



ATTACHMENT F

TRAFFIC ANALYSIS MEMORANDUM

DATED FEBRUARY 11, 2020



MEMORANDUM

TO: Mr. Jason Simmons; Consultants Collaborative
FROM: Jonathan Sanchez & Nick Mesler
DATE: February 11, 2020
RE: San Marcos Movie Studio – Traffic Analysis Memorandum

The purpose of this Traffic Analysis Memorandum is to analyze the existing traffic operations with the implementation of the San Marcos Movie Studio Project (Project) by analyzing the intersections of San Elijo Road North & Baker Street and San Elijo Road South & Baker Street as well as the roadway segments of San Elijo Road between the project driveway and Baker Street. In addition, it will be determined if signalizing the intersection of San Elijo Road & the Project Driveway is warranted at this time. Finally, this memorandum documents the number of drivers during the highest period of activity (PM period) that utilize the driveways of the gas station located at 1710 San Elijo Road, to make a “U-turn” from San Elijo Road South onto San Elijo Road North based on driveway counts.

Project Background

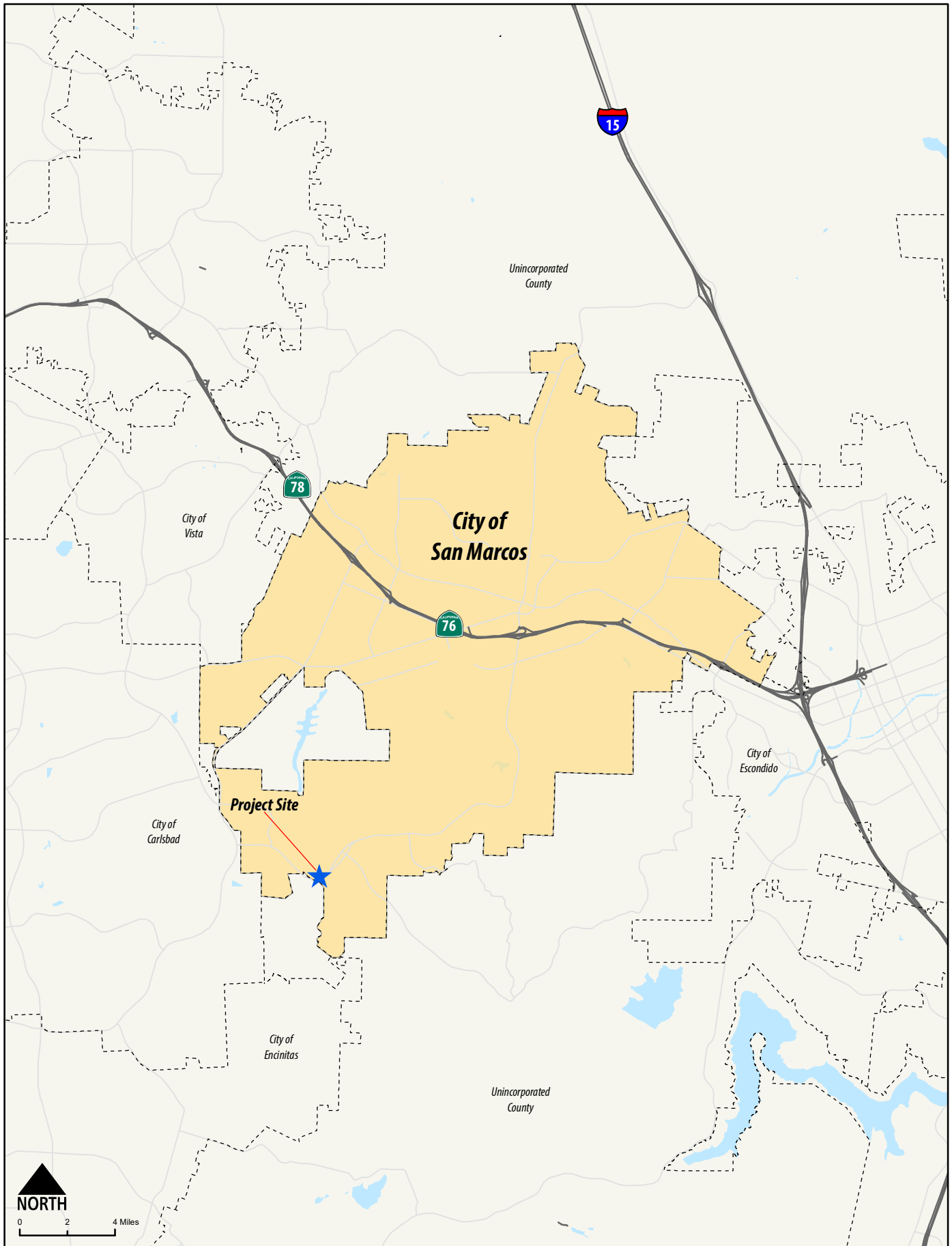
The previously approved traffic study conducted for the Project, prepared by Chen Ryan Associates on August 15, 2018, stated that the development of the San Marcos Studios and reconfiguration of the driveway would not result in a significant traffic impact. The Project was conditioned by San Marcos City Council to install a traffic signal at the San Elijo Road & Project Driveway intersection within one year of opening. The previous study did not conclude that signalization would be warranted by the Manual on Uniform Traffic Control Devices (MUTCD).

Project Description

The Project site consists of a movie studio that is utilized for filming and producing a reality show and documentary about youth sports culture and the making of Loma San Marcos. Additionally, the same movie studio is anticipated to be used for different movie production purposes that differ from the youth sports reality show.

The project’s hours of operation are between 3:00 PM and 9:00 PM during weekdays and from 8:00 AM to 8:00 PM on weekends, with workers having a 2:00 PM to 10:00 PM schedule during weekdays.

Figure 1 displays the Project location while **Figure 2** and **Figure 3** display the proposed site plan and circulation plan within the site, respectively.

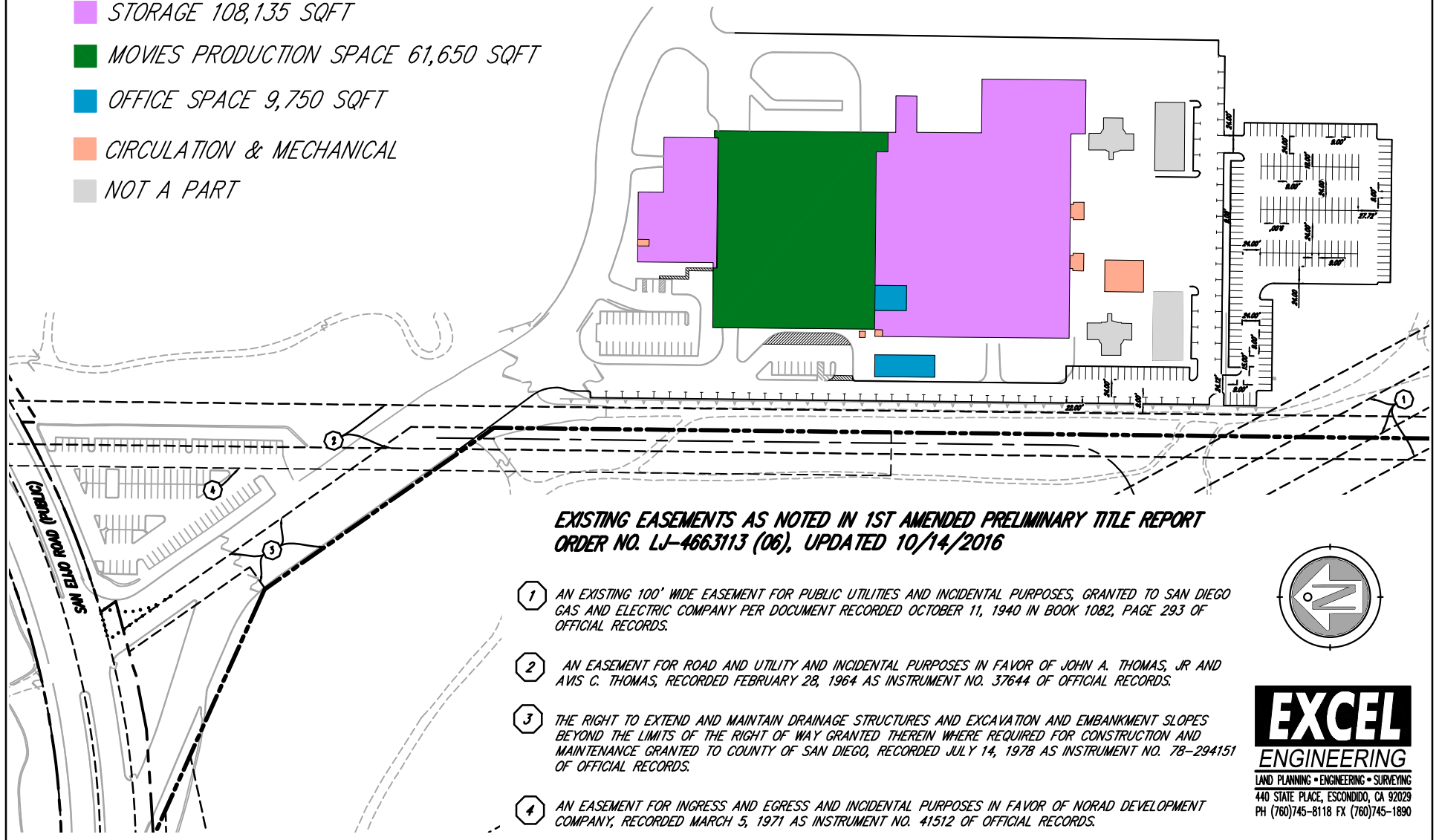


SITE PLAN

LOMA SAN MARCOS
San Marcos, California

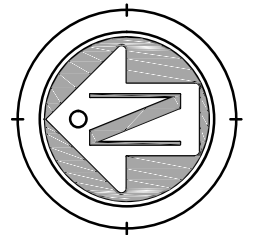
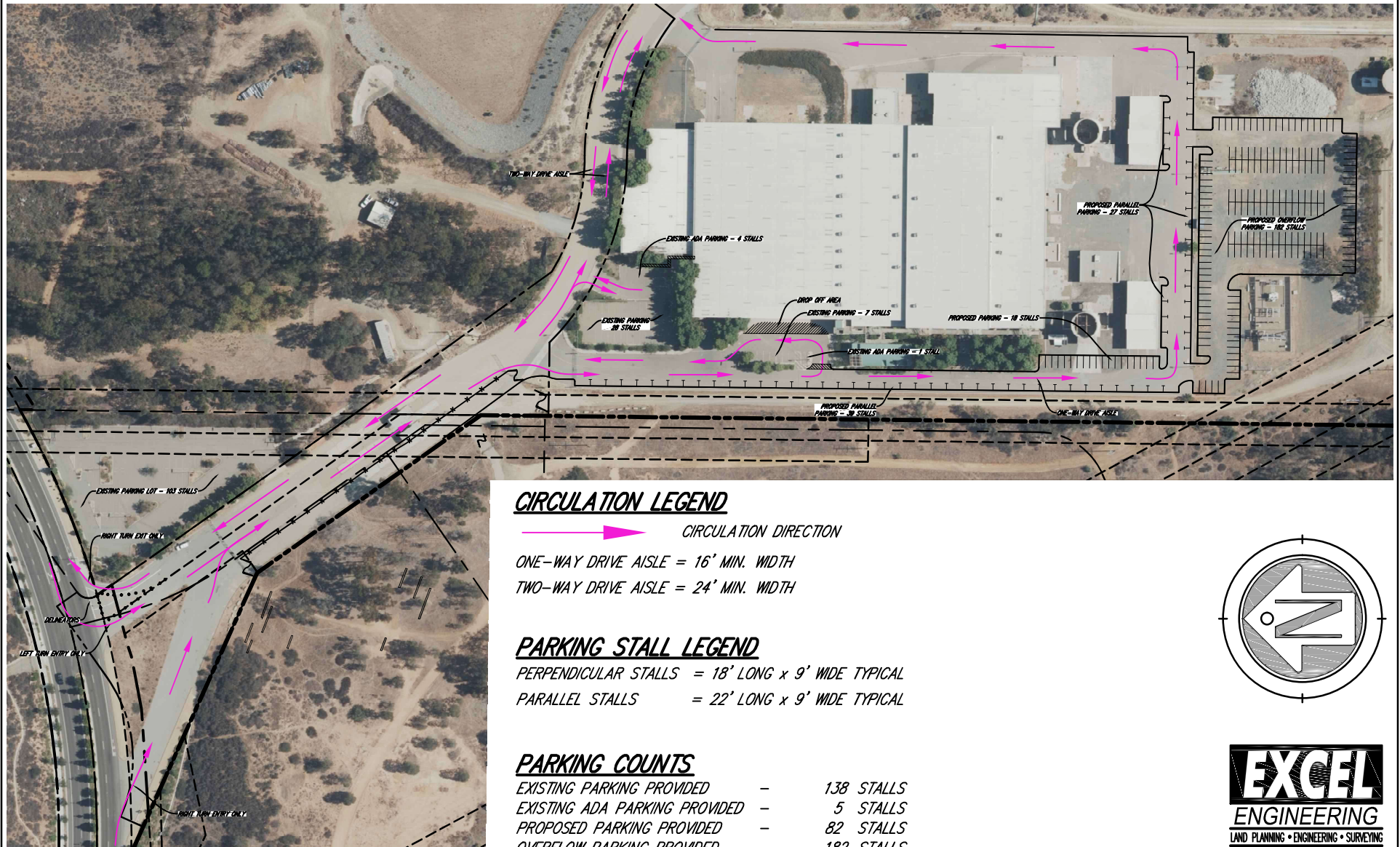
LEGENDS:

- STORAGE 108,135 SQFT
- MOVIES PRODUCTION SPACE 61,650 SQFT
- OFFICE SPACE 9,750 SQFT
- CIRCULATION & MECHANICAL
- NOT A PART



LOMA SAN MARCOS

PARKING AND CIRCULATION EXHIBIT



Project Study Area

This section documents the project study area roadway and intersection configuration, traffic volumes and traffic operations.

Roadway Segments

- San Elijo Road, between Melrose Drive/Dove Trail Drive and Project Driveway; and
- San Elijo Road, between Project Driveway and Baker Street.

Intersections

1. San Elijo Road North / Baker Street
2. San Elijo Road South / Baker Street

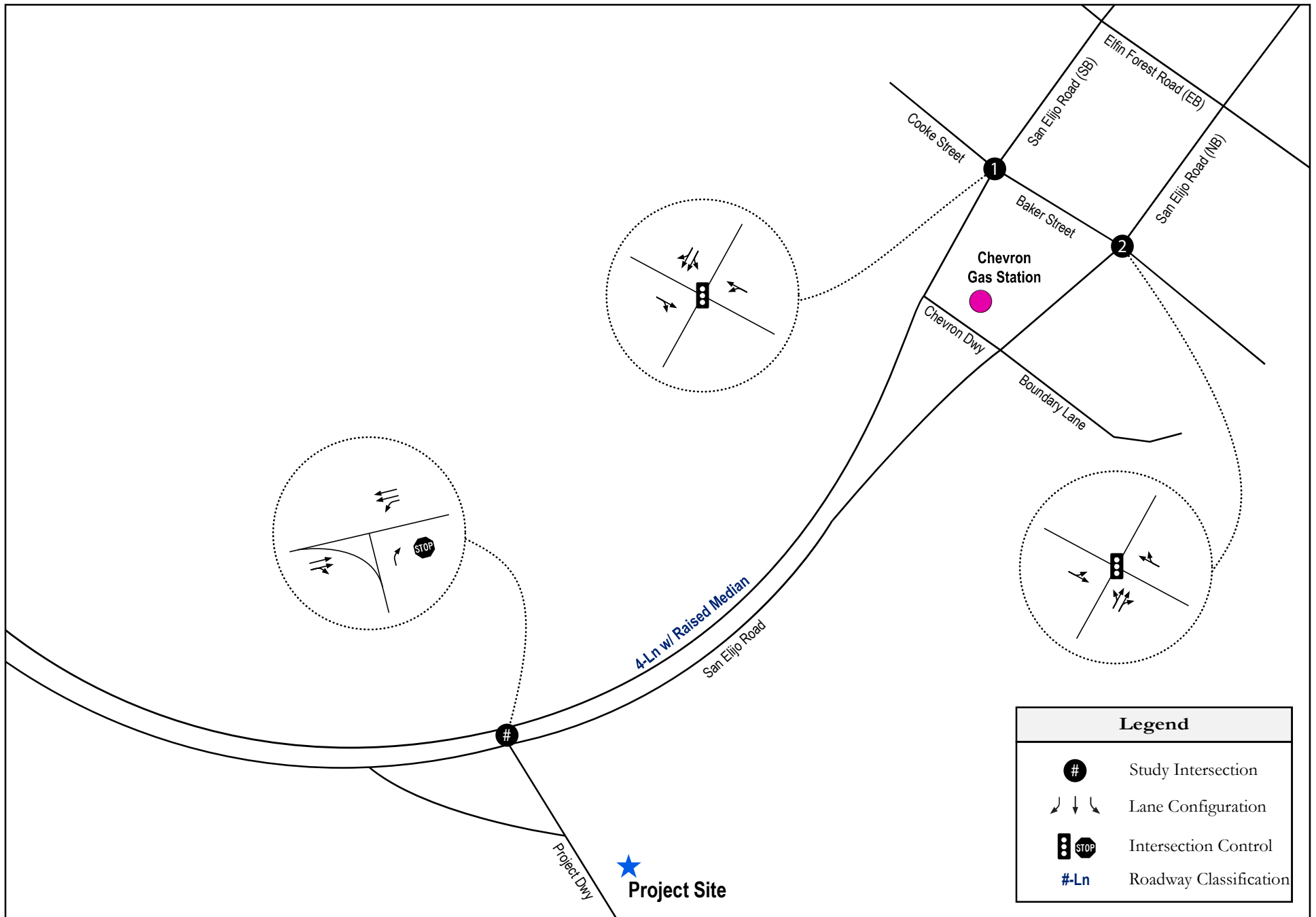
Intersections are analyzed under three scenarios:

- AM Weekday Peak Hour
- PM Weekday Peak Hour
- Midday Weekend Peak Hour

Roadway Facilities

San Elijo Road – Within the study area, San Elijo Road is a 4-lane roadway with a raised median and a posted speed limit of 45 mph. There are currently five-foot-wide sidewalks and Class II bike lanes on both sides of the roadway. On-street parking is prohibited on both sides of the roadway.

Figure 4 below displays the study area roadway and intersection geometrics along San Elijo Road under Existing conditions.



Pre-Project Conditions

The previously approved traffic study conducted for the Project, prepared by Chen Ryan Associates on August 15, 2018, anticipated that the project would generate a total of 63 peak hour trips (57-in / 6-out) during the AM and 69 peak hour trips (14-in / 55-out) during the PM. However, after approval and implementation of the project, based on counts at the project driveway it was identified that the project generates 2 peak hour trips (1-in / 1-out) during the AM peak hour and 40 peak hour trips (19-in / 21-out) during the PM peak hour.

Pre-Project conditions details such as traffic volumes, roadway analysis, and intersection analysis are provided in **Attachment 1**.

Existing Conditions (Project in Operation)

The roadway cross-section along the project frontage section of San Elijo Road and intersection lane configurations at the two study intersections is identical as the Pre-Project conditions.

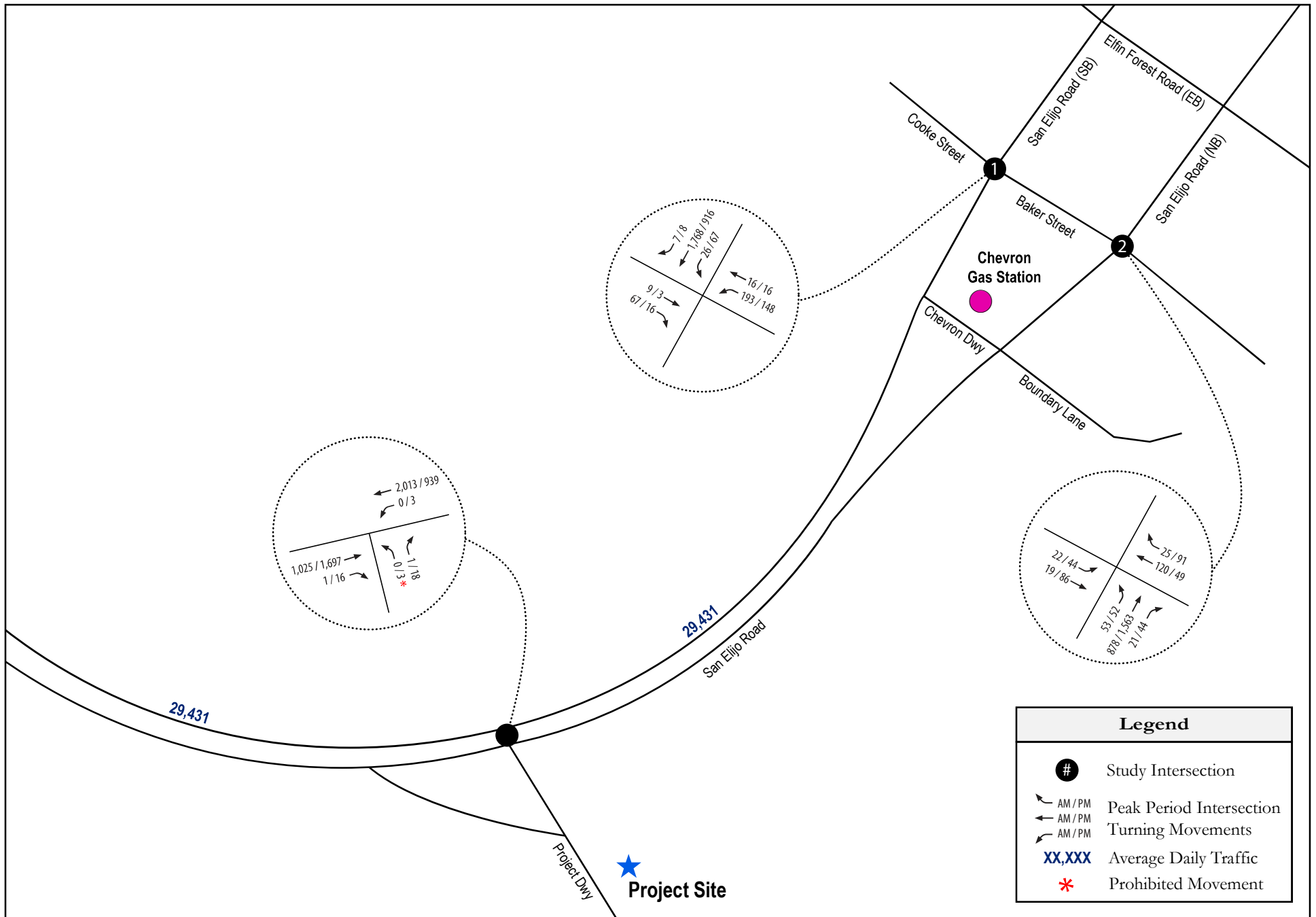
Traffic Volumes

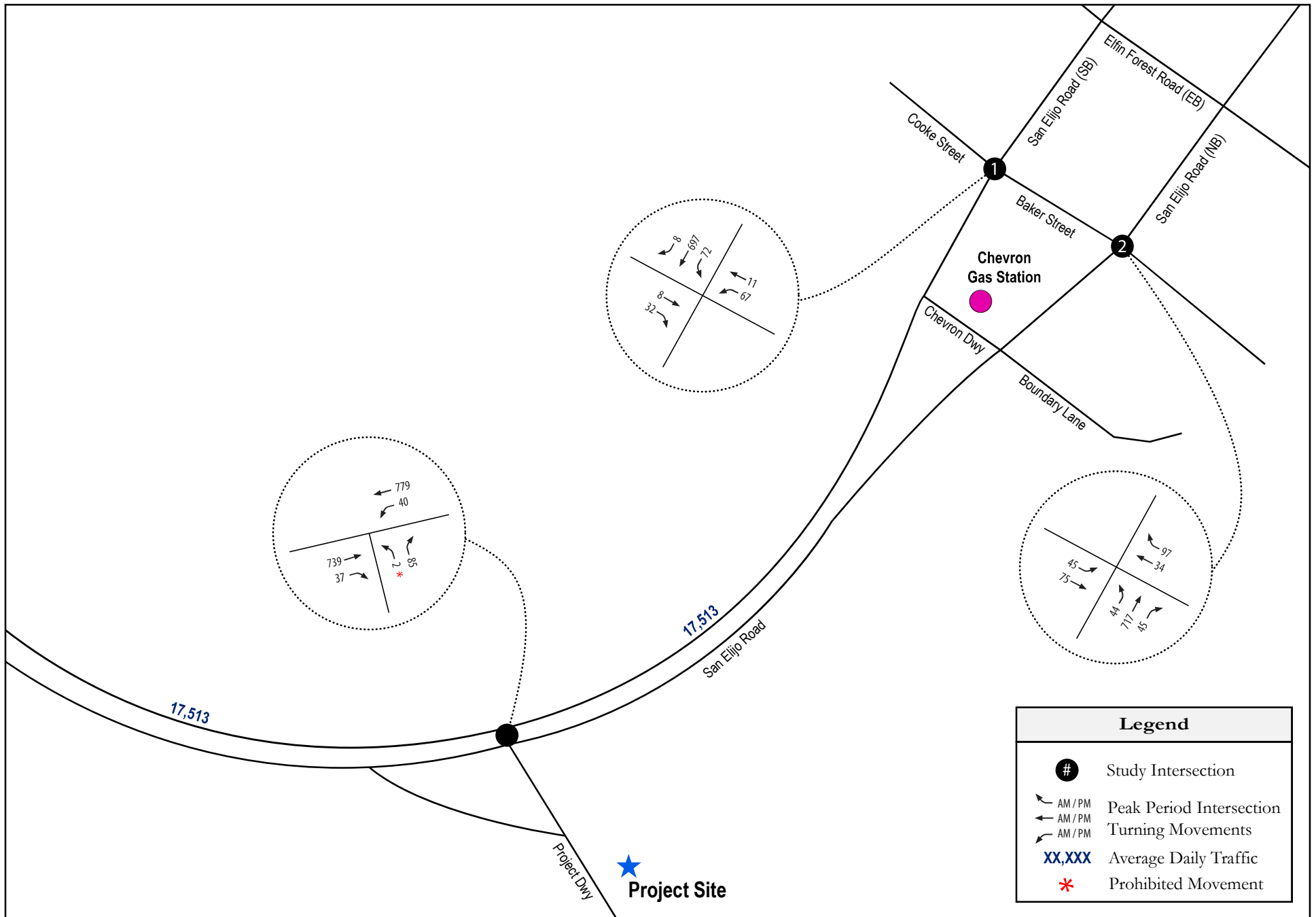
Traffic counts for the intersection and roadway segments within the study area were conducted by Elite Traffic Dynamics, LLC on one weekday and one weekend day on Tuesday, December 17, 2019, Sunday, December 15, 2019, during normal operations of the project. Additionally, counts were collected on, Sunday, February 2, 2020 during an average medium size event (basketball tournament) at the project site. Medium size events represent the vast majority of the events that currently take place at the project site. Counts were collected at the following as follows:

- Tuesday, December 17, 2019 – 2:00 PM to 6:00 PM in order to capture traffic volumes during the highest period of traffic activity in the area during the weekday. A total of 105 trips (45-in / 60-out) were observed to ingress and egress the project site during the four-hour period while 37 trips (16-in / 21-out) were observed to ingress and egress the project site during the peak hour (4:15 PM to 5:15 PM);
- Sunday, December 15, 2019 – 10:00 AM to 2:00 PM in order to capture traffic volumes during the highest period of traffic activity in the area during the weekend day. A total of 57 trips (22-in / 35-out) were observed to ingress and egress the project site during the four-hour period while 17 trips (6-in / 11-out) were observed to ingress and egress the project site during the peak hour (12:30 PM to 1:30 PM); and
- Sunday, February 2, 2020 – 8:00 AM to 2:00 PM in order to capture traffic volumes during the highest period of traffic activity in the area during a medium size event during a weekend day at the project site's driveway. A total of 544 trips (198-in / 346-out) were observed to ingress and egress the project site during the six-hour period while 124 trips (37-in / 87-out) were observed to ingress and egress the project site during the peak hour (11:15 AM to 12:15 PM).

Traffic counts are provided in **Attachment 2**.

Figure 5 displays the traffic volumes under Existing conditions during a weekday while **Figure 6** displays the traffic volumes under Existing conditions during a weekend day.





Traffic Operations Under Existing Conditions

This section documents the traffic operations under Existing conditions within the study area. Roadway segment and intersection operations are discussed separately below.

Roadway Segment

Table 1 displays the daily roadway level of service for San Elijo Road, along the project frontage under Existing conditions on a weekday.

Table 1 Roadway Segment Level of Service Results – Existing Conditions (Weekday)

Roadway	Segment	Functional Classification	LOS Threshold (LOS E)	ADT	V/C	LOS	Pre-Project ¹		Δ
							V/C	LOS	
San Elijo Road	Between Melrose Drive/Dove Tail Drive and Project Driveway	4-Lane w/Raised Median	40,000	29,431	0.736	C	0.718	C	0.018
	Between Project Driveway and Baker Street	4-Lane w/Raised Median	40,000	29,431	0.736	C	0.729	C	0.007

Source: Chen Ryan Associates, January 2020

Notes:

V/C = Volume to Capacity Ratio

Δ = Change in vehicle to capacity ratio between Pre-Project and Existing Conditions

¹ Roadway analysis results obtained from the San Marcos Movie Studios Traffic Analysis Memorandum prepared by Chen Ryan Associates on August 15, 2018.

As shown in Table 1, San Elijo Road continues to operate at LOS C within the study area with the implementation of the Proposed Project.

Table 2 displays the daily roadway level of service for San Elijo Road, along the project fontange under Existing Conditions on a weekend day.

Table 2 Roadway Segment Level of Service Results – Existing Conditions (Weekend day)

Roadway	Segment	Functional Classification	LOS Threshold (LOS E)	ADT	V/C	LOS	Pre-Project ¹		Δ
							V/C	LOS	
San Elijo Road	Between Melrose Drive/Dove Tail Drive and Project Driveway	4-Lane w/Raised Median	40,000	17,513	0.438	B	0.487	B	-0.049
	Between Project Driveway and Baker Street	4-Lane w/Raised Median	40,000	17,513	0.438	B	0.491	B	-0.053

Source: Chen Ryan Associates, January 2020

Note:

V/C = Volume to Capacity Ratio

Δ = Change in average intersection delay between Pre-Project and Existing Conditions

¹ Roadway analysis results obtained from the San Marcos Movie Studios Traffic Analysis Memorandum prepared by Chen Ryan Associates on August 15, 2018.

As shown in Table 2, San Elijo Road continues to operate at LOS B within the study area with the implementation of the Proposed Project.

Intersection

Table 3 displays the overall average intersection delay and LOS for the study area intersections under Existing Conditions on a weekday. LOS calculation worksheets are provided in **Attachment 3**.

Table 3 Peak Hour Intersection Level of Service Results – Existing Conditions (Weekday)

ID #	Intersection	Control Type	AM Peak Hour		PM Peak Hour		Pre-Project ¹	Pre-Project ¹	Δ in Delay
			Avg. Delay (sec.)	LOS	Avg. Delay (sec.)	LOS	Delay (AM/PM)	LOS (AM/PM)	
1	San Elijo Road North / Baker Street	Signal	28.1	C	29.8	C	27.9 / 13.2	C / B	0.2 / 16.6
2	San Elijo Road South / Baker Street	Signal	11.5	B	11.9	B	12.2 / 12.1	B / B	-0.7 / 0.2

Source: Chen Ryan Associates, January 2020

Notes:

Δ = Change in vehicle to capacity ratio between Pre-Project and Existing Conditions

¹ Roadway analysis results obtained from the San Marcos Movie Studios Traffic Analysis Memorandum prepared by Chen Ryan Associates on August 15, 2018.

As shown in Table 3, the analyzed intersections currently operate at acceptable LOS C or better with the implementation of the Proposed Project.

Table 4 displays the overall average intersection delay and LOS for the study area intersections under Existing Conditions on a weekend day. LOS calculation worksheets are provided in Attachment 3.

Table 4 Peak Hour Intersection Level of Service Results – Existing Conditions (Weekend day)

ID #	Intersection	Control Type	Midday Peak Hour		Pre-Project Delay (Midday)	Pre-Project LOS (Midday)	Δ in Delay
			Avg. Delay (sec.)	LOS			
1	San Elijo Road North / Baker Street	Signal	14.9	B	N/A	0.2 / 16.6	N/A
2	San Elijo Road South / Baker Street	Signal	13.4	B	N/A	-0.7 / 0.2	N/A

Source: Chen Ryan Associates, January 2020

Notes:

Δ = Change in vehicle to capacity ratio between Pre-Project and Existing Conditions.

¹ Roadway analysis results obtained from the San Marcos Movie Studios Traffic Analysis Memorandum prepared by Chen Ryan Associates on August 15, 2018.

As shown in Table 4, the analyzed intersections currently operate at acceptable LOS B with the implementation of the Proposed Project.

Pedestrians Crossing Project Driveway

Pedestrian counts were collected at the same days and times as vehicular counts in order to observe and determine the level of pedestrian activity at the project driveway during the project's hours of operation, which are between 3:00 PM and 9:00 PM during weekdays and from 8:00 AM to 8:00 PM on weekends, with workers having a 2:00 PM to 10:00 PM schedule during weekdays. Pedestrian counts per day are described below:

- Tuesday, December 17, 2019 – 2:00 PM to 6:00 PM: A total of 69 pedestrians were observed to cross the project driveway during the four-hour period. The peak hour of pedestrian activity at the project driveway occurred between 2:30 PM and 3:30 PM, with 59 pedestrians observed. During the peak hour of pedestrian activity, a total of 29 vehicles (4-in / 25-out) were observed to ingress and egress the project site. The pedestrian peak hour does not coincide with the vehicular peak hour of the project site, which occurs between 4:15 PM and 5:15 PM.
- Sunday, December 15, 2019 – 10:00 AM to 2:00 PM: A total of 25 pedestrians were observed to cross the project driveway during the four-hour period. The peak hour of pedestrian activity at the project driveway occurred between 11:30 AM and 12:30 PM, with 25 pedestrians observed. During the peak hour of pedestrian activity, a total of 15 vehicles (10-in / 5-out) were observed to ingress and egress the project site. The pedestrian peak hour does not coincide with the vehicular peak hour of the project site, which occurs between 12:30 PM and 1:30 PM.
- Sunday, February 2, 2020 – 8:00 AM to 2:00 PM: A total of 58 pedestrians were observed to cross the project driveway during the six-hour period. The peak hour of pedestrian activity at the project driveway occurred between 9:45 AM and 10:45 AM, with 25 pedestrians observed. During the peak hour of pedestrian activity, a total of 117 vehicles (54-in / 63-out) were observed to ingress and egress the project site. The pedestrian peak hour does not coincide with the vehicular peak hour of the project site, which occurs between 11:15 AM and 12:15 PM.

The pedestrian activity at the project driveway described above is consistent with the project site's hours of operation not coinciding with the dismissal period of the schools within the surrounding area.

Warrant Analysis

Two MUTCD signal warrant analysis were conducted to determine whether signalization of the San Elijo Road and Project Driveway intersection is necessary at this time, from a warrant perspective. Peak Hour Signal Warrant (Warrant 3) analysis was conducted for the three study scenarios, Weekday AM and PM Peak Hours, and Sunday (February 2, 2020) Midday Peak Hour, while the Peak Hour Pedestrian Volume Warrant (Warrant 4) was conducted only for the highest period of activity which was Weekday during the PM (when school is in session). All analyzed scenarios concluded that the existing traffic patterns as well as the pedestrian activity (no pedestrians were observed to cross San Elijo Road) do not meet the requirements to satisfy signal warrants 3 nor 4. The Peak Hour Signal Warrants can be found in **Attachment 4**.

U-Turns at Gas Station

City of San Marcos staff has expressed concerns related to drivers utilizing the driveways of the gas station located at 1710 San Elijo Road, to make a “U-turn” from San Elijo Road South onto San Elijo Road North. Therefore, counts were collected via video cameras at the two project driveways to determine the number of vehicles making U-turn movements.

Traffic counts were collected during a weekday (Tuesday, December 17, 2019) from 2:00 PM to 6:00 PM and from 10:00 AM to 2:00 PM during a weekend day (Sunday, December 15, 2019), and it was observed that a total of seventy-one (71) vehicles utilized these driveways to make either a U-turn movement or to cut through:

- Tuesday, December 17, 2019 (2:00 PM to 6:00 PM) – Twenty-seven (27) vehicles originated from Boundary Lane (northbound movement) and utilized the gas station driveways to cut through and eventually make a left-turn onto San Elijo Road North. Additionally, thirteen (13) vehicles utilized the gas station driveways to make a U-turn movement from San Elijo Road South onto San Elijo Road North.

The project trips identified to come out (right-turn out of driveway) of the project driveway from 2:00 PM and 6:00 PM was 60 trips. If it is assumed that all thirteen (13) vehicles that utilized the gas station driveways to make a U-turn movement from San Elijo Road South onto San Elijo Road North originated from the project site, then that represents approximately 33% (13/40) of the vehicular volumes that make use of the gas station driveways in an improper way.

- Sunday, December 15, 2019 (10:00 AM to 2:00 PM) - Twenty-one (21) vehicles originated from Boundary Lane (northbound movement) and utilized the gas station driveways to cut through and eventually make a left-turn onto San Elijo Road North. Additionally, ten (10) vehicles utilized the gas station driveways to make a U-turn movement from San Elijo Road South onto San Elijo Road North.

The project trips identified to come out (right-turn out of driveway) of the project driveway from 10:00 AM and 2:00 PM was 35 trips. If it is assumed that all ten (10) vehicles that utilized the gas station driveways to make a U-turn movement from San Elijo Road South onto San Elijo Road North originated from the project site, then that represents approximately 33% (10/31) of the vehicular volumes that make use of the gas station driveways in an improper way.

However, it is not certain that the twenty-three (23) vehicles observed making a U-turn movement between the hours of 2:00 PM and 6:00 PM on Tuesday, December 17 and between the hours of 10:00 AM and 2:00 PM at the gas station driveways originated from the project site. Additionally, the majority of the vehicles (48) utilizing the gas station driveways to cut through originate from Boundary Lane and are likely not related to the project and represent 67% of the vehicular volumes that make use of the gas station driveways in an improper way, which represents an existing conditions problem, isolated from the San Marcos Movie Studio project.

It is important to note that counts during the medium size event (Sunday, February 2, 2020) were only conducted at the project driveway, and not at the gas station driveways.

Conclusion

The implementation of the proposed projects has not caused adverse effects on the transportation network. Additionally, the traffic signal warrant analysis conducted at the intersection of the San Elijo Road and the Project Driveway does not meet the requirements for signalization. Finally, it was observed that a total of seventy-one (71) vehicles utilized the gas station driveways to make either a U-turn movement or to cut through, however, it is not certain that the twenty-three (23) vehicles observed making a U-turn movement between the hours of 2:00 PM and 6:00 PM on Tuesday, December 17 and between the hours of 10:00 AM and 2:00 PM at the gas station driveways originated from the project site. Additionally, the majority of the vehicles (48) utilizing the gas station driveways to cut through originate from Boundary Lane and are likely not related to the project and represent 67% of the vehicular volumes that make use of the gas station driveways in an improper way.

Please feel free to contact me at (619) 468-2739 with any questions and/or comments.

Sincerely,



Jonathan Sanchez

**Attachment 1 – San Marcos Movie Studio Traffic Analysis Memorandum,
August 15, 2018**



August 15, 2018

Mr. Jason Simmons
Consultants Collaborative
160 Industrial Street
Suite 200
San Marcos, CA 92078

Re: San Marcos Movie Studio – Traffic Analysis Memorandum

Dear Mr. Simmons,

The purpose of this Traffic Analysis Memorandum is to assess the potential transportation related impacts that may be associated with the San Marcos Movie Studio Project (Proposed Project).

Project Background

The previously approved traffic study conducted for the San Marcos Studios Project, prepared by Crain & Associates, 2003, stated that the development of the San Marcos Studios was scheduled to occur in two phases. Phase I would consist of the conversion of the existing onsite vacant MRF buildings to house the intended production, studio and office uses, including interior structural modifications to increase the useable floor area from approximately 194,500 to 213,361 square feet. Additionally, completion of Phase I was expected to occur in 2005. Phase II was to include the construction of a new six-story, 120,000 square foot office building and a multi-story parking structure capable of accommodating up to approximately 935 Vehicles.

The previous traffic study concluded that after completion and occupancy, Phase I of the project could generate approximately, 775 net new daily trips, including 101 (91-inbound, 10 outbound) new trips occurring during the AM peak hour and 101 net new trips (20 inbound, 81 outbound) occurring during the PM peak hour. At full buildout, the project could generate approximately 1,857 net new daily trips, including 242 net new trips (218 inbound; 24 outbound) during the AM peak hour and 242 net new trips (48 inbound, 194 outbound) during the PM peak hour.

Project Description

The proposed project consists of a movie studio that would be utilized for filming and producing a reality show and documentary about youth sports culture and the making of Loma San Marcos. Additionally, the same movie studio is anticipated to be used for different movie production purposes that differ from the youth sports reality show. Therefore, this traffic analysis memorandum analyses the following scenarios:

- Scenario A: Youth Sports Reality Show
- Scenario B: Movie Production

The proposed project under Scenarios A and B consist of the following land uses:

- 61,650 sq.ft. of Movie Production;
- 9,750 sq.ft of Media Office; and
- 108,135 sq.ft. of Storage.

The 61,650 sq.ft. of Movie Production will be utilized to build 5 youth sports courts destined for Basketball, Volleyball and other floor sports with the intent to play actual recreationally competitive games while a live audience watches and interacts with the cameras and the players.

The proposed project would be in operations between 3pm and 9pm during weekdays and from 8am to 8pm on weekends, with workers having a 2pm to 10pm schedule during weekdays. Therefore, only the PM peak hour will be analyzed for the purpose of determining potential traffic impacts during peak hours.

As mentioned above, the same proposed project site would also be utilized as a movie production area in which the 61,650 sq.ft. of "Movie Production" land use could also be used during typical business hours between 8am and 5pm for movie production uses instead of the filming of the youth sports reality show. However, it is important to note that none of the different movie production uses would overlap with the filming and production of the youth sports reality show.

Figure 1 displays the Proposed Project location while **Figure 2** and **Figure 3** display the proposed project site plan and circulation plan within the site, respectively.

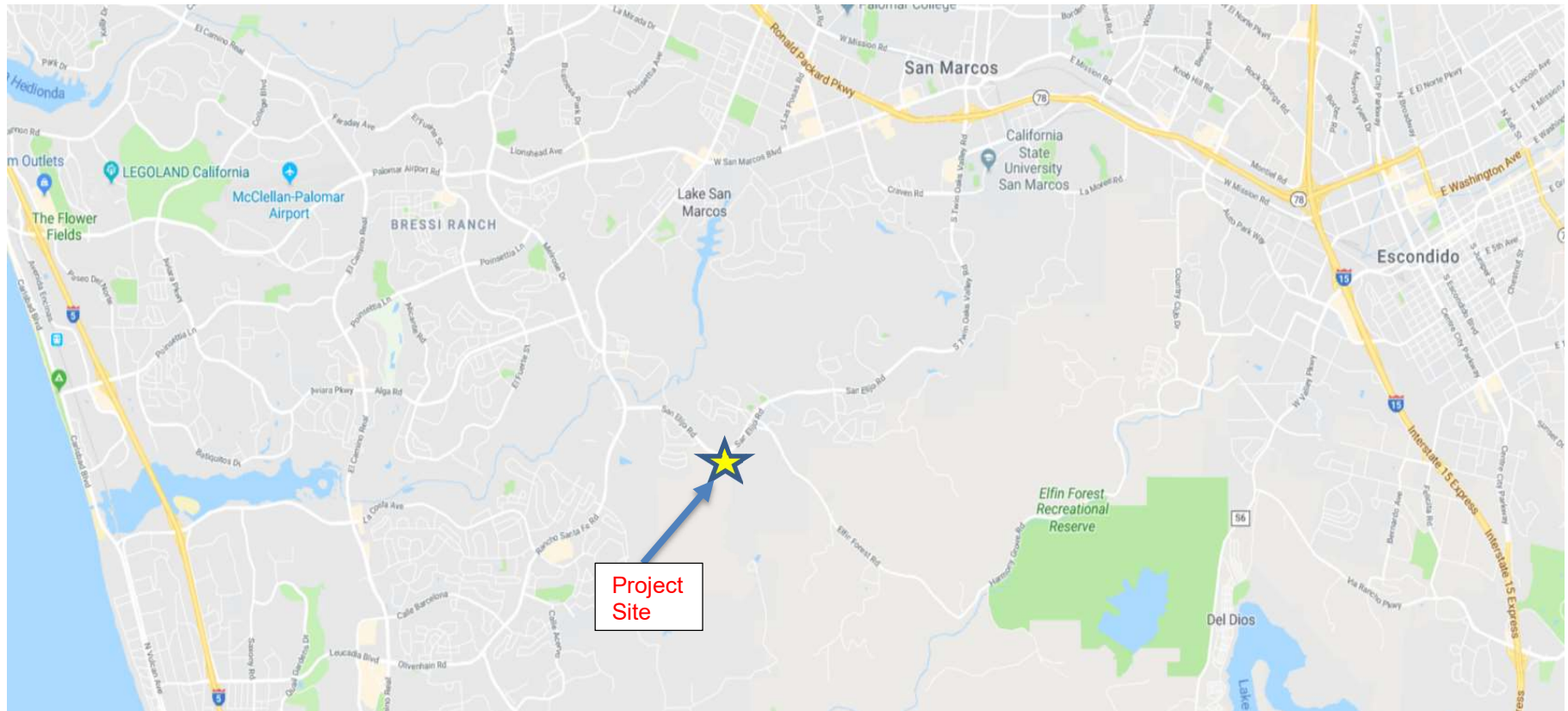


Figure 1: Project Location



LOMA SAN MARCOS PARKING AND CIRCULATION EXHIBIT



Figure 3: Circulation Plan

Project Study Area

Based on the project location and proposed land uses, it was determined that the study area would include the following:

Roadway Segments

- San Elijo Road, between Melrose Drive/Dove Trail Drive and Project Driveway; and
- San Elijo Road, between Project Driveway and Baker Street.

Intersections

1. San Elijo Road / Project Driveway
2. San Elijo Road North / Baker Street
3. San Elijo Road South / Baker Street

Intersections were analyzed based on the hours of operation of the different scenarios. For example, under Scenario A, only the PM peak hour was analyzed - but for Scenario B both AM and PM peak hours were analyzed.

It is important to note that the, the intersections of San Elijo Road North / Baker Street and San Elijo Road South / Baker Street are only analyzed during “weekday” conditions because of higher traffic volumes when compared to a weekend day.

Existing Conditions

This section documents the existing study area roadway and intersection configuration, traffic volumes and traffic operations.

Roadway Facilities

San Elijo Road – Within the study area, San Elijo Road is a 4-lane roadway with a raised median and a posted speed limit of 45 mph. There are currently five-foot-wide sidewalks and Class II bike lanes on both sides of the roadway. On-street parking is prohibited on both sides of the roadway.

Figure 4 below displays the study area roadway and intersection configurations along San Elijo Road.

