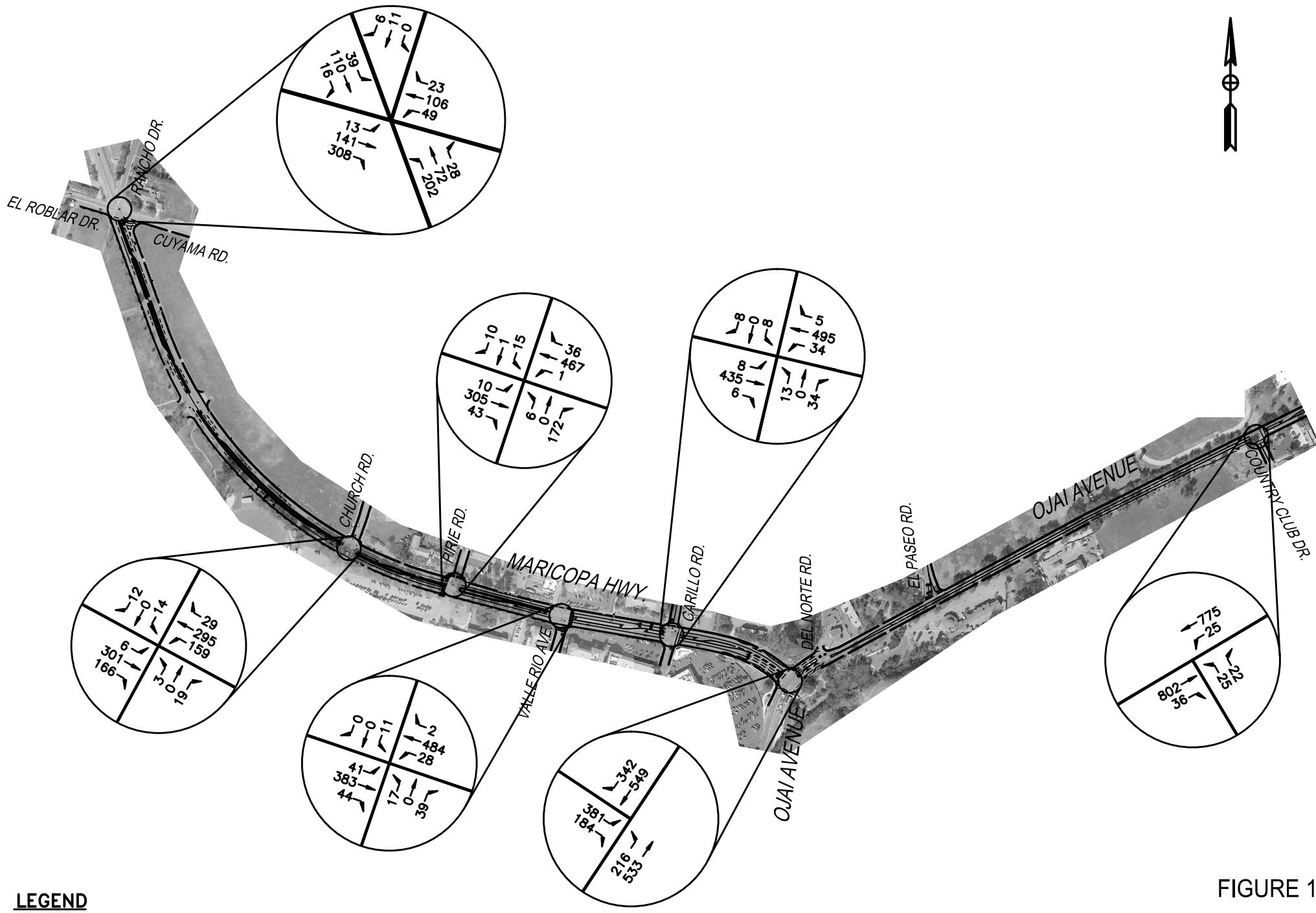
1. Canada Street (TDA FUNDED)
2. Blanche Street
3. Ventura Street
4. Arcade – Center
5. Arcade – East
6. Montgomery Street
7. Bald Street
8. Drown Street
9. South Fulton Street
10. North Fulton street
11. Park Road
12. Bryant Street
13. Whispering Oaks (TDA FUNDED)

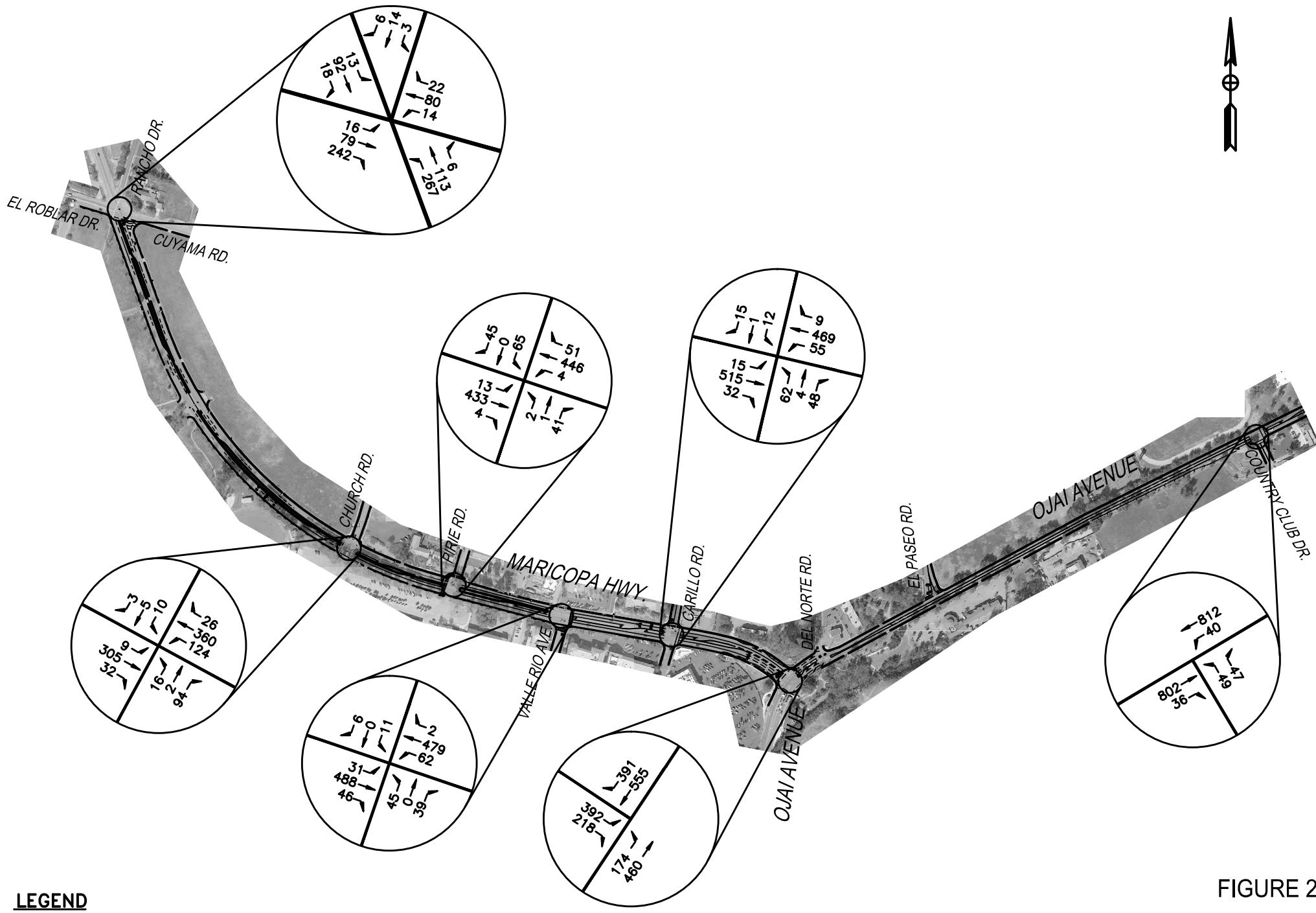
MARICOPA HIGHWAY:

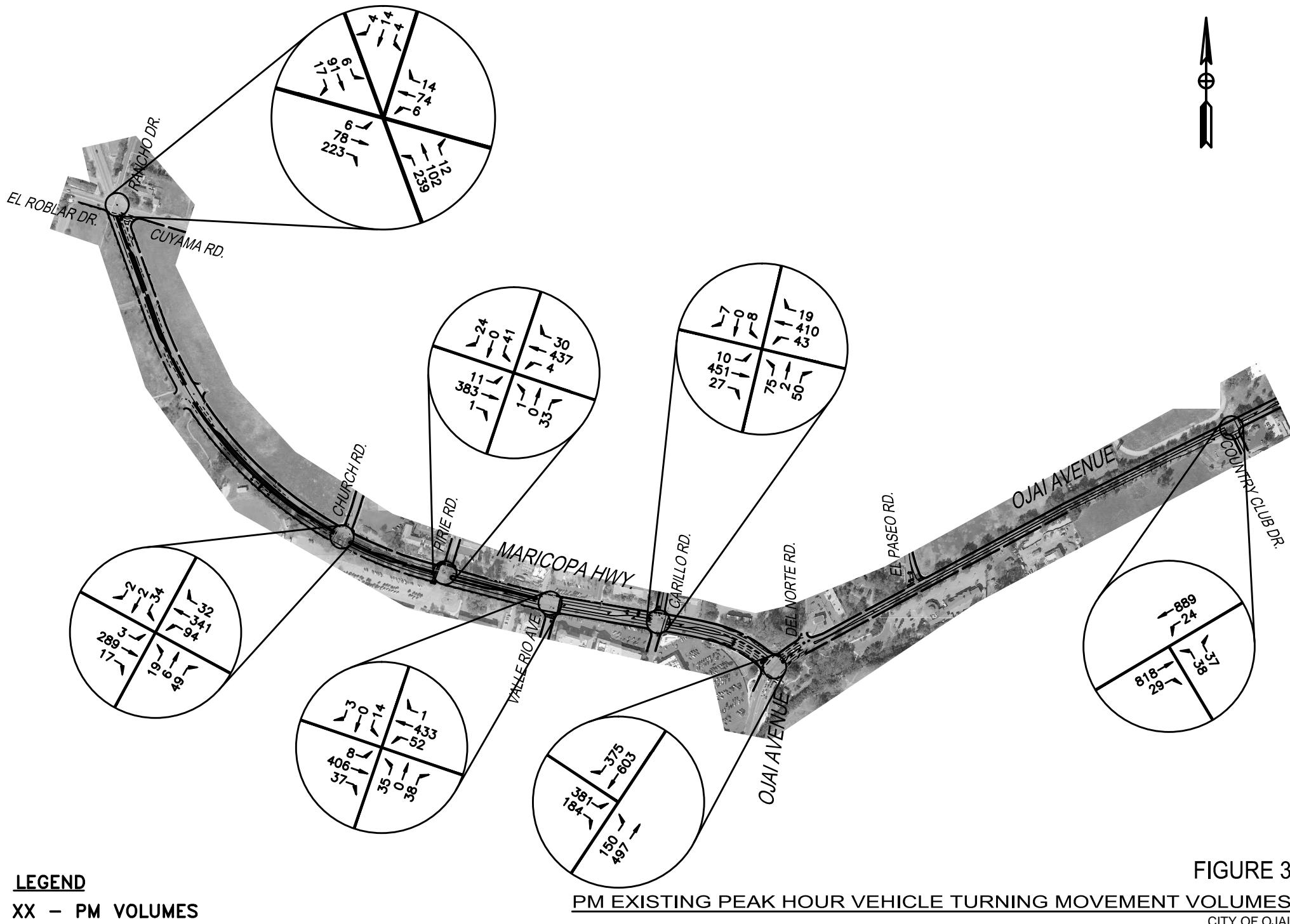
1. Church Road
2. Pirie Road
3. Vallerio Avenue
4. Carillo Road