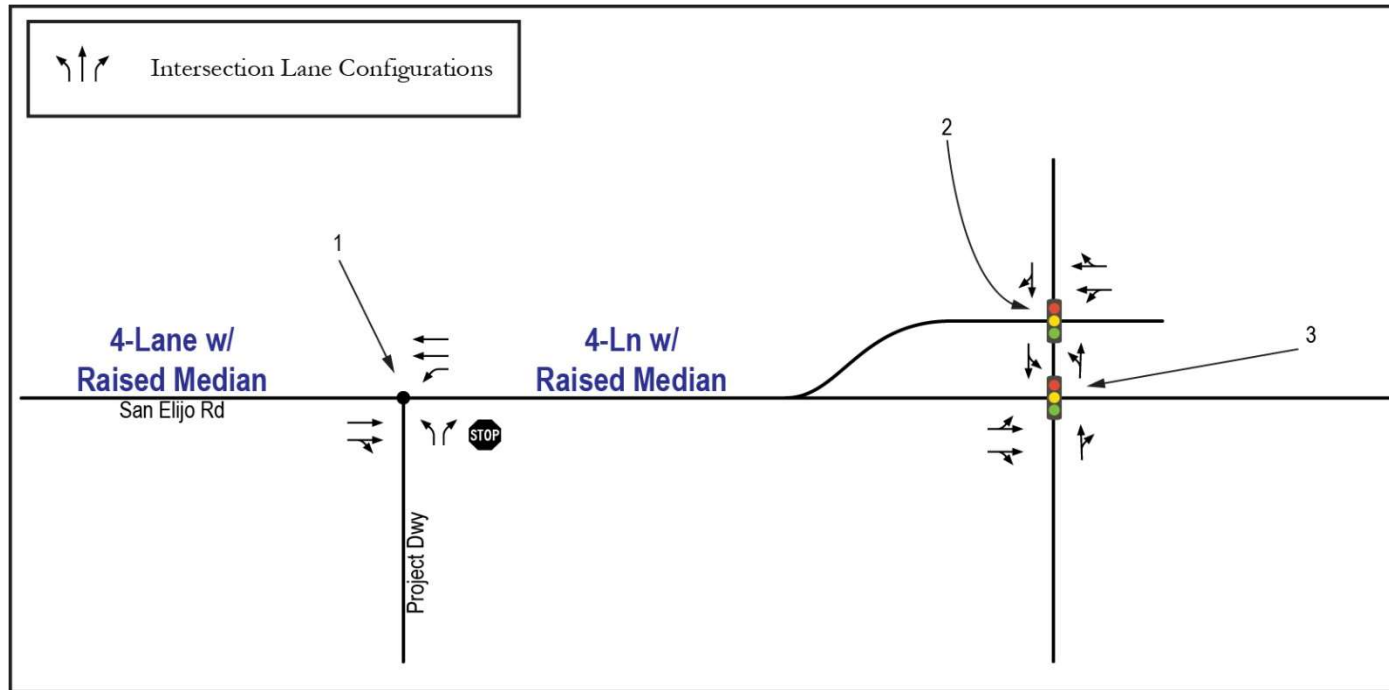


Figure 4: Roadway and Intersection Configuration

Traffic Volumes

Traffic counts for the intersection and roadway segments within the study area were conducted on a weekday and two weekend days on Wednesday, November 29, 2017 and Tuesday, December 5, 2017 and Saturday, January 13, 2018 and Sunday, January 14, 2018. As a conservative approach, the weekend day with the highest traffic volumes was utilized for the analysis (Saturday). Traffic counts are provided in **Attachment 1**.

Figure 5 displays the existing daily traffic volumes during a weekday while **Figure 6** displays weekend day existing daily traffic volumes during a weekend day along the project frontage section of San Elijo Road, as well as the peak hour intersection turning movement at the project driveway.

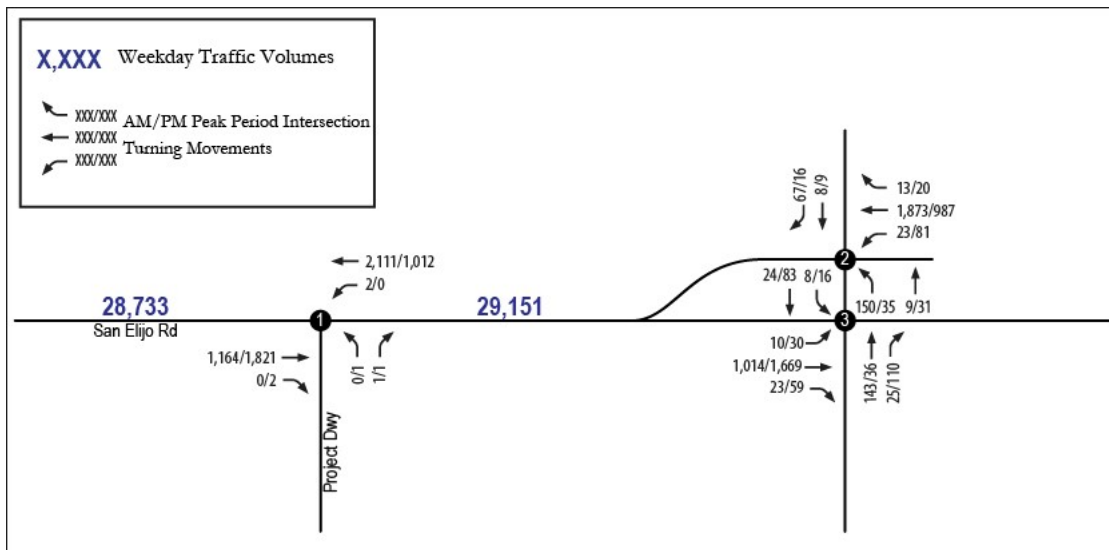


Figure 5: Traffic Volumes – Existing Conditions (weekday)

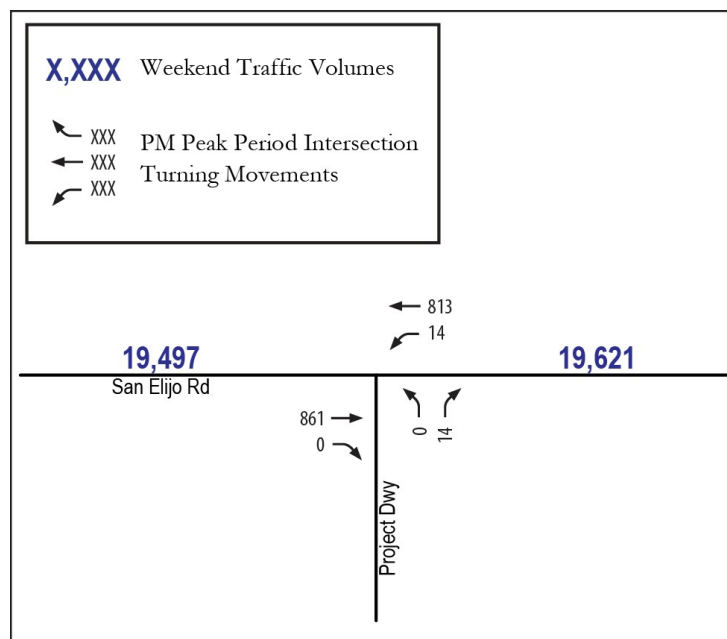


Figure 6: Traffic Volumes – Existing Conditions (weekend day)

Traffic Operations

This section documents the existing traffic operations at the study area facilities. Roadway segment and intersection operations are discussed separately below.

Roadway Segment

The City of San Marcos utilizes the roadway capacities and level of service (LOS) standards outlined in Table 2 of the *SANTEC/ITE Guidelines for Traffic Impact Studies [TIS] within the San Diego Region*, March 2000. This table is provided in **Attachment 2**.

Table 1 below displays the daily roadway level of service for San Elijo Road within the study area, under Existing Conditions during a weekday.

Table 1: Existing Daily Roadway Level of Service - Weekday

Roadway	Segment	X-Section	ADT	Capacity (LOS E)	V/C	LOS
San Elijo Road	Between Melrose Drive/Dove Tail Drive and Project Driveway	4-Lane w/Raised Median	28,733	40,000	0.718	C
	Between Project Driveway and Baker Street		29,151		0.729	C

Source: NDS, Chen Ryan Associates, July 2018

Note:

V/C: Volume to Capacity Ratio.

As shown above, San Elijo Road currently operates at LOS C within the study area.

Table 2 below displays the daily roadway level of service for San Elijo Road within the study area, under Existing Conditions during a weekend day.

Table 2: Existing Daily Roadway Level of Service – Weekend day

Roadway	Segment	X-Section	ADT	Capacity (LOS E)	V/C	LOS
San Elijo Road	Between Melrose Drive/Dove Tail Drive and Project Driveway	4-Lane w/Raised Median	19,497	40,000	0.487	B
	Between Project Driveway and Baker Street		19,621		0.491	B

Source: NDS, Chen Ryan Associates, July 2018

Note:

V/C: Volume to Capacity Ratio.

As shown, San Elijo Road currently operates at LOS B within the study area under Existing Conditions during a weekend day.

Intersection

The overall average intersection delay and LOS methodologies outlined in the *2010 Highway Capacity Manual* (HCM) were utilized to analyze the study area intersection. Synchro 9.0 Traffic Analysis Software was utilized to perform the analysis. Signal timing sheets are provided in Attachment 1.

Table 3 displays the overall average intersection delay and LOS for the study area intersections under Existing Conditions during a weekday. LOS calculation worksheets are provided in **Attachment 3**.

Table 3: Existing Peak Hour Intersection Level of Service – Weekday

Intersection	Traffic Control	Existing Conditions					
		Worst approach AM	Average Delay (sec.) AM	LOS AM	Worst approach PM	Average Delay (sec.) PM	LOS PM
1. San Elijo Road / Project Driveway	SSSC	NBR	17.1	C	NBL	184.4	F
2. San Elijo Road North / Baker Street	Signalized	-	29.7	C	-	31.1	C
3. San Elijo Road South / Baker Street	Signalized	-	12.1	B	-	12.3	B

Source: Chen Ryan Associates, July 2018

Notes:

SSSC = Side-Street Stop Control.

For SSSC intersections, the delay shown is the worst delay experienced by any of the approaches.

As shown, the analyzed intersections currently operate at LOS C or better during both AM and PM peak hours during a weekday, with the exception of the following intersection:

- San Elijo Road / Project Driveway – LOS F during the PM peak hour.

It is important to note that the intersections of San Elijo Road North / Baker Street and San Elijo Road South / Baker Street are only analyzed during “weekday” conditions because of higher traffic volumes when compared to a weekend day.

Table 4 displays the overall average intersection delay and LOS for the study area intersections under Existing Conditions during a weekend day. LOS calculation worksheets are provided in Attachment 3.

Table 4: Existing Peak Hour Intersection Level of Service – Weekend day

Intersection	Traffic Control	Existing Conditions		
		Worst approach PM	Average Delay (sec.) PM	LOS PM
1. San Elijo Road / Project Driveway	SSSC	NBR	12.1	B
2. San Elijo Road North / Baker Street	Signalized	-	N/A	N/A
3. San Elijo Road South / Baker Street	Signalized	-	N/A	N/A

Source: Chen Ryan Associates, July 2018

Notes:

SSSC = Side-Street Stop Control.

For SSSC intersections, the delay shown is the worst delay experienced by any of the approaches.

As shown, the analyzed intersection currently operates at acceptable LOS B during the PM peak hour under Existing Conditions during a weekend day.

Queueing

The 95th percentile queue was calculated based on the methodologies outlined in the *2010 Highway Capacity Manual* (HCM) to analyze the study area intersection. Synchro 9.0 Traffic Analysis Software was utilized to perform the analysis.

Table 5 displays queueing at the proposed project driveway under Existing Conditions during a weekday, while **Table 6** displays queueing during a weekend day.

Table 5: Existing Peak Hour Queueing Analysis – Weekday

Intersection	Traffic Control	Project Driveway Length ¹	Existing Conditions			
			Worst approach AM	95 th Percentile Queue (ft) AM	Worst approach PM	95 th Percentile Queue (ft) PM
1. San Elijo Road / Project Driveway	SSSC	200 feet	NBR	25 feet	NBR	25 feet

Source: Chen Ryan Associates, July 2018

Notes:

SSSC = Side-Street Stop Control.

Queueing results obtained from HCM 2010 report assuming 25 feet per vehicle.

¹ Measured from existing driveway stop bar to existing gate.

As shown, 25 feet of queue or one vehicle is anticipated at the project driveway during both the AM and PM peak hours.

Table 6: Existing Peak Hour Queueing Analysis – Weekend day

Intersection	Traffic Control	Project Driveway Length ¹	Existing Conditions	
			Worst approach PM	95 th Percentile Queue (ft) PM
1. San Elijo Road / Project Driveway	SSSC	200 feet	NBR	25 feet

Source: Chen Ryan Associates, July 2018

Notes:

SSSC = Side-Street Stop Control.

Queueing results obtained from HCM 2010 report assuming 25 feet per vehicle.

¹ Measured from existing driveway stop bar to existing gate.

As shown, 25 feet of queue or one vehicle is anticipated at the project driveway during the PM peak hour.

Project Trip Generation, Distribution and Assignment

This section outlines the analysis assumptions relating to the Proposed Project trip generation, assumed trip distribution pattern and trip assignment under Scenarios A and B.

Trip Generation – Scenario A

The proposed project under Scenario A consists of a movie studio that will film and produce a reality show and documentary about youth sports culture and the making of Loma San Marcos. The proposed project consists of the following land uses:

- 61,650 sq.ft. of Movie Production;
- 9,750 sq.ft of Media Office; and
- 108,135 sq.ft. of Storage.

The 61,650 sq.ft. of Movie Production will be utilized to build 5 youth sports courts destined for Basketball, Volleyball and other floor sports with the intent to play actual recreationally competitive games while live audience watches and interacts with the cameras and the players. Media offices will be used for editing and producing the episodes and film documentary.

The proposed project would be in operations between 3pm and 9pm during weekdays and from 8am to 8pm during weekends, with workers having a 2pm to 10pm schedule. Therefore, only the PM peak hour will be analyzed in order to determine potential traffic impacts.

Neither the SANDAG Not So Brief Guide to Vehicular Trip Generation nor the latest ITE Trip Generation Manual contain trip rates for land uses similar to this facility, the following trip rates are proposed:

- 61,650 sq.ft. of Movie Production - Although the proposed project land use is classified as “Movie Production”, the square footage would be used to build 5 youth sports courts, therefore, it is proposed as a conservative approach that the “Soccer Complex” land use trip rate from ITE Trip Generation Manual, 9th Edition was utilized to determine the number of trips generated.
- 9,750 sq.ft of Media Office – Based on conversations with the project applicant, the “Media Office” land use would operate similarly to that of an “Industrial Park” land use because of all the operations being confined within the proposed project. Therefore, the “Industrial Park” trip rate found in the SANDAG Not So Brief Guide to Vehicular Trip Generation was utilized to determine the number of trips generated.
- 108,135 sq.ft. of Storage – The proposed project site currently has storage operations and based on counts conducted on November 29, 2017, it was determined that 2 trips during the PM peak hour egressed from the project driveway. The proposed project would not cause the existing storage trip generation to increase, however, it would restrict storage operations to off peak hours. Therefore, the trips associated with the existing storage land use would be removed from the transportation network during peak hours.

Table 7 displays the proposed project trip generation.

Table 7: Proposed Project Trip Generation – Scenario A

Land Use	Quantity	Trip Rate	Daily Trips		PM Peak Hour
Soccer Complex	5	71.33 trips ¹ / Field	357	26%	93 (39-in / 54-out)
Industrial Park	9,750 sf	8 trips ² / 1,000 sf	78	12%	5 (1-in / 4-out) ³
Storage	108,135 sf	Based on driveway counts	4	50%	Trips will not occur during the PM peak hour ⁴
Proposed Project Total			439	-	98 (40-in / 58-out)

Source: SANDAG's Not So Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, April 2002. ITE Trip Generation Manual, 9th Edition.

Notes:

¹ ITE Trip Generation Manual, 9th Edition Soccer Complex Rates were utilized.

² SANDAG Trip Generation Rates for Industrial Park were utilized.

³ Workers would work between 2pm and 10pm. However, for a conservative analysis, it is assumed that 50% of the trips generated by the "Media Office" land use would occur during the PM peak hour.

⁴ Existing storage trips would be restricted to non-peak hour operations.

As shown, the Proposed Project is anticipated to generate a total of 439 daily trips, including 98 trips (40-in / 58-out) during the PM peak hour. This trip generation applies for both the weekday and weekend day.

Trip Generation – Scenario B

The proposed project under Scenario B consists of a movie studio used for different movie production purposes that differ from the youth sports reality show. The proposed project consists of the following land uses:

- 61,650 sq.ft. of Movie Production;
- 9,750 sq.ft of Media Office; and
- 108,135 sq.ft. of Storage.

The proposed project would be in operations between 8am and 5pm.

Neither the SANDAG Not So Brief Guide to Vehicular Trip Generation nor the latest ITE Trip Generation Manual contain trip rates for land uses similar to this facility, the following trip rates are proposed:

- 61,650 sq.ft. of Movie Production - Based on conversations with the project applicant, the "Movie Production" land use would operate similarly to that of an "Industrial Park" land use because of all the operations being confined within the proposed project. Therefore, the "Industrial Park" trip rate found in the SANDAG Not So Brief Guide to Vehicular Trip Generation was utilized to determine the number of trips generated.
- 9,750 sq.ft of Media Office – Based on conversations with the project applicant, the "Media Office" land use would operate similarly to that of an "Industrial Park" land use because of all the operations being confined within the proposed project. Therefore, the "Industrial Park" trip

rate found in the SANDAG Not So Brief Guide to Vehicular Trip Generation was utilized to determine the number of trips generated.

- 108,135 sq.ft. of Storage – The proposed project site currently has storage operations and based on counts conducted on November 29, 2017, it was determined that 2 trips during the PM peak hour egressed from the project driveway. The proposed project would not cause the existing storage trip generation to increase, however, it would restrict storage operations to off peak hours. Therefore, the trips associated with the existing storage land use would be removed from the transportation network during peak hours.

Table 8 displays the proposed project trip generation under Scenario B.

Table 8: Proposed Project Trip Generation – Scenario B

Land Use	Quantity	Trip Rate	Daily Trips		AM Peak Hour		PM Peak Hour
Movie Production	61,650 sf	8 trips ¹ / 1,000 sf	494	11%	54 (49-in / 5-out)	12%	60 (12-in / 48-out)
Industrial Park	9,750 sf	8 trips ¹ / 1,000 sf	78	11%	9 (8-in / 1-out)	12%	9 (2-in / 7-out)
Storage	108,135 sf	Based on driveway counts	4	50%	Trips will not occur during the AM peak hour ²	50%	Trips will not occur during the PM peak hour ²
Proposed Project Total			576	-	63 (57-in / 6-out)	-	69 (14-in / 55-out)

Source: SANDAG's Not So Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, April 2002

Notes:

¹ SANDAG Trip Generation Rates for Industrial Park were utilized.

² Existing storage trips would be restricted to non-peak hour operations.

As shown, the Proposed Project is anticipated to generate a total of 576 daily trips, including 63 trips (57-in / 6-out) during the AM peak hour and 69 trips (14-in / 55-out) during the PM peak hour.

Project Trip Distribution – Scenarios A & B

The project trip distribution for both Scenarios A and B was developed based on existing travel patterns and land uses along San Elijo Road. It was assumed that 80% of the traffic would access the Proposed Project to/from the west and the other 20% would access the Proposed Project to/from the east. Peak hour project traffic was then distributed to the study intersections.

Project Trip Assignment – Scenarios A & B

The project trip assignment for both Scenarios A and B was calculated by applying the project trip generation (displayed in Table 3) and distributing it to the study area roadway network based on the assumed project trip distribution. **Figure 7** and **Figure 8** display the project trip assignment for Scenarios A and B, respectively.

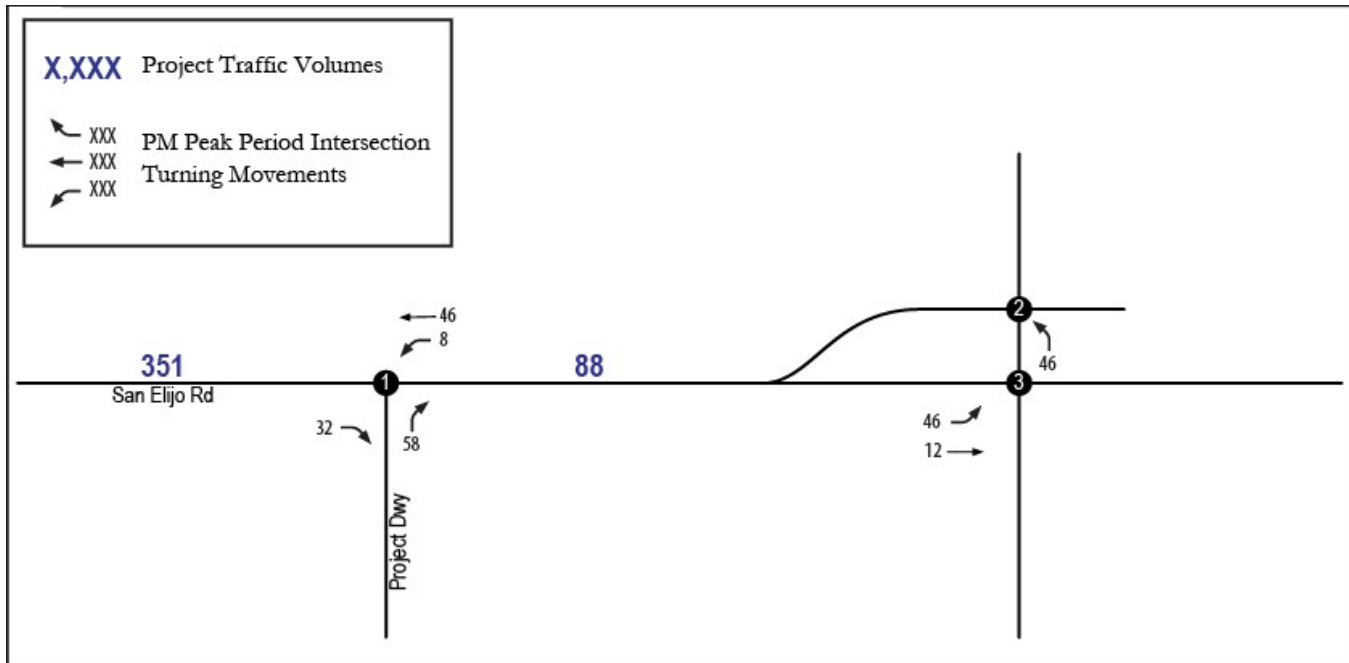


Figure 7: Scenario A - Project Trip Assignment

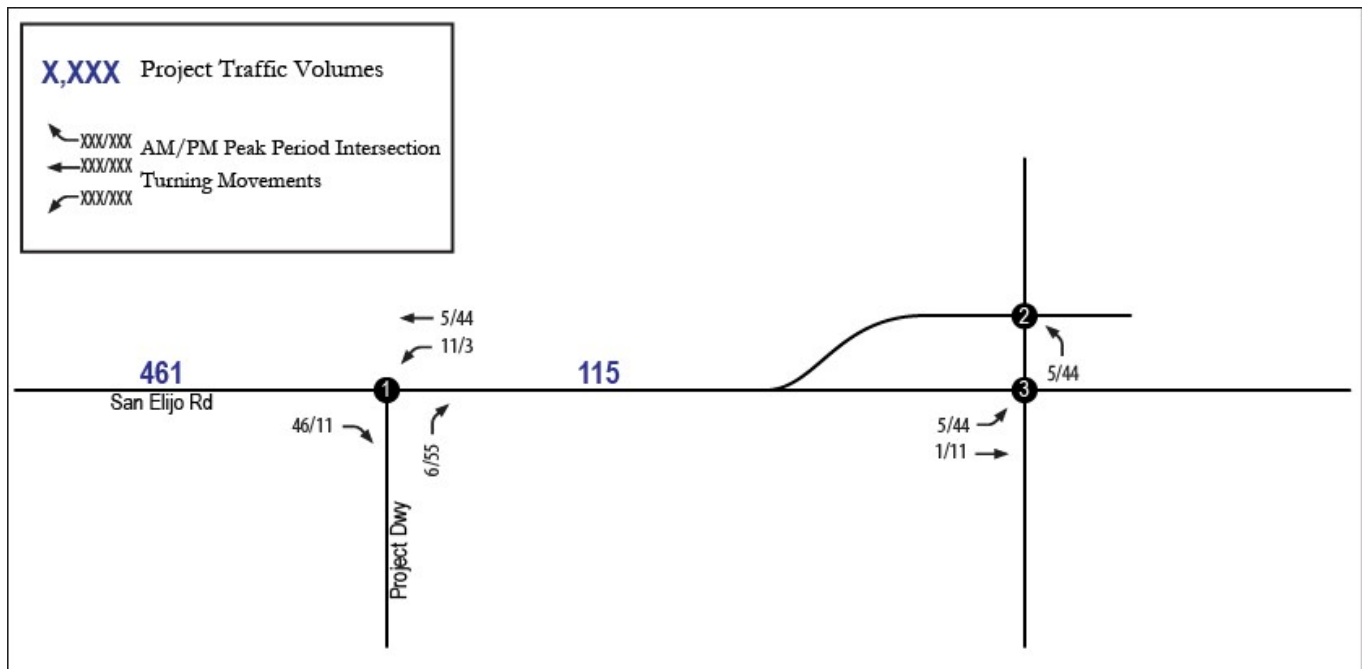


Figure 8: Scenario B - Project Trip Assignment

Existing Plus Project Conditions – Scenario A

The section documents the anticipated traffic operations under Existing Plus Project conditions and identifies traffic related impacts that may be associated with the Proposed Project.

Existing Plus Project Roadway Configurations and Traffic Volumes

It was assumed that the roadway cross-section along project frontage section of San Elijo Road would remain identical as the Existing conditions with the implementation of the Proposed Project. However, the project driveway would restrict the northbound left-turn movement, modifying the existing configuration to allow only the northbound right-turn movement. The restriction of the left turn movement out of the proposed project driveway would be temporarily accomplished through the installation of delineators until the County of San Diego grants permission for the installation of a raised pinned AC channelization (pork-chop) island. Restriction of the left turn movement out of the driveway improves traffic operations at both roadway and intersection level because it removes an additional point of conflict which increases the capacity of the roadway and intersection. Additionally, it improves safety at the intersection because it prevents drivers from crossing two lanes of traffic on a major arterial with limited sight distance due to the location of the driveway (middle of horizontal curve).

The restriction of the left turn movement out of the project driveway would result in project trips that intend to go west of the project to have to go east to the intersection of San Elijo Road South and Baker Street, turn left at this intersection and subsequently turn left again at the intersection of San Elijo Road North and Baker Street to be able to head west.

Figure 9 displays the traffic volumes under Existing Plus Project conditions during a weekday while **Figure 10** displays the traffic volumes under Existing Plus Project conditions during a weekend day. Existing Plus Project traffic volumes were derived by adding the Existing traffic volumes, (displayed in Figure 5 and Figure 6) and the anticipated project volumes (displayed in Figure 7).

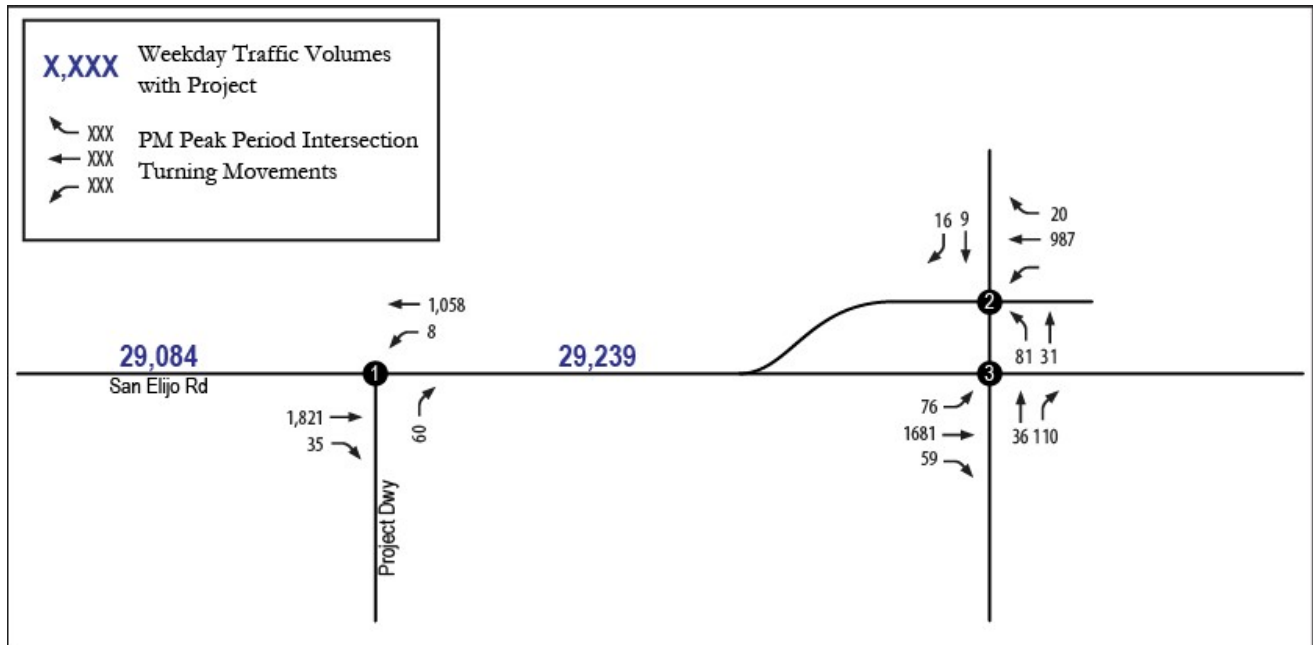


Figure 9: Traffic Volumes – Existing Plus Project (weekday)

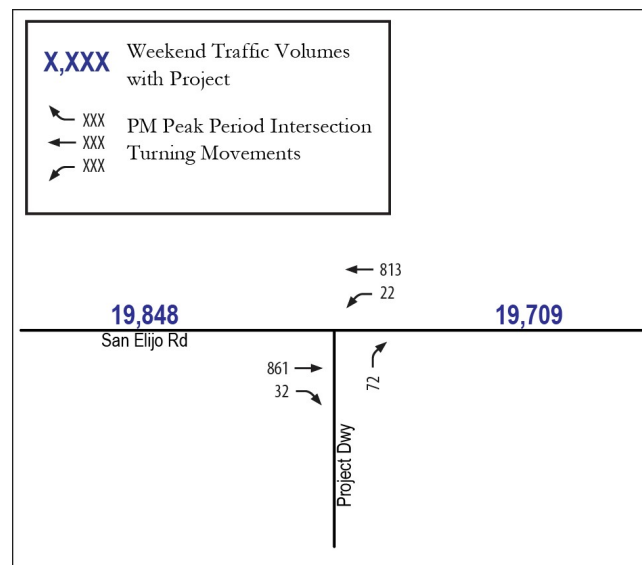


Figure 10: Traffic Volumes – Existing Plus Project (weekend day)

Traffic Operations Under Existing Plus Project Conditions

This section documents the anticipated traffic operations under Existing Plus Project conditions within the study area. Roadway segment and intersection operations are discussed separately below.

Roadway Segment

Table 9 displays the daily roadway level of service for San Elijo Road, along the project fontange under Existing Plus Project (Scenario A) conditions on a weekday.

Table 9: Existing Plus Project (Scenario A) Daily Roadway Level of Service - Weekday

Roadway	Segment	X-Section	ADT	Capacity (LOS E)	With Project		Existing V/C	Δ	S?
					V/C	LOS			
San Elijo Road	Between Melrose Drive/Dove Tail Drive and Project Driveway	4-Lane w/Raised Median	29,084	40,000	0.727	C	0.718	0.009	No
	Between Project Driveway and Baker Street		29,239		0.731	C	0.729	0.002	No

Source: Chen Ryan Associates, July 2018

Notes:

V/C: Volume to Capacity Ratio.

Δ : Change in V/C ration between Existing Plus Project and Existing Conditions.

S?: Significant impact?

As shown, San Elijo Road is projected to continue operate at LOS C within the study area with the implementation of the Proposed Project.

Based on the significant impact criteria identified in the *SANTEC/ITE Guidelines for Traffic Impact Studies [TIS] within the San Diego Region*, the analyzed roadway segments would operate at acceptable LOS C with the implementation of the Proposed Project, therefore, *no significant impacts are anticipated*. It would take an additional 5,916 and 5,761 daily trips, respectively, to cause a significant impact at the analyzed roadway segments.

Table 10 displays the daily roadway level of service for San Elijo Road, along the project frontage under Existing Plus Project (Scenario B) conditions on a weekend day.

Table 10: Existing Plus Project (Scenario A) Daily Roadway Level of Service – Weekend day

Roadway	Segment	X-Section	ADT	Capacity (LOS E)	With Project		Existing V/C	Δ	S?
					V/C	LOS			
San Elijo Road	Between Melrose Drive and Project Driveway	4-Lane w/Raised Median	19,848	40,000	0.496	B	0.487	0.009	No
	Between Project Driveway and Baker Street		19,709		0.493	B	0.491	0.002	No

Source: Chen Ryan Associates, July 2018

Notes:

Δ : Change in average intersection delay between Existing Plus Project and Existing Conditions.

SSSC: Side-Street Stop Control intersection.

For SSSC intersections, the delay shown is the worst delay experienced by any of the approaches.

S?: Significant Impact?

As shown, San Elijo Road is projected to continue operate at LOS B along the project frontage with the implementation of the Proposed Project.

Based on the significant impact criteria identified in the *SANTEC/ITE Guidelines for Traffic Impact Studies [TIS] within the San Diego Region*, the analyzed roadway segments would operate at acceptable LOS B with the implementation of the Proposed Project, therefore, *no significant impacts are anticipated*. It would take an additional 15,152 and 15,291 daily trips, respectively, to cause a significant impact at the analyzed roadway segments.

Intersection

Table 11 displays the overall average intersection delay and LOS for the study area intersections under Existing Plus Project (Scenario A) conditions on a weekday. LOS calculation worksheets are provided in **Attachment 4**.

Table 11: Existing Plus Project (Scenario A) Peak Hour Intersection Level of Service - Weekday

Intersection	With Project			Existing Conditions		Δ	S?
	Worst approach PM	Average Delay (sec.) PM	LOS PM	Average Delay (sec.) PM	LOS PM		
1. San Elijo Road / Project Driveway	NBR	34.8 ¹	D	184.4	F	-149.6	No
2. San Elijo Road North / Baker Street	-	31.2	C	31.1	C	0.1	No
3. San Elijo Road South / Baker Street	-	12.6	B	12.3	B	0.3	No

Source: Chen Ryan Associates, July 2018

Notes:

Δ : Change in average intersection delay between Existing Plus Project and Existing Conditions.

SSSC: Side-Street Stop Control intersection.

For SSSC intersections, the delay shown is the worst delay experienced by any of the approaches.

S?: Significant Impact?

¹ The restriction of the northbound left-turn movement improved the traffic operations at the project driveway.

As shown, the analyzed intersection is projected to operate at acceptable LOS D with the implementation of the Proposed Project.

Based on the significant impact criteria identified in the *SANTEC/ITE Guidelines for Traffic Impact Studies [TIS] within the San Diego Region*, the project driveway is anticipated to operate at acceptable LOS D during the PM peak hour with the implementation of the Proposed Project, therefore, *no significant impacts are anticipated*. It would take an additional trip (1) during the PM peak hour to trigger an impact at the intersection. However, it is important to note that as a conservative approach, existing peak hour factor values were utilized under Existing Plus Project (Scenarios A and B). If the peak hour factor were to be modified to reflect a more uniform traffic arrival pattern, the intersection operations would improve.

Table 12 displays the overall average intersection delay and LOS for the study area intersections under Existing Plus Project (Scenario A) conditions on a weekend day. LOS calculation worksheets are provided in Attachment 4.

Table 12: Existing Plus Project (Scenario A) Peak Hour Intersection Level of Service – Weekend day

Intersection	With Project			Existing Conditions		Δ	S?
	Worst approach PM	Average Delay (sec.) PM	LOS PM	Average Delay (sec.) PM	LOS PM		
1. San Elijo Road / Project Driveway	NBR	14.2	B	12.1	B	2.1	No

Source: Chen Ryan Associates, July 2018

Notes:

Δ : Change in average intersection delay between Existing Plus Project and Existing Conditions.

*SSSC: Side-Street Stop Control intersection.

S?: Significant Impact?

As shown, the analyzed intersection is projected to continue operating at acceptable LOS B with the implementation of the Proposed Project.

Based on the significant impact criteria identified in the *SANTEC/ITE Guidelines for Traffic Impact Studies [TIS] within the San Diego Region*, the project driveway is anticipated to operate at acceptable LOS B during the PM peak hour with the implementation of the Proposed Project, therefore, *no significant impacts are anticipated*. It would take an additional 203 trips during the PM peak hour to trigger an impact at the intersection. However, it is important to note that as a conservative approach, existing peak hour factor values were utilized under Existing Plus Project scenario. If the peak hour factor were to be modified to reflect a more uniform traffic arrival pattern, the intersection operations would improve.

Queueing

Table 13 displays queueing at the proposed project driveway under Existing Conditions during a weekday, while **Table 14** displays queueing during a weekend day.

Table 13: Existing Plus Project (Scenario A) - Peak Hour Intersection Level of Service – Weekday

Intersection	Traffic Control	Project Driveway Length ¹	With Project		Existing Conditions	Δ
			Worst approach PM	95 th Percentile Queue (ft) PM	95 th Percentile Queue (ft) PM	
1. San Elijo Road / Project Driveway	SSSC	200 feet	NBR	75 feet	25 feet	50 feet

Source: Chen Ryan Associates, July 2018

Notes:

SSSC = Side-Street Stop Control.

Queueing results obtained from HCM 2010 report assuming 25 feet per vehicle.

¹ Measured from existing driveway stop bar to existing gate.

As shown, 75 feet of queue or three vehicles, is anticipated at the project driveway during the PM peak hour. The project driveway is 200 feet in length and it would be able to accommodate the projected queue with the implementation of the proposed project.

Table 14: Existing Plus Project (Scenario A) - Peak Hour Intersection Level of Service – Weekend day

Intersection	Traffic Control	With Project		Existing Conditions	Δ
		Worst approach PM	95 th Percentile Queue (ft) PM	95 th Percentile Queue (ft) PM	
1. San Elijo Road / Project Driveway	SSSC	NBR	25 feet	25 feet	0 feet

Source: Chen Ryan Associates, July 2018

Notes:

SSSC = Side-Street Stop Control.

Queueing results obtained from HCM 2010 report assuming 25 feet per vehicle.

As shown, 25 feet of queue or one vehicle is anticipated at the project driveway during the PM peak hour. The project driveway is 200 feet in length and it would be able to accommodate the projected queue with the implementation of the proposed project.

Existing Plus Project Conditions – Scenario B

The section documents the anticipated traffic operations under Existing Plus Project conditions and identifies traffic related impacts that may be associated with the Proposed Project.

Existing Plus Project Roadway Configurations and Traffic Volumes

The same roadway and intersection geometries assumed under Scenario A were assumed under Scenario B.

Figure 11 displays the traffic volumes under Existing Plus Project conditions during a weekday. Existing Plus Project traffic volumes were derived by adding the Existing traffic volumes, (displayed in Figure 5) and the anticipated project volumes (displayed in Figure 8).

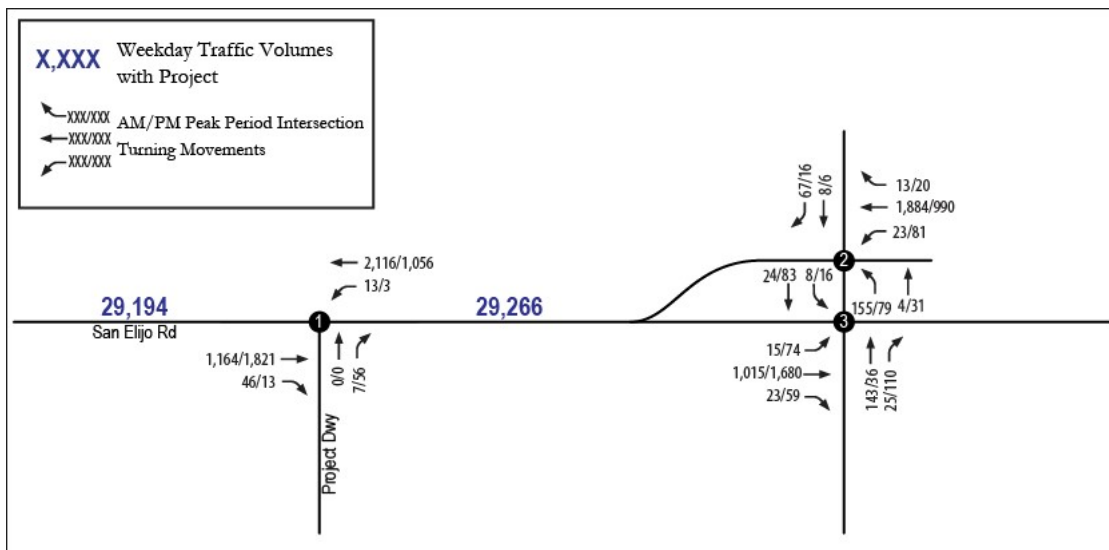


Figure 11: Traffic Volumes – Existing Plus Project (weekday)

Traffic Operations Under Existing Plus Project Conditions

This section documents the anticipated traffic operations under Existing Plus Project conditions within the study area. Roadway segment and intersection operations are discussed separately below.

Roadway Segment

Table 15 displays the daily roadway level of service for San Elijo Road, along the project fontange under Existing Plus Project (Scenario B) conditions.

Table 15: Existing Plus Project (Scenario B) Daily Roadway Level of Service - Weekday

Roadway	Segment	X-Section	ADT	Capacity (LOS E)	With Project		Existing V/C	Δ	S?
					V/C	LOS			
San Elijo Road	Between Melrose Drive/Dove Tail Drive and Project Driveway	4-Lane w/Raised Median	29,194	40,000	0.730	C	0.718	0.012	No
	Between Project Driveway and Baker Street		29,266		0.732	C	0.729	0.003	No

Source: Chen Ryan Associates, July 2018

Notes:

V/C: Volume to Capacity Ratio.

Δ : Change in V/C ration between Existing Plus Project and Existing Conditions.

S?: Significant impact?

As shown, San Elijo Road is projected to continue operate at LOS C within the study area with the implementation of the Proposed Project.

Based on the significant impact criteria identified in the *SANTEC/ITE Guidelines for Traffic Impact Studies [TIS] within the San Diego Region*, the analyzed roadway segments would operate at acceptable LOS C with the implementation of the Proposed Project, therefore, *no significant impacts are anticipated*. It would take an additional 5,806 and 5,734 daily trips, respectively, to cause a significant impact at the analyzed roadway segments.

Intersection

Table 16 displays the overall average intersection delay and LOS for the study area intersections under Existing Plus Project (Scenario B) conditions. LOS calculation worksheets are provided in Attachment 4.

Table 16: Existing Plus Project (Scenario B) Peak Hour Intersection Level of Service - Weekday

Intersection	With Project			Existing Conditions					Δ	S?
	Worst approach AM	Average Delay (sec.) AM	LOS AM	Worst approach PM	Average Delay (sec.) PM	LOS PM	Average Delay (sec.) AM / PM	LOS AM / PM		
1. San Elijo Road / Project Driveway	NBR	18.2	C	NBR	33.1 ¹	D	17.1 / 184.4	F	1.1 / -151.3	No
2. San Elijo Road North / Baker Street	-	30.0	C	-	31.2	C	29.7 / 31.1	C	0.3 / 0.1	No
3. San Elijo Road South / Baker Street	-	12.1	B	-	12.6	B	12.1 / 12.3	B	0.0 / 0.3	No

Source: Chen Ryan Associates, July 2018

Notes:

Δ : Change in average intersection delay between Existing Plus Project and Existing Conditions.

SSSC: Side-Street Stop Control intersection.

For SSSC intersections, the delay shown is the worst delay experienced by any of the approaches.

S?: Significant Impact?

¹ The restriction of the northbound left-turn movement improved the traffic operations at the project driveway.

As shown, the analyzed intersections are projected to operate at acceptable LOS D or better with the implementation of the Proposed Project.

Based on the significant impact criteria identified in the *SANTEC/ITE Guidelines for Traffic Impact Studies [TIS] within the San Diego Region*, the project driveway is anticipated to operate at acceptable LOS D during the PM peak hour with the implementation of the Proposed Project, therefore, *no significant impacts are anticipated*. It would take five (5) additional trips during the PM peak hour to trigger an impact at the intersection. However, it is important to note that as a conservative approach, existing peak hour factor values were utilized under Existing Plus Project scenario. If the peak hour factor were to be modified to reflect a more uniform traffic arrival pattern, the intersection operations would improve.

Queueing

Table 17 displays queueing at the proposed project driveway under Existing Plus Project (Scenario B) Conditions.

Table 17: Existing Plus Project (Scenario B) - Peak Hour Intersection Level of Service – Weekday

Intersection	Traffic Control	Project Driveway Length ¹	With Project				Existing Conditions	Δ
			Worst approach AM	95 th Percentile Queue (ft) AM	Worst approach PM	95 th Percentile Queue (ft) PM	95 th Percentile Queue (ft) AM / PM	
1. San Elijo Road / Project Driveway	SSSC	200 feet	NBR	25 feet	NBR	75 feet	25 feet	0 feet / 50 feet

Source: Chen Ryan Associates, July 2018

Notes:

SSSC = Side-Street Stop Control.

Queueing results obtained from HCM 2010 report assuming 25 feet per vehicle.

¹ Measured from existing driveway stop bar to existing gate.

As shown, 75 feet of queue or three vehicles, is anticipated at the project driveway during the PM peak hour. The project driveway is 200 feet in length and it would be able to accommodate the projected queue with the implementation of the proposed project.

Sight Distance

Based on the City of San Marcos minimum sight distance requirements, the safe sight distance at the proposed project driveway is 610 feet for vehicles turning left or right, to accelerate to the operating speed of the street without causing approaching vehicles to reduce speed by more than 10 miles per hour. Based on a sight distance engineering study conducted on December 18, 2017 and provided by the project applicant, the project driveway **meets** the required 610 feet of safe sight distance. However, there are potential line of sight obstructions for which the following measure is recommended:

- Continue the regular pruning of the trees located along the median.

The sight distance analysis is provided in **Attachment 5**.

Parking

The project shall be consistent with the parking requirements outlined in the City of San Marcos Municipal Code.

Conclusion

The proposed project is not anticipated to cause any significant impacts to any of the roadway or intersection facilities within the analyzed study area in either of the two analyzed scenarios. The restriction of the northbound left-turn movement would improve the operations of the project driveway.

Please feel free to contact me at (619) 468-2739 with any questions and/or comments.