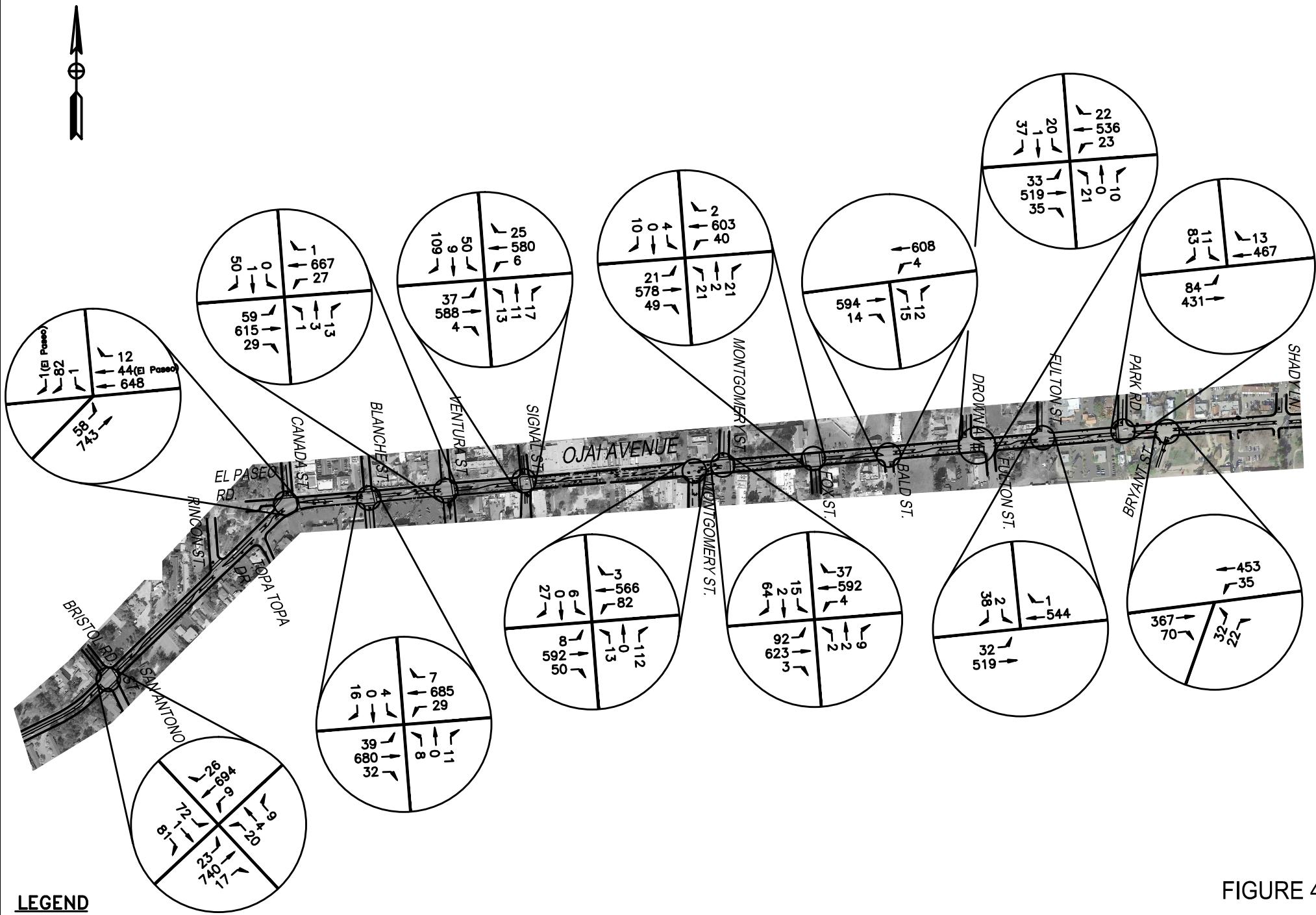
CITY OF OJAI
Department of Public Works

Ojai Avenue and Maricopa Highway