Sincerely,



Jonathan Sanchez

Attachment 1 – Traffic Counts & Signal Timing Sheets

National Data & Surveying ServicesIntersection Turning Movement Count

Location: Proposed Project Dwy & San Elijo Rd
City: San Marcos
Control: 1-Way Stop(NB)

Project ID: 17-04361-005
Date: 11/29/2017

Total

NS/EW Streets:	Proposed Project Dwy				Proposed Project Dwy				San Elijo Rd				San Elijo Rd				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	1 NT	1 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	2 ET	0 ER	0 EU	1 WL	2 WT	0 WR	0 WU	
7:00 AM	0	0	1	0	0	0	0	0	0	180	1	0	0	404	0	0	586
7:15 AM	0	0	0	0	0	0	0	0	0	284	0	0	0	482	0	0	766
7:30 AM	0	0	1	0	0	0	0	0	0	429	0	0	1	588	0	0	1019
7:45 AM	0	0	0	0	0	0	0	0	0	256	0	0	0	587	0	0	843
8:00 AM	0	0	0	0	0	0	0	0	0	195	0	0	1	454	0	0	650
8:15 AM	0	0	1	0	0	0	0	0	0	196	1	0	0	375	0	0	573
8:30 AM	0	0	0	0	0	0	0	0	0	185	0	0	0	379	0	0	564
8:45 AM	0	0	1	0	0	0	0	0	0	159	3	0	0	374	0	0	537
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	0	4	0	0	0	0	0	0	1884	5	0	2	3643	0	0	5538
	0.00%	0.00%	100.00%	0.00%					0.00%	99.74%	0.26%	0.00%	0.05%	99.95%	0.00%	0.00%	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	0	1	0	0	0	0	0	0	1164	0	0	2	2111	0	0	3278
PEAK HR FACTOR :	0.000	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.678	0.000	0.000	0.500	0.898	0.000	0.000	0.804
			0.250							0.678				0.897			

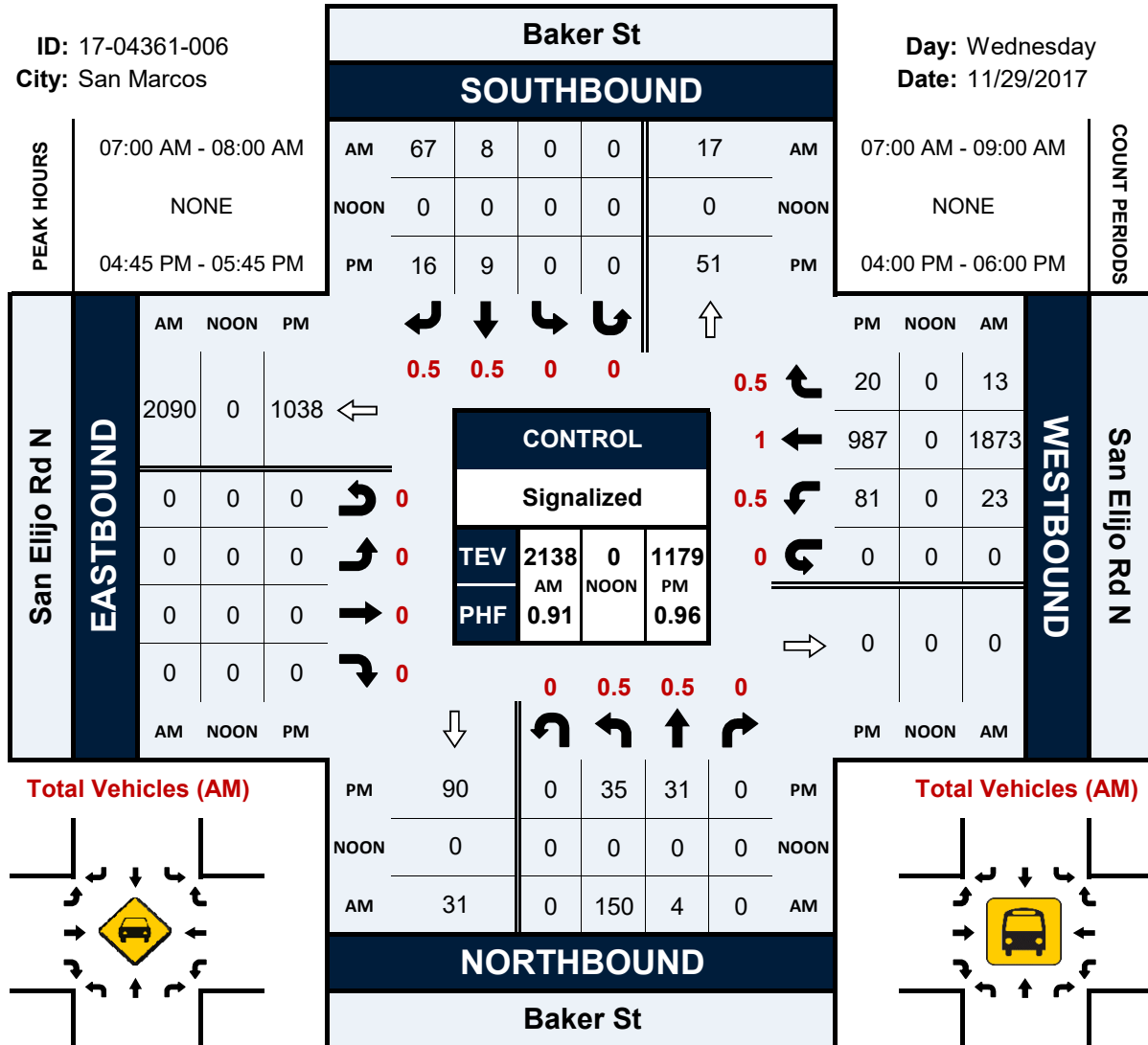
PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	1 NT	1 NR	0 NU	0 SL	0 ST	0 SR	0 SU	0 EL	2 ET	0 ER	0 EU	1 WL	2 WT	0 WR	0 WU	
4:00 PM	0	0	0	0	0	0	0	0	0	412	1	0	0	222	0	0	635
4:15 PM	0	0	0	0	0	0	0	0	0	385	1	0	0	237	0	0	623
4:30 PM	0	0	0	0	0	0	0	0	0	430	1	0	0	255	0	0	686
4:45 PM	1	0	0	0	0	0	0	0	0	412	0	0	0	255	0	0	668
5:00 PM	1	0	0	0	0	0	0	0	0	451	1	0	0	263	0	0	716
5:15 PM	0	0	0	0	0	0	0	0	0	449	1	0	0	246	0	0	696
5:30 PM	0	0	1	0	0	0	0	0	0	505	0	0	0	244	0	0	750
5:45 PM	0	0	0	0	0	0	0	0	0	416	0	0	0	259	0	0	675
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	2	0	1	0	0	0	0	0	0	3460	5	0	0	1981	0	0	5449
	66.67%	0.00%	33.33%	0.00%					0.00%	99.86%	0.14%	0.00%	0.00%	100.00%	0.00%	0.00%	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	1	0	1	0	0	0	0	0	0	1821	2	0	0	1012	0	0	2837
PEAK HR FACTOR :	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.901	0.500	0.000	0.000	0.962	0.000	0.000	0.946
			0.500							0.902				0.962			

Baker St & San Elijo Rd N

Peak Hour Turning Movement Count

ID: 17-04361-006
City: San Marcos

Day: Wednesday
Date: 11/29/2017



National Data & Surveying ServicesIntersection Turning Movement Count

Location: Baker St & San Elijo Rd N
City: San Marcos
Control: Signalized

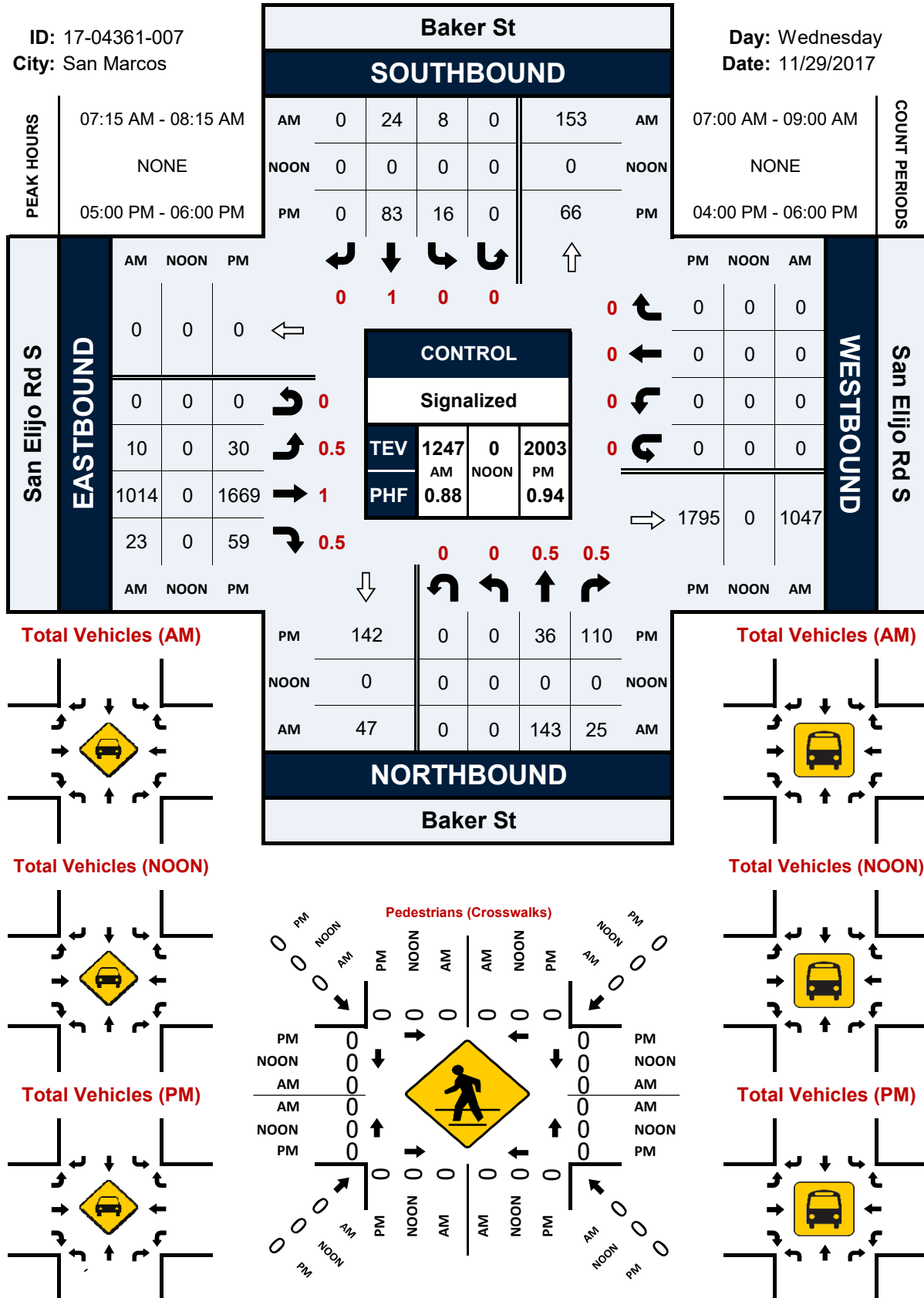
Project ID: 17-04361-006
Date: 11/29/2017

Total

NS/EW Streets:	Baker St				Baker St				San Elijo Rd N				San Elijo Rd N				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0.5 NL	0.5 NT	0 NR	0 NU	0 SL	0.5 ST	0.5 SR	0 SU	0 EL	0 ET	0 ER	0 EU	0.5 WL	1 WT	0.5 WR	0 WU	
7:00 AM	14	0	0	0	0	1	12	0	0	0	0	0	12	433	2	0	474
7:15 AM	39	0	0	0	0	2	21	0	0	0	0	0	4	466	3	0	535
7:30 AM	59	3	0	0	0	3	25	0	0	0	0	0	4	493	2	0	589
7:45 AM	38	1	0	0	0	2	9	0	0	0	0	0	3	481	6	0	540
8:00 AM	6	6	0	0	0	1	9	0	0	0	0	0	9	396	1	0	428
8:15 AM	12	3	0	0	0	2	3	0	0	0	0	0	13	354	1	0	388
8:30 AM	14	2	0	0	0	2	6	0	0	0	0	0	19	374	5	0	422
8:45 AM	13	2	0	0	0	1	6	0	0	0	0	0	17	317	4	0	360
TOTAL VOLUMES :	NL 195	NT 17	NR 0	NU 0	SL 0	ST 14	SR 91	SU 0	EL 0	ET 0	ER 0	EU 0	WL 81	WT 3314	WR 24	WU 0	TOTAL 3736
APPROACH %'s :	91.98%	8.02%	0.00%	0.00%	0.00%	13.33%	86.67%	0.00%					2.37%	96.93%	0.70%	0.00%	
PEAK HR :	07:00 AM - 08:00 AM																TOTAL
PEAK HR VOL :	150	4	0	0	0	8	67	0	0	0	0	0	23	1873	13	0	2138
PEAK HR FACTOR :	0.636	0.333	0.000	0.000	0.000	0.667	0.670	0.000	0.000	0.000	0.000	0.000	0.479	0.950	0.542	0.000	0.907
	0.621				0.670								0.956				

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0.5 NL	0.5 NT	0 NR	0 NU	0 SL	0.5 ST	0.5 SR	0 SU	0 EL	0 ET	0 ER	0 EU	0.5 WL	1 WT	0.5 WR	0 WU	
4:00 PM	15	10	0	0	0	2	3	0	0	0	0	0	17	238	3	0	288
4:15 PM	12	5	0	0	0	3	3	0	0	0	0	0	15	231	2	0	271
4:30 PM	10	7	0	0	0	1	6	0	0	0	0	0	10	232	3	0	269
4:45 PM	10	8	0	0	0	3	4	0	0	0	0	0	11	265	6	0	307
5:00 PM	9	5	0	0	0	3	1	0	0	0	0	0	22	242	3	0	285
5:15 PM	7	8	0	0	0	2	7	0	0	0	0	0	20	234	1	0	279
5:30 PM	9	10	0	0	0	1	4	0	0	0	0	0	28	246	10	0	308
5:45 PM	12	15	0	0	0	3	5	0	0	0	0	0	24	175	1	0	235
TOTAL VOLUMES :	NL 84	NT 68	NR 0	NU 0	SL 0	ST 18	SR 33	SU 0	EL 0	ET 0	ER 0	EU 0	WL 147	WT 1863	WR 29	WU 0	TOTAL 2242
APPROACH %'s :	55.26%	44.74%	0.00%	0.00%	0.00%	35.29%	64.71%	0.00%					7.21%	91.37%	1.42%	0.00%	
PEAK HR :	04:45 PM - 05:45 PM																TOTAL
PEAK HR VOL :	35	31	0	0	0	9	16	0	0	0	0	0	81	987	20	0	1179
PEAK HR FACTOR :	0.875	0.775	0.000	0.000	0.000	0.750	0.571	0.000	0.000	0.000	0.000	0.000	0.723	0.931	0.500	0.000	0.957
	0.868				0.694								0.958				

Day: Wednesday
Date: 11/29/2017



National Data & Surveying ServicesIntersection Turning Movement Count

Location: Baker St & San Elijo Rd S
City: San Marcos
Control: Signalized

Project ID: 17-04361-007
Date: 11/29/2017

Total

NS/EW Streets:	Baker St				Baker St				San Elijo Rd S				San Elijo Rd S				
AM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	0.5 NT	0.5 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0.5 EL	1 ET	0.5 ER	0 EU	0 WL	0 WT	0 WR	0 WU	
7:00 AM	0	8	10	0	0	11	0	0	5	176	4	0	0	0	0	0	214
7:15 AM	0	24	11	0	2	9	0	0	0	264	4	0	0	0	0	0	314
7:30 AM	0	53	4	0	2	1	0	0	4	289	3	0	0	0	0	0	356
7:45 AM	0	55	4	0	3	6	0	0	3	281	4	0	0	0	0	0	356
8:00 AM	0	11	6	0	1	8	0	0	3	180	12	0	0	0	0	0	221
8:15 AM	0	9	8	0	4	9	0	0	6	200	5	0	0	0	0	0	241
8:30 AM	0	9	9	0	9	7	0	0	3	177	5	0	0	0	0	0	219
8:45 AM	0	14	13	0	6	18	0	0	5	143	4	0	0	0	0	0	203
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	183	65	0	27	69	0	0	29	1710	41	0	0	0	0	0	2124
	0.00%	73.79%	26.21%	0.00%	28.13%	71.88%	0.00%	0.00%	1.63%	96.07%	2.30%	0.00%	0	0	0	0	
PEAK HR :	07:15 AM - 08:15 AM																TOTAL
PEAK HR VOL :	0	143	25	0	8	24	0	0	10	1014	23	0	0	0	0	0	1247
PEAK HR FACTOR :	0.000	0.650	0.568	0.000	0.667	0.667	0.000	0.000	0.625	0.877	0.479	0.000	0.000	0.000	0.000	0.000	0.876
	0.712				0.727				0.884								

PM	NORTHBOUND				SOUTHBOUND				EASTBOUND				WESTBOUND				TOTAL
	0 NL	0.5 NT	0.5 NR	0 NU	0 SL	1 ST	0 SR	0 SU	0.5 EL	1 ET	0.5 ER	0 EU	0 WL	0 WT	0 WR	0 WU	
4:00 PM	0	8	22	0	4	14	0	0	9	374	7	0	0	0	0	0	438
4:15 PM	0	13	19	0	7	16	0	0	7	363	10	0	0	0	0	0	435
4:30 PM	0	11	19	0	2	9	0	0	6	398	16	0	0	0	0	0	461
4:45 PM	0	14	19	0	2	7	0	0	9	388	11	0	0	0	0	0	450
5:00 PM	0	5	14	0	5	18	0	0	3	437	17	0	0	0	0	0	499
5:15 PM	0	8	33	0	5	17	0	0	9	402	15	0	0	0	0	0	489
5:30 PM	0	10	31	0	3	24	0	0	8	443	16	0	0	0	0	0	535
5:45 PM	0	13	32	0	3	24	0	0	10	387	11	0	0	0	0	0	480
TOTAL VOLUMES :	NL	NT	NR	NU	SL	ST	SR	SU	EL	ET	ER	EU	WL	WT	WR	WU	TOTAL
APPROACH %'s :	0	82	189	0	31	129	0	0	61	3192	103	0	0	0	0	0	3787
	0.00%	30.26%	69.74%	0.00%	19.38%	80.63%	0.00%	0.00%	1.82%	95.11%	3.07%	0.00%	0	0	0	0	
PEAK HR :	05:00 PM - 06:00 PM																TOTAL
PEAK HR VOL :	0	36	110	0	16	83	0	0	30	1669	59	0	0	0	0	0	2003
PEAK HR FACTOR :	0.000	0.692	0.833	0.000	0.800	0.865	0.000	0.000	0.750	0.942	0.868	0.000	0.000	0.000	0.000	0.000	0.936
	0.811				0.917				0.941								

VOLUME

San Elijo Rd Bet. Melrose Dr/Dove Tail Dr & Questhaven Pacific View

Day: Tuesday
Date: 12/5/2017City: San Marcos
Project #: CA17_4362_012

DAILY TOTALS					NB	SB	EB					WB	Total	
					0	0						14,283		
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL		
00:00			14	12	26		12:00			177	180	357		
00:15			16	7	23		12:15			183	156	339		
00:30			6	4	10		12:30			191	168	359		
00:45			5	41	4	27	12:45			197	748	142	646	
01:00			7	7	14		13:00			162	164	326		
01:15			5	1	6		13:15			199	177	376		
01:30			5	1	6		13:30			205	173	378		
01:45			4	21	3	12	13:45			269	835	155	669	
02:00			1	5	6		14:00			294	179	473		
02:15			3	2	5		14:15			339	210	549		
02:30			4	3	7		14:30			255	452	707		
02:45			2	10	4	14	14:45			269	1157	256	1097	
03:00			4	2	6		15:00			291	241	532		
03:15			4	6	10		15:15			370	236	606		
03:30			8	6	14		15:30			397	278	675		
03:45			3	19	9	23	15:45			366	1424	267	1022	
04:00			7	13	20		16:00			383	256	639		
04:15			7	18	25		16:15			361	231	592		
04:30			9	27	36		16:30			403	255	658		
04:45			4	27	49	107	16:45			419	1566	236	978	
05:00			12	46	58		17:00			432	245	677		
05:15			18	64	82		17:15			440	297	737		
05:30			24	90	114		17:30			382	218	600		
05:45			33	87	148	348	17:45			398	1652	217	977	
06:00			44	150	194		18:00			320	226	546		
06:15			69	184	253		18:15			324	196	520		
06:30			117	269	386		18:30			244	157	401		
06:45			197	427	369	972	18:45			192	1080	140	719	
07:00			206	465	671		19:00			179	96	275		
07:15			318	483	801		19:15			151	93	244		
07:30			324	523	847		19:30			147	86	233		
07:45			181	1029	500	1971	19:45			128	605	76	351	
08:00			175	441	616		20:00			116	91	207		
08:15			201	440	641		20:15			103	78	181		
08:30			213	409	622		20:30			106	80	186		
08:45			183	772	340	1630	20:45			97	422	90	339	
09:00			175	302	477		21:00			109	67	176		
09:15			131	207	338		21:15			88	66	154		
09:30			155	189	344		21:30			66	46	112		
09:45			146	607	181	879	21:45			74	337	40	219	
10:00			118	206	324		22:00			40	33	73		
10:15			141	175	316		22:15			51	26	77		
10:30			128	174	302		22:30			50	18	68		
10:45			123	510	137	692	22:45			29	170	16	93	
11:00			154	133	287		23:00			28	18	46		
11:15			144	174	318		23:15			26	19	45		
11:30			170	136	306		23:30			22	18	40		
11:45			182	650	156	599	23:45			11	87	11	66	
TOTALS			4200	7274	11474		TOTALS			10083	7176	17259		
SPLIT %			36.6%	63.4%	39.9%		SPLIT %			58.4%	41.6%	60.1%		

DAILY TOTALS					NB	SB	EB					WB	Total				
					0	0	14,283					14,450	28,733				
AM Peak Hour			06:45	07:00	07:00		PM Peak Hour			16:30	14:30	16:30					
AM Pk Volume			1045	1971	3000		PM Pk Volume			1694	1185	2727					
Pk Hr Factor			0.806	0.942	0.885		Pk Hr Factor			0.963	0.655	0.925					
7 - 9 Volume	0	0	1801	3601	5402		4 - 6 Volume	0	0	3218	1955	5173					
7 - 9 Peak Hour			07:00	07:00	07:00		4 - 6 Peak Hour			16:30	16:30	16:30					
7 - 9 Pk Volume	0	0	1029	1971	3000		4 - 6 Pk Volume	0	0	1694	1033	2727					
Pk Hr Factor	0.000	0.000	0.794	0.942	0.885		Pk Hr Factor	0.000	0.000	0.963	0.870	0.925					

VOLUME

San Elijo Rd Bet. Questhaven Pacific View & Baker St

Day: Tuesday
Date: 12/5/2017City: San Marcos
Project #: CA17_4362_013

DAILY TOTALS					NB	SB						EB	WB						Total
					0	0						15,143	14,008						29,151
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							TOTAL
00:00			13	11	24		12:00			193	179	372							
00:15			16	9	25		12:15			186	150	336							
00:30			6	4	10		12:30			198	161	359							
00:45			5	40	4	28	12:45			201	778	139	629	340	1407				
01:00			7	7	14		13:00			170	153	323							
01:15			5	1	6		13:15			182	177	359							
01:30			5	1	6		13:30			206	169	375							
01:45			4	21	2	11	13:45			238	796	146	645	384	1441				
02:00			1	5	6		14:00			309	173	482							
02:15			3	2	5		14:15			339	218	557							
02:30			4	3	7		14:30			229	442	671							
02:45			2	10	4	14	14:45			269	1146	233	1066	502	2212				
03:00			3	2	5		15:00			318	237	555							
03:15			5	8	13		15:15			349	238	587							
03:30			8	5	13		15:30			441	268	709							
03:45			3	19	8	23	15:45			523	1631	252	995	775	2626				
04:00			7	12	19		16:00			387	241	628							
04:15			5	20	25		16:15			395	243	638							
04:30			12	27	39		16:30			380	242	622							
04:45			9	33	47	106	16:45			442	1604	235	961	677	2565				
05:00			12	45	57		17:00			480	225	705							
05:15			19	66	85		17:15			524	273	797							
05:30			25	92	117		17:30			464	205	669							
05:45			31	87	144	347	17:45			385	1853	202	905	587	2758				
06:00			44	147	191		18:00			361	220	581							
06:15			68	183	251		18:15			281	193	474							
06:30			121	263	384		18:30			272	148	420							
06:45			196	429	368	961	18:45			233	1147	140	701	373	1848				
07:00			187	433	620		19:00			193	99	292							
07:15			346	483	829		19:15			182	88	270							
07:30			362	505	867		19:30			152	86	238							
07:45			187	1082	475	1896	19:45			160	687	79	352	239	1039				
08:00			178	419	597		20:00			144	85	229							
08:15			201	430	631		20:15			131	84	215							
08:30			219	375	594		20:30			117	75	192							
08:45			193	791	344	1568	20:45			106	498	79	323	185	821				
09:00			172	291	463		21:00			98	68	166							
09:15			152	193	345		21:15			115	59	174							
09:30			156	187	343		21:30			98	49	147							
09:45			149	629	168	839	21:45			78	389	40	216	118	605				
10:00			119	197	316		22:00			51	31	82							
10:15			145	174	319		22:15			49	25	74							
10:30			126	170	296		22:30			55	18	73							
10:45			124	514	131	672	22:45			43	198	19	93	62	291				
11:00			157	140	297		23:00			36	17	53							
11:15			147	160	307		23:15			30	16	46							
11:30			174	144	318		23:30			28	17	45							
11:45			167	645	149	593	23:45			22	116	14	64	36	180				
TOTALS			4300	7058	11358		TOTALS			10843	6950	17793							
SPLIT %			37.9%	62.1%	39.0%		SPLIT %			60.9%	39.1%	61.0%							

DAILY TOTALS					NB	SB						EB	WB						Total
					0	0						15,143	14,008						29,151
AM Peak Hour			06:45	07:00	07:00		PM Peak Hour			16:45	14:30	16:45							
AM Pk Volume			1091	1896	2978		PM Pk Volume			1910	1150	2848							
Pk Hr Factor			0.753	0.939	0.859		Pk Hr Factor			0.911	0.650	0.893							
7 - 9 Volume	0	0	1873	3464	5337		4 - 6 Volume	0	0	3457	1866	5323							
7 - 9 Peak Hour			07:00	07:00	07:00		4 - 6 Peak Hour			16:45	16:30	16:45							
7 - 9 Pk Volume	0	0	1082	1896	2978		4 - 6 Pk Volume	0	0	1910	975	2848							
Pk Hr Factor	0.000	0.000	0.747	0.939	0.859		Pk Hr Factor	0.000	0.000	0.911	0.893	0.893							

VOLUME

San Elijo Rd E/O Dwy

Day: Saturday
Date: 1/13/2018

City: San Marcos
Project #: CA18_4009_002

DAILY TOTALS						NB		SB		EB						WB		Total											
						0		0		9,966			9,655			19,621													
AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL									
00:00					26		12		38		12:00					193		180		373									
00:15					26		17		43		12:15					183		173		356									
00:30					10		19		29		12:30					178		185		363									
00:45					17		79		8		56		25		135		12:45	242		796		220		758		462		1554	
01:00					11		9		20		13:00					198		205		403									
01:15					9		8		17		13:15					237		205		442									
01:30					6		5		11		13:30					198		183		381									
01:45					9		35		7		29		16		64		13:45	197		830		187		780		384		1610	
02:00					14		4		18		14:00					199		161		360									
02:15					9		5		14		14:15					203		143		346									
02:30					6		8		14		14:30					199		172		371									
02:45					8		37		7		24		15		61		14:45	207		808		150		626		357		1434	
03:00					4		9		13		15:00					192		178		370									
03:15					8		4		12		15:15					224		155		379									
03:30					6		3		9		15:30					210		167		377									
03:45					6		24		6		22		12		46		15:45	209		835		146		646		355		1481	
04:00					4		8		12		16:00					202		164		366									
04:15					5		7		12		16:15					227		142		369									
04:30					6		8		14		16:30					191		178		369									
04:45					9		24		6		29		15		53		16:45	202		822		168		652		370		1474	
05:00					8		12		20		17:00					205		185		390									
05:15					11		19		30		17:15					210		192		402									
05:30					9		22		31		17:30					204		149		353									
05:45					16		44		48		101		64		145		17:45	166		785		172		698		338		1483	
06:00					20		39		59		18:00					163		121		284									
06:15					26		42		68		18:15					176		109		285									
06:30					37		56		93		18:30					150		125		275									
06:45					35		118		92		229		127		347		18:45	125		614		115		470		240		1084	
07:00					47		83		130		19:00					127		83		210									
07:15					58		105		163		19:15					100		80		180									
07:30					68		158		226		19:30					105		47		152									
07:45					84		257		141		487		225		744		19:45	113		445		67		277		180		722	
08:00					91		145		236		20:00					97		67		164									
08:15					91		159		250		20:15					108		70		178									
08:30					111		176		287		20:30					89		64		153									
08:45					100		393		210		690		310		1083		20:45	88		382		58		259		146		641	
09:00					117		168		285		21:00					78		62		140									
09:15					111		158		269		21:15					92		68		160									
09:30					149		177		326		21:30					86		62		148									
09:45					157		534		166		669		323		1203		21:45	62		318		61		253		123		571	
10:00					129		207		336		22:00					73		55		128									
10:15					160		185		345		22:15					68		35		103									
10:30					185		200		385		22:30					65		36		101									
10:45					177		651		205		797		382		1448		22:45	49		255		50		176		99		431	
11:00					174		209		383		23:00					50		30		80									
11:15					170		212		382		23:15					43		22		65									
11:30					174		210		384		23:30					34		24		58									
11:45					213		731		197		828		410		1559		23:45	22		149		23		99		45		248	
TOTALS					2927		3961		6888		TOTALS					7039		5694		12733									
SPLIT %					42.5%		57.5%		35.1%		SPLIT %					55.3%		44.7%		64.9%									

DAILY TOTALS			NB	SB	EB			WB			Total
			0	0							9,966
AM Peak Hour			11:45	10:45	11:00	PM Peak Hour			12:45	12:30	12:45
AM Pk Volume			767	836	1559	PM Pk Volume			875	815	1688
Pk Hr Factor			0.900	0.986	0.951	Pk Hr Factor			0.904	0.926	0.913
7 - 9 Volume	0	0	650	1177	1827	4 - 6 Volume	0	0	1607	1350	2957
7 - 9 Peak Hour			08:00	08:00	08:00	4 - 6 Peak Hour			16:15	16:30	16:30
7 - 9 Pk Volume	0	0	393	690	1083	4 - 6 Pk Volume	0	0	825	723	1531
Pk Hr Factor	0.000	0.000	0.885	0.821	0.873	Pk Hr Factor	0.000	0.000	0.909	0.941	0.952

VOLUME

San Elijo Rd E/O Dwy

Day: Sunday

Date: 1/14/2018

City: San Marcos

Project #: CA18_4009_002

DAILY TOTALS					NB	SB	EB					WB	Total				
					0	0	8,173					7,984	16,157				
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL					
00:00			36	28	64		12:00			150	190	340					
00:15			22	13	35		12:15			150	172	322					
00:30			27	14	41		12:30			171	184	355					
00:45			18	103	15	70	12:45			193	664	156	702				
01:00			12		17	29	13:00			175		170	345				
01:15			12		10	22	13:15			182		161	343				
01:30			12		11	23	13:30			151		170	321				
01:45			10	46	6	44	13:45			160	668	171	672				
02:00			3		5	8	14:00			174		138	312				
02:15			6		7	13	14:15			167		142	309				
02:30			8		8	16	14:30			189		165	354				
02:45			12	29	4	24	14:45			196	726	124	569				
03:00			5		8	13	15:00			169		156	325				
03:15			3		5	8	15:15			152		178	330				
03:30			4		3	7	15:30			158		146	304				
03:45			7	19	5	21	15:45			167	646	143	623				
04:00			9		8	17	16:00			160		134	294				
04:15			4		11	15	16:15			190		136	326				
04:30			8		16	24	16:30			173		132	305				
04:45			9	30	19	54	16:45			164	687	154	556				
05:00			9		13	22	17:00			171		155	326				
05:15			6		14	20	17:15			164		178	342				
05:30			8		18	26	17:30			174		161	335				
05:45			21	44	30	75	17:45			156	665	113	607				
06:00			18		28	46	18:00			148		111	259				
06:15			14		32	46	18:15			160		113	273				
06:30			22		41	63	18:30			136		89	225				
06:45			34	88	37	138	18:45			111	555	97	410				
07:00			27		46	73	19:00			110		84	194				
07:15			30		72	102	19:15			99		69	168				
07:30			44		89	133	19:30			90		63	153				
07:45			57	158	82	289	19:45			81	380	78	294				
08:00			53		77	130	20:00			110		69	179				
08:15			58		97	155	20:15			100		54	154				
08:30			68		131	199	20:30			77		59	136				
08:45			84	263	101	406	20:45			61	348	43	225				
09:00			77		142	219	21:00			61		52	113				
09:15			95		151	246	21:15			66		43	109				
09:30			110		168	278	21:30			54		34	88				
09:45			126	408	159	620	21:45			59	240	32	161				
10:00			138		149	287	22:00			51		32	83				
10:15			123		126	249	22:15			64		30	94				
10:30			131		195	326	22:30			50		25	75				
10:45			148	540	169	639	22:45			26	191	21	108				
11:00			140		158	298	23:00			28		18	46				
11:15			125		157	282	23:15			25		13	38				
11:30			142		160	302	23:30			27		17	44				
11:45			174	581	143	618	23:45			14	94	11	59				
TOTALS						2309	2998	5307	TOTALS						5864	4986	10850
SPLIT %						43.5%	56.5%	32.8%	SPLIT %						54.0%	46.0%	67.2%

DAILY TOTALS					NB	SB						EB	WB						Total
					0	0						8,173	7,984						16,157
AM Peak Hour			11:45	11:45	11:45		PM Peak Hour			14:00	12:00	12:30							
AM Pk Volume			645	689	1334		PM Pk Volume			726	702	1392							
Pk Hr Factor			0.927	0.907	0.939		Pk Hr Factor			0.926	0.924	0.980							
7 - 9 Volume	0	0	421	695	1116		4 - 6 Volume	0	0	1352	1163	2515							
7 - 9 Peak Hour			08:00	08:00	08:00		4 - 6 Peak Hour			16:15	16:45	16:45							
7 - 9 Pk Volume	0	0	263	406	669		4 - 6 Pk Volume	0	0	698	648	1321							
Pk Hr Factor	0.000	0.000	0.783	0.775	0.840		Pk Hr Factor	0.000	0.000	0.918	0.910	0.966							

VOLUME

San Elijo Rd W/O Dwy

Day: Saturday
Date: 1/13/2018City: San Marcos
Project #: CA18_4009_001

DAILY TOTALS						NB		SB		EB						WB		Total						
						0		0		9,859			9,638			19,497								
AM Period	NB		SB		EB		WB		TOTAL		PM Period	NB		SB		EB		WB		TOTAL				
00:00					25		11		36		12:00					187		177		364				
00:15					25		17		42		12:15					183		180		363				
00:30					10		19		29		12:30					170		187		357				
00:45					17		77		9		56	12:45					244		784		211	755	455	1539
01:00					10		7		17		13:00					198		198		396				
01:15					9		9		18		13:15					229		201		430				
01:30					8		5		13		13:30					190		189		379				
01:45					7		34		7		28	13:45					195		812		180	768	375	1580
02:00					14		4		18		14:00					202		161		363				
02:15					9		5		14		14:15					202		142		344				
02:30					6		8		14		14:30					199		177		376				
02:45					7		36		1		18	14:45					209		812		144	624	353	1436
03:00					4		9		13		15:00					181		183		364				
03:15					8		4		12		15:15					222		155		377				
03:30					2		3		5		15:30					207		169		376				
03:45					6		20		6		22	15:45					214		824		143	650	357	1474
04:00					4		7		11		16:00					204		167		371				
04:15					5		8		13		16:15					229		138		367				
04:30					6		8		14		16:30					180		179		359				
04:45					9		24		5		28	16:45					197		810		170	654	367	1464
05:00					5		12		17		17:00					213		185		398				
05:15					11		18		29		17:15					200		202		402				
05:30					8		22		30		17:30					204		152		356				
05:45					16		40		46		98	17:45					166		783		166	705	332	1488
06:00					20		40		60		18:00					158		130		288				
06:15					27		43		70		18:15					175		109		284				
06:30					37		54		91		18:30					148		128		276				
06:45					36		120		89		226	18:45					129		610		118	485	247	1095
07:00					43		83		126		19:00					123		83		206				
07:15					60		102		162		19:15					102		79		181				
07:30					64		157		221		19:30					99		49		148				
07:45					84		251		141		483	19:45					110		434		67	278	177	712
08:00					96		153		249		20:00					96		72		168				
08:15					88		164		252		20:15					109		63		172				
08:30					111		175		286		20:30					90		68		158				
08:45					99		394		202		694	20:45					87		382		59	262	146	644
09:00					115		172		287		21:00					80		61		141				
09:15					114		160		274		21:15					89		70		159				
09:30					150		178		328		21:30					86		63		149				
09:45					152		531		165		675	21:45					61		316		62	256	123	572
10:00					130		201		331		22:00					70		54		124				
10:15					162		186		348		22:15					72		34		106				
10:30					180		200		380		22:30					62		36		98				
10:45					183		655		199		786	22:45					47		251		50	174	97	425
11:00					164		206		370		23:00					48		30		78				
11:15					164		206		370		23:15					43		22		65				
11:30					176		206		382		23:30					35		22		57				
11:45					207		711		198		816	23:45					22		148		23	97	45	245
TOTALS					2893		3930		6823		TOTALS					6966		5708		12674				
SPLIT %					42.4%		57.6%		35.0%		SPLIT %					55.0%		45.0%		65.0%				

DAILY TOTALS					NB	SB						EB	WB						Total
					0	0						9,859	9,638						19,497
AM Peak Hour			11:30	10:45	11:00		PM Peak Hour			12:45	12:45	12:45							
AM Pk Volume			753	817	1527		PM Pk Volume			861	799	1660							
Pk Hr Factor			0.909	0.992	0.943		Pk Hr Factor			0.882	0.947	0.912							
7 - 9 Volume	0	0	645	1177	1822		4 - 6 Volume	0	0	1593	1359	2952							
7 - 9 Peak Hour			08:00	08:00	08:00		4 - 6 Peak Hour			16:15	16:30	16:30							
7 - 9 Pk Volume	0	0	394	694	1088		4 - 6 Pk Volume	0	0	819	736	1526							
Pk Hr Factor	0.000	0.000	0.887	0.859	0.904		Pk Hr Factor	0.000	0.000	0.894	0.911	0.949							

VOLUME

San Elijo Rd W/O Dwy

Day: Sunday

Date: 1/14/2018

City: San Marcos

Project #: CA18_4009_001

DAILY TOTALS					NB	SB						EB	WB						Total
					0	0						8,082	7,967						16,049
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							TOTAL
00:00			37	29	66		12:00			155	184	339							
00:15			20	13	33		12:15			150	175	325							
00:30			28	14	42		12:30			175	177	352							
00:45			17	102	14	70	12:45			178	658	159	695	337	1353				
01:00			12	16	28		13:00			174	173	347							
01:15			12	10	22		13:15			181	158	339							
01:30			12	11	23		13:30			148	169	317							
01:45			10	46	7	44	13:45			158	661	162	662	320	1323				
02:00			3	1	4		14:00			170	135	305							
02:15			6	7	13		14:15			162	148	310							
02:30			9	8	17		14:30			192	163	355							
02:45			11	29	4	20	14:45			189	713	123	569	312	1282				
03:00			5	7	12		15:00			169	159	328							
03:15			3	6	9		15:15			155	180	335							
03:30			4	3	7		15:30			163	148	311							
03:45			6	18	4	20	15:45			155	642	146	633	301	1275				
04:00			9	5	14		16:00			156	137	293							
04:15			4	12	16		16:15			195	135	330							
04:30			8	7	15		16:30			165	132	297							
04:45			8	29	18	42	16:45			158	674	150	554	308	1228				
05:00			1	12	13		17:00			168	161	329							
05:15			6	14	20		17:15			167	183	350							
05:30			8	10	18		17:30			169	157	326							
05:45			22	37	30	66	17:45			154	658	115	616	269	1274				
06:00			19	27	46		18:00			144	105	249							
06:15			14	31	45		18:15			160	115	275							
06:30			22	42	64		18:30			139	87	226							
06:45			32	87	36	136	18:45			105	548	100	407	205	955				
07:00			29	46	75		19:00			110	85	195							
07:15			30	69	99		19:15			96	69	165							
07:30			43	91	134		19:30			88	61	149							
07:45			58	160	82	288	19:45			79	373	79	294	158	667				
08:00			53	75	128		20:00			108	67	175							
08:15			56	96	152		20:15			95	50	145							
08:30			71	135	206		20:30			78	61	139							
08:45			84	264	101	407	20:45			61	342	43	221	104	563				
09:00			77	143	220		21:00			63	52	115							
09:15			99	147	246		21:15			64	44	108							
09:30			111	178	289		21:30			54	34	88							
09:45			127	414	158	626	21:45			63	244	34	164	97	408				
10:00			136	155	291		22:00			48	33	81							
10:15			127	127	254		22:15			64	30	94							
10:30			122	196	318		22:30			48	25	73							
10:45			149	534	170	648	22:45			24	184	19	107	43	291				
11:00			142	160	302		23:00			28	19	47							
11:15			118	157	275		23:15			25	14	39							
11:30			139	159	298		23:30			27	16	43							
11:45			172	571	143	619	23:45			14	94	10	59	24	153				
TOTALS			2291	2986	5277		TOTALS			5791	4981	10772							
SPLIT %			43.4%	56.6%	32.9%		SPLIT %			53.8%	46.2%	67.1%							

DAILY TOTALS					NB	SB						EB	WB						Total
					0	0						8,082	7,967						16,049
AM Peak Hour			11:45	10:30	11:45		PM Peak Hour			14:00	12:00	12:30							
AM Pk Volume			652	683	1331		PM Pk Volume			713	695	1375							
Pk Hr Factor			0.931	0.871	0.945		Pk Hr Factor			0.928	0.944	0.977							
7 - 9 Volume	0	0	424	695	1119		4 - 6 Volume	0	0	1332	1170	2502							
7 - 9 Peak Hour			08:00	08:00	08:00		4 - 6 Peak Hour			16:15	16:45	16:45							
7 - 9 Pk Volume	0	0	264	407	671		4 - 6 Pk Volume	0	0	686	651	1313							
Pk Hr Factor	0.000	0.000	0.786	0.754	0.814		Pk Hr Factor	0.000	0.000	0.879	0.889	0.938							

Name	Type	EWStreet	NSStreet	Group	Drop#	Area	AreaAddr	Channel	Sys Ref #	Last Change	FM Name
San Elijo W	McCain 233	San Elijo N	Cooke	NONE	4	5	4	erial:COM26:	67	#####	NONE

																	Bar	
																	Hour	Minute
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F		
Page 0 <C/5>																0	1

Notes are in Column A, Rows 32 to 40

INTERSECTION: San Elijo W & Cooke

Page 1 (of 9)

 Group Assignment: **NONE**

 N/S Street Name: **Cooke**

 Last Database Change: **10/17/2017 17:08**

 Field Master Assignment: **NONE**

 E/W Street Name: **San Elijo N**

 System Reference Number: **67**

Change Record					
Change	By	Date	Change	By	Date

Notes:

Manual Plan

0 = Automatic

1-9 = Plan 1-9

14 = Free

15 = Flash

Manual Offset

0 = Automatic

1 = Offset A

2 = Offset B

3 = Offset C

Drop Number	4	<C/0+0+0>
Zone Number	0	<C/0+0+1>
Area Number	5	<C/0+0+2>
Area Address	4	<C/0+0+3>
QuicNet Channel	Serial:COM26:	(QuicNet)

Communication Addresses

Manual Plan		<C/0+A+1>
Manual Offset		<C/0+B+1>

Manual Selection

Flash Start	0	<F/1+0+E>
Red Revert	5.0	<F/1+0+F>
All Red Start	5.0	<F/1+C+0>
FYA Red Revert	0.0	<F/1+0+5>
OVLP CHG Red	6.0	<F/1+0+3>

Start / Revert Times

Exclusive Walk	0	<F/1+0+0>
Exclusive FDW	0	<F/1+0+1>
All Red Clear	0.0	<F/1+0+2>

Exclusive Ped Phase

 (Outputs specified in Assignable
Outputs at E/127+A+E & F)

Column Numbers ---->		Phase							
Phase Names ---->		1	2	3	4	5	6	7	8
0	Ped Walk	0	0	0	7	0	7	0	7
1	Ped FDW	0	0	0	10	0	10	0	10
2	Min Green	0	0	0	5	0	10	0	5
3	Type 3 Disconnect	0	0	0	0	0	0	0	0
4	Added per Vehicle	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	Veh Extension	0.0	0.0	0.0	2.0	0.0	3.0	0.0	3.0
6	Max Gap	0.0	0.0	0.0	2.0	0.0	3.0	0.0	3.0
7	Min Gap	0.0	0.0	0.0	2.0	0.0	3.0	0.0	3.0
8	Max Limit	0	0	0	40	0	40	0	40
9	Max Limit 2	0	0	0	0	0	0	0	0
A	Adv. / Delay Walk	0	0	0	3	0	3	0	3
B	PE Min Ped FDW	0	0	0	0	0	0	0	0
C	Cond Serv Check	0	0	0	0	0	0	0	0
D	Reduce Every	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	Yellow Change	0.0	0.0	0.0	3.0	0.0	4.5	0.0	3.0
F	Red Clear	0.0	0.0	0.0	2.0	0.0	1.5	0.0	2.0

Phase Timing - Bank 1

<C+0+F=1>

	9	A	B	C	D
Phase 1	0	0	0	0	0.0
Phase 2	20	0	0	0	0.0
Phase 3	0	0	0	0	0.0
Phase 4	20	0	0	0	0.0
Phase 5	0	0	0	0	0.0
Phase 6	20	0	0	0	0.0
Phase 7	0	0	0	0	0.0
Phase 8	20	0	0	0	0.0
Max Initial					
Alternate Walk					
Alternate FDW					
Alternate Initial					
Alternate Extension					

Alternate Timing

<C+0+F=1>

	E
RR-1 Delay	0
RR-1 Clear	10
EV-A Delay	0
EV-A Clear	1
EV-B Delay	0
EV-B Clear	1
EV-C Delay	0
EV-C Clear	1
EV-D Delay	0
EV-D Clear	1
RR-2 Delay	0
RR-2 Clear	10
View EV Delay	- - -
View EV Clear	- - -
View RR Delay	- - -
View RR Clear	- - -

Preempt Timing

	F	Row
Permit	4 6 8	0
Red Lock	8	1
Yellow Lock		2
Min Recall	6	3
Ped Recall	6	4
View Set Peds	- - - -	5
Rest In Walk		6
Red Rest		7
Dual Entry	4 8	8
Max Recall		9
Soft Recall		A
Max 2		B
Cond. Service		C
Man Cntrl Calls		D
Yellow Start	4 8	E
First Phases	6	F

Phase Functions <C+0+F=1>

		Overlap							
Column Numbers ---->		1	2	3	4	5	6	7	8
Row	Overlap Name ---->								
0	Load Switch Number	0	0	0	0	0	0	0	0
1	Veh Set 1 - Phases								
2	Veh Set 2 - Phases								
3	Veh Set 3 - Phases								
4	Neg Veh Phases								
5	Neg Ped Phases								
6	Green Omit Phases								
7	Green Clear Omit Phs.								
8	Overlap Recall	N	N	N	N	N	N	N	N
9	Queue Jump Phase								
A	Queue Jump Time	0	0	0	0	0	0	0	0
B	Minimum Green	0	0	0	0	0	0	0	0
C	Maximum Green	0	0	0	0	0	0	0	0
D	Green Clear	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	Yellow Change	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
F	Red Clear	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Overlap Assignments

<C+0+E=29>

Extra 1 Flags

- 1 = TBC Type 1
 2 = NEMA Ext. Coord
 3 = Auto Daylight Savings
 4 = Solid FDW on EV
 5 = Extended Status
 6 = International Ped
 7 = Flash - Clear Outputs
 8 = Split Ring

Extra 2 Flags

- 1 = AWB During Initial
 2 = 3 Section FYA
 3 = Disable Min Walk
 4 = QuicNet System
 5 = Ignore P/P on EV
 6 = Manual Hold in FDW
 7 = Allow QuicNet PE
 8 = Flash Grn B4 Yellow

	C	Row
EV-A	0	0
EV-B	0	1
EV-C	0	2
EV-D	0	3
RR-1 *	- - -	4
RR-2 *	- - -	5
SE-1	0	6
SE-2	0	7

Preempt Priority

<C+0+E=125>

(* RR-1 is always Highest,
 and RR-2 is always
 Second Highest)

Row	Column Numbers ---->	E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Flash to PE Circuits	
6	Flash Entry Phases	
7	Disable Yellow Range	
8	Disable Ovp Yel Range	
9	Overlap Yellow Flash	
A	EV-A Phases	
B	EV-B Phases	4
C	EV-C Phases	6
D	EV-D Phases	8
E	Extra 1 Config. Bits	1 3 5
F	IC Select (Interconnect)	2

Configuration

<C+0+E=125>

	F
Ext. Permit 1 Phases	
Ext. Permit 2 Phases	
Exclusive Ped Assign	
Preempt Non-Lock	
Ped for 2P Output	
Ped for 6P Output	6
Ped for 4P Output	
Ped for 8P Output	8
Yellow Flash Phases	
Low Priority A Phases	
Low Priority B Phases	
Low Priority C Phases	
Low Priority D Phases	
Restricted Phases	
Extra 2 Config. Bits	4 7

Configuration

<C+0+E=125>

	F
Fast Green Flash Phase	
Green Flash Phases	
Flashing Walk Phases	
Guaranteed Passage	
Simultaneous Gap Term	12345678
Sequential Timing	
Advance Walk Phases	4 6 8
Delay Walk Phases	
External Recall	
Start-up Overlap Green	
Max Extension	
Inhibit Ped Reservice	
Semi-Actuated	
Start-up Overlap Yellow	
Start-up Vehicle Calls	12345678
Start-up Ped Calls	12345678

Specials

<C+0+F=2>

Flash to PE &
PE Non-Lock

- 1 = EV A 5 = RR 1
 2 = EV B 6 = RR 2
 3 = EV C 7 = SE 1
 4 = EV D 8 = SE 2

IC Select Flags

- 1 =
 2 = Modem
 3 = 7-Wire Slave
 4 = FYA/Ped call side
 5 = Ped Inhibit FYA
 6 = Simplex Master
 7 =
 8 = Offset Interrupter

	2	Row
		0
Phase 1	10	1
Phase 2	10	2
Phase 3	10	3
Phase 4	10	4
Phase 5	10	5
Phase 6	10	6
Phase 7	10	7
Phase 8	10	8

Coordination
Transition
Minimums

<C+0+C=5>

Coord Extra

1 = Programmed WALK Time for Sync Phases

2 = Always Terminate Sync Phase Peds

Column Numbers ---->		Plan								
Plan Name ---->		1	2	3	4	5	6	7	8	9
0	Cycle Length	60	45	80	90	90	90	0	0	0
1	Phase 1 - ForceOff	0	0	0	0	0	0	0	0	0
2	Phase 2 - ForceOff	0	0	0	0	0	0	0	0	0
3	Phase 3 - ForceOff	0	0	0	0	0	0	0	0	0
4	Phase 4 - ForceOff	30	19	20	25	25	30	0	0	0
5	Phase 5 - ForceOff	0	0	0	0	0	0	0	0	0
6	Phase 6 - ForceOff	0	0	0	0	0	0	0	0	0
7	Phase 7 - ForceOff	0	0	0	0	0	0	0	0	0
8	Phase 8 - ForceOff	30	19	0	0	0	30	0	0	0
9	Ring Offset	0	0	0	0	0	0	0	0	0
A	Offset 1	33	14	8	59	52	33	0	0	0
B	Offset 2	0	0	0	0	0	0	0	0	0
C	Offset 3	0	0	0	0	0	0	0	0	0
D	Perm 1 - End	4	4	8	9	9	2	0	0	0
E	Hold Release	255	255	255	255	255	255	0	0	0
F	Reserved	0	0	0	0	0	0	0	0	0

Coordination - Bank 1

<C+0+C=1>

E		Row
Plan 1 - Sync	6	1
Plan 2 - Sync	6	2
Plan 3 - Sync	6	3
Plan 4 - Sync	6	4
Plan 5 - Sync	6	5
Plan 6 - Sync	6	6
Plan 7 - Sync	6	7
Plan 8 - Sync	6	8
Plan 9 - Sync	6	9
NEMA Sync		A
NEMA Hold		B
		C
		D
Coord Extra		E
		F

Sync Phases

<C+0+C=1>

Row											Row
0	Ped Adjustment	0	0	0	0	0	0	0	0	0	0
1	Perm 2 - Start	0	0	0	0	0	0	0	0	0	1
2	Perm 2 - End	0	0	0	0	0	0	0	0	0	2
3	Perm 3 - Start	0	0	0	0	0	0	0	0	0	3
4	Perm 3 - End	0	0	0	0	0	0	0	0	0	4
5	Reservice Time	0	0	0	0	0	0	0	0	0	5
6	Reservice Phases										6
7											7
8	Pretimed Phases										8
9	Max Recall										9
A	Perm 1 Veh Phase	12345678	12345678	12345678	12345678	12345678	12345678	12345678	12345678	12345678	A
B	Perm 1 Ped Phase	12345678	12345678	12345678	12345678	12345678	12345678	12345678	12345678	12345678	B
C	Perm 2 Veh Phase										C
D	Perm 2 Ped Phase										D
E	Perm 3 Veh Phase										E
F	Perm 3 Ped Phase										F

Coordination - Bank 2

<C+0+C=2>

F		Row
Free Lag	2 4 6 8	0
Plan 1 - Lag	2 4 6 8	1
Plan 2 - Lag	2 4 6 8	2
Plan 3 - Lag	2 4 6 8	3
Plan 4 - Lag	2 4 6 8	4
Plan 5 - Lag	2 4 6 8	5
Plan 6 - Lag	2 4 6 8	6
Plan 7 - Lag	2 4 6 8	7
Plan 8 - Lag	2 4 6 8	8
Plan 9 - Lag	2 4 6 8	9
External Lag		A
Lag Hold		B
		C
		D
		E
		F

Lag Phases

<C+0+C=1>

Row	Column 8		Column 9		Column A		Column B		Column C		Column D		Column E		Column F		Row
0	One-Shot Timer	0	Latch 1 Set	0	NOT-3	0	Max 2	0	Pretimed	0	Set DOW	0	Dial 2 (7-Wire)	0	Sim Term	0	0
1	AND-5 (a)	0	Latch 1 Reset	0	NOT-4	0	Bus Checkin A	0	Plan 1	0	Ext. Perm 1	0	Dial 3 (7-Wire)	0	EV-A	71	1
2	AND-5 (b)	0	Latch 2 Set	0	OR-4 (a)	0	Bus Checkin B	0	Plan 2	0	Ext. Perm 2	0	Offset 1 (7-Wire)	0	EV-B	72	2
3	AND-6 (a)	0	Latch 2 Reset	0	OR-4 (b)	0	Bus Checkin C	0	Plan 3	0	Gate Down	0	Offset 2 (7-Wire)	0	EV-C	73	3
4	AND-6 (b)	0	NAND-3 (a)	0	OR-5 (a)	0	Bus Checkin D	0	Plan 4	0	Set Clock	0	Offset 3 (7-Wire)	0	EV-D	74	4
5	Reserved		NAND-3 (b)	0	OR-5 (b)	0	Bus Checkout A	0	Plan 5	0	Stop Time	82	Free (7-Wire)	0	RR-1	51	5
6	Reserved		NAND-4 (a)	0	OR-6 (a)	0	Bus Checkout B	0	Plan 6	0	Flash Sense	81	Flash (7-Wire)	0	RR-2	52	6
7	Reserved		NAND-4 (b)	0	OR-6 (b)	0	Bus Checkout C	0	Plan 7	0	Manual Enable	0	Excl. Ped Omit	0	Spec. Event 1	0	7
8	Spec. Funct. 1	0	OR-7 (a)	0	EXTMR	0	Bus Checkout D	0	Plan 8	0	Man. Advance	0	NOT-1	0	Spec. Event 2	0	8
9	Spec. Funct. 2	0	OR-7 (b)	0	External Alarm 1	0	Max Inhibit (nema)	0	Plan 9	0	External Alarm 2	0	NOT-2	0	External Lag	0	9
A	Spec. Funct. 3	0	OR-7 (c)	0	AND-4 (a)	0	Force A (nema)	0	DELAY-A	0	Phase Bank 2	0	OR-1 (a)	0	AND-1 (a)	0	A
B	Spec. Funct. 4	0	OR-7 (d)	0	AND-4 (b)	0	Force B (nema)	0	DELAY-B	0	Phase Bank 3	0	OR-1 (b)	0	AND-1 (b)	0	B
C	Reserved		OR-8 (a)	0	NAND-1 (a)	0	C.N.A. (nema)	0	DELAY-C	0	Overlap Set 2	0	OR-2 (a)	0	AND-2 (a)	0	C
D	Reserved		OR-8 (b)	0	NAND-1 (b)	0	Hold (nema)	0	DELAY-D	0	Overlap Set 3	0	OR-2 (b)	0	AND-2 (b)	0	D
E	Reserved		OR-8 (c)	0	NAND-2 (a)	0	Max Recall	0	DELAY-E	0	Detector Set 2	0	OR-3 (a)	0	AND-3 (a)	0	E
F	Reserved		OR-8 (d)	0	NAND-2 (b)	0	Min Recall	0	DELAY-F	0	Detector Set 3	0	OR-3 (b)	0	AND-3 (b)	0	F

Assignable Inputs

<C+0+E=126>

Row	Column 8		Column 9		Column A		Column B		Column C		Column D		Column E		Column F		Row
0	Reserved		Phase ON - 1	0	Preempt Fail	0	Flasher 0	0	Free	0	NOT-1	0	TOD Out 1	0	Dial 2 (7-Wire)	0	0
1	Reserved		Phase ON - 2	0	Sp Evnt Out 1	0	Flasher 1	0	Plan 1	0	OR-1	0	TOD Out 2	0	Dial 3 (7-Wire)	0	1
2	Reserved		Phase ON - 3	0	Sp Evnt Out 2	0	Fast Flasher	0	Plan 2	0	OR-2	0	TOD Out 3	0	Offset 1 (7-Wire)	0	2
3	Reserved		Phase ON - 4	0	Sp Evnt Out 3	0	EXTMR	0	Plan 3	0	OR-3	0	TOD Out 4	0	Offset 2 (7-Wire)	0	3
4	Reserved		Phase ON - 5	0	Sp Evnt Out 4	0	One-Shot Timer	0	Plan 4	0	AND-1	0	TOD Out 5	0	Offset 3 (7-Wire)	0	4
5	Reserved		Phase ON - 6	0	Sp Evnt Out 5	0	Reserved		Plan 5	0	AND-2	0	TOD Out 6	0	Free (7-Wire)	0	5
6	Reserved		Phase ON - 7	0	Sp Evnt Out 6	0	Latch 1	0	Plan 6	0	AND-3	0	TOD Out 7	0	Flash (7-Wire)	0	6
7	Reserved		Phase ON - 8	0	Sp Evnt Out 7	0	Latch 2	0	Plan 7	0	NOT-2	0	TOD Out 8	0	Preempt	0	7
8	Flh Yell Arrow 1	0	Ph. Check - 1	0	Sp Evnt Out 8	0	NOT-3	0	Plan 8	0	EV-A	0	Adv. Warn - 1	0	Low Priority A	0	8
9	Green 1	0	Ph. Check - 2	0	Coord On	0	NOT-4	0	Plan 9	0	EV-B	0	Adv. Warn - 2	0	Low Priority B	0	9
A	Flh Yell Arrow 3	0	Ph. Check - 3	0	Detector Fail	0	OR-4	0	Spec. Funct. 3	0	EV-C	0	DELAY-A	0	Low Priority C	0	A
B	Green 3	0	Ph. Check - 4	0	Spec. Funct. 1	0	OR-5	0	Spec. Funct. 4	0	EV-D	0	DELAY-B	0	Low Priority D	0	B
C	Flh Yell Arrow 5	0	Ph. Check - 5	0	Spec. Funct. 2	0	OR-6	0	NAND-3	0	RR-1	0	DELAY-C	0	AND-5	0	C
D	Green 5	0	Ph. Check - 6	0	Central Control	0	AND-4	0	NAND-4	0	RR-2	0	DELAY-D	0	AND-6	0	D
E	Flh Yell Arrow 7	0	Ph. Check - 7	0	Excl. Ped DW	0	NAND-1	0	OR-7	0	Spec. Event 1	0	DELAY-E	0	Reserved		E
F	Green 7	0	Ph. Check - 8	0	Excl. Ped WK	0	NAND-2	0	OR-8	0	Spec. Event 2	0	DELAY-F	0	Reserved		F

Assignable Outputs

<C+0+E=127>

		Phase							
Column Numbers ---->		1	2	3	4	5	6	7	8
Row	Phase Names ---->								
0	Ped Walk	0	0	0	0	0	7	7	7
1	Ped FDW	0	0	0	0	0	7	6	6
2	Min Green	0	0	0	0	0	7	7	7
3	Type 3 Disconnect	0	0	0	0	0	0	0	0
4	Added per Vehicle	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	Veh Extension	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0
6	Max Gap	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0
7	Min Gap	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0
8	Max Limit	0	0	0	0	0	40	40	40
9	Max Limit 2	0	0	0	0	0	0	0	0
A	Adv. / Delay Walk	0	0	0	0	0	0	0	0
B	PE Min Ped FDW	0	0	0	0	0	0	0	0
C	Cond Serv Check	0	0	0	0	0	0	0	0
D	Reduce Every	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	Yellow Change	0.0	0.0	0.0	0.0	0.0	3.2	3.2	3.2
F	Red Clear	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0

Phase Timing - Bank 2 <C+0+F=2>

	9	A	B	C	D
	---	---	---	---	---
Phase 1	0	0	0	0	0.0
Phase 2	20	0	0	0	0.0
Phase 3	0	0	0	0	0.0
Phase 4	20	0	0	0	0.0
Phase 5	0	0	0	0	0.0
Phase 6	20	0	0	0	0.0
Phase 7	0	0	0	0	0.0
Phase 8	20	0	0	0	0.0
Max Initial					
Alternate Walk					
Alternate FDW					
Alternate Initial					
Alternate Extension					

Alternate Timing

Transition Type
 0.X = Shortway
 1.X = Lengthen
 X.1 thru X.4 =
 Number of
 cycles when
 lengthening

Daylight Savings
 Date
 If set to all zeros,
 standard dates
 will be used.

Transition Type	0.3	<C/5+1+9>
-----------------	-----	-----------

TBC Transition

Hawk Select	0	F/1+0+4>
-------------	---	----------

Hawk Select 200 = Mid-Block, 201 = Hawk

Address	0	<C/1+0+6>
Select Parity	0	<C/1+0+5>

AB3418 Comm 2 0 = No Parity, 1 = Even

Begin Month	3	<C/5+2+A>
Begin Week	2	<C/5+2+B>
End Month	11	<C/5+2+C>
End Week	1	<C/5+2+D>

Daylight Savings Time

Time B4 Yellow	0.0	<F/1+C+E>
Phase Number	0	<F/1+C+F>

Advance Warning Beacon - Sign 1

Time B4 Yellow	0.0	
Phase Number	0	<F/1+D+F>

Advance Warning Beacon - Sign 2

Offset Time	0	<C/5+2+E>
Max Cycle Time	0	<C/5+2+F>

Yellow Yield Coordination

	12345678	
Omit Alarm	12345678	<C/5+F+0>

Local Alarm Disable

		1	2	3	4	5	6	7	8
Row									
0	Ped Walk	0	0	0	0	0	7	7	7
1	Ped FDW	0	0	0	0	0	7	6	6
2	Min Green	0	0	0	0	0	7	7	7
3	Type 3 Disconnect	0	0	0	0	0	0	0	0
4	Added per Vehicle	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	Veh Extension	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0
6	Max Gap	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0
7	Min Gap	0.0	0.0	0.0	0.0	0.0	3.0	3.0	3.0
8	Max Limit	0	0	0	0	0	40	40	40
9	Max Limit 2	0	0	0	0	0	0	0	0
A	Adv. / Delay Walk	0	0	0	0	0	0	0	0
B	PE Min Ped FDW	0	0	0	0	0	0	0	0
C	Cond Serv Check	0	0	0	0	0	0	0	0
D	Reduce Every	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	Yellow Change	0.0	0.0	0.0	0.0	0.0	3.2	3.2	3.2
F	Red Clear	0.0	0.0	0.0	0.0	0.0	1.0	1.0	1.0

Phase Timing - Bank 3 <C+0+F=3>

	9	A	B	C	D
	---	---	---	---	---
Phase 1	0	0	0	0	0.0
Phase 2	20	0	0	0	0.0
Phase 3	0	0	0	0	0.0
Phase 4	20	0	0	0	0.0
Phase 5	0	0	0	0	0.0
Phase 6	20	0	0	0	0.0
Phase 7	0	0	0	0	0.0
Phase 8	20	0	0	0	0.0
Max Initial					
Alternate Walk					
Alternate FDW					
Alternate Initial					
Alternate Extension					

Alternate Timing

Column Numbers ---->						1	3
Row	Detector Name	C1 Pin Number	Attributes	Phase(s)	Assign	Delay	Carry-over
0		39	45 7	2	123	0.0	0.0
1		40	45 7	6	123	0.0	0.0
2		41	45 7	4	123	0.0	0.0
3		42	45 7	8	123	0.0	0.0
4		43	45 7	2	123	0.0	0.0
5		44	45 7	6	123	0.0	0.0
6		45	45 7	4	123	0.0	0.0
7		46	45 7	8	123	0.0	0.0
8		47	67	2	123	0.0	0.0
9		48	67	6	123	0.0	0.0
A		49	67	4	123	0.0	0.0
B		50	67	8	123	0.0	0.0
C		55	45 7	5	123	0.0	0.0
D		56	45 7	1	123	0.0	0.0
E		57	45 7	7	123	0.0	0.0
F		58	45 7	3	123	0.0	0.0

Column Numbers ---->						2	4
Row	Detector Name	C1 Pin Number	Attributes	Phase(s)	Assign	Delay	Carry-over
0		59	45 7	5	123	0.0	0.0
1		60	45 7	1	123	0.0	0.0
2		61	45 7	7	123	0.0	0.0
3		62	45 7	3	123	0.0	0.0
4		63	45 7	2	123	0.0	0.0
5		64	45 7	6	123	0.0	0.0
6		65	45 7	4	123	0.0	0.0
7		66	45 7	8	123	0.0	0.0
8		67	2	2	123	0.0	0.0
9		68	2	6	123	0.0	0.0
A		69	2	4	123	0.0	0.0
B		70	2	8	123	0.0	0.0
C		76	45 7	2	123	0.0	0.0
D		77	45 7	6	123	0.0	0.0
E		78	45 7	4	123	0.0	0.0
F		79	45 7	8	123	0.0	0.0

Detector Assignments <C+0+E=126>

<C+0+D=0>

Ped / Phase / Overlap									Row
Column Numbers ---->	1	2	3	4	5	6	7	8	
Walk	0	0	0	0	0	0	0	0	0
Don't Walk	0	0	0	0	0	0	0	0	1
Phase Green	0	0	0	0	0	0	0	0	2
Phase Yellow	0	0	0	0	0	0	0	0	3
Phase Red	0	0	0	0	0	0	0	0	4
Overlap Green	0	0	0	0	0	0	0	0	5
Overlap Yellow	0	0	0	0	0	0	0	0	6
Overlap Red	0	0	0	0	0	0	0	0	7

Redirect Phase Outputs <C+0+E=127>

Cabinet Type 0 <E/125+D+0>

Enable Redirection

(Enable Redirection = 30)

Max OFF (minutes) 60 <D/0+0+1>

Max ON (minutes) 5 <D/0+0+2>

Chatter Fail Time 0 <D/0+0+4>

Detector Failure Monitor

Ped Ovlp Parent Ph 0 <E/125+D+1>

Ped Ovlp Phases <E/125+D+2>

RR1 Exit Phases <E/125+D+3>

Excl Ped/Ped Svc 0 <E/125+D+4>

Miscellaneous**Detector Attributes**

- 1 = Full Time Delay
- 2 = Ped Call
- 3 = Overlap
- 4 = Count
- 5 = Extension
- 6 = Type 3
- 7 = Calling
- 8 = Alternate

Det. Assignments

- 1 = Det. Set 1
- 2 = Det. Set 2
- 3 = Det. Set 3
- 4 =
- 5 =
- 6 = Failure - Min Recall
- 7 = Failure - Max Recall
- 8 = Report on Failure

	B	Row
One-Shot	0.0	8
Ext. Timer	0	9
DELAY-A	0	A
DELAY-B	0	B
DELAY-C	0	C
DELAY-D	0	D
DELAY-E	0	E
DELAY-F	0	F

Delay Logic Times

<C+0+D=0> (seconds)

Row	Time	Plan	Offset	Day of Week
0	00 : 00	E	A	1234567
1	07 : 00	6	A	23456
2	09 : 30	1	A	23456
3	13 : 00	6	A	23456
4	18 : 30	1	A	23456
5	20 : 00	E	A	23456
6	09 : 00	1	A	1 7
7	18 : 00	E	A	1 7
8	00 : 00	0	0	
9	00 : 00	0	0	
A	00 : 00	0	0	
B	00 : 00	0	0	
C	00 : 00	0	0	
D	00 : 00	0	0	
E	00 : 00	0	0	
F	00 : 00	0	0	

TOD Coordination <C+0+9=0.1>
(Bank 1)

Time	Funct.	Day of Week
07 : 00	4	23456
20 : 00	4	23456
09 : 00	4	1 7
18 : 00	4	1 7
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	

TOD Function <C+0+7=0.1>

Column 4
Phases/Bits
6
6

<C+0+E=27>

Day	Year	Month	Holiday Type
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	

Holiday Dates <C+0+8=1.1>
(Bank 1)

Time	Plan	Offset	Holiday Type
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	

Holiday Events <C+0+9=1.1>
(Bank 1)

T.O.D. Functions

- 0 =
 1 = Red Lock
 2 = Yellow Lock
 3 = Veh Min Recall
 4 = Ped Recall
 5 =
 6 = Rest In Walk
 7 = Red Rest
 8 = Double Entry
 9 = Veh Max Recall
 A = Veh Soft Recall
 B = Maximum 2
 C = Conditional Service
 D = Free Lag Phases
 E = Bit 1 - Local Override
 Bit 4 - Disable Detector
 OFF Monitor
 Bit 5 - Disable Low
 Priority Preempt
 Bit 6 - FYA Inhibit
 Bit 7 - Detector Count
 Monitor
 Bit 8 - Real Time Split
 Monitor
 F = Output Bits 1 thru 8

Row	Time	Plan	Offset	Day of Week
0	00 : 00	0	0	
1	00 : 00	0	0	
2	00 : 00	0	0	
3	00 : 00	0	0	
4	00 : 00	0	0	
5	00 : 00	0	0	
6	00 : 00	0	0	
7	00 : 00	0	0	
8	00 : 00	0	0	
9	00 : 00	0	0	
A	00 : 00	0	0	
B	00 : 00	0	0	
C	00 : 00	0	0	
D	00 : 00	0	0	
E	00 : 00	0	0	
F	00 : 00	0	0	

TOD Coordination <C+0+9=0.2>
(Bank 2)

Time	Funct.	Holiday Type
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	

Holiday TOD Function <C+0+7=0.2>

Column 4
Phases/Bits

<C+0+E=28>

Day	Year	Month	Holiday Type
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	

Holiday Dates <C+0+8=1.2>
(Bank 2)

Time	Plan	Offset	Holiday Type
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	

Holiday Events <C+0+9=1.2>
(Bank 2)

Plan Select

- 1 thru 9 = Coordination
 Plan 1 thru 9
 14 or E = Free
 15 or F = Flash

Offset Select

- A = Offset A
 B = Offset B
 C = Offset C

	6	7	8	9	A	B	C	D	E	F
Row	Clear	Time	Ped Call	Hold	Advance	Force Off	Vehicle Call	Permit Phases	Ped Omit	Output
0		0								
1		0								
2		0								
3		0								
4		0								
5		0								
6		0								
7		0								
8		0								
9		0								
A		0								
B		0								
C		0								
D		0								
E		0								
F		0								

Special Event Schedule -- Table 1 <C+0+E=27>

Notes:

0 <E/27+5+F>
Limited Service Interval

	6	7	8	9	A	B	C	D	E	F
Row	Clear	Time	Ped Call	Hold	Advance	Force Off	Vehicle Call	Permit Phases	Ped Omit	Output
0		0								
1		0								
2		0								
3		0								
4		0								
5		0								
6		0								
7		0								
8		0								
9		0								
A		0								
B		0								
C		0								
D		0								
E		0								
F		0								

Special Event Schedule -- Table 2 <C+0+E=28>

Notes:

0 <E/28+5+F>
Limited Service Interval

Min Time (seconds) | 0 | <F/1+0+8>

Min Green Before PE Force Off

Max Time (minutes) | 255 | <F/1+0+9>

Max Preempt Time Before Failure

Min Time (seconds) | 0 | <F/1+0+A>

Min Time Between Same Preempts

(Does Not Apply To Railroad Preempt)

Low Pri. Channel | | <E/125+C+8>

Disable Low Priority Channel

Low Priority

1 = Channel A

2 = Channel B

3 = Channel C

4 = Channel D

Row		
C	Bus Headway	0
D	Bus Delay	0
E	Max Early Grn	0
F	Max Grn Ext.	0

Priority Parameters

<F/1 +A+Row>

Row	Time	Headway	Direction	Day of Week
0	00 : 00	0	0	
1	00 : 00	0	0	
2	00 : 00	0	0	
3	00 : 00	0	0	
4	00 : 00	0	0	
5	00 : 00	0	0	
6	00 : 00	0	0	
7	00 : 00	0	0	
8	00 : 00	0	0	
9	00 : 00	0	0	
A	00 : 00	0	0	
B	00 : 00	0	0	
C	00 : 00	0	0	
D	00 : 00	0	0	
E	00 : 00	0	0	
F	00 : 00	0	0	

Headway Schedule <C+0+9=2.1>

Headway Time

(minutes)

1 thru 9 = 1 thru 9

A = 10

B = 11

C = 12

D = 13

E = 14

F = 15

Low Priority Preemption (Bus Priority)

Note: Also see "Time of Day Functions", Function E, Bit 5 (Disable Low Priority)

Name	Type	EWStreet	NSStreet	Group	Drop#	Area	AreaAddr	Channel	Sys Ref #	Last Change	FM Name
San Elijo E & McCain 233	San Elijo	Baker	NONE		1	0	3	erial:COM26:	52	#####	NONE

																	Bar	
																	Hour	Minute
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F		
Page 0 <C/5>																0	1

Notes are in Column A, Rows 32 to 40

INTERSECTION: San Elijo E & Baker

Page 1 (of 9)

 Group Assignment: **NONE**

 N/S Street Name: **Baker**

 Last Database Change: **11/16/2017 9:19**

 Field Master Assignment: **NONE**

 E/W Street Name: **San Elijo**

 System Reference Number: **52**

Change Record					
Change	By	Date	Change	By	Date

Notes:

Manual Plan

0 = Automatic

1-9 = Plan 1-9

14 = Free

15 = Flash

Manual Offset

0 = Automatic

1 = Offset A

2 = Offset B

3 = Offset C

Drop Number	1	<C/0+0+0>
Zone Number	0	<C/0+0+1>
Area Number	0	<C/0+0+2>
Area Address	3	<C/0+0+3>
QuicNet Channel	Serial:COM26:	(QuicNet)

Communication Addresses

Manual Plan		<C/0+A+1>
Manual Offset		<C/0+B+1>

Manual Selection

Flash Start	0	<F/1+0+E>
Red Revert	5.0	<F/1+0+F>
All Red Start	5.0	<F/1+C+0>
FYA Red Revert	2.0	<F/1+0+5>
OVLP CHG Red	6.0	<F/1+0+3>

Start / Revert Times

Exclusive Walk	0	<F/1+0+0>
Exclusive FDW	0	<F/1+0+1>
All Red Clear	0.0	<F/1+0+2>

Exclusive Ped Phase

 (Outputs specified in Assignable
Outputs at E/127+A+E & F)

Column Numbers ---->		Phase							
Phase Names ---->		1	2	3	4	5	6	7	8
0	Ped Walk	0	7	0	7	0	0	0	7
1	Ped FDW	0	10	0	10	0	0	0	10
2	Min Green	0	10	0	5	0	0	0	5
3	Type 3 Disconnect	0	0	0	0	0	0	0	0
4	Added per Vehicle	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	Veh Extension	0.0	3.0	0.0	3.0	0.0	0.0	0.0	3.0
6	Max Gap	0.0	3.0	0.0	3.0	0.0	0.0	0.0	3.0
7	Min Gap	0.0	3.0	0.0	3.0	0.0	0.0	0.0	3.0
8	Max Limit	0	40	0	30	0	0	0	30
9	Max Limit 2	0	0	0	0	0	0	0	0
A	Adv. / Delay Walk	0	3	0	3	0	0	0	3
B	PE Min Ped FDW	0	0	0	0	0	0	0	0
C	Cond Serv Check	0	0	0	0	0	0	0	0
D	Reduce Every	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	Yellow Change	0.0	3.0	0.0	3.0	0.0	0.0	0.0	3.0
F	Red Clear	0.0	1.5	0.0	1.5	0.0	0.0	0.0	1.5

Phase Timing - Bank 1

<C+0+F=1>

	9	A	B	C	D
Phase 1	0	0	0	0	0.0
Phase 2	20	0	0	0	0.0
Phase 3	0	0	0	0	0.0
Phase 4	20	0	0	0	0.0
Phase 5	0	0	0	0	0.0
Phase 6	20	0	0	0	0.0
Phase 7	0	0	0	0	0.0
Phase 8	20	0	0	0	0.0
Max Initial					
Alternate Walk					
Alternate FDW					
Alternate Initial					
Alternate Extension					

Alternate Timing

<C+0+F=1>

	E
RR-1 Delay	0
RR-1 Clear	10
EV-A Delay	0
EV-A Clear	5
EV-B Delay	0
EV-B Clear	5
EV-C Delay	0
EV-C Clear	5
EV-D Delay	0
EV-D Clear	5
RR-2 Delay	0
RR-2 Clear	10
View EV Delay	- - -
View EV Clear	- - -
View RR Delay	- - -
View RR Clear	- - -

Preempt Timing

	F	Row
Permit	2 4 8	0
Red Lock		1
Yellow Lock		2
Min Recall	2	3
Ped Recall	2	4
View Set Peds	- - - -	5
Rest In Walk		6
Red Rest		7
Dual Entry	4 8	8
Max Recall		9
Soft Recall		A
Max 2		B
Cond. Service		C
Man Cntrl Calls		D
Yellow Start	4 8	E
First Phases	2	F

Phase Functions <C+0+F=1>

		Overlap							
Column Numbers ---->		1	2	3	4	5	6	7	8
Row	Overlap Name ---->								
0	Load Switch Number	0	0	0	0	0	0	0	0
1	Veh Set 1 - Phases								
2	Veh Set 2 - Phases								
3	Veh Set 3 - Phases								
4	Neg Veh Phases								
5	Neg Ped Phases								
6	Green Omit Phases								
7	Green Clear Omit Phs.								
8	Overlap Recall	N	N	N	N	N	N	N	N
9	Queue Jump Phase								
A	Queue Jump Time	0	0	0	0	0	0	0	0
B	Minimum Green	0	0	0	0	0	0	0	0
C	Maximum Green	0	0	0	0	0	0	0	0
D	Green Clear	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
E	Yellow Change	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
F	Red Clear	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Overlap Assignments

<C+0+E=29>

Extra 1 Flags

- 1 = TBC Type 1
 2 = NEMA Ext. Coord
 3 = Auto Daylight Savings
 4 = Solid FDW on EV
 5 = Extended Status
 6 = International Ped
 7 = Flash - Clear Outputs
 8 = Split Ring

Extra 2 Flags

- 1 = AWB During Initial
 2 = 3 Section FYA
 3 = Disable Min Walk
 4 = QuicNet System
 5 = Ignore P/P on EV
 6 = Manual Hold in FDW
 7 = Allow QuicNet PE
 8 = Flash Grn B4 Yellow

	C	Row
EV-A	0	0
EV-B	0	1
EV-C	0	2
EV-D	0	3
RR-1 *	- - -	4
RR-2 *	- - -	5
SE-1	0	6
SE-2	0	7

Preempt Priority

<C+0+E=125>

(* RR-1 is always Highest,
 and RR-2 is always
 Second Highest)

Row	Column Numbers ---->	E
0	Exclusive Phases	
1	RR-1 Clear Phases	
2	RR-2 Clear Phases	
3	RR-2 Limited Service	
4	Prot / Perm Phases	
5	Flash to PE Circuits	
6	Flash Entry Phases	
7	Disable Yellow Range	
8	Disable Ovp Yel Range	
9	Overlap Yellow Flash	
A	EV-A Phases	2
B	EV-B Phases	4
C	EV-C Phases	
D	EV-D Phases	8
E	Extra 1 Config. Bits	1 3 5
F	IC Select (Interconnect)	2

Configuration

<C+0+E=125>

	F
Ext. Permit 1 Phases	
Ext. Permit 2 Phases	
Exclusive Ped Assign	
Preempt Non-Lock	
Ped for 2P Output	2
Ped for 6P Output	
Ped for 4P Output	4
Ped for 8P Output	8
Yellow Flash Phases	
Low Priority A Phases	
Low Priority B Phases	
Low Priority C Phases	
Low Priority D Phases	
Restricted Phases	
Extra 2 Config. Bits	4 7

Configuration

<C+0+E=125>

	F
Fast Green Flash Phase	
Green Flash Phases	
Flashing Walk Phases	
Guaranteed Passage	
Simultaneous Gap Term	12345678
Sequential Timing	
Advance Walk Phases	2 4 8
Delay Walk Phases	
External Recall	
Start-up Overlap Green	
Max Extension	
Inhibit Ped Reservice	
Semi-Actuated	
Start-up Overlap Yellow	
Start-up Vehicle Calls	12345678
Start-up Ped Calls	12345678

Specials

<C+0+F=2>

Flash to PE &
PE Non-Lock

- 1 = EV A 5 = RR 1
 2 = EV B 6 = RR 2
 3 = EV C 7 = SE 1
 4 = EV D 8 = SE 2

IC Select Flags

- 1 =
 2 = Modem
 3 = 7-Wire Slave
 4 = FYA/Ped call side
 5 = Ped Inhibit FYA
 6 = Simplex Master
 7 =
 8 = Offset Interrupter

	2	Row
		0
Phase 1	10	1
Phase 2	10	2
Phase 3	10	3
Phase 4	10	4
Phase 5	10	5
Phase 6	10	6
Phase 7	10	7
Phase 8	10	8

Coordination
Transition
Minimums

<C+0+C=5>

Coord Extra

1 = Programmed WALK Time for Sync Phases

2 = Always Terminate Sync Phase Peds

Column Numbers ---->		Plan								
Plan Name ---->		1	2	3	4	5	6	7	8	9
0	Cycle Length	60	100	100	100	100	90	100	100	100
1	Phase 1 - ForceOff	0	65	65	65	65	0	65	65	65
2	Phase 2 - ForceOff	0	0	0	0	0	0	0	0	0
3	Phase 3 - ForceOff	0	25	25	25	25	0	25	25	25
4	Phase 4 - ForceOff	30	40	40	40	40	30	40	40	40
5	Phase 5 - ForceOff	0	65	65	65	65	0	65	65	65
6	Phase 6 - ForceOff	0	0	0	0	0	0	0	0	0
7	Phase 7 - ForceOff	0	25	25	25	25	0	25	25	25
8	Phase 8 - ForceOff	30	40	40	40	40	30	40	40	40
9	Ring Offset	0	0	0	0	0	0	0	0	0
A	Offset 1	0	0	0	0	0	0	0	0	0
B	Offset 2	0	0	0	0	0	0	0	0	0
C	Offset 3	0	0	0	0	0	0	0	0	0
D	Perm 1 - End	1	12	12	12	12	6	12	12	0
E	Hold Release	255	255	255	255	255	255	255	255	255
F	Reserved	0	0	0	0	0	0	0	0	0

Coordination - Bank 1

<C+0+C=1>

E		Row
Plan 1 - Sync	2 6	1
Plan 2 - Sync	2 6	2
Plan 3 - Sync	2 6	3
Plan 4 - Sync	2 6	4
Plan 5 - Sync	2 6	5
Plan 6 - Sync	2 6	6
Plan 7 - Sync	2 6	7
Plan 8 - Sync	2 6	8
Plan 9 - Sync	2 6	9
NEMA Sync		A
NEMA Hold		B
		C
		D
Coord Extra		E
		F

Sync Phases

<C+0+C=1>

Row											Row
0	Ped Adjustment	0	0	0	0	0	0	0	0	0	0
1	Perm 2 - Start	0	0	0	0	0	0	0	0	0	1
2	Perm 2 - End	0	0	0	0	0	0	0	0	0	2
3	Perm 3 - Start	0	0	0	0	0	0	0	0	0	3
4	Perm 3 - End	0	0	0	0	0	0	0	0	0	4
5	Reservice Time	0	0	0	0	0	0	0	0	0	5
6	Reservice Phases										6
7											7
8	Pretimed Phases										8
9	Max Recall										9
A	Perm 1 Veh Phase	12345678	12345678	12345678	12345678	12345678	12345678	12345678	12345678	12345678	A
B	Perm 1 Ped Phase	12345678	12345678	12345678	12345678	12345678	12345678	12345678	12345678	12345678	B
C	Perm 2 Veh Phase										C
D	Perm 2 Ped Phase										D
E	Perm 3 Veh Phase										E
F	Perm 3 Ped Phase										F

Coordination - Bank 2

<C+0+C=2>

F		Row
Free Lag	2 4 6 8	0
Plan 1 - Lag	2 4 6 8	1
Plan 2 - Lag	2 4 6 8	2
Plan 3 - Lag	2 4 6 8	3
Plan 4 - Lag	2 4 6 8	4
Plan 5 - Lag	2 4 6 8	5
Plan 6 - Lag	2 4 6 8	6
Plan 7 - Lag	2 4 6 8	7
Plan 8 - Lag	2 4 6 8	8
Plan 9 - Lag	2 4 6 8	9
External Lag		A
Lag Hold		B
		C
		D
		E
		F

Lag Phases

<C+0+C=1>

Row	Column 8		Column 9		Column A		Column B		Column C		Column D		Column E		Column F		Row
0	One-Shot Timer	0	Latch 1 Set	0	NOT-3	0	Max 2	0	Pretimed	0	Set DOW	0	Dial 2 (7-Wire)	0	Sim Term	0	0
1	AND-5 (a)	0	Latch 1 Reset	0	NOT-4	0	Bus Checkin A	0	Plan 1	0	Ext. Perm 1	0	Dial 3 (7-Wire)	0	EV-A	71	1
2	AND-5 (b)	0	Latch 2 Set	0	OR-4 (a)	0	Bus Checkin B	0	Plan 2	0	Ext. Perm 2	0	Offset 1 (7-Wire)	0	EV-B	72	2
3	AND-6 (a)	0	Latch 2 Reset	0	OR-4 (b)	0	Bus Checkin C	0	Plan 3	0	Gate Down	0	Offset 2 (7-Wire)	0	EV-C	73	3
4	AND-6 (b)	0	NAND-3 (a)	0	OR-5 (a)	0	Bus Checkin D	0	Plan 4	0	Set Clock	0	Offset 3 (7-Wire)	0	EV-D	74	4
5	Reserved		NAND-3 (b)	0	OR-5 (b)	0	Bus Checkout A	0	Plan 5	0	Stop Time	82	Free (7-Wire)	0	RR-1	51	5
6	Reserved		NAND-4 (a)	0	OR-6 (a)	0	Bus Checkout B	0	Plan 6	0	Flash Sense	81	Flash (7-Wire)	0	RR-2	52	6
7	Reserved		NAND-4 (b)	0	OR-6 (b)	0	Bus Checkout C	0	Plan 7	0	Manual Enable	0	Excl. Ped Omit	0	Spec. Event 1	0	7
8	Spec. Funct. 1	0	OR-7 (a)	0	EXTMR	0	Bus Checkout D	0	Plan 8	0	Man. Advance	0	NOT-1	0	Spec. Event 2	0	8
9	Spec. Funct. 2	0	OR-7 (b)	0	External Alarm 1	0	Max Inhibit (nema)	0	Plan 9	0	External Alarm 2	0	NOT-2	0	External Lag	0	9
A	Spec. Funct. 3	0	OR-7 (c)	0	AND-4 (a)	0	Force A (nema)	0	DELAY-A	0	Phase Bank 2	0	OR-1 (a)	0	AND-1 (a)	0	A
B	Spec. Funct. 4	0	OR-7 (d)	0	AND-4 (b)	0	Force B (nema)	0	DELAY-B	0	Phase Bank 3	0	OR-1 (b)	0	AND-1 (b)	0	B
C	Reserved		OR-8 (a)	0	NAND-1 (a)	0	C.N.A. (nema)	0	DELAY-C	0	Overlap Set 2	0	OR-2 (a)	0	AND-2 (a)	0	C
D	Reserved		OR-8 (b)	0	NAND-1 (b)	0	Hold (nema)	0	DELAY-D	0	Overlap Set 3	0	OR-2 (b)	0	AND-2 (b)	0	D
E	Reserved		OR-8 (c)	0	NAND-2 (a)	0	Max Recall	0	DELAY-E	0	Detector Set 2	0	OR-3 (a)	0	AND-3 (a)	0	E
F	Reserved		OR-8 (d)	0	NAND-2 (b)	0	Min Recall	0	DELAY-F	0	Detector Set 3	0	OR-3 (b)	0	AND-3 (b)	0	F

Assignable Inputs

<C+0+E=126>

Row	Column 8		Column 9		Column A		Column B		Column C		Column D		Column E		Column F		Row
0	Reserved		Phase ON - 1	0	Preempt Fail	0	Flasher 0	0	Free	0	NOT-1	0	TOD Out 1	0	Dial 2 (7-Wire)	0	0
1	Reserved		Phase ON - 2	0	Sp Evnt Out 1	0	Flasher 1	0	Plan 1	0	OR-1	0	TOD Out 2	0	Dial 3 (7-Wire)	0	1
2	Reserved		Phase ON - 3	0	Sp Evnt Out 2	0	Fast Flasher	0	Plan 2	0	OR-2	0	TOD Out 3	0	Offset 1 (7-Wire)	0	2
3	Reserved		Phase ON - 4	0	Sp Evnt Out 3	0	EXTMR	0	Plan 3	0	OR-3	0	TOD Out 4	0	Offset 2 (7-Wire)	0	3
4	Reserved		Phase ON - 5	0	Sp Evnt Out 4	0	One-Shot Timer	0	Plan 4	0	AND-1	0	TOD Out 5	0	Offset 3 (7-Wire)	0	4
5	Reserved		Phase ON - 6	0	Sp Evnt Out 5	0	Reserved		Plan 5	0	AND-2	0	TOD Out 6	0	Free (7-Wire)	0	5
6	Reserved		Phase ON - 7	0	Sp Evnt Out 6	0	Latch 1	0	Plan 6	0	AND-3	0	TOD Out 7	0	Flash (7-Wire)	0	6
7	Reserved		Phase ON - 8	0	Sp Evnt Out 7	0	Latch 2	0	Plan 7	0	NOT-2	0	TOD Out 8	0	Preempt	0	7
8	Flh Yell Arrow 1	0	Ph. Check - 1	0	Sp Evnt Out 8	0	NOT-3	0	Plan 8	0	EV-A	0	Adv. Warn - 1	0	Low Priority A	0	8
9	Green 1	0	Ph. Check - 2	0	Coord On	0	NOT-4	0	Plan 9	0	EV-B	0	Adv. Warn - 2	0	Low Priority B	0	9
A	Flh Yell Arrow 3	0	Ph. Check - 3	0	Detector Fail	0	OR-4	0	Spec. Funct. 3	0	EV-C	0	DELAY-A	0	Low Priority C	0	A
B	Green 3	0	Ph. Check - 4	0	Spec. Funct. 1	0	OR-5	0	Spec. Funct. 4	0	EV-D	0	DELAY-B	0	Low Priority D	0	B
C	Flh Yell Arrow 5	0	Ph. Check - 5	0	Spec. Funct. 2	0	OR-6	0	NAND-3	0	RR-1	0	DELAY-C	0	AND-5	0	C
D	Green 5	0	Ph. Check - 6	0	Central Control	0	AND-4	0	NAND-4	0	RR-2	0	DELAY-D	0	AND-6	0	D
E	Flh Yell Arrow 7	0	Ph. Check - 7	0	Excl. Ped DW	0	NAND-1	0	OR-7	0	Spec. Event 1	0	DELAY-E	0	Reserved		E
F	Green 7	0	Ph. Check - 8	0	Excl. Ped WK	0	NAND-2	0	OR-8	0	Spec. Event 2	0	DELAY-F	0	Reserved		F

Assignable Outputs

<C+0+E=127>

		Phase							
Column Numbers ---->		1	2	3	4	5	6	7	8
Row	Phase Names ---->								
0	Ped Walk	0	7	0	7	0	7	0	7
1	Ped FDW	0	15	0	15	0	15	0	15
2	Min Green	4	7	4	4	4	7	4	4
3	Type 3 Disconnect	0	20	0	20	0	20	0	20
4	Added per Vehicle	0.0	2.0	0.0	2.0	0.0	2.0	0.0	2.0
5	Veh Extension	2.0	4.0	2.0	2.5	2.0	4.0	2.0	2.5
6	Max Gap	3.0	6.0	3.0	3.0	3.0	6.0	3.0	3.0
7	Min Gap	0.5	2.0	0.5	1.5	0.5	2.0	0.5	1.5
8	Max Limit	20	30	20	25	20	30	20	25
9	Max Limit 2	30	50	30	40	30	50	30	40
A	Adv. / Delay Walk	0	0	0	0	0	0	0	0
B	PE Min Ped FDW	7	7	7	7	7	7	7	7
C	Cond Serv Check	10	10	10	10	10	10	10	10
D	Reduce Every	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
E	Yellow Change	3.0	4.0	3.0	3.0	3.0	4.0	3.0	3.0
F	Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Phase Timing - Bank 2 <C+0+F=2>

	9	A	B	C	D
Phase 1	0	0	0	0	0.0
Phase 2	20	0	0	0	0.0
Phase 3	0	0	0	0	0.0
Phase 4	20	0	0	0	0.0
Phase 5	0	0	0	0	0.0
Phase 6	20	0	0	0	0.0
Phase 7	0	0	0	0	0.0
Phase 8	20	0	0	0	0.0
Max Initial					
Alternate Walk					
Alternate FDW					
Alternate Initial					
Alternate Extension					

Alternate Timing

Transition Type
 0.X = Shortway
 1.X = Lengthen
 X.1 thru X.4 =
 Number of
 cycles when
 lengthening

Transition Type | 0.3 <C/5+1+9>

TBC Transition

Hawk Select | 0 <F/1+0+4>
Hawk Select 200 = Mid-Block, 201 = Hawk

Address | 0 <C/1+0+6>
 Select Parity | 0 <C/1+0+5>
AB3418 Comm 2 0 = No Parity, 1 = Even

Begin Month | 3 <C/5+2+A>
 Begin Week | 2 <C/5+2+B>
 End Month | 11 <C/5+2+C>
 End Week | 1 <C/5+2+D>

Daylight Savings Time

Time B4 Yellow | 0.0 <F/1+C+E>
 Phase Number | 0 <F/1+C+F>

Advance Warning Beacon - Sign 1

Time B4 Yellow | 0.0
 Phase Number | 0 <F/1+D+F>
Advance Warning Beacon - Sign 2

Offset Time | 0 <C/5+2+E>
 Max Cycle Time | 20 <C/5+2+F>

Yellow Yield Coordination

12345678
 Omit Alarm | 12345678 <C/5+F+0>
Local Alarm Disable

Row		1	2	3	4	5	6	7	8
0	Ped Walk	0	7	0	7	0	7	0	7
1	Ped FDW	0	15	0	15	0	15	0	15
2	Min Green	4	7	4	4	4	7	4	4
3	Type 3 Disconnect	0	20	0	20	0	20	0	20
4	Added per Vehicle	0.0	2.0	0.0	2.0	0.0	2.0	0.0	2.0
5	Veh Extension	2.0	4.0	2.0	2.5	2.0	4.0	2.0	2.5
6	Max Gap	3.0	6.0	3.0	3.0	3.0	6.0	3.0	3.0
7	Min Gap	0.5	2.0	0.5	1.5	0.5	2.0	0.5	1.5
8	Max Limit	20	30	20	25	20	30	20	25
9	Max Limit 2	30	50	30	40	30	50	30	40
A	Adv. / Delay Walk	0	0	0	0	0	0	0	0
B	PE Min Ped FDW	7	7	7	7	7	7	7	7
C	Cond Serv Check	10	10	10	10	10	10	10	10
D	Reduce Every	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
E	Yellow Change	3.0	4.0	3.0	3.0	3.0	4.0	3.0	3.0
F	Red Clear	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

Phase Timing - Bank 3 <C+0+F=3>

	9	A	B	C	D
Phase 1	0	0	0	0	0.0
Phase 2	20	0	0	0	0.0
Phase 3	0	0	0	0	0.0
Phase 4	20	0	0	0	0.0
Phase 5	0	0	0	0	0.0
Phase 6	20	0	0	0	0.0
Phase 7	0	0	0	0	0.0
Phase 8	20	0	0	0	0.0
Max Initial					
Alternate Walk					
Alternate FDW					
Alternate Initial					
Alternate Extension					

Alternate Timing

Column Numbers ---->						1	3
Row	Detector Name	C1 Pin Number	Attributes	Phase(s)	Assign	Delay	Carry-over
0		39	45 7	2	123	0.0	0.0
1		40	45 7	6	123	0.0	0.0
2		41	45 7	4	123	0.0	0.0
3		42	45 7	8	123	0.0	0.0
4		43	45 7	2	123	0.0	0.0
5		44	45 7	6	123	0.0	0.0
6		45	45 7	4	123	0.0	0.0
7		46	45 7	8	123	0.0	0.0
8		47	67	2	123	0.0	0.0
9		48	67	6	123	0.0	0.0
A		49	67	4	123	0.0	0.0
B		50	67	8	123	0.0	0.0
C		55	45 7	5	123	0.0	0.0
D		56	45 7	1	123	0.0	0.0
E		57	45 7	7	123	0.0	0.0
F		58	45 7	3	123	0.0	0.0