Pedestrian and Bike Safety Improvements









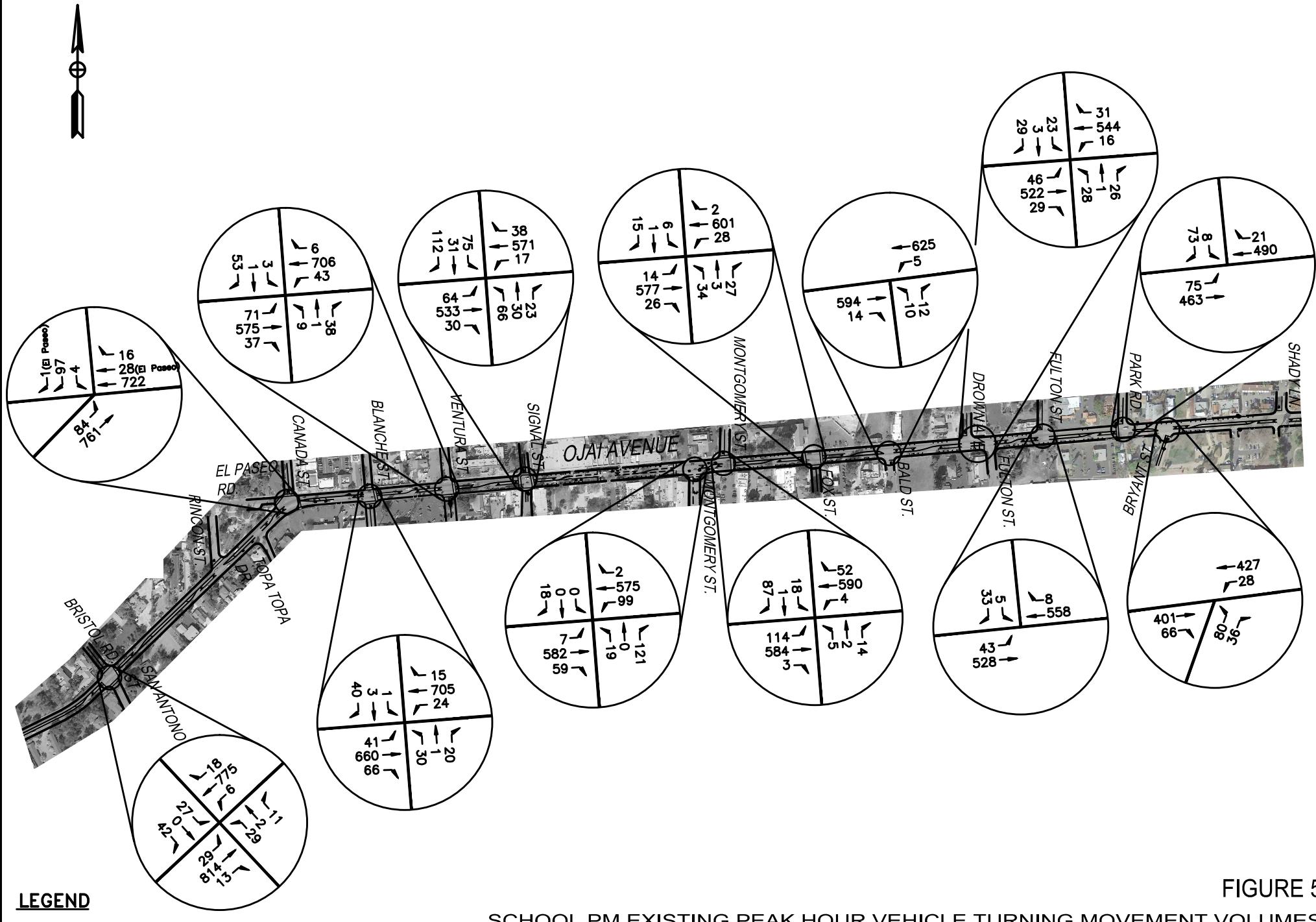
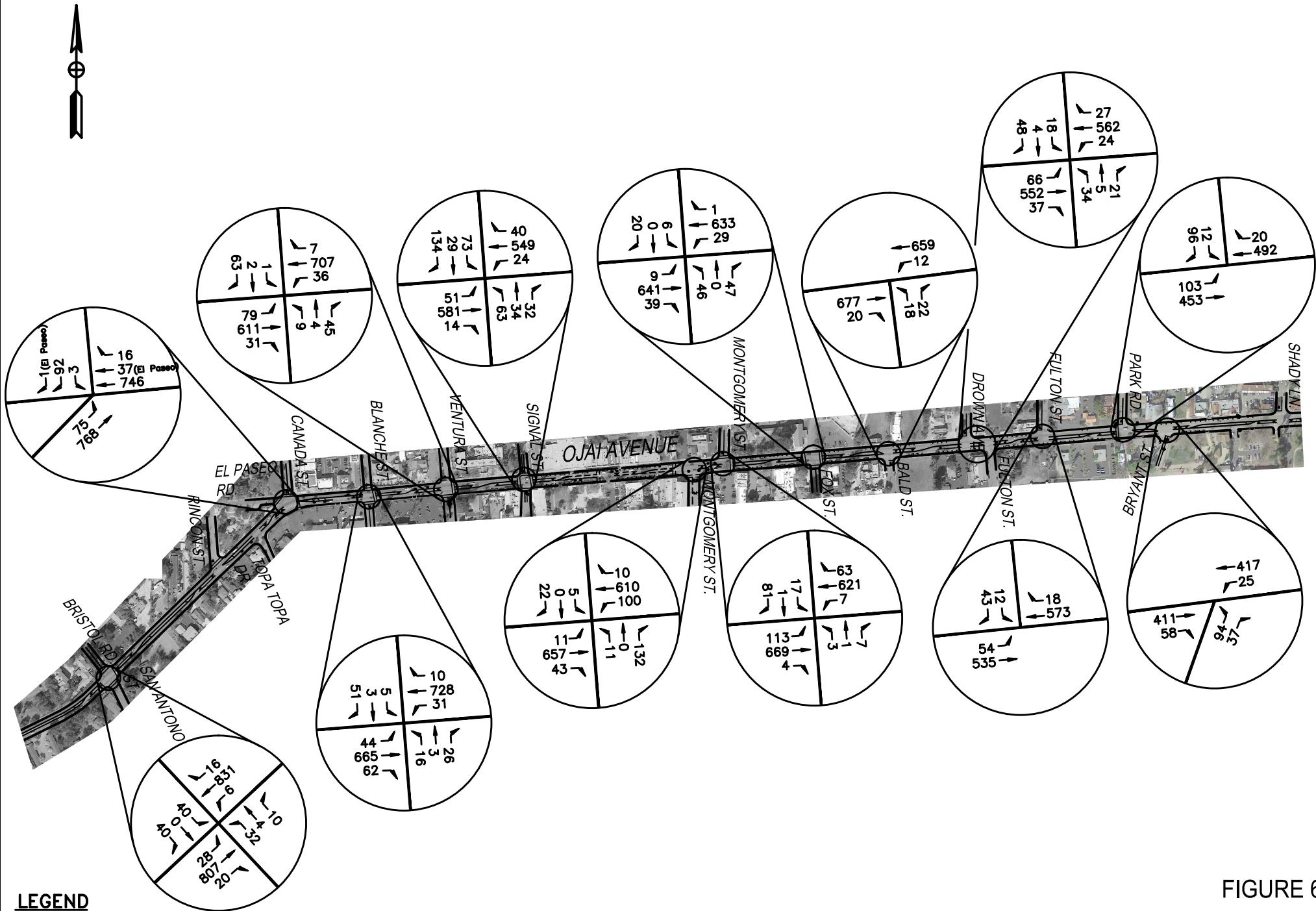


FIGURE 5

SCHOOL PM EXISTING PEAK HOUR VEHICLE TURNING MOVEMENT VOLUMES
CITY OF OJAI



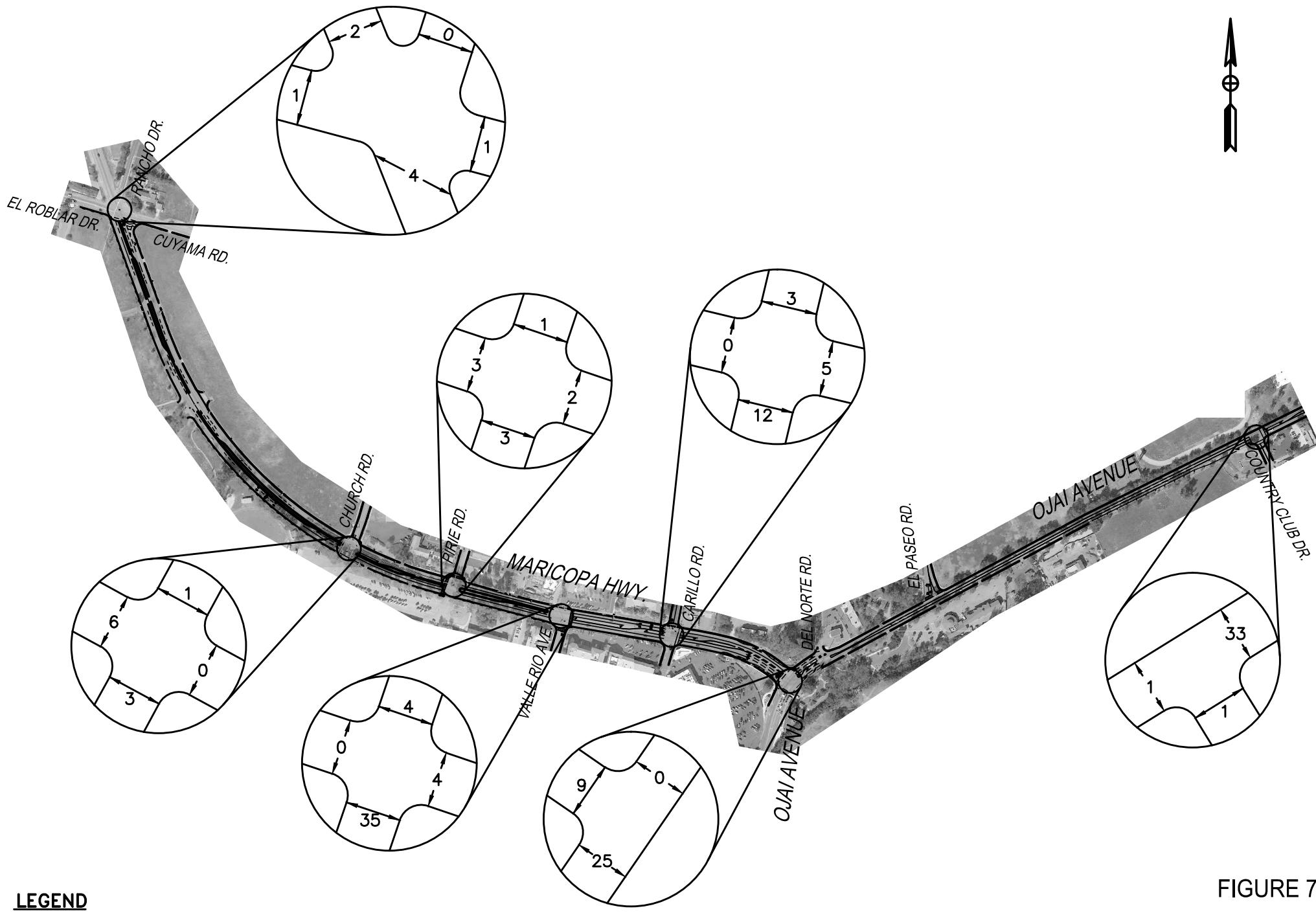