Column Numbers ---->						2	4
Row	Detector Name	C1 Pin Number	Attributes	Phase(s)	Assign	Delay	Carry-over
0		59	45 7	5	123	0.0	0.0
1		60	45 7	1	123	0.0	0.0
2		61	45 7	7	123	0.0	0.0
3		62	45 7	3	123	0.0	0.0
4		63	45 7	2	123	0.0	0.0
5		64	45 7	6	123	0.0	0.0
6		65	45 7	4	123	0.0	0.0
7		66	45 7	8	123	0.0	0.0
8		67	2	2	123	0.0	0.0
9		68	2	6	123	0.0	0.0
A		69	2	4	123	0.0	0.0
B		70	2	8	123	0.0	0.0
C		76	45 7	2	123	0.0	0.0
D		77	45 7	6	123	0.0	0.0
E		78	45 7	4	123	0.0	0.0
F		79	45 7	8	123	0.0	0.0

Detector Assignments <C+0+E=126>

<C+0+D=0>

Ped / Phase / Overlap									Row
Column Numbers ---->	1	2	3	4	5	6	7	8	
Walk	0	0	0	0	0	0	0	0	0
Don't Walk	0	0	0	0	0	0	0	0	1
Phase Green	0	0	0	0	0	0	0	0	2
Phase Yellow	0	0	0	0	0	0	0	0	3
Phase Red	0	0	0	0	0	0	0	0	4
Overlap Green	0	0	0	0	0	0	0	0	5
Overlap Yellow	0	0	0	0	0	0	0	0	6
Overlap Red	0	0	0	0	0	0	0	0	7

Redirect Phase Outputs <C+0+E=127>

Cabinet Type 0 <E/125+D+0>

Enable Redirection

(Enable Redirection = 30)

Max OFF (minutes) 60 <D/0+0+1>

Max ON (minutes) 5 <D/0+0+2>

Chatter Fail Time 0 <D/0+0+4>

Detector Failure Monitor

Ped Ovlp Parent Ph 0 <E/125+D+1>

Ped Ovlp Phases <E/125+D+2>

RR1 Exit Phases <E/125+D+3>

Excl Ped/Ped Svc 0 <E/125+D+4>

Miscellaneous**Detector Attributes**

- 1 = Full Time Delay
- 2 = Ped Call
- 3 = Overlap
- 4 = Count
- 5 = Extension
- 6 = Type 3
- 7 = Calling
- 8 = Alternate

Det. Assignments

- 1 = Det. Set 1
- 2 = Det. Set 2
- 3 = Det. Set 3
- 4 =
- 5 =
- 6 = Failure - Min Recall
- 7 = Failure - Max Recall
- 8 = Report on Failure

	B	Row
One-Shot	0.0	8
Ext. Timer	0	9
DELAY-A	0	A
DELAY-B	0	B
DELAY-C	0	C
DELAY-D	0	D
DELAY-E	0	E
DELAY-F	0	F

Delay Logic Times

<C+0+D=0> (seconds)

Row	Time	Plan	Offset	Day of Week
0	00 : 00	E	A	1234567
1	07 : 00	6	A	23456
2	09 : 30	1	A	23456
3	13 : 00	6	A	23456
4	18 : 30	1	A	23456
5	20 : 00	E	A	23456
6	09 : 00	1	A	1 7
7	18 : 00	E	A	1 7
8	00 : 00	0	0	
9	00 : 00	0	0	
A	00 : 00	0	0	
B	00 : 00	0	0	
C	00 : 00	0	0	
D	00 : 00	0	0	
E	00 : 00	0	0	
F	00 : 00	0	0	

TOD Coordination <C+0+9=0.1>
(Bank 1)

Time	Funct.	Day of Week
07 : 00	4	23456
20 : 00	4	23456
09 : 00	4	1 7
18 : 00	4	1 7
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	

TOD Function <C+0+7=0.1>

Column 4
Phases/Bits
2
2

<C+0+E=27>

Day	Year	Month	Holiday Type
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	

Holiday Dates <C+0+8=1.1>
(Bank 1)

Time	Plan	Offset	Holiday Type
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	

Holiday Events <C+0+9=1.1>
(Bank 1)

T.O.D. Functions

- 0 =
 1 = Red Lock
 2 = Yellow Lock
 3 = Veh Min Recall
 4 = Ped Recall
 5 =
 6 = Rest In Walk
 7 = Red Rest
 8 = Double Entry
 9 = Veh Max Recall
 A = Veh Soft Recall
 B = Maximum 2
 C = Conditional Service
 D = Free Lag Phases
 E = Bit 1 - Local Override
 Bit 4 - Disable Detector
 OFF Monitor
 Bit 5 - Disable Low
 Priority Preempt
 Bit 6 - FYA Inhibit
 Bit 7 - Detector Count
 Monitor
 Bit 8 - Real Time Split
 Monitor
 F = Output Bits 1 thru 8

Row	Time	Plan	Offset	Day of Week
0	00 : 00	0	0	
1	00 : 00	0	0	
2	00 : 00	0	0	
3	00 : 00	0	0	
4	00 : 00	0	0	
5	00 : 00	0	0	
6	00 : 00	0	0	
7	00 : 00	0	0	
8	00 : 00	0	0	
9	00 : 00	0	0	
A	00 : 00	0	0	
B	00 : 00	0	0	
C	00 : 00	0	0	
D	00 : 00	0	0	
E	00 : 00	0	0	
F	00 : 00	0	0	

TOD Coordination <C+0+9=0.2>
(Bank 2)

Time	Funct.	Holiday Type
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	
00 : 00	0	

Holiday TOD Function <C+0+7=0.2>

Column 4
Phases/Bits

<C+0+E=28>

Day	Year	Month	Holiday Type
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	
00	00	0	

Holiday Dates <C+0+8=1.2>
(Bank 2)

Time	Plan	Offset	Holiday Type
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	
00 : 00	0	0	

Holiday Events <C+0+9=1.2>
(Bank 2)

Plan Select

- 1 thru 9 = Coordination
 Plan 1 thru 9
 14 or E = Free
 15 or F = Flash

Offset Select

- A = Offset A
 B = Offset B
 C = Offset C

Month Select: October = A, November = B, December = C

Row	6	7	8	9	A	B	C	D	E	F
	Clear	Time	Ped Call	Hold	Advance	Force Off	Vehicle Call	Permit Phases	Ped Omit	Output
0		0								
1		0								
2		0								
3		0								
4		0								
5		0								
6		0								
7		0								
8		0								
9		0								
A		0								
B		0								
C		0								
D		0								
E		0								
F		0								

Special Event Schedule -- Table 1

<C+0+E=27>

Notes:

0 <E/27+5+F>

Limited Service Interval

Row	6	7	8	9	A	B	C	D	E	F
	Clear	Time	Ped Call	Hold	Advance	Force Off	Vehicle Call	Permit Phases	Ped Omit	Output
0		0								
1		0								
2		0								
3		0								
4		0								
5		0								
6		0								
7		0								
8		0								
9		0								
A		0								
B		0								
C		0								
D		0								
E		0								
F		0								

Special Event Schedule -- Table 2

<C+0+E=28>

Notes:

0 <E/28+5+F>

Limited Service Interval

Min Time (seconds) | 0 | <F/1+0+8>

Min Green Before PE Force Off

Max Time (minutes) | 255 | <F/1+0+9>

Max Preempt Time Before Failure

Min Time (seconds) | 0 | <F/1+0+A>

Min Time Between Same Preempts

(Does Not Apply To Railroad Preempt)

Low Pri. Channel | | <E/125+C+8>

Disable Low Priority ChannelLow Priority

1 = Channel A

2 = Channel B

3 = Channel C

4 = Channel D

Row		
C	Bus Headway	0
D	Bus Delay	0
E	Max Early Grn	0
F	Max Grn Ext.	0

Priority Parameters

<F/1 +A+Row>

Row	Time	Headway	Direction	Day of Week
0	00 : 00	0	0	_____
1	00 : 00	0	0	_____
2	00 : 00	0	0	_____
3	00 : 00	0	0	_____
4	00 : 00	0	0	_____
5	00 : 00	0	0	_____
6	00 : 00	0	0	_____
7	00 : 00	0	0	_____
8	00 : 00	0	0	_____
9	00 : 00	0	0	_____
A	00 : 00	0	0	_____
B	00 : 00	0	0	_____
C	00 : 00	0	0	_____
D	00 : 00	0	0	_____
E	00 : 00	0	0	_____
F	00 : 00	0	0	_____

Headway Schedule <C+0+9=2.1>Headway Time

(minutes)

1 thru 9 = 1 thru 9

A = 10

B = 11

C = 12

D = 13

E = 14

F = 15

Low Priority Preemption (Bus Priority)

Note: Also see "Time of Day Functions", Function E, Bit 5 (Disable Low Priority)

Attachment 2 – SANTEC/ITE Roadway Capacity Table

Table 2

**ROADWAY CLASSIFICATIONS, LEVELS OF SERVICE (LOS)
AND AVERAGE DAILY TRAFFIC (ADT)**

STREET CLASSIFICATION	LANES	CROSS SECTIONS* (APPROX.)	LEVEL OF SERVICE W/ADT**				
			A	B	C	D	E
Expressway	6 lanes	102-160/122-200	30,000	42,000	60,000	70,000	80,000
Prime Arterial	6 lanes	102-108/122-128	25,000	35,000	50,000	55,000	60,000
Major Arterial	6 lanes	102/122	20,000	28,000	40,000	45,000	50,000
Major Arterial	4 lanes	78-82/98-102	15,000	21,000	30,000	35,000	40,000
Secondary Arterial/ Collector	4 lanes	64-72/84-92	10,000	14,000	20,000	25,000	30,000
Collector (no center lane) (continuous left- turn lane)	4 lanes 2 lanes	64/84 50/70	5,000	7,000	10,000	13,000	15,000
Collector (no fronting property)	2 lanes	40/60	4,000	5,500	7,500	9,000	10,000
Collector (commercial- industrial fronting)	2 lanes	50/70	2,500	3,500	5,000	6,500	8,000
Collector (multi-family)	2 lanes	40/60	2,500	3,500	5,000	6,500	8,000
Sub-Collector (single-family)	2 lanes	36/56	---	---	2,200	---	---

LEGEND:

* Curb to curb width (feet)/right of way width (feet): based upon the City of San Diego Street Design Manual and other jurisdictions within the San Diego region.

** Approximate recommended ADT based upon the City of San Diego Street Design Manual.

NOTES:

1. The volumes and the average daily level of service listed above are only intended as a general planning guideline.
2. Levels of service are not applied to residential streets since their primary purpose is to serve abutting lots, not carry through traffic. Levels of service normally apply to roads carrying through traffic between major trip generators and attractors.

Attachment 3 – Peak hour intersection analysis reports – Existing Conditions (weekday & weekend day)

Existing AM (weekday)
1: Project Driveway & San Elijo Road

07/17/2018

Intersection

Int Delay, s/veh 0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↑	↑↑	↑	↑
Traffic Vol, veh/h	1164	0	2	2111	0	1
Future Vol, veh/h	1164	0	2	2111	0	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	None
Storage Length	-	250	100	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	68	68	90	90	25	25
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1712	0	2	2346	0	4

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	- 1712	0 2889 856
Stage 1	-	-	- 1712 -
Stage 2	-	-	- 1177 -
Critical Hdwy	-	- 4.14	- 6.84 6.94
Critical Hdwy Stg 1	-	-	- 5.84 -
Critical Hdwy Stg 2	-	-	- 5.84 -
Follow-up Hdwy	-	- 2.22	- 3.52 3.32
Pot Cap-1 Maneuver	-	0 367	- 13 301
Stage 1	-	0	- 131 -
Stage 2	-	0	- 255 -
Platoon blocked, %	-		-
Mov Cap-1 Maneuver	-	- 367	- 13 301
Mov Cap-2 Maneuver	-	-	- 13 -
Stage 1	-	-	- 131 -
Stage 2	-	-	- 254 -

Approach	EB	WB	NB
HCM Control Delay, s	0	0	17.1
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBL	WBT
Capacity (veh/h)	-	301	-	367	-
HCM Lane V/C Ratio	-	0.013	-	0.006	-
HCM Control Delay (s)	0	17.1	-	14.9	-
HCM Lane LOS	A	C	-	B	-
HCM 95th %tile Q(veh)	-	0	-	0	-

Existing AM (weekday)

2: Cooke Street/Baker Street & San Elijo W

07/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	8	67	150	4	0	0	0	0	23	1873	13
Future Volume (veh/h)	0	8	67	150	4	0	0	0	0	23	1873	13
Number	7	4	14	3	8	18				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1900	1863	0				1900	1863	1900
Adj Flow Rate, veh/h	0	12	100	242	6	0				24	1951	14
Adj No. of Lanes	0	1	0	0	1	0				0	2	0
Peak Hour Factor	0.67	0.67	0.67	0.62	0.62	0.62				0.96	0.96	0.96
Percent Heavy Veh, %	0	2	2	2	2	0				0	2	0
Cap, veh/h	0	46	385	346	7	0				25	2166	16
Arrive On Green	0.00	0.27	0.27	0.27	0.27	0.00				0.59	0.59	0.59
Sat Flow, veh/h	0	172	1437	998	25	0				43	3648	27
Grp Volume(v), veh/h	0	0	112	248	0	0				1041	0	948
Grp Sat Flow(s),veh/h/ln	0	0	1609	1023	0	0				1861	0	1858
Q Serve(g_s), s	0.0	0.0	4.9	16.9	0.0	0.0				46.5	0.0	38.1
Cycle Q Clear(g_c), s	0.0	0.0	4.9	21.9	0.0	0.0				46.5	0.0	38.1
Prop In Lane	0.00		0.89	0.98		0.00				0.02		0.01
Lane Grp Cap(c), veh/h	0	0	431	353	0	0				1105	0	1103
V/C Ratio(X)	0.00	0.00	0.26	0.70	0.00	0.00				0.94	0.00	0.86
Avail Cap(c_a), veh/h	0	0	447	366	0	0				1116	0	1115
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	0.66	0.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	25.9	34.5	0.0	0.0				16.9	0.0	15.2
Incr Delay (d2), s/veh	0.0	0.0	0.1	3.8	0.0	0.0				16.4	0.0	8.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	2.2	6.4	0.0	0.0				28.5	0.0	21.9
LnGrp Delay(d),s/veh	0.0	0.0	26.0	38.4	0.0	0.0				33.2	0.0	23.9
LnGrp LOS			C	D						C		C
Approach Vol, veh/h		112			248						1989	
Approach Delay, s/veh		26.0			38.4						28.8	
Approach LOS		C			D						C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs				4		6		8				
Phs Duration (G+Y+Rc), s				29.1		59.4		29.1				
Change Period (Y+Rc), s				5.0		6.0		5.0				
Max Green Setting (Gmax), s				25.0		54.0		25.0				
Max Q Clear Time (g_c+I1), s				6.9		48.5		23.9				
Green Ext Time (p_c), s				2.0		5.0		0.3				
Intersection Summary												
HCM 2010 Ctrl Delay				29.7								
HCM 2010 LOS				C								

Existing AM (weekday)
3: Baker Street & San Elijo E

07/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰			↱			↰↱				
Traffic Volume (veh/h)	8	24	0	0	143	25	10	1014	23	0	0	0
Future Volume (veh/h)	8	24	0	0	143	25	10	1014	23	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1900	1863	0	0	1863	1900	1900	1863	1900			
Adj Flow Rate, veh/h	11	33	0	0	201	35	11	1152	26			
Adj No. of Lanes	0	1	0	0	1	0	0	2	0			
Peak Hour Factor	0.73	0.73	0.73	0.71	0.71	0.71	0.88	0.88	0.88			
Percent Heavy Veh, %	2	2	0	0	2	2	0	2	0			
Cap, veh/h	65	155	0	0	252	44	24	2645	63			
Arrive On Green	0.16	0.16	0.00	0.00	0.16	0.16	0.74	0.74	0.74			
Sat Flow, veh/h	94	951	0	0	1546	269	33	3591	85			
Grp Volume(v), veh/h	44	0	0	0	0	236	625	0	564			
Grp Sat Flow(s),veh/h/ln	1045	0	0	0	0	1815	1861	0	1848			
Q Serve(g_s), s	0.2	0.0	0.0	0.0	0.0	11.3	12.0	0.0	10.4			
Cycle Q Clear(g_c), s	11.4	0.0	0.0	0.0	0.0	11.3	12.0	0.0	10.4			
Prop In Lane	0.25		0.00	0.00		0.15	0.02		0.05			
Lane Grp Cap(c), veh/h	221	0	0	0	0	296	1371	0	1361			
V/C Ratio(X)	0.20	0.00	0.00	0.00	0.00	0.80	0.46	0.00	0.41			
Avail Cap(c_a), veh/h	414	0	0	0	0	514	1371	0	1361			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.97	0.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	32.5	0.0	0.0	0.0	0.0	36.2	4.7	0.0	4.5			
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.0	0.0	4.9	1.1	0.0	0.9			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	1.0	0.0	0.0	0.0	0.0	6.0	6.5	0.0	5.5			
LnGrp Delay(d),s/veh	32.9	0.0	0.0	0.0	0.0	41.1	5.8	0.0	5.4			
LnGrp LOS	C					D	A		A			
Approach Vol, veh/h		44			236			1189				
Approach Delay, s/veh		32.9			41.1			5.6				
Approach LOS		C			D			A				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		70.8		19.2				19.2				
Change Period (Y+Rc), s		4.5		4.5				4.5				
Max Green Setting (Gmax), s		55.5		25.5				25.5				
Max Q Clear Time (g_c+I1), s		14.0		13.4				13.3				
Green Ext Time (p_c), s		11.3		1.3				1.3				
Intersection Summary												
HCM 2010 Ctrl Delay			12.1									
HCM 2010 LOS			B									

Existing PM (weekday)
1: Project Driveway & San Elijo Road

01/18/2018

Intersection

Int Delay, s/veh 0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↑	↑↑	↑	↑
Traffic Vol, veh/h	1821	2	0	1012	1	1
Future Vol, veh/h	1821	2	0	1012	1	1
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	None
Storage Length	-	200	100	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	96	96	50	50
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2023	2	0	1054	2	2

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	- 2023	0 2550 1012
Stage 1	-	-	- 2023 -
Stage 2	-	-	- 527 -
Critical Hdwy	-	- 4.14	- 6.84 6.94
Critical Hdwy Stg 1	-	-	- 5.84 -
Critical Hdwy Stg 2	-	-	- 5.84 -
Follow-up Hdwy	-	- 2.22	- 3.52 3.32
Pot Cap-1 Maneuver	-	0 277	- 22 237
Stage 1	-	0	- 88 -
Stage 2	-	0	- 557 -
Platoon blocked, %	-		-
Mov Cap-1 Maneuver	-	- 277	- 22 237
Mov Cap-2 Maneuver	-	-	- 22 -
Stage 1	-	-	- 88 -
Stage 2	-	-	- 557 -

Approach	EB	WB	NB
HCM Control Delay, s	0	0	102.4
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBL	WBT
Capacity (veh/h)	22	237	-	277	-
HCM Lane V/C Ratio	0.091	0.008	-	-	-
HCM Control Delay (s)	184.4	20.3	-	0	-
HCM Lane LOS	F	C	-	A	-
HCM 95th %tile Q(veh)	0.3	0	-	0	-

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	9	16	35	31	0	0	0	0	81	987	20
Future Volume (veh/h)	0	9	16	35	31	0	0	0	0	81	987	20
Number	7	4	14	3	8	18				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1900	1863	0				1900	1863	1900
Adj Flow Rate, veh/h	0	13	23	40	36	0				84	1028	21
Adj No. of Lanes	0	1	0	0	1	0				0	2	0
Peak Hour Factor	0.69	0.69	0.69	0.87	0.87	0.87				0.96	0.96	0.96
Percent Heavy Veh, %	0	2	2	2	2	0				0	2	0
Cap, veh/h	0	47	83	108	62	0				106	1365	29
Arrive On Green	0.00	0.08	0.08	0.08	0.08	0.00				0.41	0.41	0.41
Sat Flow, veh/h	0	605	1070	608	800	0				262	3366	72
Grp Volume(v), veh/h	0	0	36	76	0	0				593	0	540
Grp Sat Flow(s),veh/h/ln	0	0	1674	1408	0	0				1850	0	1850
Q Serve(g_s), s	0.0	0.0	1.8	3.1	0.0	0.0				25.2	0.0	22.0
Cycle Q Clear(g_c), s	0.0	0.0	1.8	5.0	0.0	0.0				25.2	0.0	22.0
Prop In Lane	0.00		0.64	0.53		0.00				0.14		0.04
Lane Grp Cap(c), veh/h	0	0	130	170	0	0				750	0	751
V/C Ratio(X)	0.00	0.00	0.28	0.45	0.00	0.00				0.79	0.00	0.72
Avail Cap(c_a), veh/h	0	0	465	483	0	0				1110	0	1110
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	0.71	0.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	39.1	40.7	0.0	0.0				23.4	0.0	22.4
Incr Delay (d2), s/veh	0.0	0.0	0.4	1.3	0.0	0.0				8.3	0.0	5.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.9	1.9	0.0	0.0				14.6	0.0	12.5
LnGrp Delay(d),s/veh	0.0	0.0	39.6	42.0	0.0	0.0				31.7	0.0	28.3
LnGrp LOS			D	D						C		C
Approach Vol, veh/h		36			76						1133	
Approach Delay, s/veh		39.6			42.0						30.1	
Approach LOS		D			D						C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs				4		6		8				
Phs Duration (G+Y+Rc), s				12.0		42.5		12.0				
Change Period (Y+Rc), s				5.0		6.0		5.0				
Max Green Setting (Gmax), s				25.0		54.0		25.0				
Max Q Clear Time (g_c+I1), s				3.8		27.2		7.0				
Green Ext Time (p_c), s				0.5		9.3		0.4				
Intersection Summary												
HCM 2010 Ctrl Delay			31.1									
HCM 2010 LOS			C									
Notes												

Existing PM (weekday)
3: Baker Street & San Elijo E

05/18/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	83	0	0	36	110	30	1669	59	0	0	0
Future Volume (veh/h)	16	83	0	0	36	110	30	1669	59	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1900	1863	0	0	1863	1900	1900	1863	1900			
Adj Flow Rate, veh/h	17	90	0	0	44	136	32	1776	63			
Adj No. of Lanes	0	1	0	0	1	0	0	2	0			
Peak Hour Factor	0.92	0.92	0.92	0.81	0.81	0.81	0.94	0.94	0.94			
Percent Heavy Veh, %	2	2	0	0	2	2	0	2	0			
Cap, veh/h	58	182	0	0	59	181	46	2646	98			
Arrive On Green	0.15	0.15	0.00	0.00	0.15	0.15	0.75	0.75	0.75			
Sat Flow, veh/h	76	1248	0	0	402	1242	61	3509	130			
Grp Volume(v), veh/h	107	0	0	0	0	180	980	0	891			
Grp Sat Flow(s),veh/h/ln	1325	0	0	0	0	1644	1860	0	1840			
Q Serve(g_s), s	0.2	0.0	0.0	0.0	0.0	9.5	24.7	0.0	20.8			
Cycle Q Clear(g_c), s	9.7	0.0	0.0	0.0	0.0	9.5	24.7	0.0	20.8			
Prop In Lane	0.16		0.00	0.00		0.76	0.03		0.07			
Lane Grp Cap(c), veh/h	240	0	0	0	0	240	1402	0	1387			
V/C Ratio(X)	0.45	0.00	0.00	0.00	0.00	0.75	0.70	0.00	0.64			
Avail Cap(c_a), veh/h	475	0	0	0	0	466	1402	0	1387			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.99	0.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	34.9	0.0	0.0	0.0	0.0	36.9	5.8	0.0	5.3			
Incr Delay (d2), s/veh	1.3	0.0	0.0	0.0	0.0	4.7	2.9	0.0	2.3			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.5	0.0	0.0	0.0	0.0	4.6	13.4	0.0	11.3			
LnGrp Delay(d),s/veh	36.2	0.0	0.0	0.0	0.0	41.5	8.7	0.0	7.6			
LnGrp LOS	D					D	A		A			
Approach Vol, veh/h		107			180			1871				
Approach Delay, s/veh		36.2			41.5			8.2				
Approach LOS		D			D			A				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		72.4		17.6				17.6				
Change Period (Y+Rc), s		4.5		4.5				4.5				
Max Green Setting (Gmax), s		55.5		25.5				25.5				
Max Q Clear Time (g_c+I1), s		26.7		11.7				11.5				
Green Ext Time (p_c), s		19.4		1.5				1.5				
Intersection Summary												
HCM 2010 Ctrl Delay				12.3								
HCM 2010 LOS				B								

Existing PM (weekend)
1: Project Driveway & San Elijo Road

01/18/2018

Intersection

Int Delay, s/veh 0.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↑	↑↑	↑	↑
Traffic Vol, veh/h	861	0	14	813	0	14
Future Vol, veh/h	861	0	14	813	0	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	None
Storage Length	-	200	100	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	96	96	50	50
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	957	0	15	847	0	28

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	-	957
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	-	4.14
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	-	2.22
Pot Cap-1 Maneuver	-	0	714
Stage 1	-	0	-
Stage 2	-	0	-
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	-	-	714
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.2	12.1
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	WBL	WBT
Capacity (veh/h)	-	534	-	714	-
HCM Lane V/C Ratio	-	0.052	-	0.02	-
HCM Control Delay (s)	0	12.1	-	10.1	-
HCM Lane LOS	A	B	-	B	-
HCM 95th %tile Q(veh)	-	0.2	-	0.1	-

**Attachment 4 – Peak hour intersection analysis reports
– Existing + Project Conditions (weekday & weekend
day)**

Existing + Project PM (weekday) - Scenario A
1: Project Driveway & San Elijo Road

01/18/2018

Intersection

Int Delay, s/veh 1.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↑	↑↑		↑
Traffic Vol, veh/h	1821	35	8	1012	0	60
Future Vol, veh/h	1821	35	8	1012	0	60
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	None
Storage Length	-	200	100	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	96	96	50	50
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2023	39	8	1054	0	120

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	- 2023	0 - 1012
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	4.14	- 6.94
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	2.22	- 3.32
Pot Cap-1 Maneuver	-	0 277	- 0 237
Stage 1	-	0	- 0
Stage 2	-	0	- 0
Platoon blocked, %	-		-
Mov Cap-1 Maneuver	-	- 277	- - 237
Mov Cap-2 Maneuver	-	-	- -
Stage 1	-	-	- -
Stage 2	-	-	- -

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	34.8
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	EBT	WBL	WBT
Capacity (veh/h)	237	-	277	-
HCM Lane V/C Ratio	0.506	-	0.03	-
HCM Control Delay (s)	34.8	-	18.4	-
HCM Lane LOS	D	-	C	-
HCM 95th %tile Q(veh)	2.6	-	0.1	-

Existing + Project PM (weekday) - Scenario A
2: Cooke Street/Baker Street & San Elijo W

05/18/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	9	16	81	31	0	0	0	0	81	987	20
Future Volume (veh/h)	0	9	16	81	31	0	0	0	0	81	987	20
Number	7	4	14	3	8	18				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1900	1863	0				1900	1863	1900
Adj Flow Rate, veh/h	0	13	23	93	36	0				84	1028	21
Adj No. of Lanes	0	1	0	0	1	0				0	2	0
Peak Hour Factor	0.69	0.69	0.69	0.87	0.87	0.87				0.96	0.96	0.96
Percent Heavy Veh, %	0	2	2	2	2	0				0	2	0
Cap, veh/h	0	75	132	180	55	0				106	1365	29
Arrive On Green	0.00	0.12	0.12	0.12	0.12	0.00				0.41	0.41	0.41
Sat Flow, veh/h	0	605	1070	899	445	0				262	3366	72
Grp Volume(v), veh/h	0	0	36	129	0	0				593	0	540
Grp Sat Flow(s),veh/h/ln	0	0	1674	1344	0	0				1850	0	1850
Q Serve(g_s), s	0.0	0.0	1.7	6.9	0.0	0.0				25.2	0.0	22.0
Cycle Q Clear(g_c), s	0.0	0.0	1.7	8.6	0.0	0.0				25.2	0.0	22.0
Prop In Lane	0.00		0.64	0.72		0.00				0.14		0.04
Lane Grp Cap(c), veh/h	0	0	207	235	0	0				750	0	751
V/C Ratio(X)	0.00	0.00	0.17	0.55	0.00	0.00				0.79	0.00	0.72
Avail Cap(c_a), veh/h	0	0	465	463	0	0				1110	0	1110
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	0.71	0.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	35.3	38.7	0.0	0.0				23.4	0.0	22.4
Incr Delay (d2), s/veh	0.0	0.0	0.1	1.4	0.0	0.0				8.3	0.0	5.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.8	3.2	0.0	0.0				14.6	0.0	12.5
LnGrp Delay(d),s/veh	0.0	0.0	35.5	40.1	0.0	0.0				31.7	0.0	28.3
LnGrp LOS			D	D						C		C
Approach Vol, veh/h		36			129						1133	
Approach Delay, s/veh		35.5			40.1						30.1	
Approach LOS		D			D						C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs				4		6		8				
Phs Duration (G+Y+Rc), s				16.1		42.5		16.1				
Change Period (Y+Rc), s				5.0		6.0		5.0				
Max Green Setting (Gmax), s				25.0		54.0		25.0				
Max Q Clear Time (g_c+I1), s				3.7		27.2		10.6				
Green Ext Time (p_c), s				0.8		9.3		0.7				
Intersection Summary												
HCM 2010 Ctrl Delay			31.2									
HCM 2010 LOS			C									
Notes												

Existing + Project PM (weekday) - Scenario A
3: Baker Street & San Elijo E

05/18/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	83	0	0	36	110	76	1681	59	0	0	0
Future Volume (veh/h)	16	83	0	0	36	110	76	1681	59	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1900	1863	0	0	1863	1900	1900	1863	1900			
Adj Flow Rate, veh/h	17	90	0	0	44	136	81	1788	63			
Adj No. of Lanes	0	1	0	0	1	0	0	2	0			
Peak Hour Factor	0.92	0.92	0.92	0.81	0.81	0.81	0.94	0.94	0.94			
Percent Heavy Veh, %	2	2	0	0	2	2	0	2	0			
Cap, veh/h	58	182	0	0	59	181	112	2580	95			
Arrive On Green	0.15	0.15	0.00	0.00	0.15	0.15	0.75	0.75	0.75			
Sat Flow, veh/h	76	1248	0	0	402	1242	149	3421	126			
Grp Volume(v), veh/h	107	0	0	0	0	180	1012	0	920			
Grp Sat Flow(s),veh/h/ln	1325	0	0	0	0	1644	1855	0	1841			
Q Serve(g_s), s	0.2	0.0	0.0	0.0	0.0	9.5	26.5	0.0	22.1			
Cycle Q Clear(g_c), s	9.7	0.0	0.0	0.0	0.0	9.5	26.5	0.0	22.1			
Prop In Lane	0.16		0.00	0.00		0.76	0.08		0.07			
Lane Grp Cap(c), veh/h	240	0	0	0	0	240	1399	0	1388			
V/C Ratio(X)	0.45	0.00	0.00	0.00	0.00	0.75	0.72	0.00	0.66			
Avail Cap(c_a), veh/h	475	0	0	0	0	466	1399	0	1388			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	34.9	0.0	0.0	0.0	0.0	36.9	6.0	0.0	5.4			
Incr Delay (d2), s/veh	1.3	0.0	0.0	0.0	0.0	4.7	3.3	0.0	2.5			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.5	0.0	0.0	0.0	0.0	4.6	14.5	0.0	12.0			
LnGrp Delay(d),s/veh	36.2	0.0	0.0	0.0	0.0	41.5	9.3	0.0	8.0			
LnGrp LOS	D					D	A		A			
Approach Vol, veh/h		107			180			1932				
Approach Delay, s/veh		36.2			41.5			8.6				
Approach LOS		D			D			A				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		72.4		17.6				17.6				
Change Period (Y+Rc), s		4.5		4.5				4.5				
Max Green Setting (Gmax), s		55.5		25.5				25.5				
Max Q Clear Time (g_c+I1), s		28.5		11.7				11.5				
Green Ext Time (p_c), s		19.3		1.5				1.5				
Intersection Summary												
HCM 2010 Ctrl Delay				12.6								
HCM 2010 LOS				B								

Existing + Project PM (weekend) - Scenario A
1: Project Driveway & San Elijo Road

01/18/2018

Intersection

Int Delay, s/veh 1.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↑	↑↑		↑
Traffic Vol, veh/h	861	32	22	813	0	72
Future Vol, veh/h	861	32	22	813	0	72
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	None
Storage Length	-	200	100	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	96	96	50	50
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	957	36	23	847	0	144

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	- 957	0 - 478
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	4.14	- 6.94
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	2.22	- 3.32
Pot Cap-1 Maneuver	- 0	714	- 0 534
Stage 1	- 0	-	0 -
Stage 2	- 0	-	0 -
Platoon blocked, %	-		-
Mov Cap-1 Maneuver	-	714	- 534
Mov Cap-2 Maneuver	-	-	-
Stage 1	-	-	-
Stage 2	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	0.3	14.2
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	WBL	WBT
Capacity (veh/h)	534	-	714	-
HCM Lane V/C Ratio	0.27	-	0.032	-
HCM Control Delay (s)	14.2	-	10.2	-
HCM Lane LOS	B	-	B	-
HCM 95th %tile Q(veh)	1.1	-	0.1	-

Existing + Project AM - Scenario B
1: Project Driveway & San Elijo Road

07/17/2018

Intersection

Int Delay, s/veh 0.2

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↑	↑	↑↑		↑
Traffic Vol, veh/h	1164	46	13	2116	0	7
Future Vol, veh/h	1164	46	13	2116	0	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	None
Storage Length	-	250	100	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	68	68	90	90	25	25
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1712	68	14	2351	0	28

Major/Minor	Major1	Major2	Minor1
Conflicting Flow All	0	- 1712	0 - 856
Stage 1	-	-	-
Stage 2	-	-	-
Critical Hdwy	-	4.14	- 6.94
Critical Hdwy Stg 1	-	-	-
Critical Hdwy Stg 2	-	-	-
Follow-up Hdwy	-	2.22	- 3.32
Pot Cap-1 Maneuver	-	0 367	- 0 301
Stage 1	-	0	- 0
Stage 2	-	0	- 0
Platoon blocked, %	-		-
Mov Cap-1 Maneuver	-	- 367	- - 301
Mov Cap-2 Maneuver	-	-	- -
Stage 1	-	-	- -
Stage 2	-	-	- -

Approach	EB	WB	NB
HCM Control Delay, s	0	0.1	18.2
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	WBL	WBT
Capacity (veh/h)	301	-	367	-
HCM Lane V/C Ratio	0.093	-	0.039	-
HCM Control Delay (s)	18.2	-	15.2	-
HCM Lane LOS	C	-	C	-
HCM 95th %tile Q(veh)	0.3	-	0.1	-

Existing + Project AM - Scenario B
2: Cooke Street/Baker Street & San Elijo W

07/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	8	67	155	4	0	0	0	0	23	1884	13
Future Volume (veh/h)	0	8	67	155	4	0	0	0	0	23	1884	13
Number	7	4	14	3	8	18				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1900	1863	0				1900	1863	1900
Adj Flow Rate, veh/h	0	12	100	250	6	0				24	1962	14
Adj No. of Lanes	0	1	0	0	1	0				0	2	0
Peak Hour Factor	0.67	0.67	0.67	0.62	0.62	0.62				0.96	0.96	0.96
Percent Heavy Veh, %	0	2	2	2	2	0				0	2	0
Cap, veh/h	0	48	399	360	7	0				25	2170	16
Arrive On Green	0.00	0.28	0.28	0.28	0.28	0.00				0.59	0.59	0.59
Sat Flow, veh/h	0	172	1437	1011	24	0				43	3649	27
Grp Volume(v), veh/h	0	0	112	256	0	0				1047	0	953
Grp Sat Flow(s),veh/h/ln	0	0	1609	1035	0	0				1861	0	1858
Q Serve(g_s), s	0.0	0.0	4.9	17.4	0.0	0.0				47.0	0.0	38.4
Cycle Q Clear(g_c), s	0.0	0.0	4.9	22.2	0.0	0.0				47.0	0.0	38.4
Prop In Lane	0.00		0.89	0.98		0.00				0.02		0.01
Lane Grp Cap(c), veh/h	0	0	447	367	0	0				1106	0	1105
V/C Ratio(X)	0.00	0.00	0.25	0.70	0.00	0.00				0.95	0.00	0.86
Avail Cap(c_a), veh/h	0	0	447	367	0	0				1116	0	1115
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	0.66	0.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	25.2	33.9	0.0	0.0				16.9	0.0	15.2
Incr Delay (d2), s/veh	0.0	0.0	1.3	3.8	0.0	0.0				16.9	0.0	8.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	2.3	6.6	0.0	0.0				29.0	0.0	22.1
LnGrp Delay(d),s/veh	0.0	0.0	26.6	37.7	0.0	0.0				33.8	0.0	24.1
LnGrp LOS			C	D						C		C
Approach Vol, veh/h		112			256						2000	
Approach Delay, s/veh		26.6			37.7						29.2	
Approach LOS		C			D						C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs				4		6		8				
Phs Duration (G+Y+Rc), s				30.0		59.5		30.0				
Change Period (Y+Rc), s				5.0		6.0		5.0				
Max Green Setting (Gmax), s				25.0		54.0		25.0				
Max Q Clear Time (g_c+I1), s				6.9		49.0		24.2				
Green Ext Time (p_c), s				2.1		4.6		0.2				
Intersection Summary												
HCM 2010 Ctrl Delay			30.0									
HCM 2010 LOS			C									

Existing + Project AM - Scenario B
3: Baker Street & San Elijo E

07/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↰			↰			↰↱				
Traffic Volume (veh/h)	8	24	0	0	143	25	15	1015	23	0	0	0
Future Volume (veh/h)	8	24	0	0	143	25	15	1015	23	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1900	1863	0	0	1863	1900	1900	1863	1900			
Adj Flow Rate, veh/h	11	33	0	0	201	35	17	1153	26			
Adj No. of Lanes	0	1	0	0	1	0	0	2	0			
Peak Hour Factor	0.73	0.73	0.73	0.71	0.71	0.71	0.88	0.88	0.88			
Percent Heavy Veh, %	2	2	0	0	2	2	0	2	0			
Cap, veh/h	65	155	0	0	252	44	37	2632	62			
Arrive On Green	0.16	0.16	0.00	0.00	0.16	0.16	0.74	0.74	0.74			
Sat Flow, veh/h	94	951	0	0	1546	269	50	3573	85			
Grp Volume(v), veh/h	44	0	0	0	0	236	628	0	568			
Grp Sat Flow(s),veh/h/ln	1045	0	0	0	0	1815	1860	0	1848			
Q Serve(g_s), s	0.2	0.0	0.0	0.0	0.0	11.3	12.1	0.0	10.5			
Cycle Q Clear(g_c), s	11.4	0.0	0.0	0.0	0.0	11.3	12.1	0.0	10.5			
Prop In Lane	0.25		0.00	0.00		0.15	0.03		0.05			
Lane Grp Cap(c), veh/h	221	0	0	0	0	296	1370	0	1361			
V/C Ratio(X)	0.20	0.00	0.00	0.00	0.00	0.80	0.46	0.00	0.42			
Avail Cap(c_a), veh/h	414	0	0	0	0	514	1370	0	1361			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.98	0.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	32.5	0.0	0.0	0.0	0.0	36.2	4.7	0.0	4.5			
Incr Delay (d2), s/veh	0.4	0.0	0.0	0.0	0.0	4.9	1.1	0.0	0.9			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	1.0	0.0	0.0	0.0	0.0	6.0	6.5	0.0	5.6			
LnGrp Delay(d),s/veh	32.9	0.0	0.0	0.0	0.0	41.1	5.8	0.0	5.4			
LnGrp LOS	C					D	A		A			
Approach Vol, veh/h		44			236			1196				
Approach Delay, s/veh		32.9			41.1			5.6				
Approach LOS		C			D			A				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		70.8		19.2				19.2				
Change Period (Y+Rc), s		4.5		4.5				4.5				
Max Green Setting (Gmax), s		55.5		25.5				25.5				
Max Q Clear Time (g_c+I1), s		14.1		13.4				13.3				
Green Ext Time (p_c), s		11.4		1.3				1.3				
Intersection Summary												
HCM 2010 Ctrl Delay			12.1									
HCM 2010 LOS			B									

Existing + Project PM - Scenario B
1: Project Driveway & San Elijo Road

07/17/2018

Intersection						
Int Delay, s/veh	1.2					
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑	↗	↖	↑↑		↗
Traffic Vol, veh/h	1821	13	3	1056	0	56
Future Vol, veh/h	1821	13	3	1056	0	56
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	Free	-	None	-	None
Storage Length	-	250	100	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	96	96	50	50
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	2023	14	3	1100	0	112
Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	-	2023	0	-	1012
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	4.14	-	-	6.94
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	2.22	-	-	3.32
Pot Cap-1 Maneuver	-	0	277	-	0	237
Stage 1	-	0	-	-	0	-
Stage 2	-	0	-	-	0	-
Platoon blocked, %	-			-		
Mov Cap-1 Maneuver	-	-	277	-	-	237
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Approach	EB		WB		NB	
HCM Control Delay, s	0		0.1		33.1	
HCM LOS					D	
Minor Lane/Major Mvmt	NBLn1	EBT	WBL	WBT		
Capacity (veh/h)	237	-	277	-		
HCM Lane V/C Ratio	0.473	-	0.011	-		
HCM Control Delay (s)	33.1	-	18.1	-		
HCM Lane LOS	D	-	C	-		
HCM 95th %tile Q(veh)	2.3	-	0	-		

Existing + Project PM - Scenario B
2: Cooke Street/Baker Street & San Elijo W

07/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	9	16	79	31	0	0	0	0	81	990	20
Future Volume (veh/h)	0	9	16	79	31	0	0	0	0	81	990	20
Number	7	4	14	3	8	18				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1900	1863	0				1900	1863	1900
Adj Flow Rate, veh/h	0	13	23	91	36	0				84	1031	21
Adj No. of Lanes	0	1	0	0	1	0				0	2	0
Peak Hour Factor	0.69	0.69	0.69	0.87	0.87	0.87				0.96	0.96	0.96
Percent Heavy Veh, %	0	2	2	2	2	0				0	2	0
Cap, veh/h	0	74	131	178	55	0				106	1369	29
Arrive On Green	0.00	0.12	0.12	0.12	0.12	0.00				0.41	0.41	0.41
Sat Flow, veh/h	0	605	1070	892	454	0				261	3367	72
Grp Volume(v), veh/h	0	0	36	127	0	0				595	0	541
Grp Sat Flow(s),veh/h/ln	0	0	1674	1346	0	0				1850	0	1850
Q Serve(g_s), s	0.0	0.0	1.7	6.8	0.0	0.0				25.3	0.0	22.1
Cycle Q Clear(g_c), s	0.0	0.0	1.7	8.5	0.0	0.0				25.3	0.0	22.1
Prop In Lane	0.00		0.64	0.72		0.00				0.14		0.04
Lane Grp Cap(c), veh/h	0	0	204	233	0	0				752	0	752
V/C Ratio(X)	0.00	0.00	0.18	0.55	0.00	0.00				0.79	0.00	0.72
Avail Cap(c_a), veh/h	0	0	465	463	0	0				1110	0	1110
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	0.71	0.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	35.4	38.8	0.0	0.0				23.4	0.0	22.4
Incr Delay (d2), s/veh	0.0	0.0	0.2	1.4	0.0	0.0				8.3	0.0	5.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.8	3.2	0.0	0.0				14.6	0.0	12.5
LnGrp Delay(d),s/veh	0.0	0.0	35.6	40.2	0.0	0.0				31.7	0.0	28.3
LnGrp LOS			D	D						C		C
Approach Vol, veh/h		36			127						1136	
Approach Delay, s/veh		35.6			40.2						30.0	
Approach LOS		D			D						C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs				4		6		8				
Phs Duration (G+Y+Rc), s				16.0		42.6		16.0				
Change Period (Y+Rc), s				5.0		6.0		5.0				
Max Green Setting (Gmax), s				25.0		54.0		25.0				
Max Q Clear Time (g_c+I1), s				3.7		27.3		10.5				
Green Ext Time (p_c), s				0.8		9.3		0.7				
Intersection Summary												
HCM 2010 Ctrl Delay			31.2									
HCM 2010 LOS			C									
Notes												

Existing + Project PM - Scenario B
3: Baker Street & San Elijo E

07/17/2018

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	83	0	0	36	110	74	1680	59	0	0	0
Future Volume (veh/h)	16	83	0	0	36	110	74	1680	59	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1900	1863	0	0	1863	1900	1900	1863	1900			
Adj Flow Rate, veh/h	17	90	0	0	44	136	79	1787	63			
Adj No. of Lanes	0	1	0	0	1	0	0	2	0			
Peak Hour Factor	0.92	0.92	0.92	0.81	0.81	0.81	0.94	0.94	0.94			
Percent Heavy Veh, %	2	2	0	0	2	2	0	2	0			
Cap, veh/h	58	182	0	0	59	181	109	2582	95			
Arrive On Green	0.15	0.15	0.00	0.00	0.15	0.15	0.75	0.75	0.75			
Sat Flow, veh/h	76	1248	0	0	402	1242	145	3425	126			
Grp Volume(v), veh/h	107	0	0	0	0	180	1010	0	919			
Grp Sat Flow(s),veh/h/ln	1325	0	0	0	0	1644	1855	0	1840			
Q Serve(g_s), s	0.2	0.0	0.0	0.0	0.0	9.5	26.5	0.0	22.1			
Cycle Q Clear(g_c), s	9.7	0.0	0.0	0.0	0.0	9.5	26.5	0.0	22.1			
Prop In Lane	0.16		0.00	0.00		0.76	0.08		0.07			
Lane Grp Cap(c), veh/h	240	0	0	0	0	240	1399	0	1388			
V/C Ratio(X)	0.45	0.00	0.00	0.00	0.00	0.75	0.72	0.00	0.66			
Avail Cap(c_a), veh/h	475	0	0	0	0	466	1399	0	1388			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	34.9	0.0	0.0	0.0	0.0	36.9	6.0	0.0	5.4			
Incr Delay (d2), s/veh	1.3	0.0	0.0	0.0	0.0	4.7	3.3	0.0	2.5			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.5	0.0	0.0	0.0	0.0	4.6	14.5	0.0	11.9			
LnGrp Delay(d),s/veh	36.2	0.0	0.0	0.0	0.0	41.5	9.2	0.0	7.9			
LnGrp LOS	D					D	A		A			
Approach Vol, veh/h		107			180			1929				
Approach Delay, s/veh		36.2			41.5			8.6				
Approach LOS		D			D			A				
Timer	1	2	3	4	5	6	7	8				
Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		72.4		17.6				17.6				
Change Period (Y+Rc), s		4.5		4.5				4.5				
Max Green Setting (Gmax), s		55.5		25.5				25.5				
Max Q Clear Time (g_c+I1), s		28.5		11.7				11.5				
Green Ext Time (p_c), s		19.3		1.5				1.5				
Intersection Summary												
HCM 2010 Ctrl Delay			12.6									
HCM 2010 LOS			B									

Attachment 5 – Sight Distance Analysis

K: | 16 | 16058 | Engineering | TM | current | Exhibits | Sight Distance | 16058_SightDistance.dwg | 12/18/2017 5:06 PM | ORIGINAL PLOT SIZE: 11x17

SIGHT DISTANCE MINIMUM REQUIREMENTS
PER CITY OF SAN MARCOS

POSTED SPEED LIMIT = 45MPH

SAFE SIGHT DISTANCE
LEFT = 610'
RIGHT = N/A

**EXISTING RIGHT TURN
LINE OF SIGHT PROFILE**

SCALE: HORIZONTAL: 1"=100'
VERTICAL: 1"=20'

4.25' HIGH OBJECT AT
C/L OF INCOMING TRAFFIC

TREES ALONG
CENTER MEDIAN

POTENTIAL LINE OF SIGHT OBSTRUCTION

LINE OF SIGHT

OBSERVER EYE LEVEL AT 3.5' ABOVE GROUND
POSITIONED 1' FROM FLOW LINE OF SAN ELIJO RD

PROPOSED RESTRICTED
LEFT TURN

610.00'

DIRECTION OF
TRAFFIC FLOW

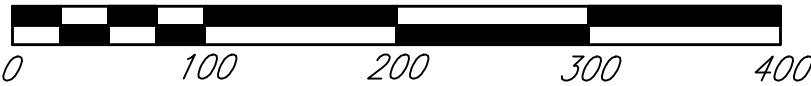
RAISED MEDIAN
STREET TREES

SAN ELIJO RD

10.00'