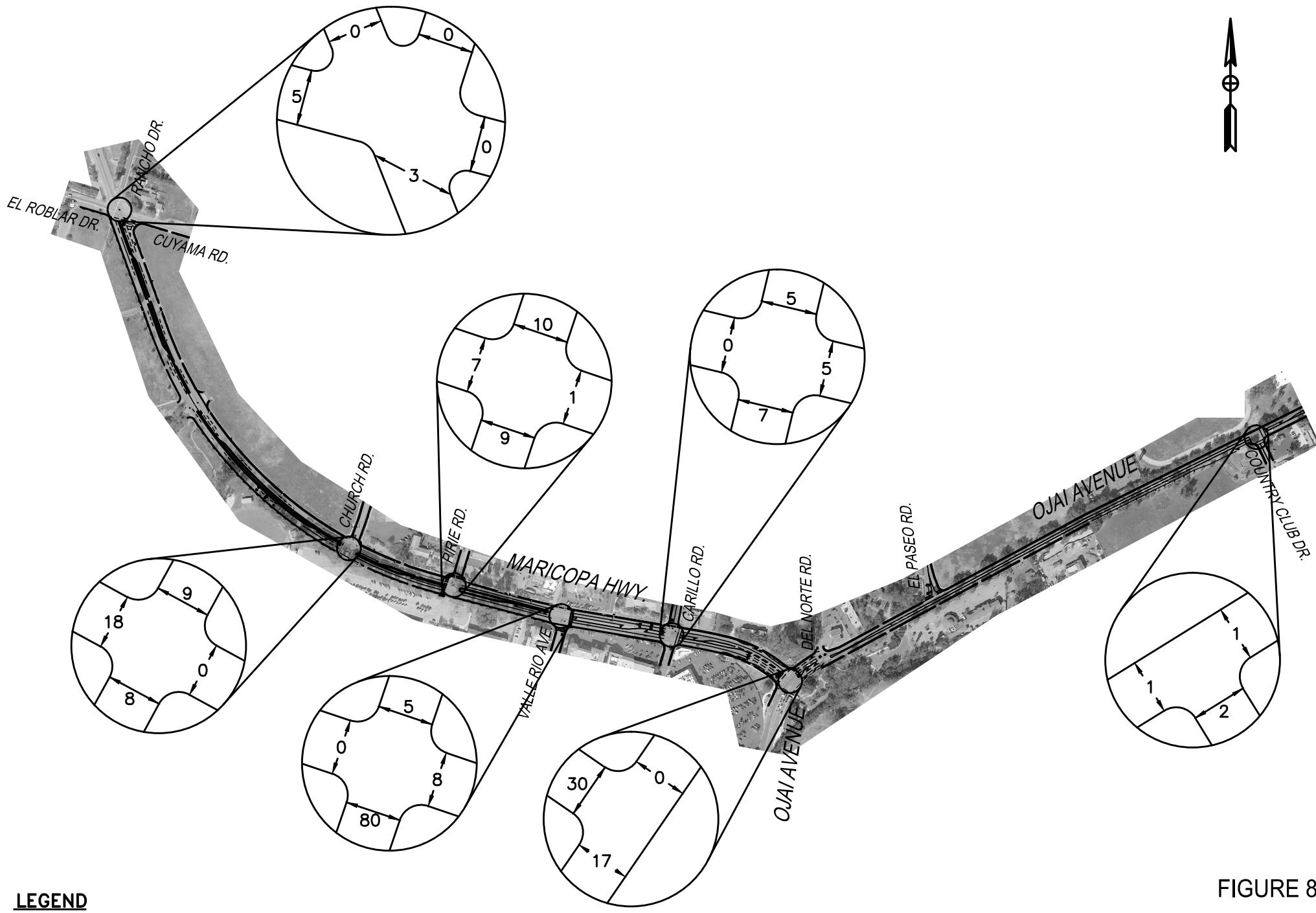
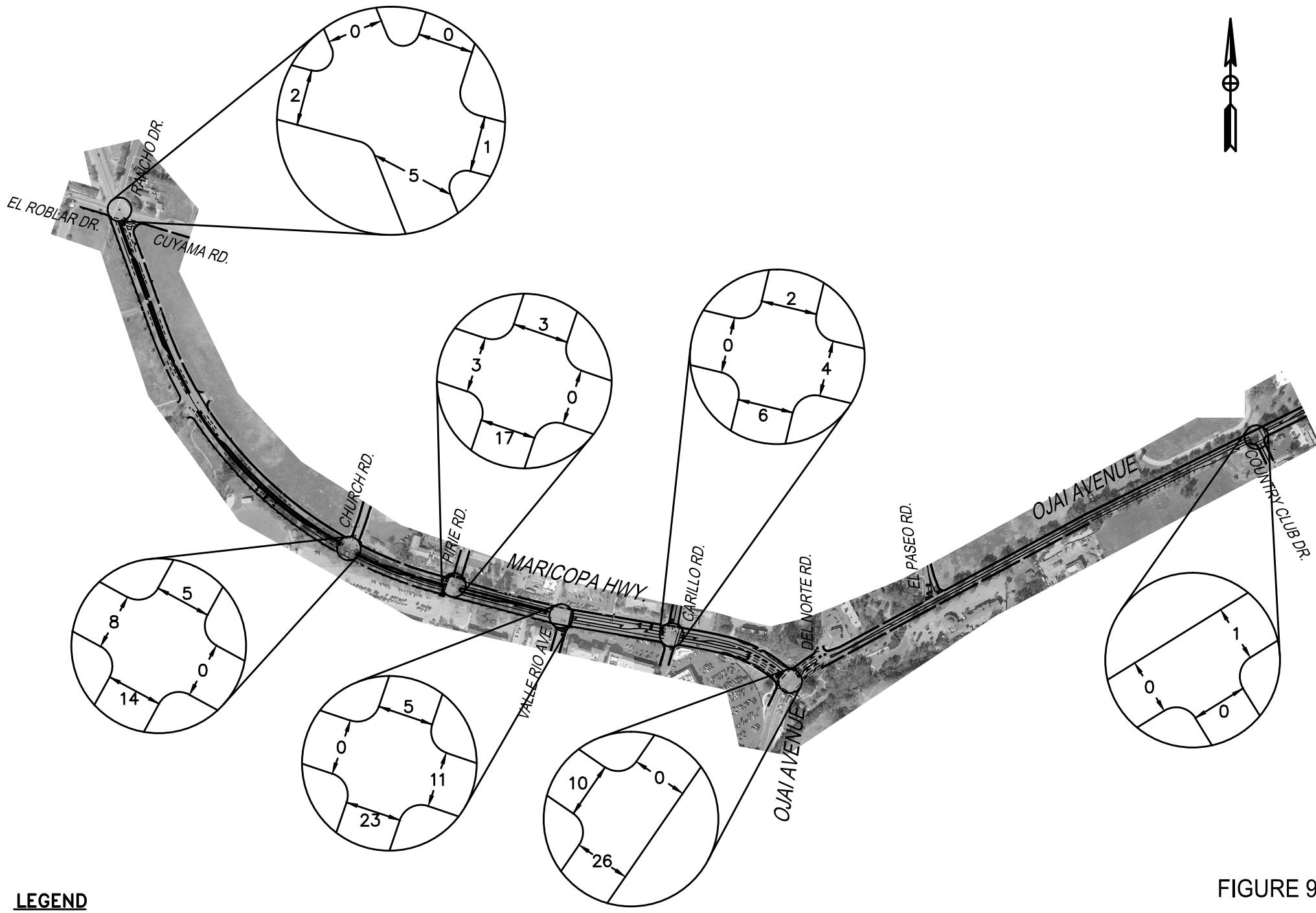
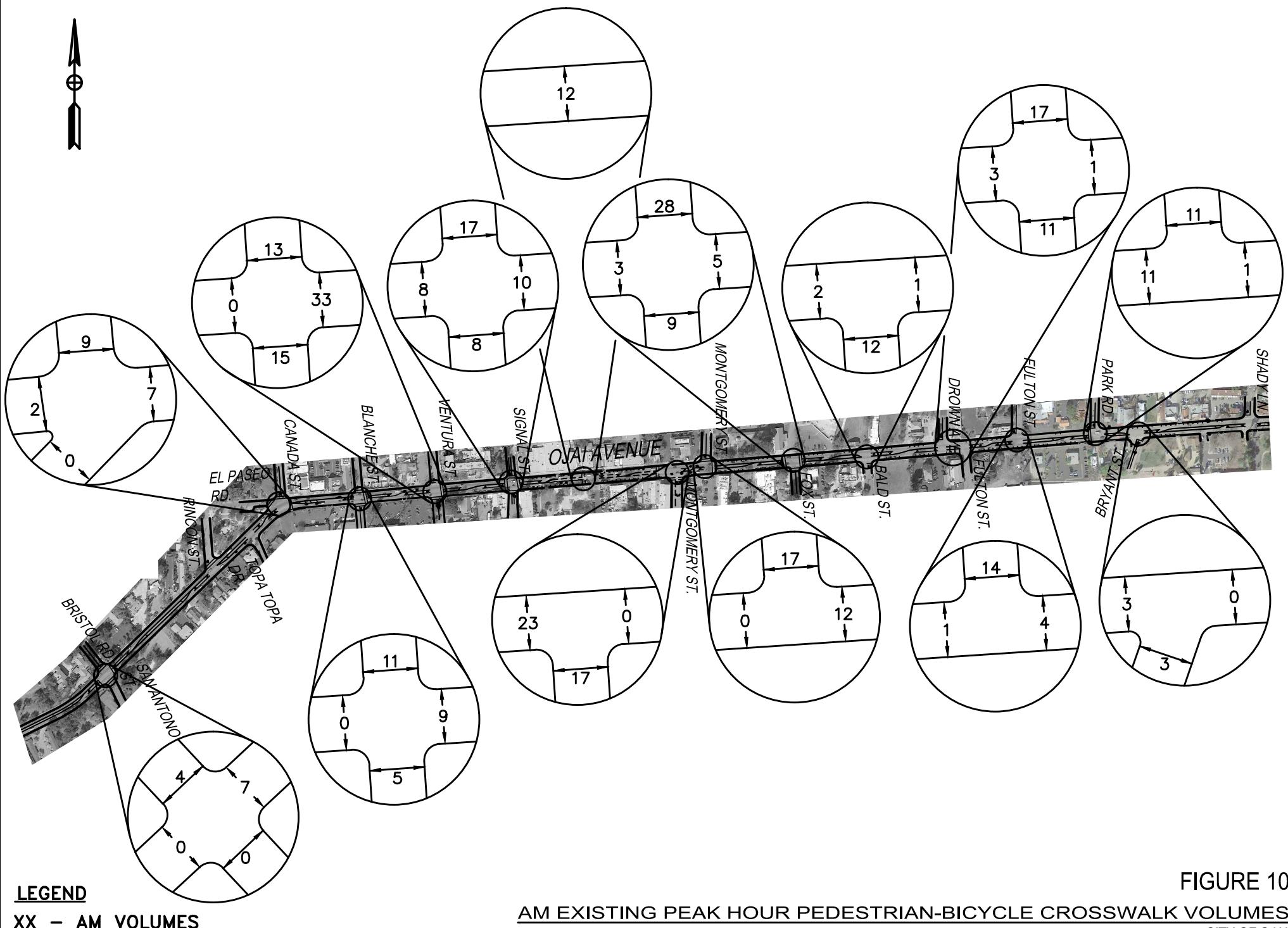