SCALE 1"=100'



COPPER HILLS, P17-007
APN 223-080-46-00
EXISTING RIGHT TURN
SIGHT DISTANCE EXHIBIT

Attachment 2 – Traffic Counts

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: ELITE TRAFFIC DYNAMICS, LLC

DATE: 12/15/19 SUNDAY	LOCATION: NORTH/SOUTH: EAST/WEST:	SAN MARCOS BAKER SAN ELIJO RD NORTH	PROJECT #: LOCATION #: CONTROL:	ETD20-1220-01 11 SIGNAL
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NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W S ▼	E ▶
INCLUDES BIKE & PED			

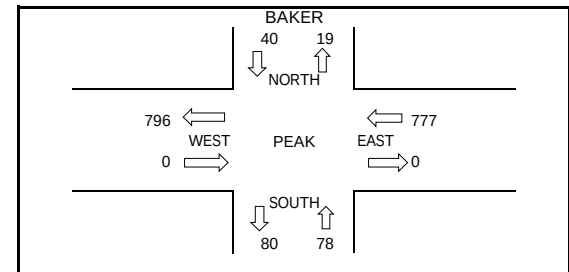
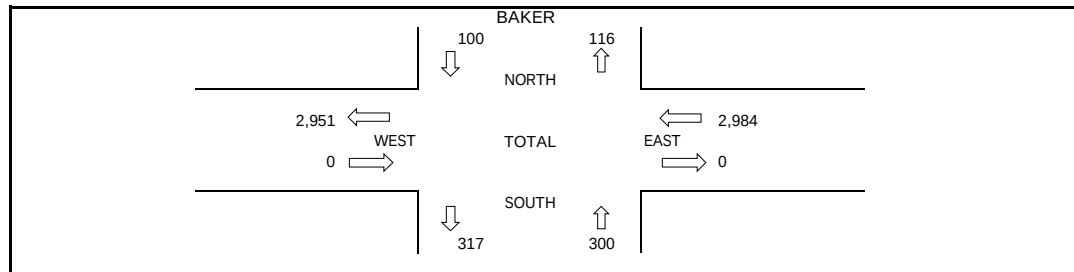
	NORTHBOUND BAKER			SOUTHBOUND BAKER			EASTBOUND SAN ELIJO RD NORTH			WESTBOUND SAN ELIJO RD NORTH			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL

INTERSECTION TURNING MOVEMENT	10:00 AM	5	4			0	3				25	157	4	198
	10:15 AM	17	3			2	8				12	169	1	212
	10:30 AM	13	0			0	5				19	186	1	224
	10:45 AM	20	4			3	5				15	171	2	220
	11:00 AM	16	2			2	10				13	175	3	221
	11:15 AM	16	3			2	3				18	160	1	203
	11:30 AM	15	2			1	14				26	191	2	251
	11:45 AM	15	5			1	2				11	177	1	212
	12:00 PM	4	11			2	6				21	138	3	185
	12:15 PM	15	5			0	4				18	167	1	210
	12:30 PM	11	8			3	3				22	179	1	227
	12:45 PM	16	10			1	2				16	155	2	202
	1:00 PM	18	8			1	5				23	179	2	236
	1:15 PM	17	5			0	2				25	161	3	213
	1:30 PM	13	5			1	6				13	138	3	179
	1:45 PM	7	7			2	1				19	151	4	191
	VOLUMES	218	82	0	0	21	79	0	0	0	296	2,654	34	3,384
	APPROACH %	73%	27%	0%	0%	21%	79%	0%	0%	0%	10%	89%	1%	
	APP/DEPART	300	/	116	100	/	317	0	/	0	2,984	/	2,951	0
	BEGIN PEAK HR	10:45 AM												
	VOLUMES	67	11	0	0	8	32	0	0	0	72	697	8	895
	APPROACH %	86%	14%	0%	0%	20%	80%	0%	0%	0%	9%	90%	1%	
	PEAK HR FACTOR	0.813			0.667			0.000			0.887			0.891
	APP/DEPART	78	/	19	40	/	80	0	/	0	777	/	796	0

VEHICLE U-TURNS				
NB	SB	EB	WB	TTL
X	X	X	X	

BIKE LEFT TURNS				
NL	SL	EL	WL	TTL
X	X	X	X	

				0					0
				0					0
				0					0
				0					0
				0					0
				0					0
				0					0
				0					0
				0					0
				0					0
				0					0
				0					0
				0					0
				0					0
				0					0
				0					0
0	0	0	0	0	0	0	0	0	0



PM	
10:00 AM	
10:15 AM	
10:30 AM	
10:45 AM	
11:00 AM	
11:15 AM	
11:30 AM	
11:45 AM	
12:00 PM	
12:15 PM	
12:30 PM	
12:45 PM	
1:00 PM	
1:15 PM	
1:30 PM	
1:45 PM	
TOTAL	

PEDESTRIAN CROSSINGS				
N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
4		4		8
2		5		7
4	1	5		10
1		1		2
2	1	2		5
2	3			5
	1	1		2
2	1	1		4
3	2	2		7
3	2	5		10
4		3		7
		5		5
2		2		4
		3		3
5		7		12
1		5		6
35	11	51	0	97

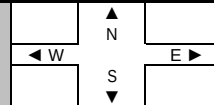
PEDESTRIAN ACTIVATIONS				
N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
0	0	0	0	0

BICYCLE CROSSINGS				
NS	SS	ES	WS	TOTAL
1				1
1				1
6				6
1				1
5		1		6
14	3		10	27
4				4
4				4
3				3
				0
1		2		3
2				2
				0
2				2
1				1
				0
45	3	3	10	61

PREPARED BY: ELITE TRAFFIC DYNAMICS, LLC

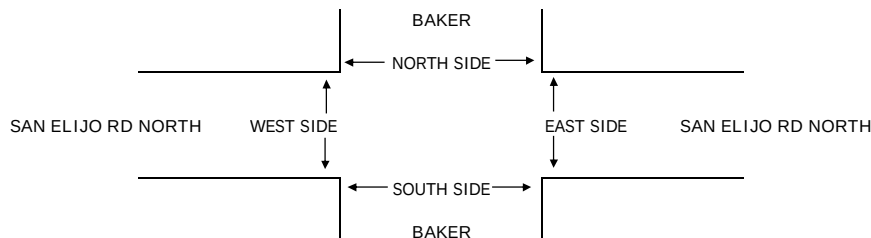
PROJECT #: ETD19-1220-01
LOCATION #: 11
CONTROL: SIGNAL

AM
PM
MD
OTHER
OTHER



U-TURNS				
NB X	SB X	EB X	WB X	TTL

						0
						0
						0
						0
						0
						0
						0
						0
0	0	0	0	0		0
						0
						0
						0
						0
						0
						0
						0
						0
						0
						0
						0
						0
						0
						0
0	0	0	0	0		0



BICYCLE CROSSINGS				
NS	SS	ES	WS	TOTAL
				0
				0
1				1
1				1
			1	1
				0
		1		1
4				4
6	0	1	1	8
2				2
			1	0
				1
				0
				0
				0
1				1
				0
	1			1
2				2
1				1
		3		3
				0
				0
				0
6	1	3	1	11

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: ELITE TRAFFIC DYNAMICS, LLC

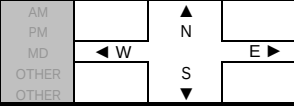
DATE:
12/17/19
TUESDAY

LOCATION: **SAN MARCOS**
NORTH/SOUTH: **BAKER**
EAST/WEST: **SAN ELIJO RD NORTH**

PROJECT #: **ETD20-1220-01**
LOCATION #: **11**
CONTROL: **SIGNAL**

NOTES:

INCLUDES BIKE & PED



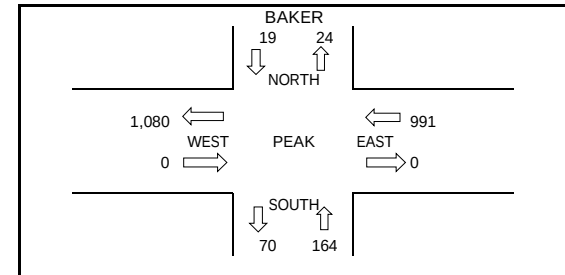
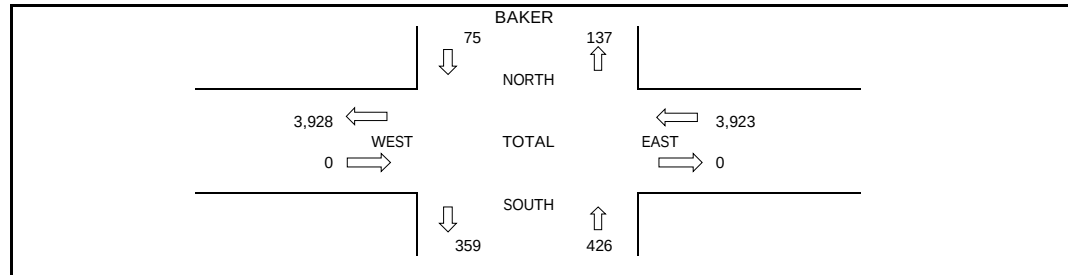
	NORTHBOUND BAKER			SOUTHBOUND BAKER			EASTBOUND SAN ELIJO RD NORTH			WESTBOUND SAN ELIJO RD NORTH			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL

VEHICLE U-TURNS				
NB	SB	EB	WB	TTL
X	X	X	X	

BIKE LEFT TURNS				
NL	SL	EL	WL	TTL
X	X	X	X	

INTERSECTION TURNING MOVEMENT	2:00 PM	15	0			2	5				23	165	2	212
	2:15 PM	27	4			1	3				11	216	5	267
	2:30 PM	76	2			1	5				18	298	0	400
	2:45 PM	29	6			0	5				22	187	2	251
	3:00 PM	16	4			1	3				16	215	1	256
	3:15 PM	13	8			2	5				17	216	4	265
	3:30 PM	23	3			0	6				13	261	3	309
	3:45 PM	11	9			0	3				20	218	1	262
	4:00 PM	11	4			1	0				18	250	2	286
	4:15 PM	14	7			0	4				24	199	5	253
	4:30 PM	11	6			3	3				24	222	4	273
	4:45 PM	17	13			3	2				29	242	1	307
	5:00 PM	23	4			1	6				27	204	1	266
	5:15 PM	19	6			1	0				19	205	5	255
	5:30 PM	19	7			1	3				31	232	7	300
	5:45 PM	12	7			4	1				26	208	4	262
	VOLUMES	336	90	0	0	21	54	0	0	0	338	3,538	47	4,424
	APPROACH %	79%	21%	0%	0%	28%	72%	0%	0%	0%	9%	90%	1%	
	APP/DEPART	426	/	137	75	/	359	0	/	0	3,923	/	3,928	0
	BEGIN PEAK HR	2:15 PM												
	VOLUMES	148	16	0	0	3	16	0	0	0	67	916	8	1,174
	APPROACH %	90%	10%	0%	0%	16%	84%	0%	0%	0%	7%	92%	1%	
	PEAK HR FACTOR	0.526			0.792			0.000			0.784			0.734
	APP/DEPART	164	/	24	19	/	70	0	/	0	991	/	1,080	0

					0						0
					0						0
					0						0
					0						0
					0						0
					0						0
					0						0
					0						0
					0						0
					0						0
					0						0
					0						0
					0						0
					0						0
					0						0
					0						0
0	0	0	0	0	0	0	0	0	0	0	0



PM	2:00 PM	
	2:15 PM	
	2:30 PM	
	2:45 PM	
	3:00 PM	
	3:15 PM	
	3:30 PM	
	3:45 PM	
	4:00 PM	
	4:15 PM	
	4:30 PM	
	4:45 PM	
	5:00 PM	
	5:15 PM	
	5:30 PM	
	5:45 PM	
	TOTAL	

PEDESTRIAN CROSSINGS				
N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
		1		1
3	3	8	1	15
7	3	5		15
		11		11
1	1	2		4
4		5		9
13		5		18
		2		2
		1		1
		1		1
		1		1
		2		2
		3		4
1		1		2
		1		1
		1		1
		0		0
29	7	49	1	86

PEDESTRIAN ACTIVATIONS				
N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
0	0	0	0	0

BICYCLE CROSSINGS				
NS	SS	ES	WS	TOTAL
2				2
				0
				0
		1		1
				0
				0
				0
				0
1				1
				0
	1			1
2				2
1				1
		3		3
				0
				0
				0
6	1	3	1	11

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: ELITE TRAFFIC DYNAMICS, LLC

DATE:
12/15/19
SUNDAY

LOCATION: SAN MARCOS
NORTH/SOUTH: BAKER
EAST/WEST: SAN ELIJO RD SOUTH

PROJECT #: ETD20-1220-01
LOCATION #: 12
CONTROL: SIGNAL

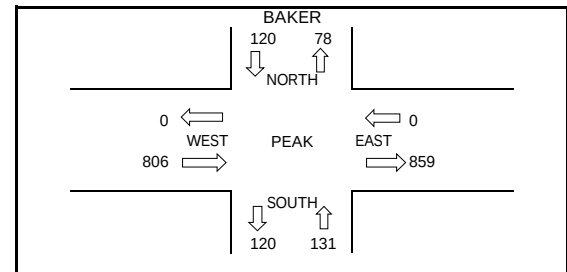
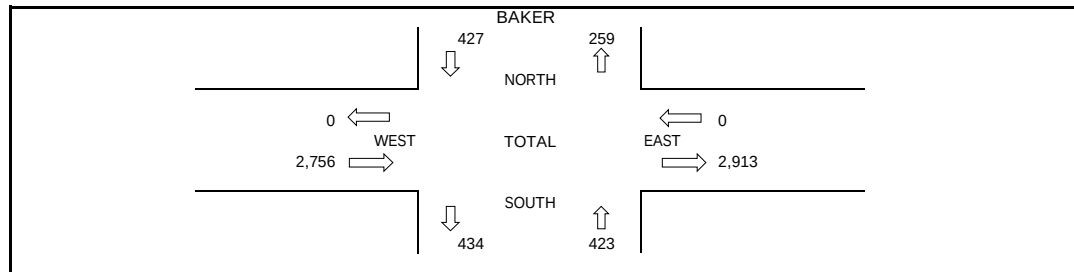
NOTES:	INCLUDES BIKE & PED	AM		▲	
		PM		▲	
		MD	◀ W	N	E ▶
		OTHER		▼	

	NORTHBOUND BAKER			SOUTHBOUND BAKER			EASTBOUND SAN ELIJO RD SOUTH			WESTBOUND SAN ELIJO RD SOUTH			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL

VEHICLE U-TURNS				
NB	SB	EB	WB	TTL

BIKE LEFT TURNS				
NL	SL	EL	WL	TTL

INTERSECTION TURNING MOVEMENT	10:00 AM		4	9	11	21		3	105	5				158
	10:15 AM		6	14	12	16		11	116	16				191
	10:30 AM		8	16	11	15		2	132	9				193
	10:45 AM		8	15	7	17		10	132	8				197
	11:00 AM		7	18	9	9		7	129	5				184
	11:15 AM		7	18	7	18		7	139	8				204
	11:30 AM		4	23	6	21		13	148	12				227
	11:45 AM		8	17	9	16		7	154	7				218
	12:00 PM		4	17	5	22		8	153	10				219
	12:15 PM		9	19	8	16		7	177	15				251
	12:30 PM		8	33	10	21		12	167	9				260
	12:45 PM		8	20	8	13		12	187	11				259
	1:00 PM		10	27	15	19		10	171	16				268
	1:15 PM		8	17	12	22		10	192	9				270
	1:30 PM		6	27	9	11		19	173	10				255
	1:45 PM		3	25	13	18		13	171	9				252
	VOLUMES	0	108	315	152	275	0	151	2,446	159	0	0	0	3,606
	APPROACH %	0%	26%	74%	36%	64%	0%	5%	89%	6%	0%	0%	0%	
	APP/DEPART	423	/	259	427	/	434	2,756	/	2,913	0	/	0	0
	BEGIN PEAK HR	12:30 PM												
	VOLUMES	0	34	97	45	75	0	44	717	45	0	0	0	1,057
	APPROACH %	0%	26%	74%	38%	63%	0%	5%	89%	6%	0%	0%	0%	
	PEAK HR FACTOR		0.799			0.882			0.955			0.000		0.979
	APP/DEPART	131	/	78	120	/	120	806	/	859	0	/	0	0



PM	10:00 AM					
	10:15 AM					
	10:30 AM					
	10:45 AM					
	11:00 AM					
	11:15 AM					
	11:30 AM					
	11:45 AM					
	12:00 PM					
	12:15 PM					
	12:30 PM					
	12:45 PM					
	1:00 PM					
	1:15 PM					
	1:30 PM					
	1:45 PM					
	TOTAL					

PEDESTRIAN CROSSINGS				
N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
	2	8		10
	6	9		15
2		7		9
3		9		12
	4	5	3	12
1	5	1		7
5		5	2	12
1	2	4	1	8
6		13	2	21
1	4	5	3	13
	7	15		22
	2	6	2	10
5	8	18	4	35
6	7	13	6	32
4	1	5	1	11
7		5	4	16
41	48	128	28	245

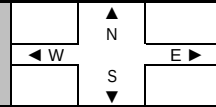
PEDESTRIAN ACTIVATIONS				
N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
0	0	0	0	0

BICYCLE CROSSINGS				
NS	SS	ES	WS	TOTAL
	2			2
	1			1
	1			1
	2			2
	1			1
	4			4
				0
	1	1		2
2	5		3	10
	4			4
	2	2		4
	1	2		3
				0
				0
	2			2
	3		2	5
2	29	5	5	41

PREPARED BY: ELITE TRAFFIC DYNAMICS, LLC

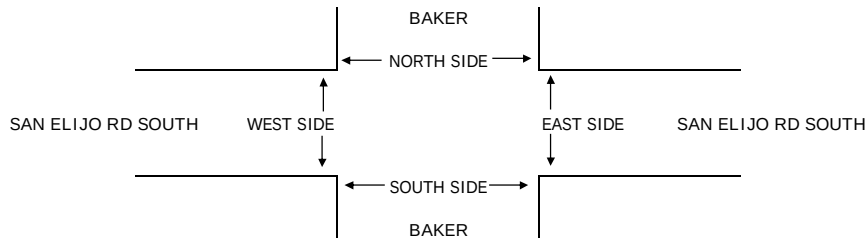
PROJECT #: ETD19-1220-01
LOCATION #: 12
CONTROL: SIGNAL

AM
PM
MD
OTHER
OTHER



U-TURNS				
NB	SB	EB	WB	TTL
X	X	X	X	

					0
					0
					0
					0
					0
					0
					0
					0
					0
0	0	0	0	0	0
					0
					0
					0
					0
					0
					0
					0
					0
					0
					0
					0
					0
					0
					0
					0
					0
0	0	0	0	0	0



BICYCLE CROSSINGS				
NS	SS	ES	WS	TOTAL
	1			1
				0
				0
				0
	1			1
	4			4
				0
				0
0	6	0	0	6
				0
				0
	3	1	1	5
	2	1		3
	1	1		2
	2			2
		1		1
	5			5
				0
	4			4
				0
	1			1
	1	2		3
				0
				0
0	19	6	1	26

INTERSECTION TURNING MOVEMENT COUNTS

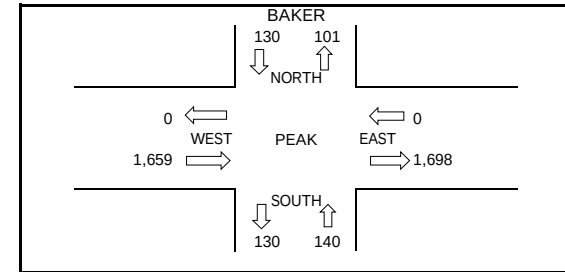
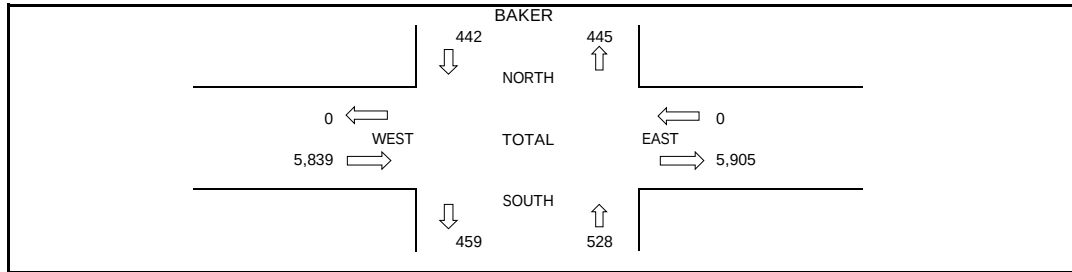
PREPARED BY: ELITE TRAFFIC DYNAMICS, LLC

DATE: 12/17/19 TUESDAY	LOCATION: NORTH/SOUTH: EAST/WEST:	SAN MARCOS BAKER SAN ELIJO RD SOUTH	PROJECT #: LOCATION #: CONTROL:	ETD20-1220-01 12 SIGNAL
------------------------------	---	---	---------------------------------------	-------------------------------

NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W S ▼	E ▶
INCLUDES BIKE & PED			

	NORTHBOUND BAKER			SOUTHBOUND BAKER			EASTBOUND SAN ELIJO RD SOUTH			WESTBOUND SAN ELIJO RD SOUTH			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL

INTERSECTION TURNING MOVEMENT	2:00 PM		6	10	11	16		13	253	8				317
	2:15 PM		15	12	7	10		26	229	15				314
	2:30 PM		34	10	7	18		23	294	7				393
	2:45 PM		24	9	10	21		12	264	8				348
	3:00 PM		10	13	7	12		8	275	7				332
	3:15 PM		6	14	9	18		11	307	7				372
	3:30 PM		12	26	9	10		10	407	17				491
	3:45 PM		10	15	5	18		20	353	9				430
	4:00 PM		10	26	6	15		12	389	16				474
	4:15 PM		10	24	12	20		13	387	10				476
	4:30 PM		9	24	12	18		17	391	10				481
	4:45 PM		14	21	8	25		12	392	16				488
	5:00 PM		16	22	12	23		10	393	8				484
	5:15 PM		17	31	5	21		15	376	9				474
	5:30 PM		15	30	8	25		13	355	12				458
	5:45 PM		7	26	24	20		15	375	10				477
	VOLUMES	0	215	313	152	290	0	230	5,440	169	0	0	0	6,809
	APPROACH %	0%	41%	59%	34%	66%	0%	4%	93%	3%	0%	0%	0%	
	APP/DEPART	528	/	445	442	/	459	5,839	/	5,905	0	/	0	0
	BEGIN PEAK HR		4:15 PM											
	VOLUMES	0	49	91	44	86	0	52	1,563	44	0	0	0	1,929
	APPROACH %	0%	35%	65%	34%	66%	0%	3%	94%	3%	0%	0%	0%	
	PEAK HR FACTOR		0.921			0.929			0.988			0.000		0.988
	APP/DEPART	140	/	101	130	/	130	1,659	/	1,698	0	/	0	0



PM	2:00 PM					
	2:15 PM					
	2:30 PM					
	2:45 PM					
	3:00 PM					
	3:15 PM					
	3:30 PM					
	3:45 PM					
	4:00 PM					
	4:15 PM					
	4:30 PM					
	4:45 PM					
	5:00 PM					
	5:15 PM					
	5:30 PM					
	5:45 PM					
	TOTAL					

PEDESTRIAN CROSSINGS					
N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	
2	1	1		3	
20	59	16	22	117	
8	12	34	10	64	
	4	31		35	
	1	9		10	
4	2	8		14	
	3	12	2	17	
5	3	7		15	
1	3	14	1	19	
1	1	5	3	10	
	2	4		6	
1	3	10		14	
1	6	19	1	27	
4	1	12	2	19	
2	2	13	1	18	
1	4	5	2	12	
48	108	200	44	400	

PEDESTRIAN ACTIVATIONS					
N SIDE	S SIDE	E SIDE	W SIDE	TOTAL	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
				0	
0	0	0	0	0	

BICYCLE CROSSINGS					
NS	SS	ES	WS	TOTAL	
				0	
				0	
	3	1	1	5	
	2	1		3	
	1	1		2	
	2			2	
		1		1	
	5			5	
				0	
	4			4	
				0	
	1			1	
	1	2		3	
				0	
				0	
				0	
0	19	6	1	26	

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: ELITE TRAFFIC DYNAMICS, LLC

DATE:
12/15/19
SUNDAY

LOCATION: SAN MARCOS
NORTH/SOUTH: EXISTING PROJECT DWY
EAST/WEST: SAN ELIJO RD

PROJECT #: ETD20-1220-01
LOCATION #: 16
CONTROL: SIGNAL

NOTES:

INCLUDES BIKE & PED

AM
PM
MD
OTHER
OTHER

W
E

N
S

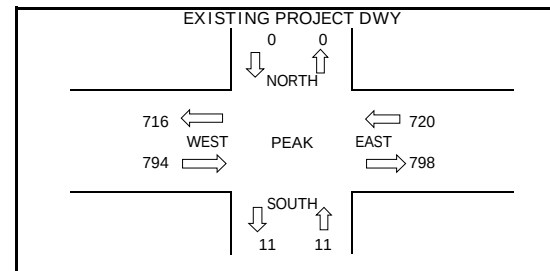
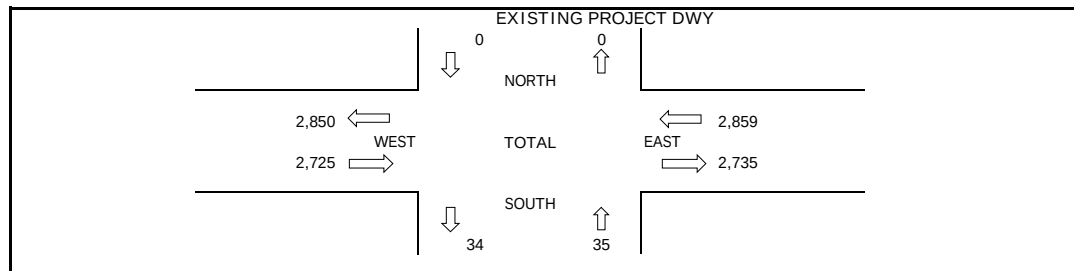
	NORTHBOUND EXISTING PROJECT DWY			SOUTHBOUND EXISTING PROJECT DWY			EASTBOUND SAN ELIJO RD			WESTBOUND SAN ELIJO RD			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL

VEHICLE U-TURNS				
NB	SB	EB	WB	TTL
X	X	X	X	

BIKE LEFT TURNS				
NL	SL	EL	WL	TTL
X	X	X	X	

INTERSECTION TURNING MOVEMENT	10:00 AM	0		1				119	0	0	156		276
	10:15 AM	0		1				139	1	2	194		337
	10:30 AM	0		1				143	1	0	198		343
	10:45 AM	0		0				143	1	0	189		333
	11:00 AM	0		4				140	2	1	182		329
	11:15 AM	0		2				149	3	0	180		334
	11:30 AM	0		5				163	3	1	205		377
	11:45 AM	2		1				161	0	1	192		357
	12:00 PM	0		2				180	1	1	150		334
	12:15 PM	0		0				188	1	1	176		366
	12:30 PM	0		3				191	0	1	179		374
	12:45 PM	1		1				198	0	4	174		378
	1:00 PM	0		5				203	4	0	180		392
	1:15 PM	0		1				196	2	0	182		381
	1:30 PM	0		2				197	1	0	152		352
	1:45 PM	0		3				193	2	0	158		356
	VOLUMES	3	0	32	0	0	0	2,703	22	12	2,847	0	5,619
	APPROACH %	9%	0%	91%	0%	0%	0%	99%	1%	0%	100%	0%	
	APP/DEPART	35	/	0	0	/	34	2,725	/	2,735	2,859	/	2,850
	BEGIN PEAK HR	12:30 PM											
	VOLUMES	1	0	10	0	0	0	788	6	5	715	0	1,525
	APPROACH %	9%	0%	91%	0%	0%	0%	99%	1%	1%	99%	0%	
	PEAK HR FACTOR	0.550			0.000			0.959			0.989		
	APP/DEPART	11	/	0	0	/	11	794	/	798	720	/	716

				0					0
			2	2					0
				0					0
			1	1					0
			1	1					0
				0					0
				0					0
				0					0
				0					0
				0					0
				0					0
				0					0
				0					0
				0					0
				0					0
				0					0
0	0	0	4	4					0



PM	10:00 AM	
	10:15 AM	
	10:30 AM	
	10:45 AM	
	11:00 AM	
	11:15 AM	
	11:30 AM	
	11:45 AM	
	12:00 PM	
	12:15 PM	
	12:30 PM	
	12:45 PM	
	1:00 PM	
	1:15 PM	
	1:30 PM	
	1:45 PM	
	TOTAL	

PEDESTRIAN CROSSINGS				
N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
			2	2
	3	1		4
	3	1		4
	1	3		4
		2		2
	1	6		7
	4	1		5
	4	2		6
	2	1		3
	2			2
	3			3
				0
		1		1
	1	3		4
		6		6
	1	1		2
0	25	28	2	55

PEDESTRIAN ACTIVATIONS				
N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
0	0	0	0	0

BICYCLE CROSSINGS				
NS	SS	ES	WS	TOTAL
1	9		1	11
3	1			4
	5			5
1	3			4
1	3		2	6
2	4			6
20	1			21
1	5			6
5	4			9
2	1			3
1	2	1		4
	2			2
2	1		1	4
1				1
1	1			2
	2			2
41	44	1	4	90

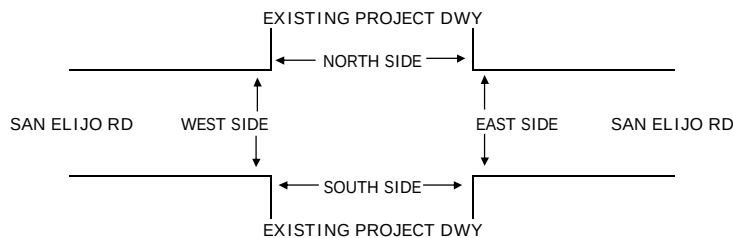
PREPARED BY: ELITE TRAFFIC DYNAMICS, LLC

PROJECT #: ETD19-1220-01
LOCATION #: 16
CONTROL: STOP

AM		▲	
PM		N	
MD	◀ W		E ▶
OTHER		S	
OTHER		▼	

U-TURNS				
NB	SB	EB	WB	TTL
X	X	X	X	

					0
					0
					0
					0
					1
			1		0
					0
					0
					0
0	0	0	1		1
					0
					0
					0
					0
					0
					0
					1
			1		0
					0
					0
					0
					0
					0
					0
					0
					0
0	0	0	1		1



BICYCLE CROSSINGS				
NS	SS	ES	WS	TOTAL
	1			1
	3			3
	1			1
				0
1	2			3
	4			4
	2			2
1				1
2	13	0	0	15
				0
	4			4
	1			1
	2			2
	1			1
	2			2
				0
				0
	3			3
				0
	3			3
				0
				0
				0
0	18	0	0	18

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: ELITE TRAFFIC DYNAMICS, LLC

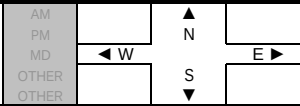
DATE:
12/17/19
TUESDAY

LOCATION: SAN MARCOS
NORTH/SOUTH: EXISTING PROJECT DWY
EAST/WEST: SAN ELIJO RD

PROJECT #: ETD20-1220-01
LOCATION #: 16
CONTROL: STOP

NOTES:

INCLUDES BIKE & PED



	NORTHBOUND EXISTING PROJECT DWY			SOUTHBOUND EXISTING PROJECT DWY			EASTBOUND SAN ELIJO RD			WESTBOUND SAN ELIJO RD			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL

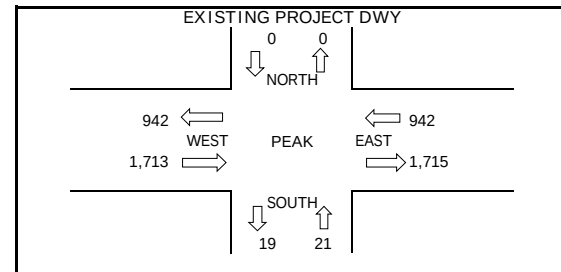
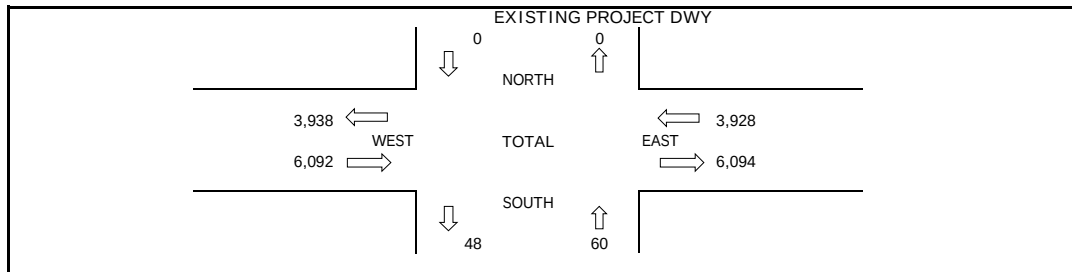
VEHICLE U-TURNS				
NB	SB	EB	WB	TTL

BIKE LEFT TURNS				
NL	SL	EL	WL	TTL

INTERSECTION TURNING MOVEMENT	2:00 PM	0		0				297	1	0	191		489
	2:15 PM	0		1				315	3	0	248		567
	2:30 PM	0		0				328	1	0	401		730
	2:45 PM	7		3				291	1	0	234		536
	3:00 PM	2		10				299	0	0	223		534
	3:15 PM	1		2				341	2	0	243		589
	3:30 PM	0		1				431	0	0	278		710
	3:45 PM	0		2				378	2	0	236		618
	4:00 PM	0		0				438	2	0	241		681
	4:15 PM	0		3				412	2	1	228		646
	4:30 PM	2		3				433	4	0	222		664
	4:45 PM	1		3				411	6	2	253		676
	5:00 PM	0		9				441	4	0	236		690
	5:15 PM	0		6				398	6	0	229		639
	5:30 PM	0		1				415	8	0	234		658
	5:45 PM	0		3				419	3	0	228		653
	VOLUMES	13	0	47	0	0	0	6,047	45	3	3,925	0	10,080
	APPROACH %	22%	0%	78%	0%	0%	0%	99%	1%	0%	100%	0%	
	APP/DEPART	60	/	0	0	/	48	6,092	/	6,094	3,928	/	3,938
	BEGIN PEAK HR	4:15 PM											
	VOLUMES	3	0	18	0	0	0	1,697	16	3	939	0	2,676
	APPROACH %	14%	0%	86%	0%	0%	0%	99%	1%	0%	100%	0%	
	PEAK HR FACTOR	0.583						0.962			0.924		0.970
	APP/DEPART	21	/	0	0	/	19	1,713	/	1,715	942	/	942

				0
				0
				0
				0
				0
				0
			1	1
				0
				0
				0
				0
				0
				0
				0
				0
0	0	0	1	1

				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
0	0	0	0	0



PM	2:00 PM	
	2:15 PM	
	2:30 PM	
	2:45 PM	
	3:00 PM	
	3:15 PM	
	3:30 PM	
	3:45 PM	
	4:00 PM	
	4:15 PM	
	4:30 PM	
	4:45 PM	
	5:00 PM	
	5:15 PM	
	5:30 PM	
	5:45 PM	
	TOTAL	

PEDESTRIAN CROSSINGS				
N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
1	1			2
1	1			2
1	47			48
	6			6
1	3			4
1	3			4
1				1
1				1
	2			2
2	1			3
3	1			4
1	1			2
				0
				0
	3			3
				0
13	69	0	0	82

PEDESTRIAN ACTIVATIONS				
N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
0	0	0	0	0

BICYCLE CROSSINGS				
NS	SS	ES	WS	TOTAL
				0
	4			4
	1			1
	2			2
	1			1
	2			2
	2			2
				0
				0
	3			3
				0
	3			3
				0
				0
				0
0	18	0	0	18

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: ELITE TRAFFIC DYNAMICS, LLC

DATE: 12/15/19 SUNDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	SAN MARCOS CHEVRON DWY 1 SAN ELIJO RD NORTH	PROJECT #: LOCATION #: CONTROL:	ETD19-1220-01 17 NONE
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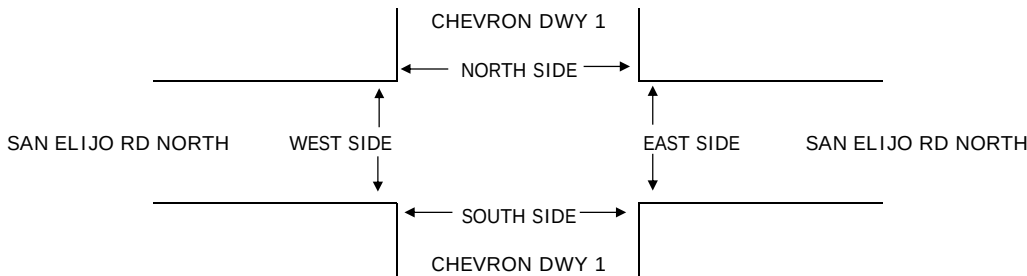
NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W S ▶ E ▼
INCLUDES BIKE & PED		

	NORTHBOUND CHEVRON DWY 1			SOUTHBOUND CHEVRON DWY 1			EASTBOUND SAN ELIJO RD NORTH			WESTBOUND SAN ELIJO RD NORTH			TOTAL
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	

U-TURNS				
NB	SB	EB	WB	TTL
X	X	X	X	

PM	10:00 AM	7								8	152		167
	10:15 AM	10								9	188		207
	10:30 AM	11								14	187		212
	10:45 AM	11								16	184		211
	11:00 AM	10								16	180		206
	11:15 AM	13								17	162		192
	11:30 AM	7								14	204		225
	11:45 AM	12								19	176		207
	12:00 PM	12								10	139		161
	12:15 PM	5								9	172		186
	12:30 PM	7								9	179		195
	12:45 PM	10								12	164		186
	1:00 PM	11								19	177		207
	1:15 PM	11								14	168		193
	1:30 PM	14								13	139		166
	1:45 PM	12								12	153		177
VOLUMES		163	0	0	0	0	0	0	0	211	2,724	0	3,098
APPROACH %		100%	0%	0%	0%	0%	0%	0%	0%	7%	93%	0%	
APP/DEPART		163	/	0	0	/	211	0	/	0	2,935	/	2,887
BEGIN PEAK HR		10:45 AM											
VOLUMES		123	0	0	0	0	0	0	0	168	2,044	0	2,335
APPROACH %		100%	0%	0%	0%	0%	0%	0%	0%	8%	92%	0%	
PEAK HR FACTOR		2.196			0.000			0.000			2.537		
APP/DEPART		123	/	0	0	/	168	0	/	0	2,212	/	2,167

				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
0	0	0	0	0



PM	10:00 AM	
	10:15 AM	
	10:30 AM	
	10:45 AM	
	11:00 AM	
	11:15 AM	
	11:30 AM	
	11:45 AM	
	12:00 PM	
	12:15 PM	
	12:30 PM	
	12:45 PM	
	1:00 PM	
	1:15 PM	
	1:30 PM	
	1:45 PM	
TOTAL		

PEDESTRIAN CROSSINGS				
N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
				0
	1		1	2
				0
				0
				0
	1	2		3
				0
				0
	1			1
				0
				0
				0
				0
				0
0	3	2	1	6

PEDESTRIAN ACTIVATIONS				
N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
0	0	0	0	0

BICYCLE CROSSINGS				
NS	SS	ES	WS	TOTAL
		1		1
				0
				0
				0
				0
				0
	13		13	26
				0
				0
				0
				0
				0
	1		1	2
				0
				0
0	14	1	14	29

PREPARED BY: ELITE TRAFFIC DYNAMICS, LLC

PROJECT #: ETD19-1220-01
LOCATION #: 17
CONTROL: NONE

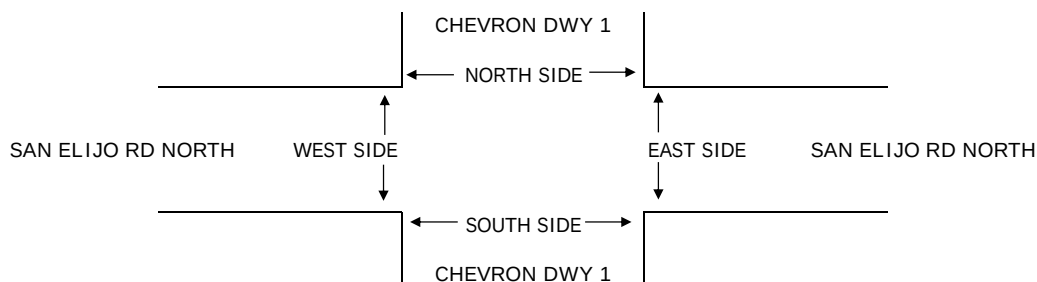
INCLUDES BIKE & PED

AM
PM
MD
OTHER
OTHER

▲
N
S
▼

U-TURNS				
NB X	SB X	EB X	WB X	TTL

				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
0	0	0	0	0



BICYCLE CROSSINGS				
NS	SS	ES	WS	TOTAL
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
0	0	0	0	0

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: ELITE TRAFFIC DYNAMICS, LLC

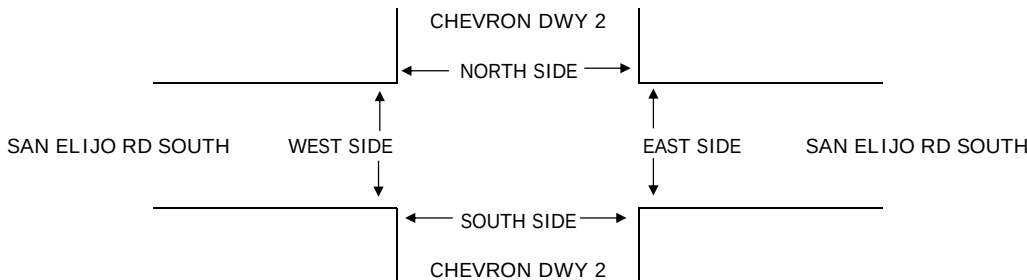
DATE: 12/15/19 SUNDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	SAN MARCOS CHEVRON DWY 2 SAN ELIJO RD SOUTH	PROJECT #: LOCATION #: CONTROL:	ETD19-1220-01 18 NONE
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NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W S ▶ E ▼
INCLUDES BIKE & PED		

	NORTHBOUND CHEVRON DWY 2			SOUTHBOUND CHEVRON DWY 2			EASTBOUND SAN ELIJO RD SOUTH			WESTBOUND SAN ELIJO RD SOUTH				U-TURNS				
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	NB X	SB X	EB X	WB X	TTL

PM	10:00 AM		0	1	9	2		6	105	2				125
	10:15 AM		4	1	13	0		9	127	5				159
	10:30 AM		2	1	9	0		7	133	4				156
	10:45 AM		0	1	10	2		4	140	0				157
	11:00 AM		1	2	9	6		13	130	5				166
	11:15 AM		1	1	11	2		4	138	8				165
	11:30 AM		1	0	11	2		8	160	6				188
	11:45 AM		2	4	16	2		4	148	8				184
	12:00 PM		6	1	7	2		8	165	7				196
	12:15 PM		1	3	12	0		7	181	3				207
	12:30 PM		1	3	15	0		11	171	10				211
	12:45 PM		3	2	14	3		10	192	6				230
	1:00 PM		2	3	13	1		11	181	4				215
	1:15 PM		1	1	12	6		7	193	7				227
	1:30 PM		5	5	7	1		7	190	3				218
	1:45 PM		3	1	7	2		4	185	5				207
	VOLUMES	0	33	30	175	31	0	120	2,539	83	0	0	0	3,011
	APPROACH %	0%	52%	48%	85%	15%	0%	4%	93%	3%	0%	0%	0%	
	APP/DEPART	63	/	153	206	/	114	2,742	/	2,744	0	/	0	0
	BEGIN PEAK HR	11:00 AM												
VOLUMES	0	27	26	134	27	0	94	2,034	72	0	0	0	2,414	
APPROACH %	0%	51%	49%	83%	17%	0%	4%	92%	3%	0%	0%	0%		
PEAK HR FACTOR	1.325			2.236			2.644			0.000			2.624	
APP/DEPART	53	/	121	161	/	99	2,200	/	2,194	0	/	0	0	

					0
					0
					0
					0
					0
					0
					0
					0
					0
					0
					0
					0
					0
					0
					0
0	0	0	0	0	0



		PEDESTRIAN CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
PM	10:00 AM		1			1
	10:15 AM		2			2
	10:30 AM	1	1	1	2	5
	10:45 AM		2			2
	11:00 AM		3			3
	11:15 AM		3			3
	11:30 AM	1	2		1	4
	11:45 AM		1			1
	12:00 PM		4			4
	12:15 PM		2			2
	12:30 PM		6			6
	12:45 PM		0			0
	1:00 PM		3			3
	1:15 PM		6			6
	1:30 PM		7			7
	1:45 PM		4			4
TOTAL		2	47	1	3	53

PEDESTRIAN ACTIVATIONS				
N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
0	0	0	0	0

BICYCLE CROSSINGS				
NS	SS	ES	WS	TOTAL
	6	2	2	10
	1			1
	1			1
	2			2
	2			2
	4			4
	1			1
	3	3		6
	5	3		8
	4			4
	2			2
	1			1
	0	1		1
	2			2
	2			2
	4			4
0	40	9	2	51

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: ELITE TRAFFIC DYNAMICS, LLC

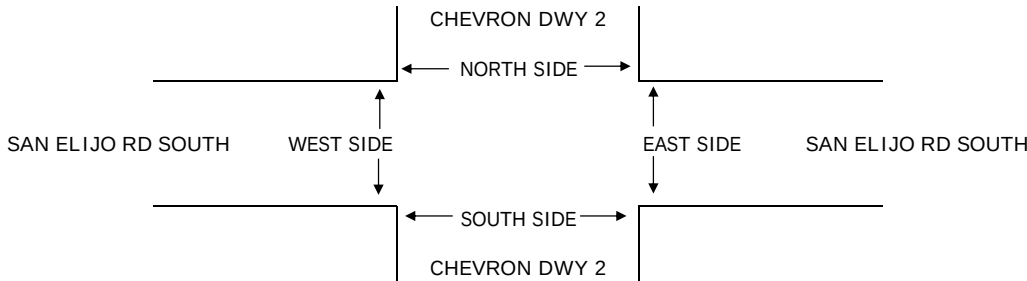
DATE: 12/17/19 TUESDAY	LOCATION: NORTH & SOUTH: EAST & WEST:	SAN MARCOS CHEVRON DWY 2 SAN ELIJO RD SOUTH	PROJECT #: LOCATION #: CONTROL:	ETD19-1220-01 18 NONE
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NOTES:	AM PM MD OTHER OTHER	▲ N ◀ W S ▶ E ▼
INCLUDES BIKE & PED		

	NORTHBOUND CHEVRON DWY 2			SOUTHBOUND CHEVRON DWY 2			EASTBOUND SAN ELIJO RD SOUTH			WESTBOUND SAN ELIJO RD SOUTH				U-TURNS				
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL	NB X	SB X	EB X	WB X	TTL

PM	2:00 PM		4	2	6	0		9	256	26				303				
	2:15 PM		3	1	5	1		13	266	29				318				
	2:30 PM		12	15	9	3		9	296	27				371				
	2:45 PM		2	2	8	1		14	276	7				310				
	3:00 PM		2	1	10	5		17	278	9				322				
	3:15 PM		1	1	8	2		7	334	12				365				
	3:30 PM		0	1	9	3		9	405	15				442				
	3:45 PM		0	2	15	1		11	362	17				408				
	4:00 PM		1	3	7	2		15	404	18				450				
	4:15 PM		1	0	16	6		8	396	16				443				
	4:30 PM		1	3	10	0		9	402	18				443				
	4:45 PM		1	0	14	0		11	408	22				456				
	5:00 PM		1	3	13	0		8	387	23				435				
	5:15 PM		2	5	11	1		12	389	22				442				
	5:30 PM		1	2	11	1		6	371	16				408				
	5:45 PM		0	2	8	0		6	387	33				436				
VOLUMES		0	32	43	160	26	0	164	5,617	310	0	0	0	6,352				
APPROACH %		0%	43%	57%	86%	14%	0%	3%	92%	5%	0%	0%	0%					
APP/DEPART		75	/	196	186	/	336	6,091	/	5,820	0	/	0	0				
BEGIN PEAK HR		3:00 PM																
VOLUMES		0	11	23	132	21	0	119	4,523	221	0	0	0	5,050				
APPROACH %		0%	32%	68%	86%	14%	0%	2%	93%	5%	0%	0%	0%					
PEAK HR FACTOR		2.125			2.391			2.757			0.000			2.769				
APP/DEPART		34	/	130	153	/	242	4,863	/	4,678	0	/	0	0				

					0
					0
					0
					0
					0
					0
					0
					0
					0
					0
					0
					0
					0
					0
0	0	0	0	0	0



PM	2:00 PM
	2:15 PM
	2:30 PM
	2:45 PM
	3:00 PM
	3:15 PM
	3:30 PM
	3:45 PM
	4:00 PM
	4:15 PM
	4:30 PM
	4:45 PM
	5:00 PM
	5:15 PM
	5:30 PM
	5:45 PM
	TOTAL

PEDESTRIAN CROSSINGS				
N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
	1			1
	14			14
	24			24
	6			6
	1			1
	5			5
	4			4
	1			1
				0
	1			1
				0
	2			2
	2			2
				0
	2			2
				0
0	63	0	0	63

PEDESTRIAN ACTIVATIONS				
N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
				0
0	0	0	0	0

BICYCLE CROSSINGS				
NS	SS	ES	WS	TOTAL
				0
	1			1
	1			1
	1			1
				0
	1			1
	2			2
	3			3
				0
	4			4
				0
	1			1
	1			1
				0
				0
				0
0	15	0	0	15

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: ELITE TRAFFIC DYNAMICS LLC

DATE: 2/2/20 SUNDAY	LOCATION: SAN MARCOS NORTH/SOUTH: EXISTING PROJECT DWY EAST/WEST: SAN ELIJO RD	PROJECT #: ETD20-0131-02 LOCATION #: CONTROL: STOP
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NOTES:	AM PM MD OTHER OTHER ▲ N ◀ W S ▶ E ▼
INCLUDES BIKE & PED	

	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			
	EXISTING PROJECT DWY			EXISTING PROJECT DWY			SAN ELIJO RD			SAN ELIJO RD			
LANES:	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	TOTAL

VEHICLE U-TURNS					BIKE LEFT TURNS				
NB	SB	EB	WB	TTL	NL	SL	EL	WL	TTL
X	X	X	X		X	X	X	X	

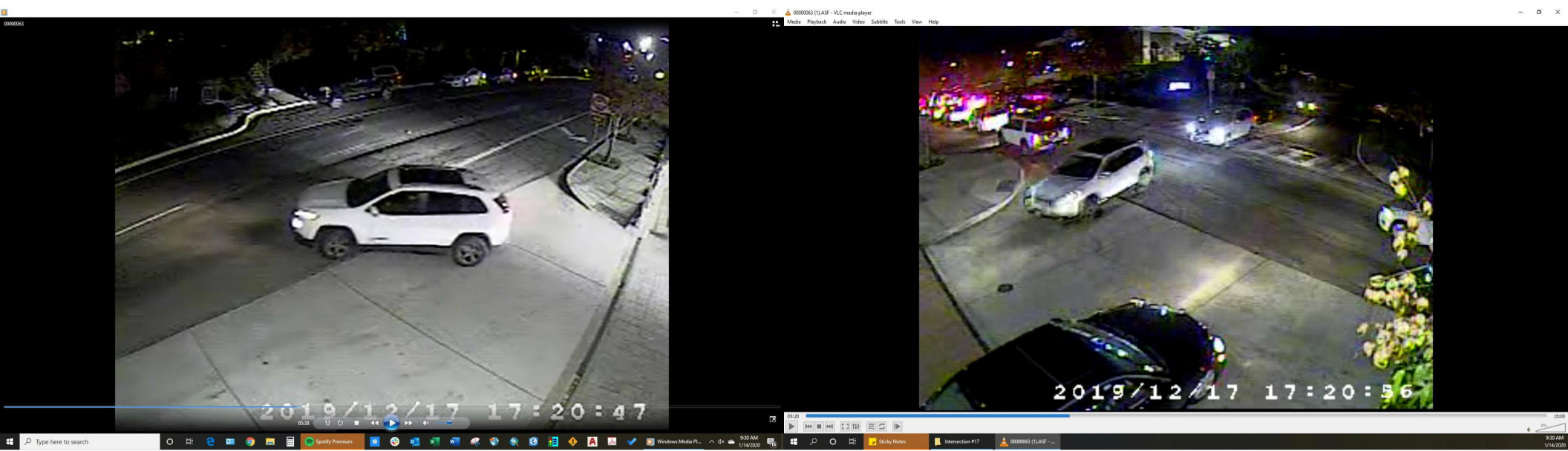
INTERSECTION TURNING MOVEMENT	8:00 AM	0		0				67	8	3	98		176
	8:15 AM	0		1				75	8	11	107		202
	8:30 AM	1		1				86	16	15	143		262
	8:45 AM	0		11				104	14	8	165		302
	9:00 AM	0		28				87	3	4	154		276
	9:15 AM	1		4				87	8	18	199		317
	9:30 AM	0		4				123	14	13	176		330
	9:45 AM	0		32				137	5	10	177		361
	10:00 AM	0		18				145	7	6	196		372
	10:15 AM	0		1				132	24	9	185		351
	10:30 AM	0		12				148	18	12	206		396
	10:45 AM	0		52				180	9	8	171		420
	11:00 AM	1		13				176	11	12	174		387
	11:15 AM	0		11				172	13	17	186		399
	11:30 AM	0		38				186	9	3	226		462
	11:45 AM	2		31				173	8	10	203		427
	12:00 PM	0		5				208	7	10	164		394
	12:15 PM	0		3				190	7	17	175		392
	12:30 PM	4		48				192	5	7	147		403
	12:45 PM	0		24				225	4	4	180		437
	1:00 PM	0		3				226	3	2	159		393
	1:15 PM	4		24				193	3	2	163		389
	1:30 PM	2		63				196	0	3	231		495
	1:45 PM	1		7				219	1	2	203		433
VOLUMES	9	0	337	0	0	0	0	2,893	198	197	3,432	0	7,066
APPROACH %	3%	0%	97%	0%	0%	0%	0%	94%	6%	5%	95%	0%	
APP/DEPART	346	/	0	0	/	395	3,091	/	3,230	3,629	/	3,441	0
BEGIN PEAK HR	11:15 AM												
VOLUMES	2	0	85	0	0	0	0	739	37	40	779	0	1,682
APPROACH %	2%	0%	98%	0%	0%	0%	0%	95%	5%	5%	95%	0%	
PEAK HR FACTOR	0.418			0.000			0.847			0.894			0.910
APP/DEPART	87	/	0	0	/	77	776	/	824	819	/	781	0

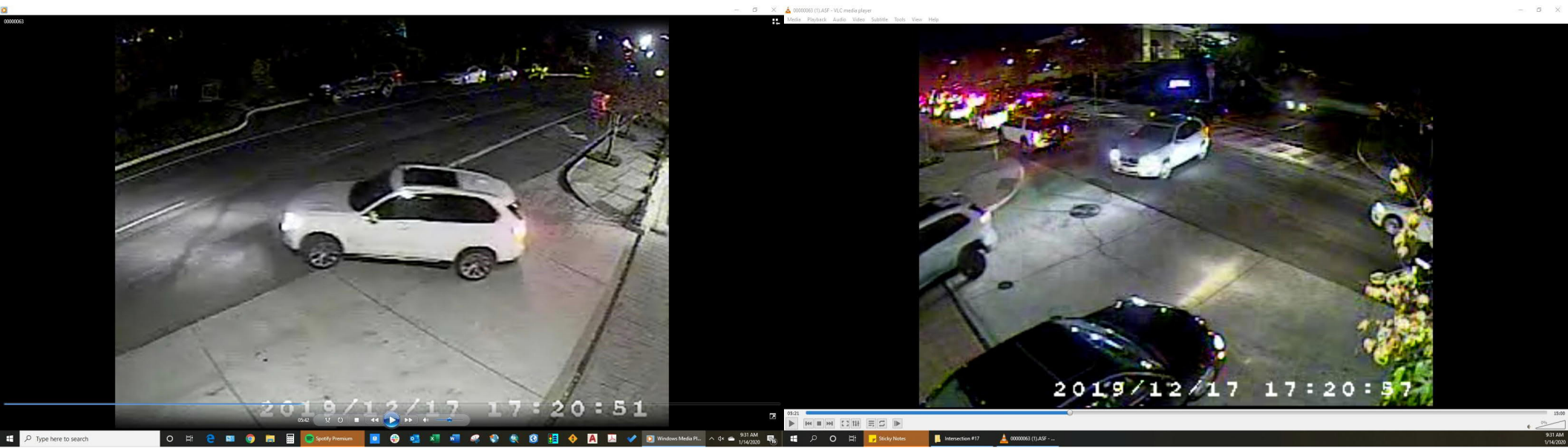
				0					0
				0					0
				0			1		1
			1	1					0
				0					0
				0					0
				0					0
				0					0
				0					0
				0					0
				0					0
				0					0
				0					0
				0					0
				0					0
				0					0
				0					0
			1	1					0
				0					0
0	0	0	3	3	0	0	1	0	1

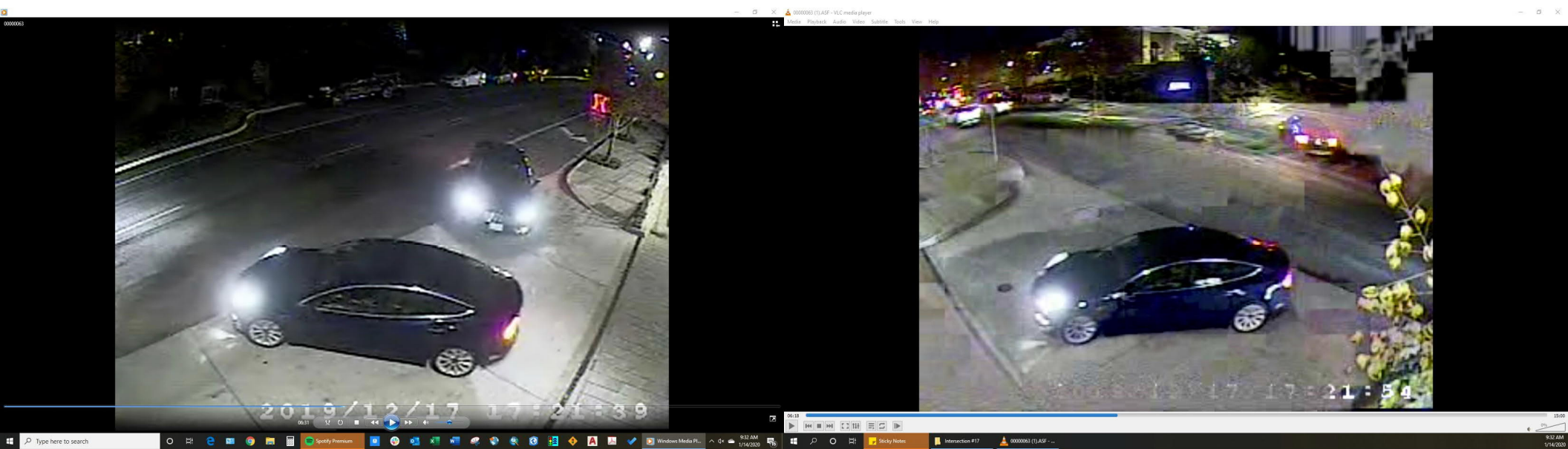
8

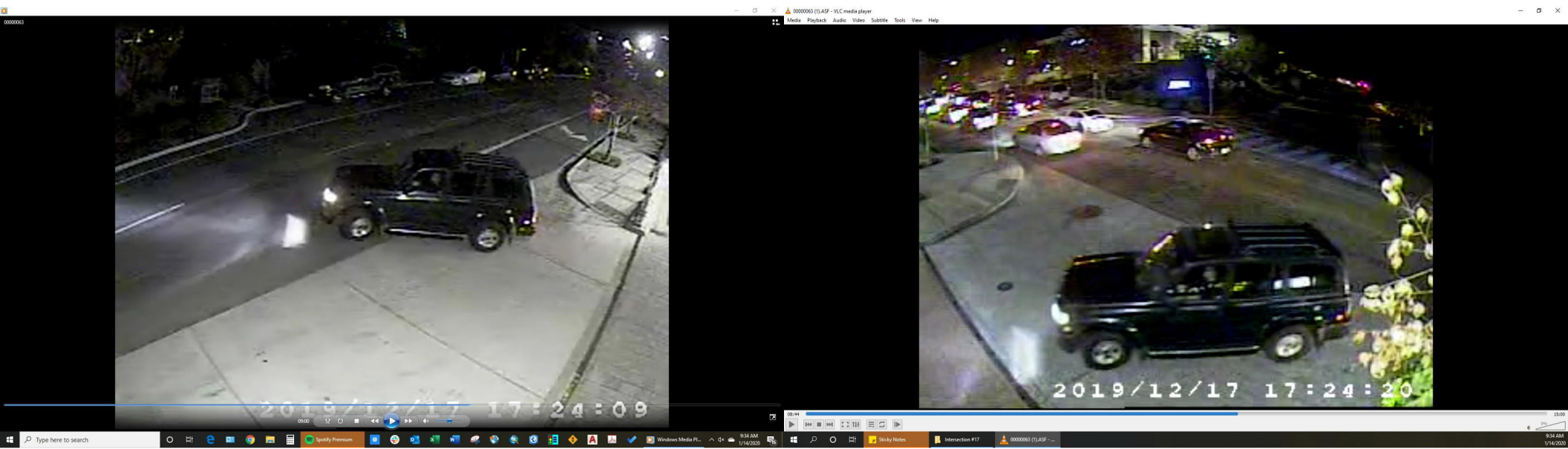
		PEDESTRIAN CROSSINGS				
		N SIDE	S SIDE	E SIDE	W SIDE	TOTAL
PM	8:00 AM	2	3			5
	8:15 AM	4	5			9
	8:30 AM	7	1			8
	8:45 AM	1	9			10
	9:00 AM	3	2			5
	9:15 AM	2	6			8
	9:30 AM	2				2
	9:45 AM	6	4		2	12
	10:00 AM	11		1		12
	10:15 AM	4	7		1	12
	10:30 AM	4	2		2	8
	10:45 AM	1				1
	11:00 AM	2	2			4
	11:15 AM	3				3
	11:30 AM	4	4			8
	11:45 AM	5	1			6
	12:00 PM	1				1
	12:15 PM	2	4			6
	12:30 PM	2	3		2	7
	12:45 PM	1				1
	1:00 PM		1		1	2
	1:15 PM					0
	1:30 PM					0
	1:45 PM		4			4
TOTAL		67	58	1	8	134

BICYCLE CROSSINGS					TOTAL
NS	SS	ES	WS		
1	3				4
	3				3
	1				1
	4				4
5	2				7
2	1	1	1		5
	3		1		4
1	8	1			10
	7				7
	4				4
4	6				10
4	3				7
3	10				13
1	6				7
4	2				6
2	14		1		17
4	2				6
1	3				4
2	1				3
2	6				8
1	1				2
					0
4	3				7
1	2				3
42	95	2	3		142











0000064

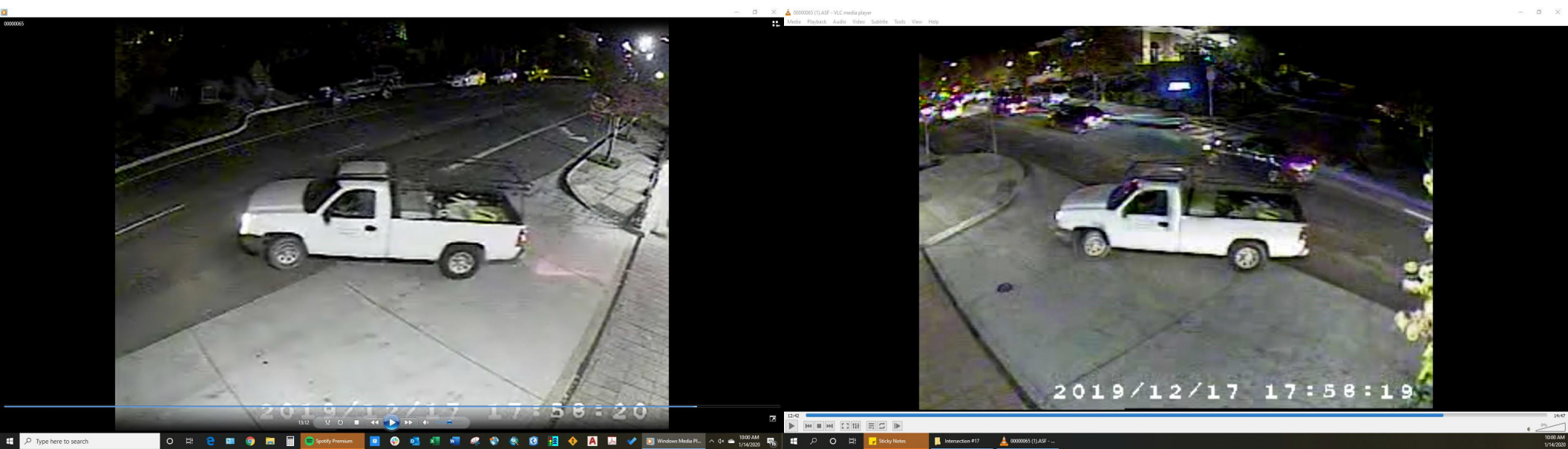
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Media Playback Audio Video Subtitle Tools View Help

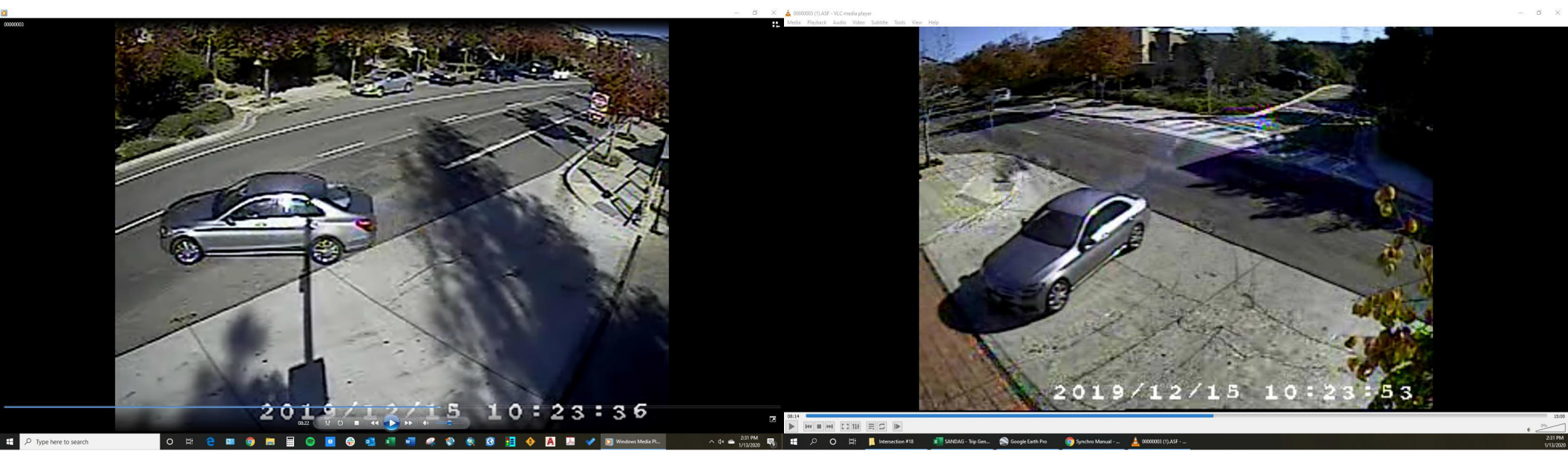


000004

000004 (1).ASF - VLC media player
Media Playback Audio Status Settings Tools View Help







0000004



2019/12/15 10:35:13

0000004 (1).ASF - VLC media player

Media Playback Audio Status Subtitles Tools View Help



2019/12/15 10:35:28

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Windows Media P...

2:37 PM 1/13/2020

Interaction #11

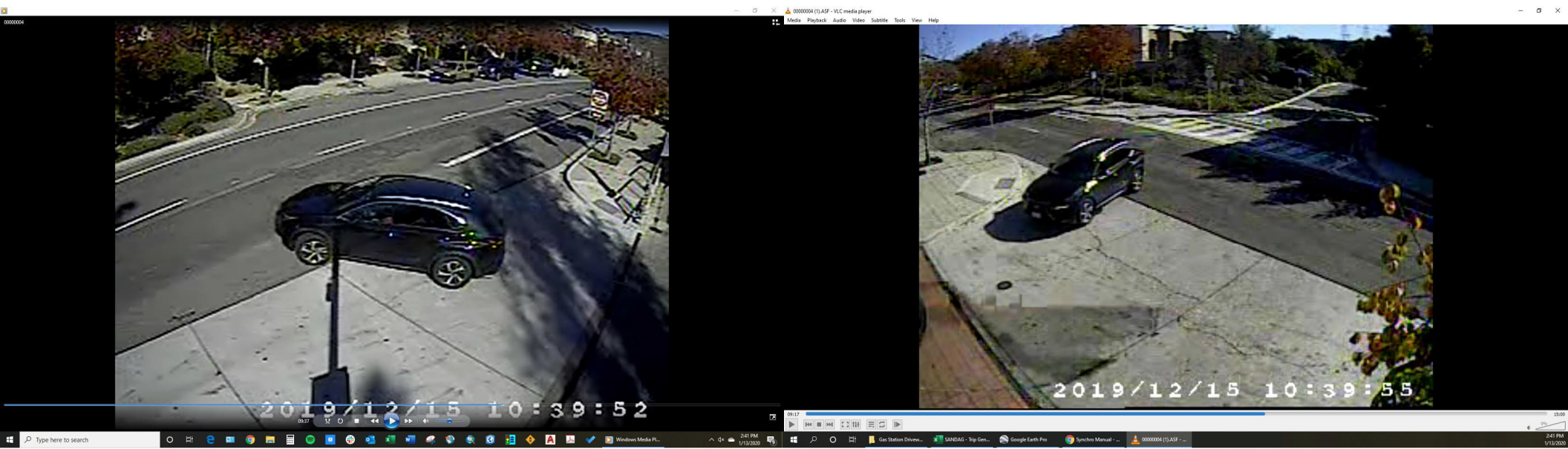
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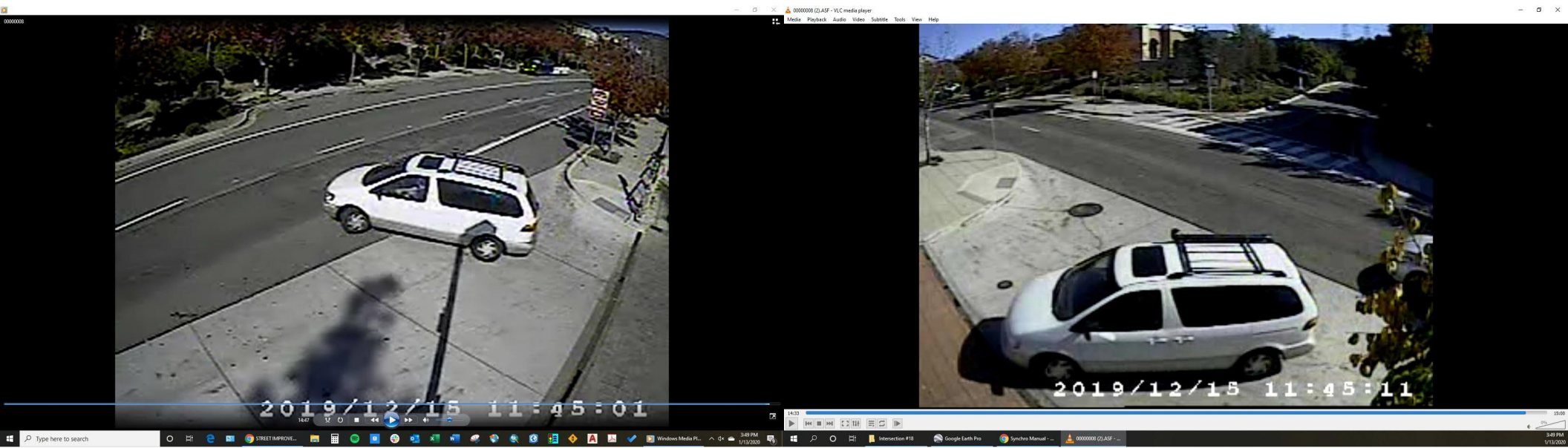
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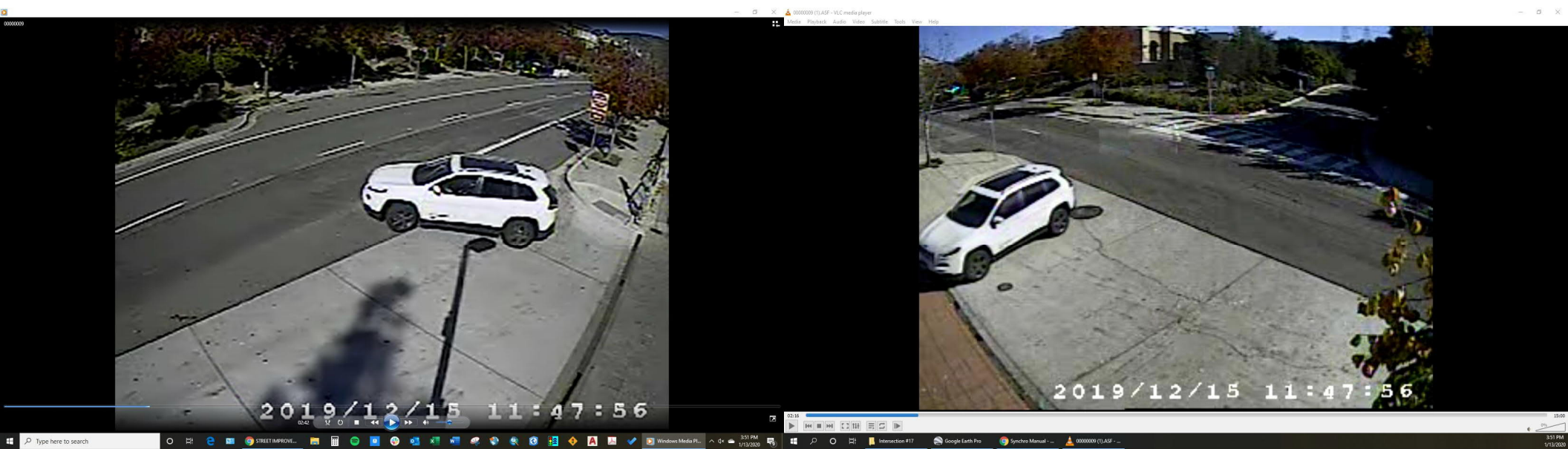
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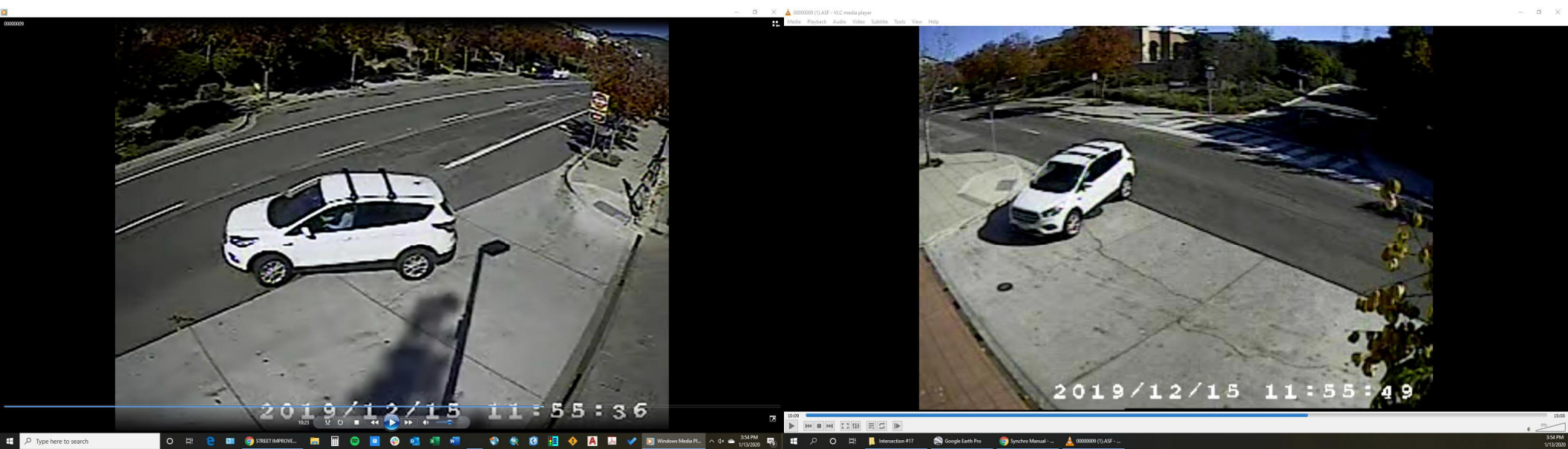
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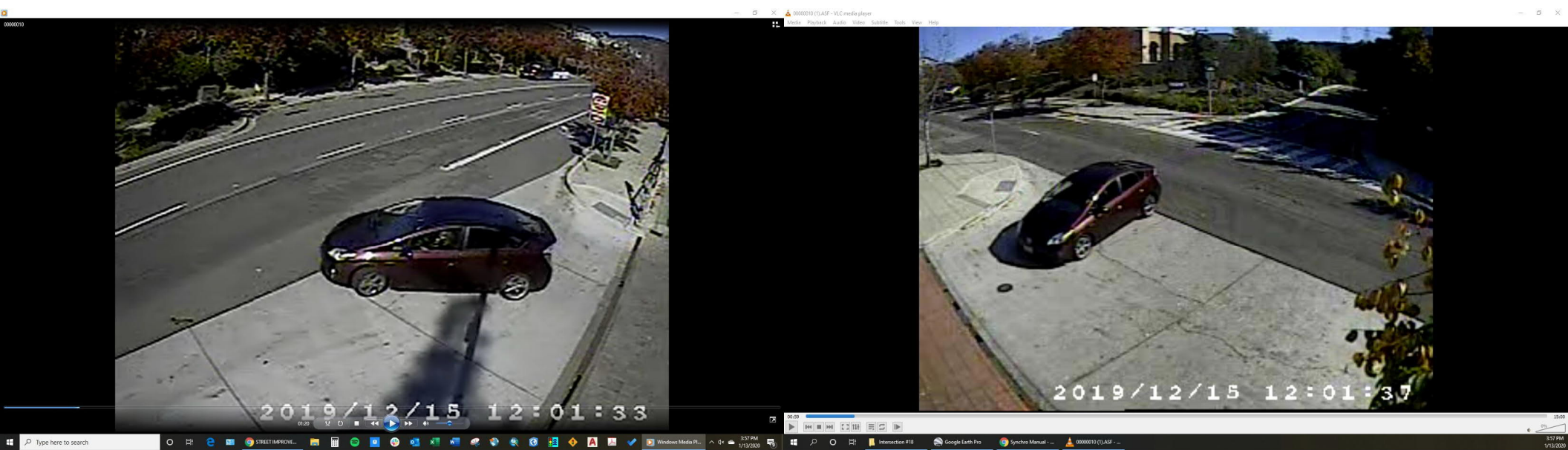
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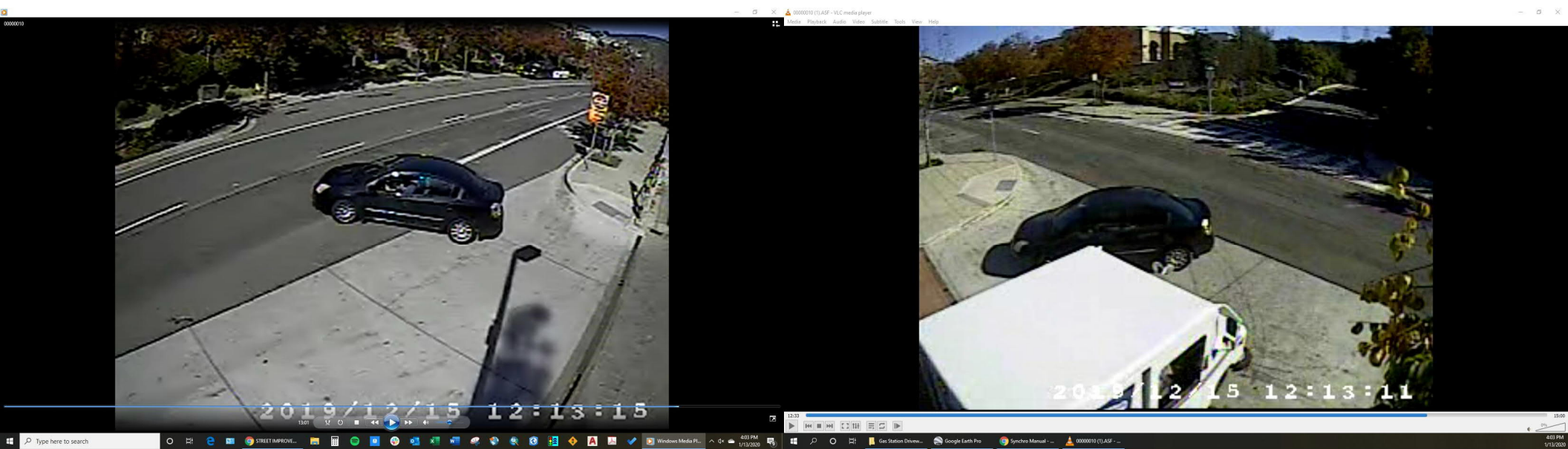


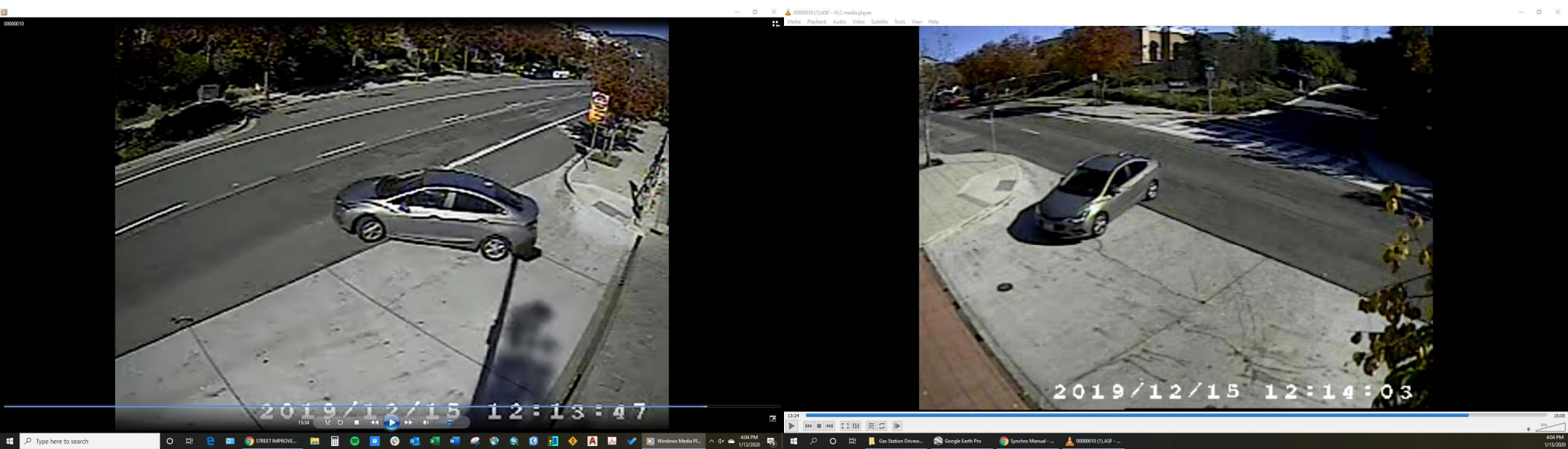










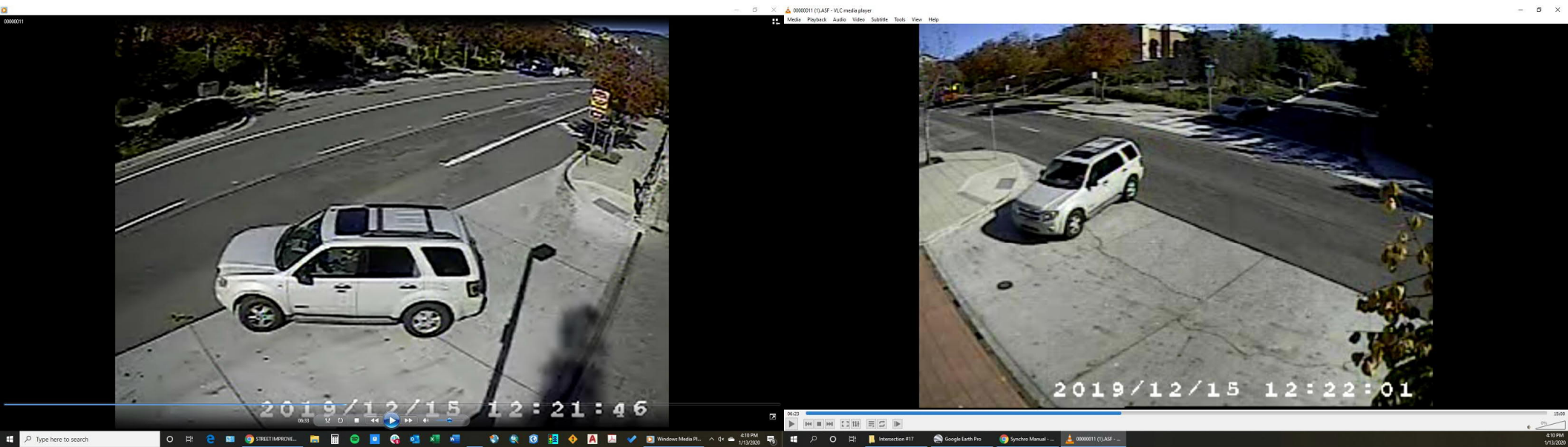


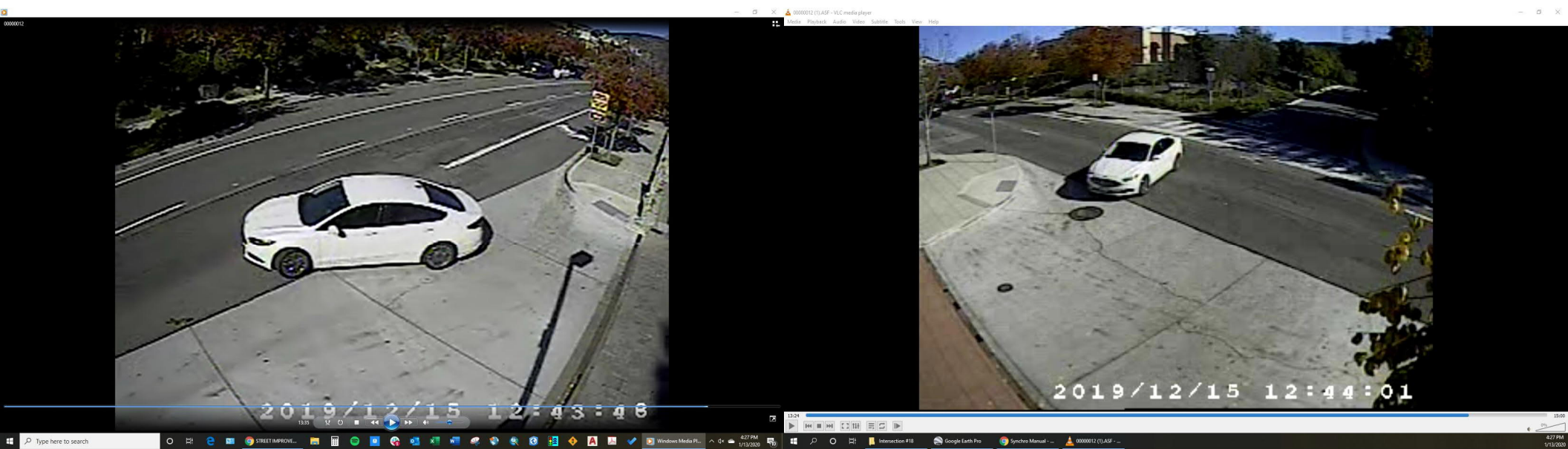
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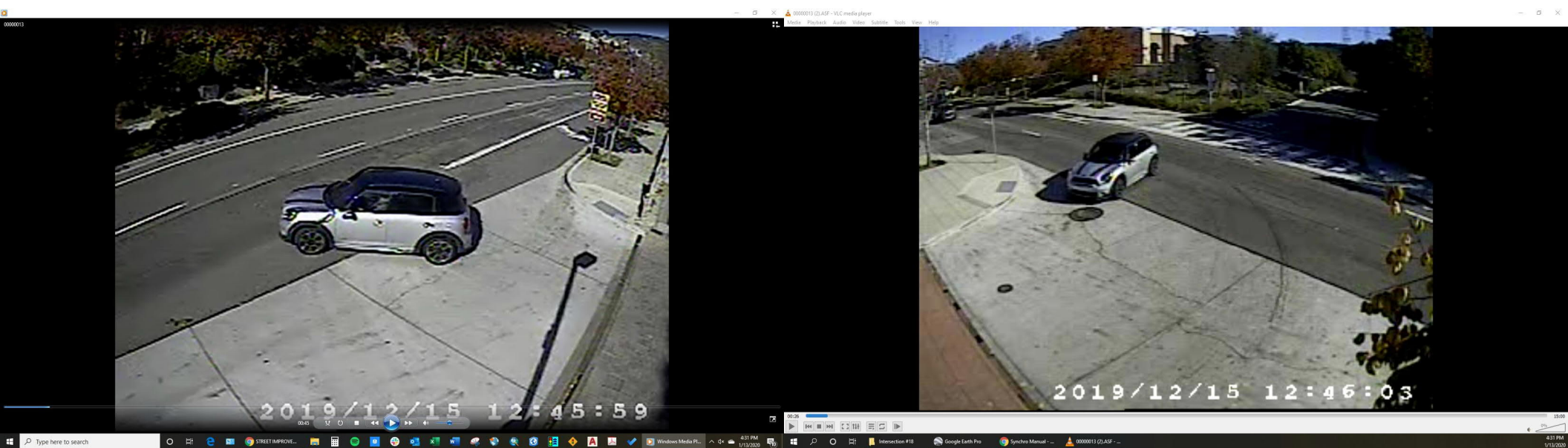
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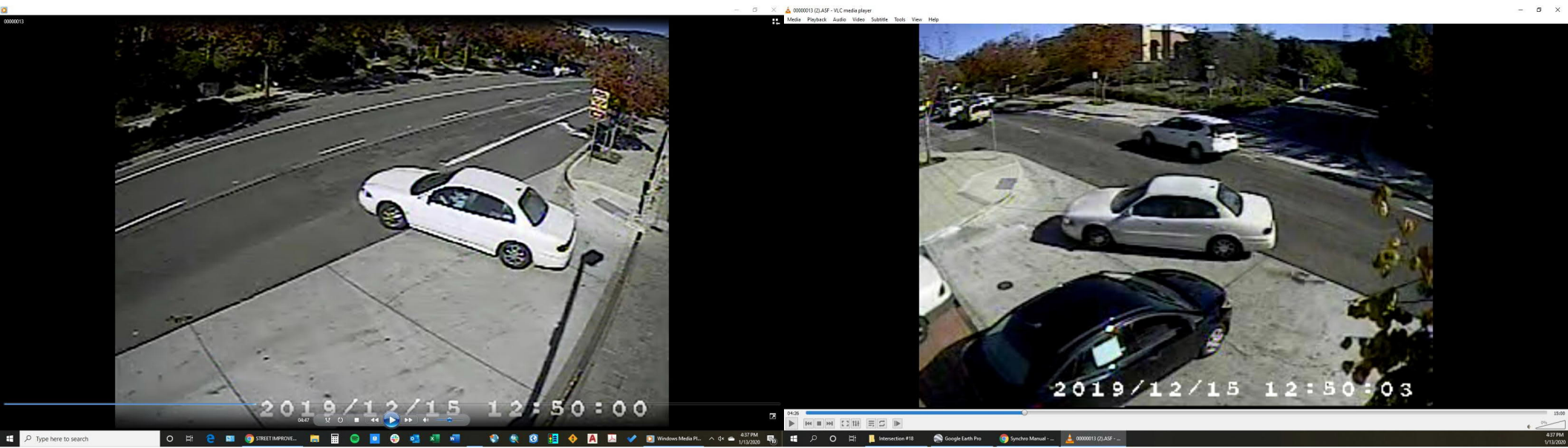
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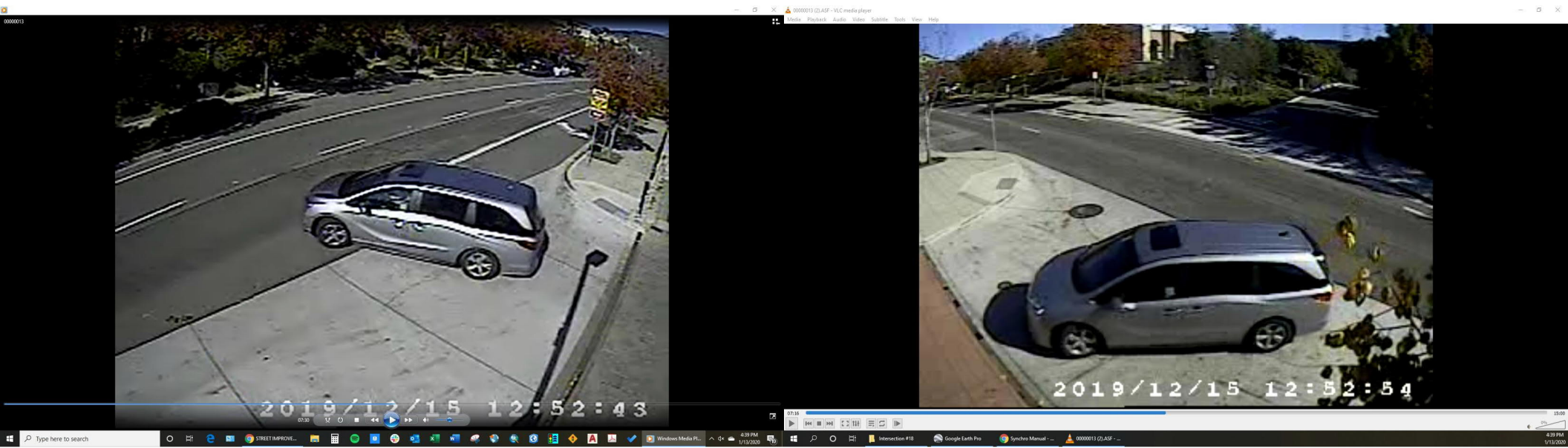