FIGURE 7

CITY OF OJAI







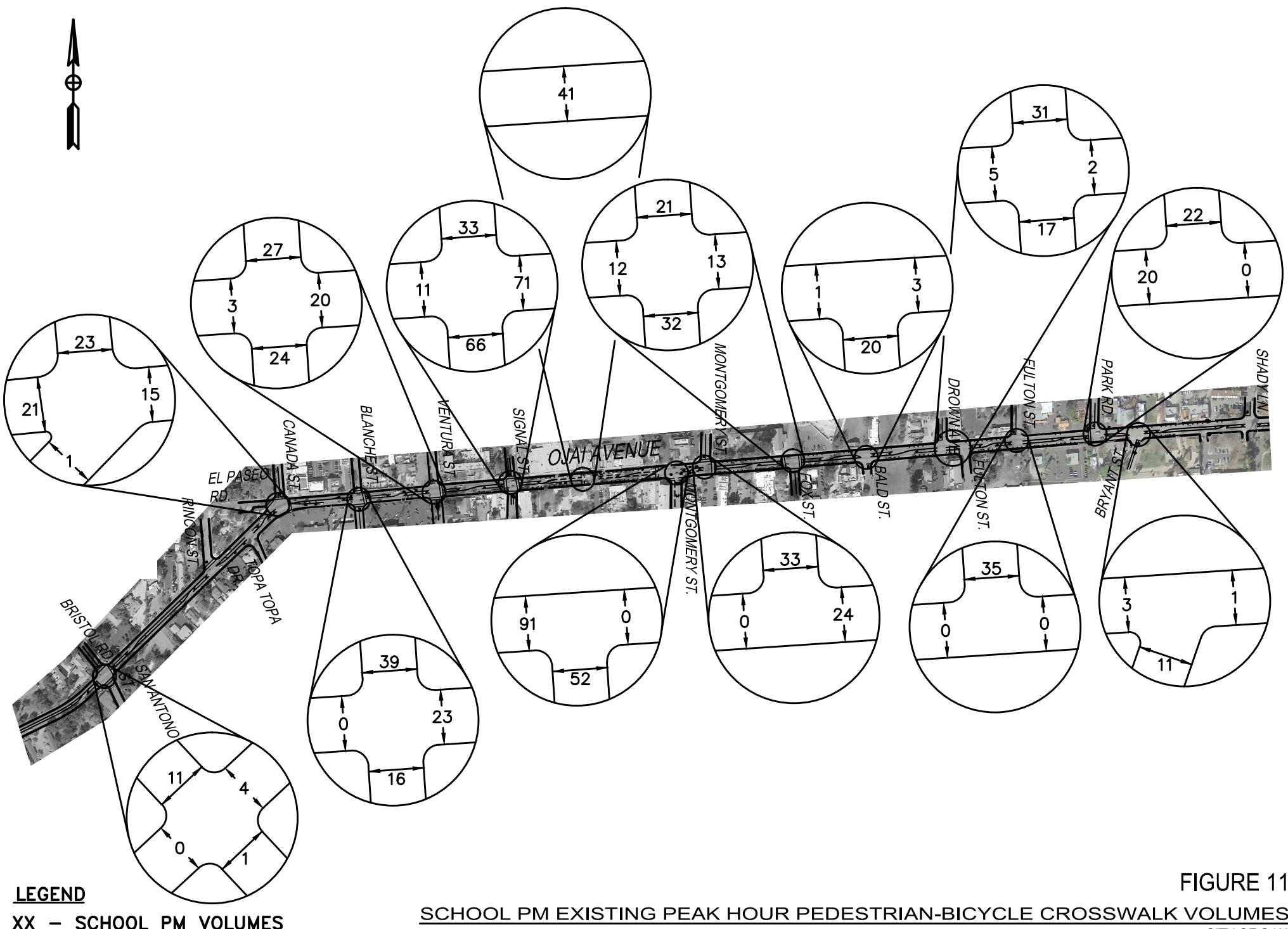


FIGURE 11

SCHOOL PM EXISTING PEAK HOUR PEDESTRIAN-BICYCLE CROSSWALK VOLUMES
 CITY OF OJAI

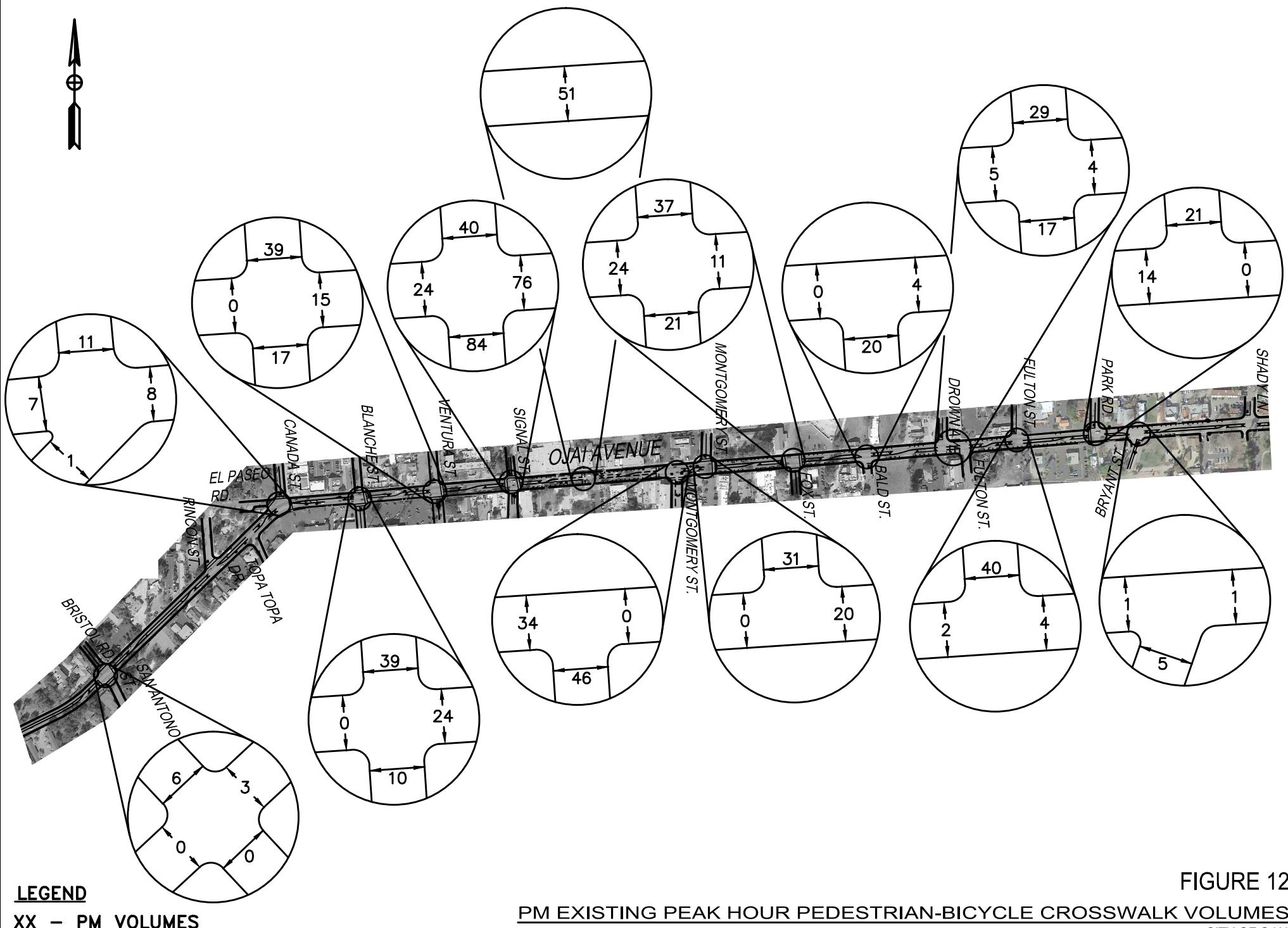


FIGURE 12

PM EXISTING PEAK HOUR PEDESTRIAN-BICYCLE CROSSWALK VOLUMES
CITY OF OJAI

Table 1 - AM Peak Hour LOS Without & With Project (with 1 Lane each direction on Maricopa Hwy)

Intersection	2016 AM				2016+Project AM					
	Avg		Avg	Crit	Avg		Crit	V/C	Avg	
	Avg	Del	Crit	Del	Del	Change	Del	Change	Del	Change
#1 MaricopaHy-ElRoblarDrCuyamaRd	B	12.5	0.48	12.5	B	12.6	0.49	0.005	12.6	0
#2 ChurchSt-MaricopaHy	C	2.1	0.14	2.1	C	2.2	0.14	0	2.2	0.1
#3 PirieRd-MaricopaHy	C	2.2	0.2	2.2	C	2.6	0.24	0.036	2.6	0.4
#4 VallerioAv-MaricopaHy	C	1.5	0.06	1.5	D	1.7	0.08	0.021	1.7	0.2
#5 CarilloRd-MaricopaHy	B	1.1	0.05	1.1	C	1.3	0.06	0.017	1.3	0.2
#6 OjaiAv-MaricopaHy	A	14.6	0.52	22.1	A	14.6	0.52	0	21.7	-0.4
#7 CountryClubDr-MaricopaHy	B	4.5	0.62	6.8	B	4.5	0.62	0	6.8	0
#8 SanAntonioStBristolRd-OjaiAv	B	12	0.69	40.7	B	12	0.69	0	40.7	0
#9 CanadaSt-OjaiAv	C	1.1	0.18	1.1	C	1.1	0.18	0	1.1	0
#10 BlancheSt-OjaiAv	D	1.1	0.09	1.1	D	1.1	0.09	0	1.1	0
#11 VenturaSt-OjaiAv	C	1.3	0.11	1.3	C	1.3	0.11	0	1.3	0
#12 SignalSt-OjaiAv	A	10.9	0.58	15.2	A	10.9	0.58	0	15.2	0
#13 MontgomeryStW-OjaiAv	C	2.5	0.23	2.5	C	2.5	0.23	0	2.5	0
#14 MontgomeryStE-OjaiAv	C	2.1	0.15	2.1	C	2.1	0.15	0	2.1	0
#15 FoxSt-OjaiAv	A	18.3	0.55	11.5	A	18.3	0.55	0	11.5	0
#16 BaldSt-OjaiAv	C	0.4	0.07	0.4	C	0.4	0.07	0	0.4	0
#17 SFultonSt-OjaiAv	D	2	0.15	2	D	2	0.15	0	2	0
#18 NFultonSt-OjaiAv	B	0.7	0.07	0.7	B	0.7	0.07	0	0.7	0
#19 ParkRd-OjaiAv	B	1.8	0.14	1.8	B	1.8	0.14	0	1.8	0
#20 BryantSt-OjaiAv	C	1.1	0.11	1.1	C	1.1	0.11	0	1.1	0

Table 2 - School Peak Hour LOS Without & With Project (with 1 Lane each direction on Maricopa Hwy)

Intersection	2016 School				2016+Project School						
	LOS	Avg		Avg	Avg		Avg		Avg	Avg	
		Avg	Crit	Del	Avg	Crit	Del	Crit	Crit	Crit	
#1 MaricopaHy-ElRoblarDrCuyamaRd <i>Multi-Way Stop</i>	B	11.8	0.49	11.8	B	11.8	0.49	-0.001	11.8	0	
#2 ChurchSt-MaricopaHy(1LaneSchoolExit) ChurchSt-MaricopaHy(2LaneSchoolExit) <i>Minor Street Stop</i>	F	20.1	0.82	20.1	F	36.7	1	0.174	36.7	16.6	
					F	22.3	0.99	0.174	22.3	2.1	
#3 PirieRd-MaricopaHy <i>Minor Street Stop</i>	C	2.3	0.22	2.3	C	3	0.3	0.078	3	0.7	
#4 VallerioAv-MaricopaHy <i>Minor Street Stop</i>	C	2.4	0.22	2.4	D	3	0.29	0.07	3	0.6	
#5 CarilloRd-MaricopaHy <i>Minor Street Stop</i>	C	3	0.29	3	D	4.2	0.38	0.096	4.2	1.1	
#6 OjaiAv-MaricopaHy <i>Traffic Signal</i>	B	18.3	0.43	27	B	18.1	0.4	-0.028	26.7	-0.3	
#7 CountryClubDr-MaricopaHy <i>Traffic Signal</i>	A	6.1	0.54	8.4	A	6.1	0.54	0	8.4	0	
#8 SanAntonioStBristolRd-OjaiAv <i>Traffic Signal</i>	A	6.1	0.54	6.9	A	6.1	0.54	0	6.9	0	
#9 CanadaSt-OjaiAv <i>Minor Street Stop</i>	C	1.6	0.24	1.6	C	1.6	0.24	0	1.6	0	
#10 BlancheSt-OjaiAv <i>Minor Street Stop</i>	F	2.7	0.39	2.7	F	2.7	0.39	0	2.7	0	
#11 VenturaSt-OjaiAv <i>Minor Street Stop</i>	C	2.1	0.12	2.1	C	2.1	0.12	0	2.1	0	
#12 SignalSt-OjaiAv <i>Traffic Signal</i>	B	12.5	0.45	12.2	B	12.5	0.45	0	12.2	0	
#13 MontgomeryStW-OjaiAv <i>Minor Street Stop</i>	C	2.6	0.24	2.6	C	2.6	0.24	0	2.6	0	
#14 MontgomeryStE-OjaiAv <i>Minor Street Stop</i>	D	2.9	0.19	2.9	D	2.9	0.19	0	2.9	0	
#15 FoxSt-OjaiAv <i>Traffic Signal</i>	A	5.9	0.4	7.2	A	5.9	0.4	0	7.2	0	
#16 BaldSt-OjaiAv <i>Minor Street Stop</i>	C	0.4	0.05	0.4	C	0.4	0.05	0	0.4	0	
#17 SFultonSt-OjaiAv <i>Minor Street Stop</i>	D	2.7	0.2	2.7	D	2.7	0.2	0	2.7	0	
#18 NFultonSt-OjaiAv <i>Minor Street Stop</i>	B	0.8	0.06	0.8	B	0.8	0.06	0	0.8	0	
#19 ParkRd-OjaiAv <i>Minor Street Stop</i>	B	1.6	0.13	1.6	B	1.6	0.13	0	1.6	0	
#20 BryantSt-OjaiAv <i>Minor Street Stop</i>	C	2.3	0.27	2.3	C	2.3	0.27	0	2.3	0	

Table 3 - PM Peak Hour LOS Without & With Project (with 1 Lane each direction on Maricopa Hwy)

Intersection	2016 PM				2016+Project PM					
	Avg		Avg	Crit	Avg		Crit	V/C	Avg	Crit
	Avg	Del	Crit	Del	Del	Crit	Del	Crit	Del	Crit
Intersection	LOS	(sec)	V/C	(sec)	LOS	(sec)	V/C	Change	(sec)	Change
#1 MaricopaHy-ElRoblarDrCuyamaRd	B	10.8	0.42	10.8	B	10.8	0.42	0	10.8	0
#2 ChurchSt-MaricopaHy	C	2.7	0.12	2.7	C	3	0.15	0.027	3	0.3
#3 PirieRd-MaricopaHy	C	1.6	0.13	1.6	C	1.9	0.17	0.039	1.9	0.3
#4 VallerioAv-MaricopaHy	C	1.9	0.12	1.9	C	2.2	0.16	0.036	2.2	0.3
#5 CarilloRd-MaricopaHy	C	2.9	0.27	2.9	D	3.8	0.35	0.078	3.8	0.9
#6 OjaiAv-MaricopaHy	B	18.8	0.46	28	B	18.6	0.44	-0.024	27.4	-0.6
#7 CountryClubDr-MaricopaHy	A	5.1	0.57	7.1	A	5.1	0.57	0	7.1	0
#8 SanAntonioStBristolRd-OjaiAv	C	9.9	0.72	13.5	C	9.9	0.72	0	13.5	0
#9 CanadaSt-OjaiAv	C	1.4	0.23	1.4	C	1.4	0.23	0	1.4	0
#10 BlancheSt-OjaiAv	E	2.3	0.23	2.3	E	2.3	0.23	0	2.3	0
#11 VenturaSt-OjaiAv	D	2.4	0.14	2.4	D	2.4	0.14	0	2.4	0
#12 SignalSt-OjaiAv	B	13.3	0.46	13.4	B	13.3	0.46	0	13.4	0
#13 MontgomeryStW-OjaiAv	D	2.8	0.29	2.8	D	2.8	0.29	0	2.8	0
#14 MontgomeryStE-OjaiAv	D	2.5	0.18	2.5	D	2.5	0.18	0	2.5	0
#15 FoxSt-OjaiAv	A	7.4	0.47	9	A	7.4	0.47	0	9	0
#16 BaldSt-OjaiAv	C	0.7	0.11	0.7	C	0.7	0.11	0	0.7	0
#17 SFultonSt-OjaiAv	E	3.7	0.32	3.7	E	3.7	0.32	0	3.7	0
#18 NFultonSt-OjaiAv	C	1.1	0.08	1.1	C	1.1	0.08	0	1.1	0
#19 ParkRd-OjaiAv	B	2.1	0.17	2.1	B	2.1	0.17	0	2.1	0
#20 BryantSt-OjaiAv	C	2.6	0.31	2.6	C	2.6	0.31	0	2.6	0