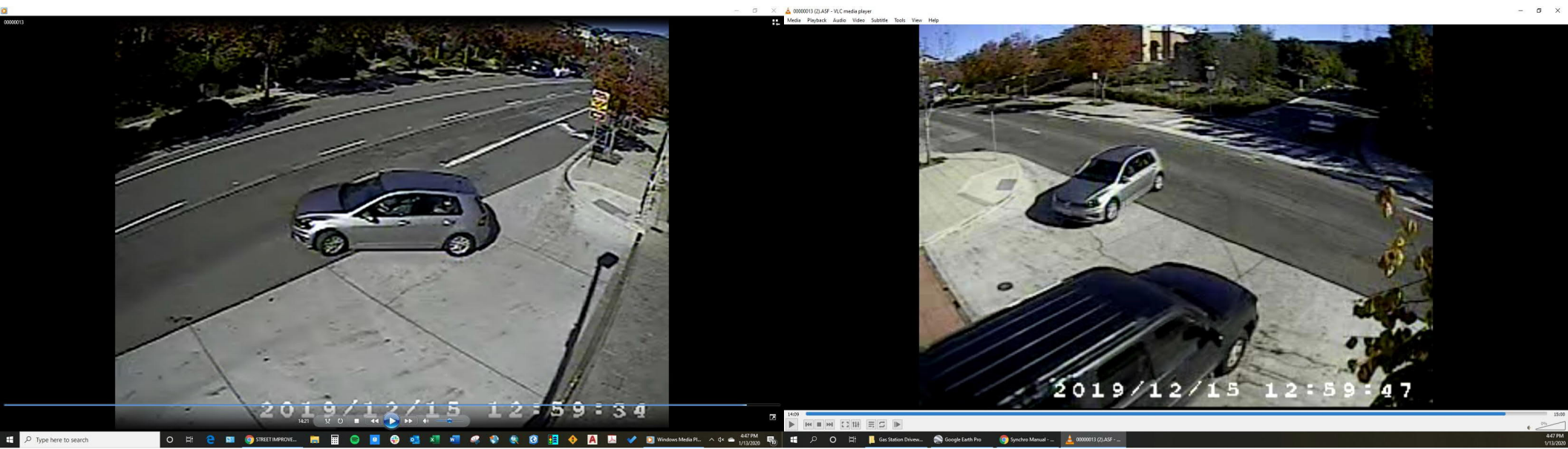










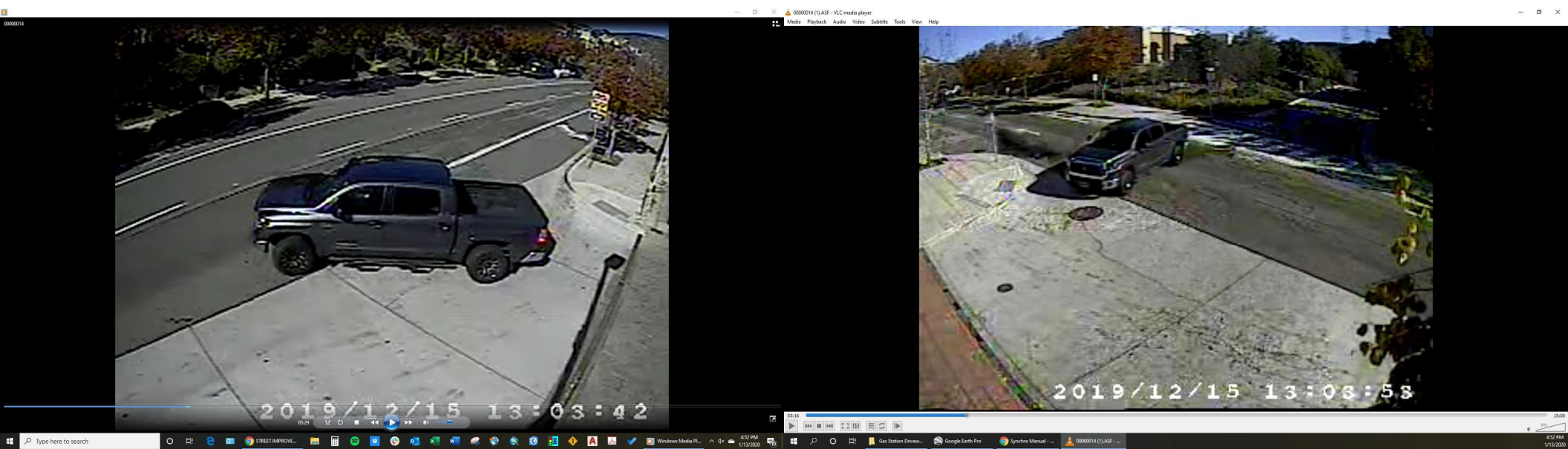


0000014

0000014 (1).ASF - VLC media player
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0000014 (1).ASF





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Media Playback Audio Show Settings Tools View Help

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0000016



2019/12/15 13:43:32



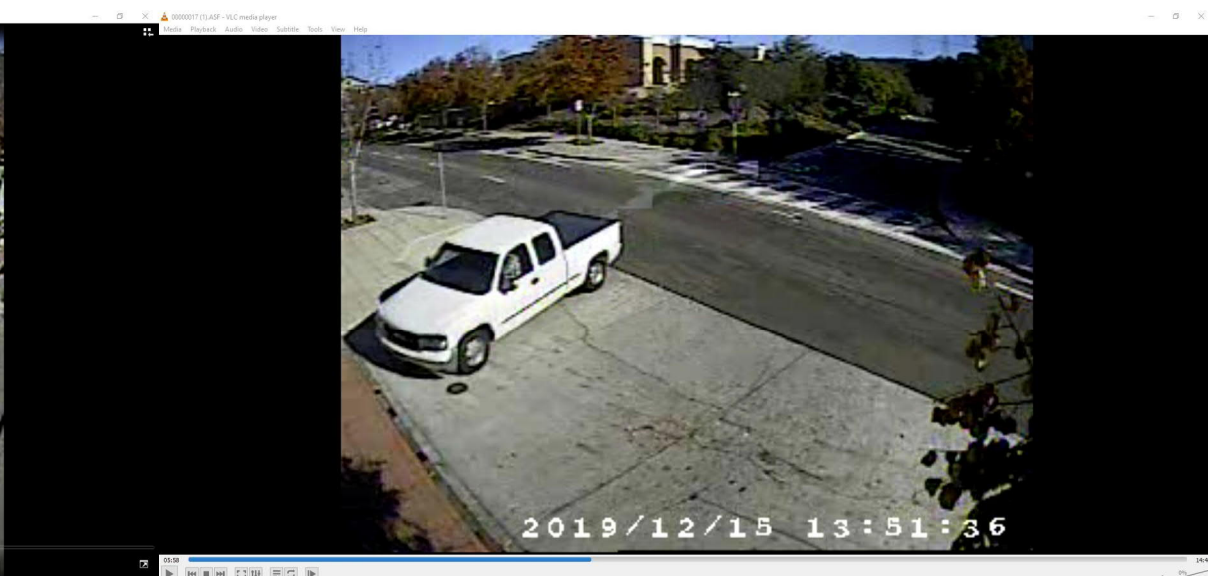
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0000017

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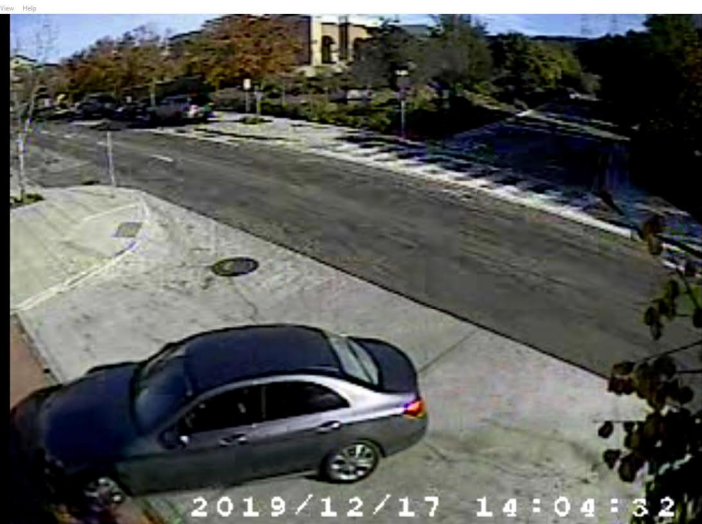
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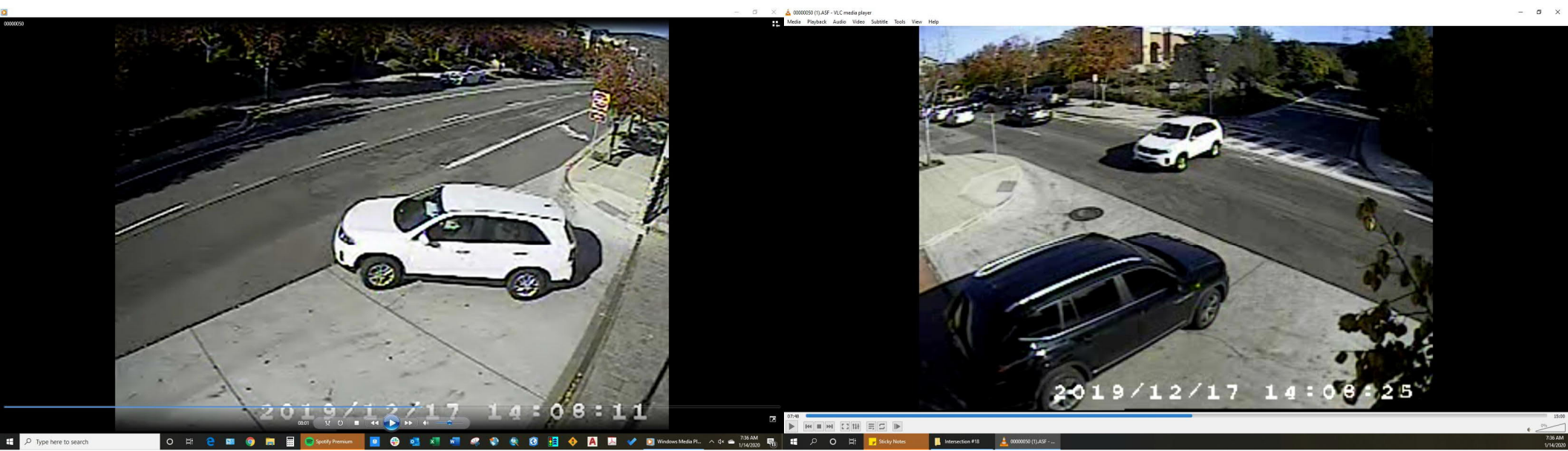


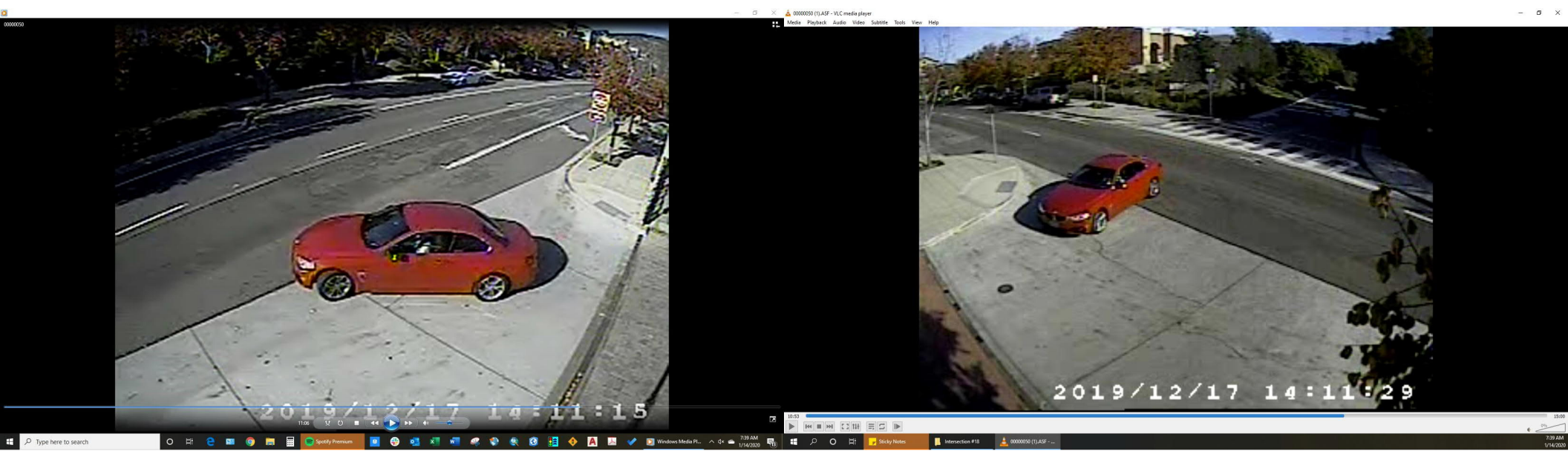
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0000000



2019/12/17 14:12:33

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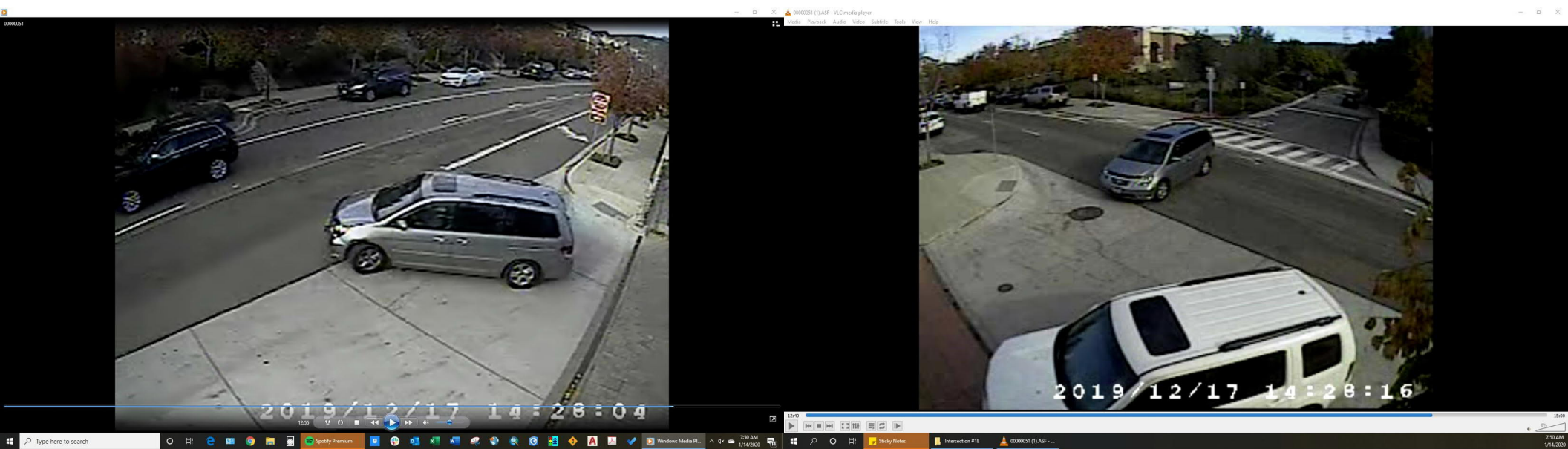
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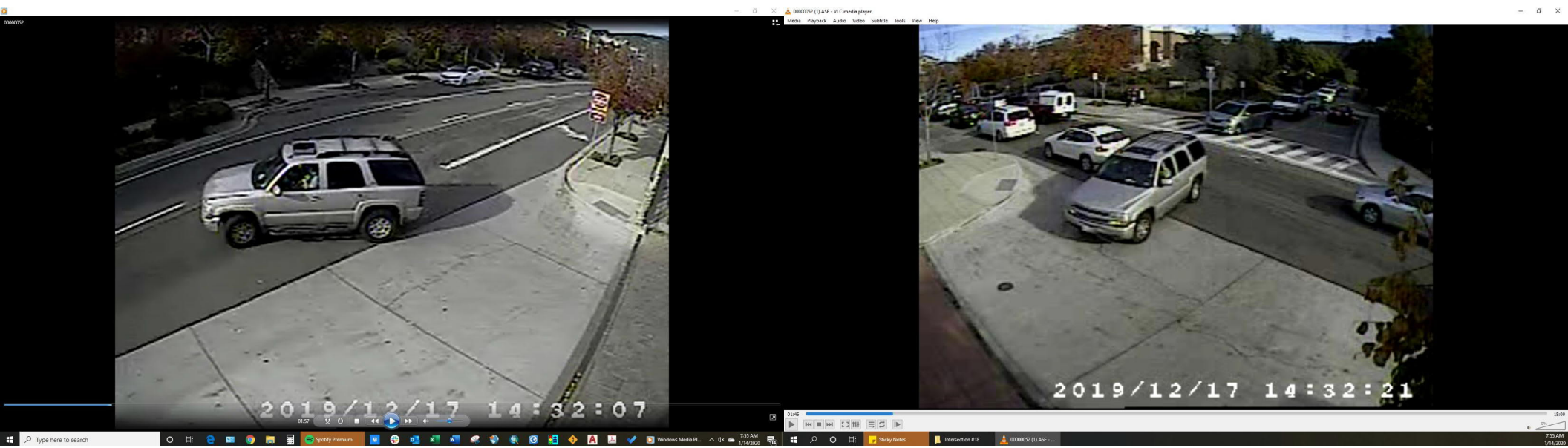
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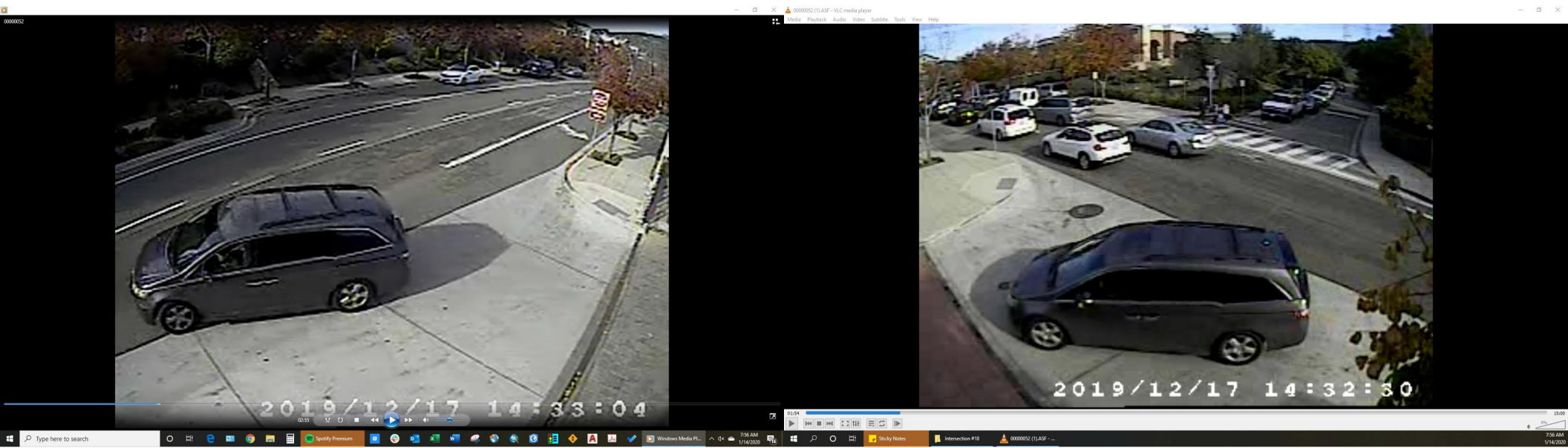


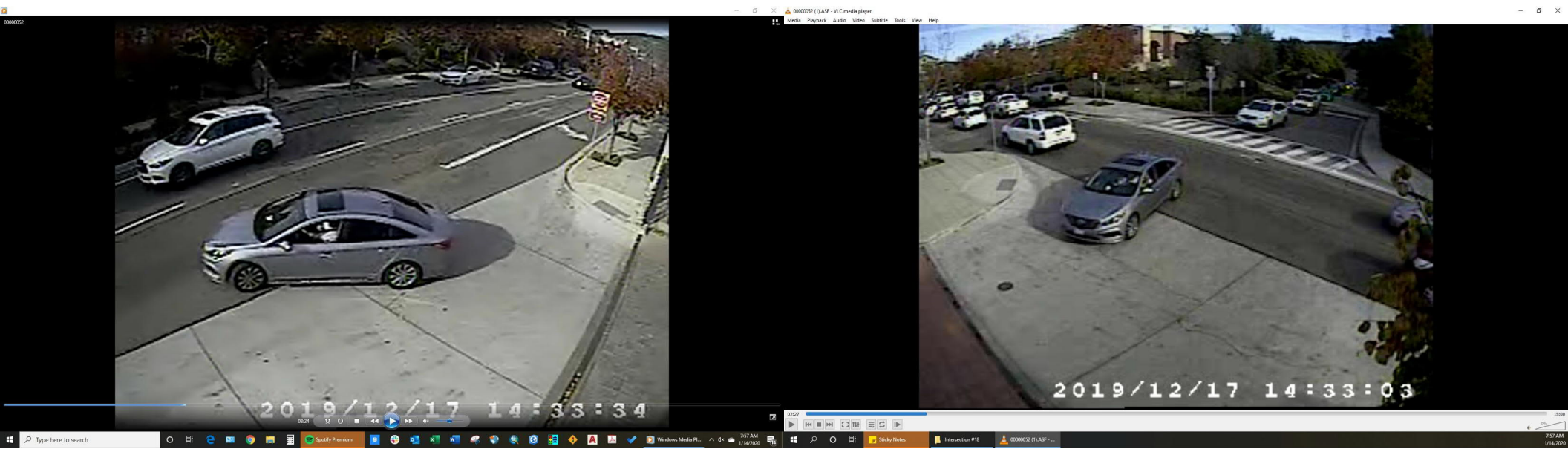
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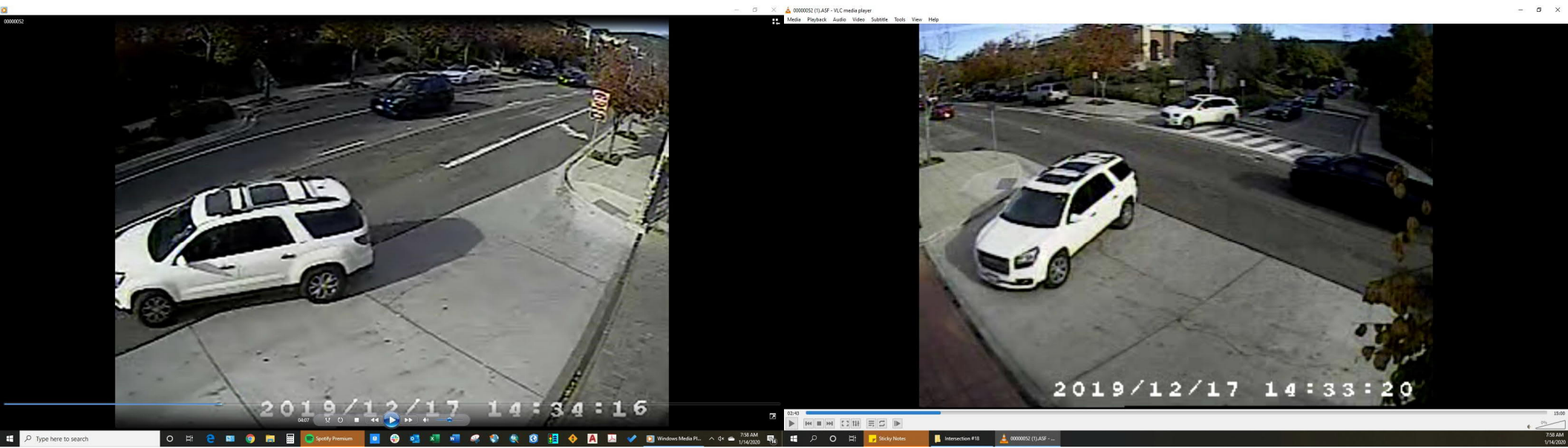












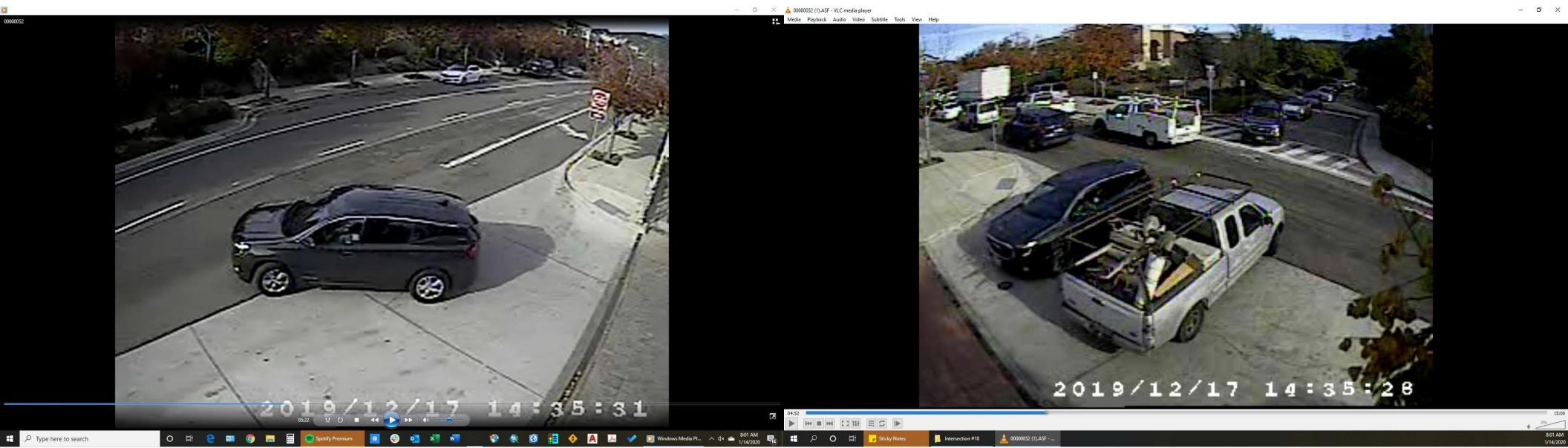
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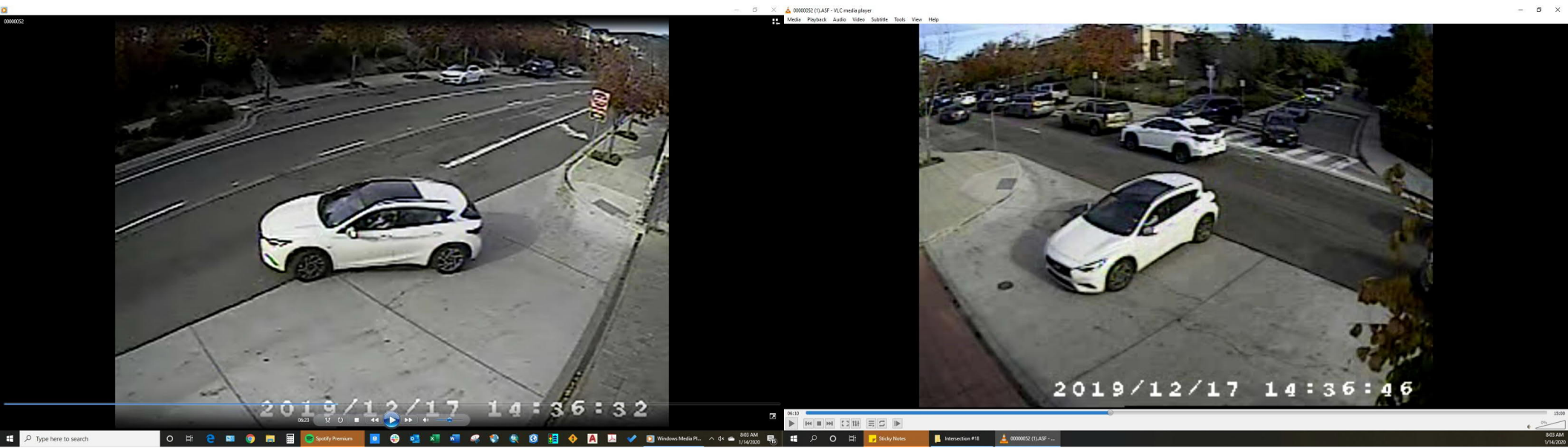


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Media Playback Audio Video Subtitle Tools View Help



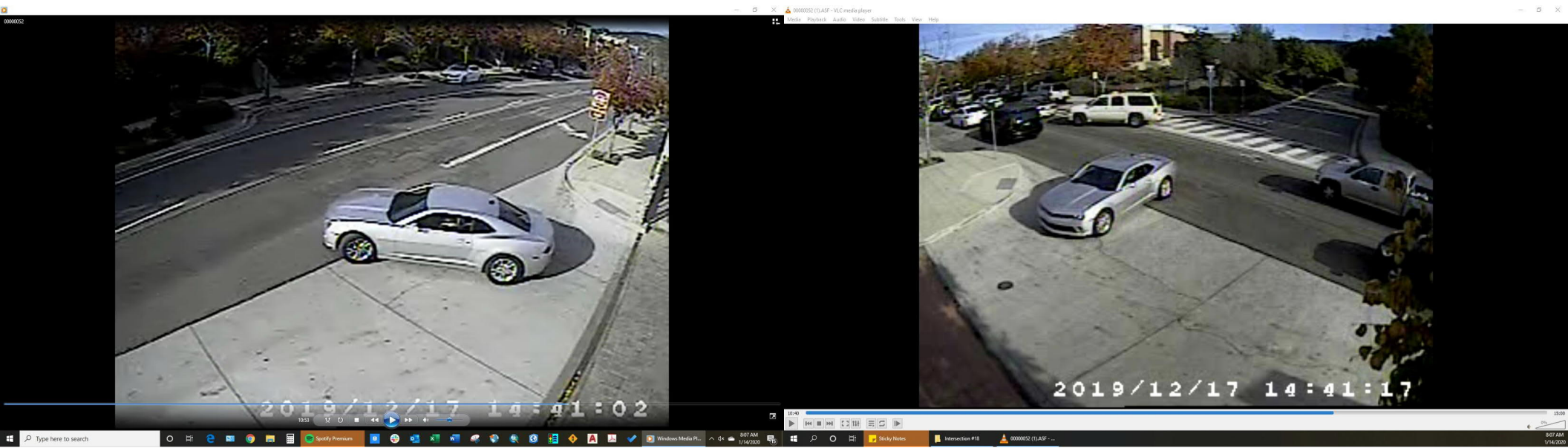
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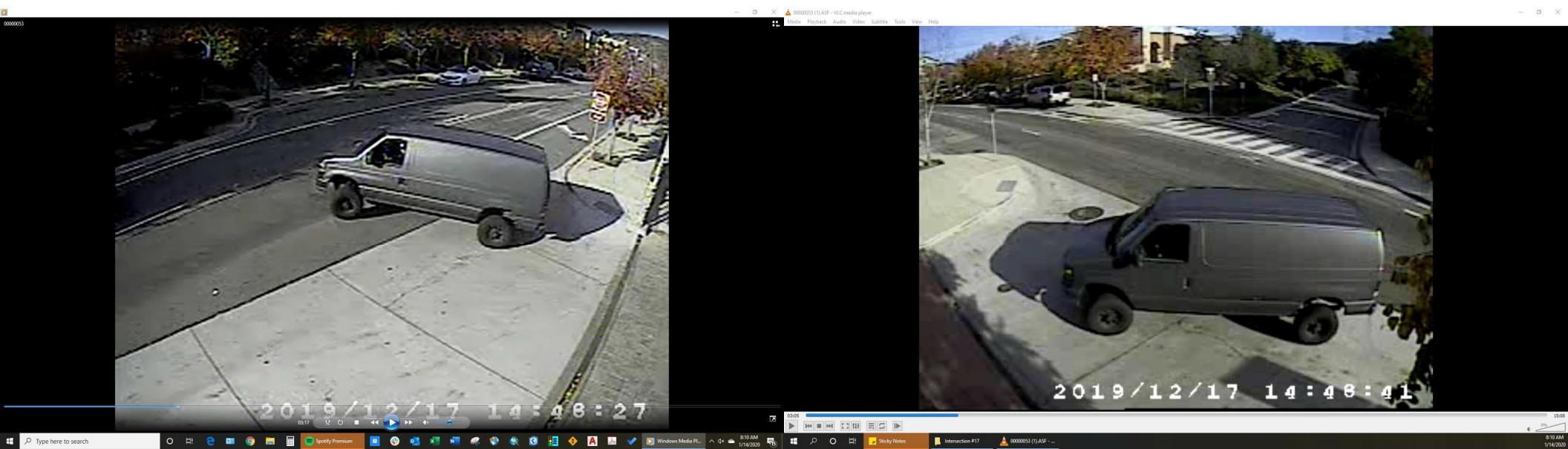


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0000001



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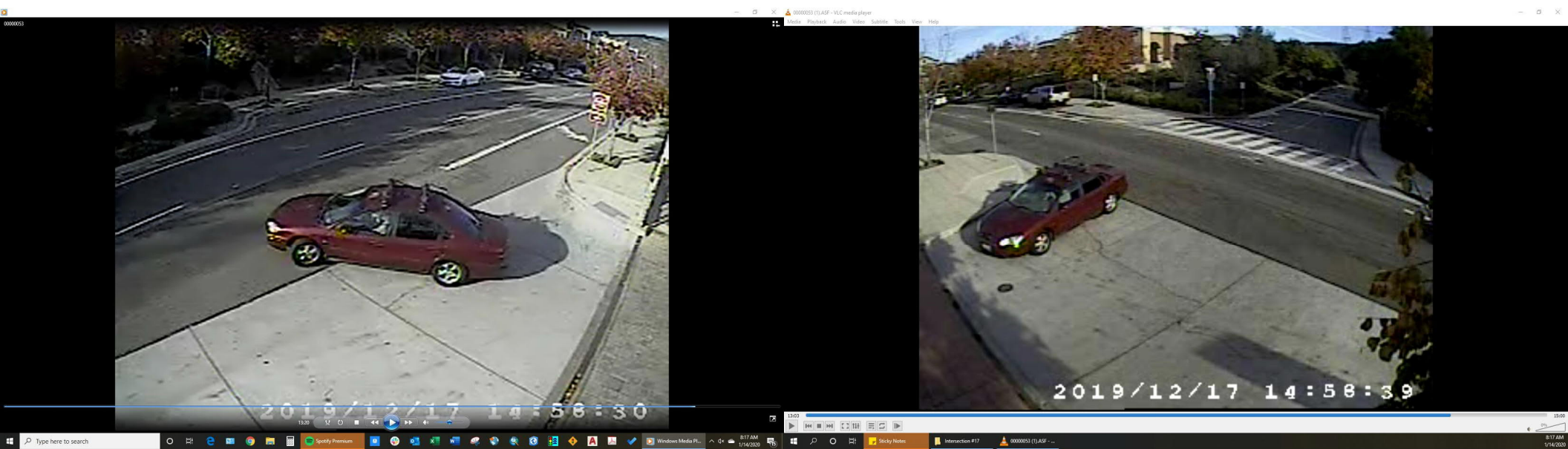


000001



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Media Playback Audio Status Subtitles Tools View Help





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0000054 (LASP) - VLC media player

Media Playback Audio Video Subtitle Tools View Help



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Taskbar with various application icons including File Explorer, Microsoft Edge, and others.

VLC media player playback controls including play/pause, stop, previous, next, and volume buttons.

15:08

12:42 PM 1/9/2020

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0000056



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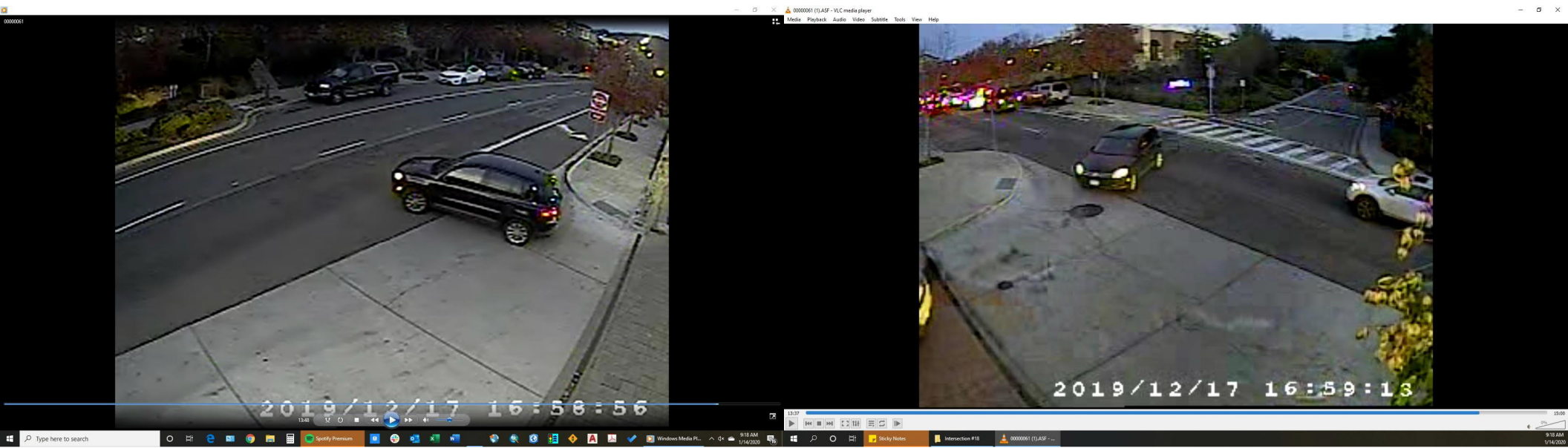


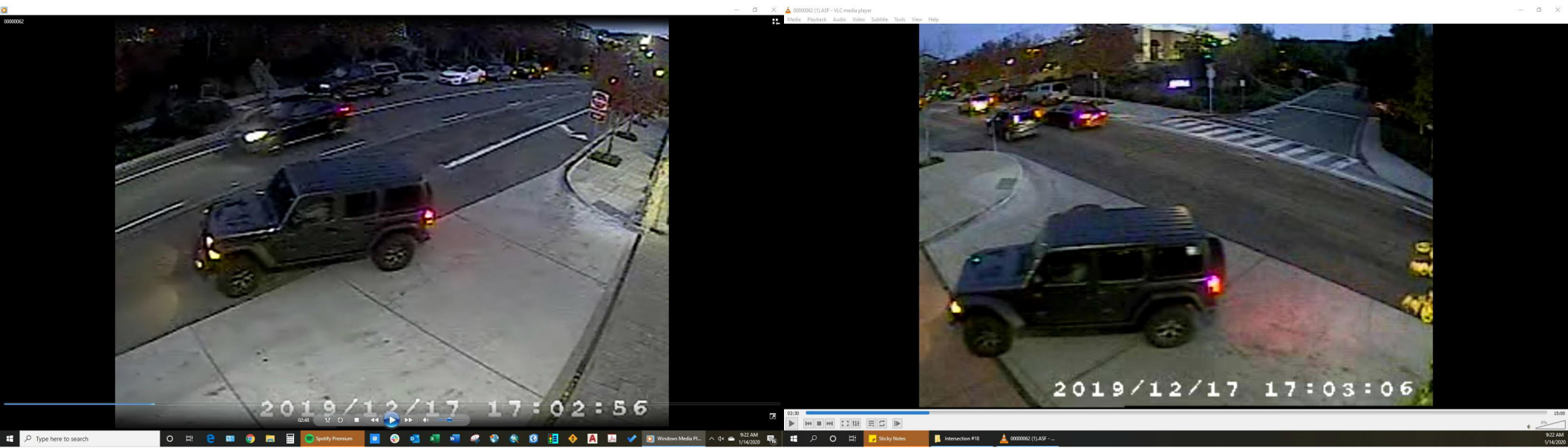
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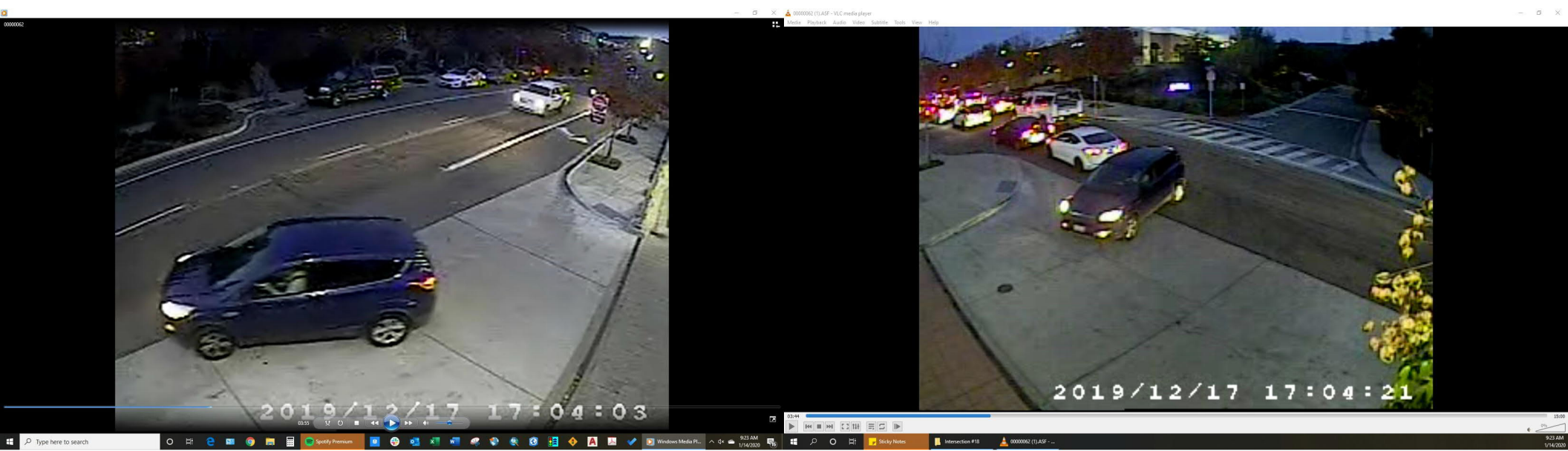


0000001 (LASF) - VLC media player









**Attachment 3 – Peak hour intersection analysis reports
– Existing Conditions (weekday & weekend day)**

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	9	67	193	16	0	0	0	0	26	1768	7
Future Volume (veh/h)	0	9	67	193	16	0	0	0	0	26	1768	7
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1900	1870	1900
Adj Flow Rate, veh/h	0	15	110	316	26	0				27	1804	7
Peak Hour Factor	0.61	0.61	0.61	0.61	0.61	0.61				0.98	0.98	0.98
Percent Heavy Veh, %	0	2	2	2	2	0				0	2	0
Cap, veh/h	0	54	395	337	21	0				31	2201	9
Arrive On Green	0.00	0.28	0.28	0.28	0.28	0.00				0.60	0.60	0.60
Sat Flow, veh/h	0	194	1421	937	77	0				52	3668	15
Grp Volume(v), veh/h	0	0	125	342	0	0				962	0	876
Grp Sat Flow(s),veh/h/ln	0	0	1615	1015	0	0				1868	0	1868
Q Serve(g_s), s	0.0	0.0	5.5	19.5	0.0	0.0				38.3	0.0	31.8
Cycle Q Clear(g_c), s	0.0	0.0	5.5	25.0	0.0	0.0				38.3	0.0	31.8
Prop In Lane	0.00		0.88	0.92		0.00				0.03		0.01
Lane Grp Cap(c), veh/h	0	0	449	359	0	0				1121	0	1121
V/C Ratio(X)	0.00	0.00	0.28	0.95	0.00	0.00				0.86	0.00	0.78
Avail Cap(c_a), veh/h	0	0	449	359	0	0				1121	0	1121
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	0.70	0.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	25.4	36.9	0.0	0.0				14.9	0.0	13.6
Incr Delay (d2), s/veh	0.0	0.0	1.5	28.3	0.0	0.0				8.6	0.0	5.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	2.3	10.4	0.0	0.0				17.2	0.0	13.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	27.0	65.2	0.0	0.0				23.5	0.0	19.0
LnGrp LOS	A	A	C	E	A	A				C	A	B
Approach Vol, veh/h		125			342						1838	
Approach Delay, s/veh		27.0			65.2						21.3	
Approach LOS		C			E						C	
Timer - Assigned Phs				4		6		8				
Phs Duration (G+Y+Rc), s				30.0		60.0		30.0				
Change Period (Y+Rc), s				5.0		6.0		5.0				
Max Green Setting (Gmax), s				25.0		54.0		25.0				
Max Q Clear Time (g_c+I1), s				7.5		40.3		27.0				
Green Ext Time (p_c), s				0.4		10.7		0.0				
Intersection Summary												
HCM 6th Ctrl Delay			28.1									
HCM 6th LOS			C									

Existing_AM
2: San Elijo E & Baker Street

01/14/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	19	0	0	120	25	53	878	21	0	0	0
Future Volume (veh/h)	22	19	0	0	120	25	53	878	21	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1900	1870	1900			
Adj Flow Rate, veh/h	26	22	0	0	171	36	62	1033	25			
Peak Hour Factor	0.85	0.85	0.85	0.70	0.70	0.70	0.85	0.85	0.85			
Percent Heavy Veh, %	2	2	0	0	2	2	0	2	0			
Cap, veh/h	87	56	0	0	214	45	149	2598	66			
Arrive On Green	0.14	0.14	0.00	0.00	0.14	0.14	0.76	0.76	0.76			
Sat Flow, veh/h	175	392	0	0	1498	315	196	3432	87			
Grp Volume(v), veh/h	48	0	0	0	0	207	587	0	533			
Grp Sat Flow(s),veh/h/ln	567	0	0	0	0	1814	1861	0	1855			
Q Serve(g_s), s	0.8	0.0	0.0	0.0	0.0	9.9	10.1	0.0	8.8			
Cycle Q Clear(g_c), s	10.7	0.0	0.0	0.0	0.0	9.9	10.1	0.0	8.8			
Prop In Lane	0.54		0.00	0.00		0.17	0.11		0.05			
Lane Grp Cap(c), veh/h	143	0	0	0	0	259	1408	0	1404			
V/C Ratio(X)	0.34	0.00	0.00	0.00	0.00	0.80	0.42	0.00	0.38			
Avail Cap(c_a), veh/h	341	0	0	0	0	514	1408	0	1404			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.97	0.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	35.6	0.0	0.0	0.0	0.0	37.3	3.9	0.0	3.7			
Incr Delay (d2), s/veh	1.3	0.0	0.0	0.0	0.0	5.6	0.9	0.0	0.8			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.0	0.0	0.0	4.8	3.3	0.0	2.9			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	36.9	0.0	0.0	0.0	0.0	42.9	4.8	0.0	4.5			
LnGrp LOS	D	A	A	A	A	D	A	A	A			
Approach Vol, veh/h		48			207			1120				
Approach Delay, s/veh		36.9			42.9			4.7				
Approach LOS		D			D			A				
Timer - Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		72.6		17.4				17.4				
Change Period (Y+Rc), s		4.5		4.5				4.5				
Max Green Setting (Gmax), s		55.5		25.5				25.5				
Max Q Clear Time (g_c+l1), s		12.1		12.7				11.9				
Green Ext Time (p_c), s		10.4		0.1				1.0				
Intersection Summary												
HCM 6th Ctrl Delay				11.5								
HCM 6th LOS				B								



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↶			↷						↶↷	
Traffic Volume (veh/h)	0	3	16	148	16	0	0	0	0	67	916	8
Future Volume (veh/h)	0	3	16	148	16	0	0	0	0	67	916	8
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Work Zone On Approach		No			No						No	
Adj Sat Flow, veh/h/ln	0	1870	1870	1870	1870	0				1900	1870	1900
Adj Flow Rate, veh/h	0	4	20	279	30	0				86	1174	10
Peak Hour Factor	0.79	0.79	0.79	0.53	0.53	0.53				0.78	0.78	0.78
Percent Heavy Veh, %	0	2	2	2	2	0				0	2	0
Cap, veh/h	0	68	339	383	33	0				107	1538	14
Arrive On Green	0.00	0.25	0.25	0.25	0.25	0.00				0.45	0.45	0.45
Sat Flow, veh/h	0	271	1355	1227	132	0				241	3452	31
Grp Volume(v), veh/h	0	0	24	309	0	0				664	0	606
Grp Sat Flow(s),veh/h/ln	0	0	1626	1359	0	0				1858	0	1865
Q Serve(g_s), s	0.0	0.0	1.0	19.0	0.0	0.0				27.7	0.0	24.0
Cycle Q Clear(g_c), s	0.0	0.0	1.0	20.0	0.0	0.0				27.7	0.0	24.0
Prop In Lane	0.00		0.83	0.90		0.00				0.13		0.02
Lane Grp Cap(c), veh/h	0	0	407	416	0	0				828	0	831
V/C Ratio(X)	0.00	0.00	0.06	0.74	0.00	0.00				0.80	0.00	0.73
Avail Cap(c_a), veh/h	0	0	452	455	0	0				1115	0	1119
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	0.82	0.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	25.7	33.3	0.0	0.0				21.5	0.0	20.5
Incr Delay (d2), s/veh	0.0	0.0	0.0	4.9	0.0	0.0				8.1	0.0	5.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.4	7.0	0.0	0.0				13.4	0.0	11.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	0.0	0.0	25.7	38.1	0.0	0.0				29.6	0.0	26.1
LnGrp LOS	A	A	C	D	A	A				C	A	C
Approach Vol, veh/h		24			309						1270	
Approach Delay, s/veh		25.7			38.1						27.9	
Approach LOS		C			D						C	
Timer - Assigned Phs				4		6		8				
Phs Duration (G+Y+Rc), s				27.5		46.1		27.5				
Change Period (Y+Rc), s				5.0		6.0		5.0				
Max Green Setting (Gmax), s				25.0		54.0		25.0				
Max Q Clear Time (g_c+l1), s				3.0		29.7		22.0				
Green Ext Time (p_c), s				0.0		10.4		0.5				
Intersection Summary												
HCM 6th Ctrl Delay			29.8									
HCM 6th LOS			C									

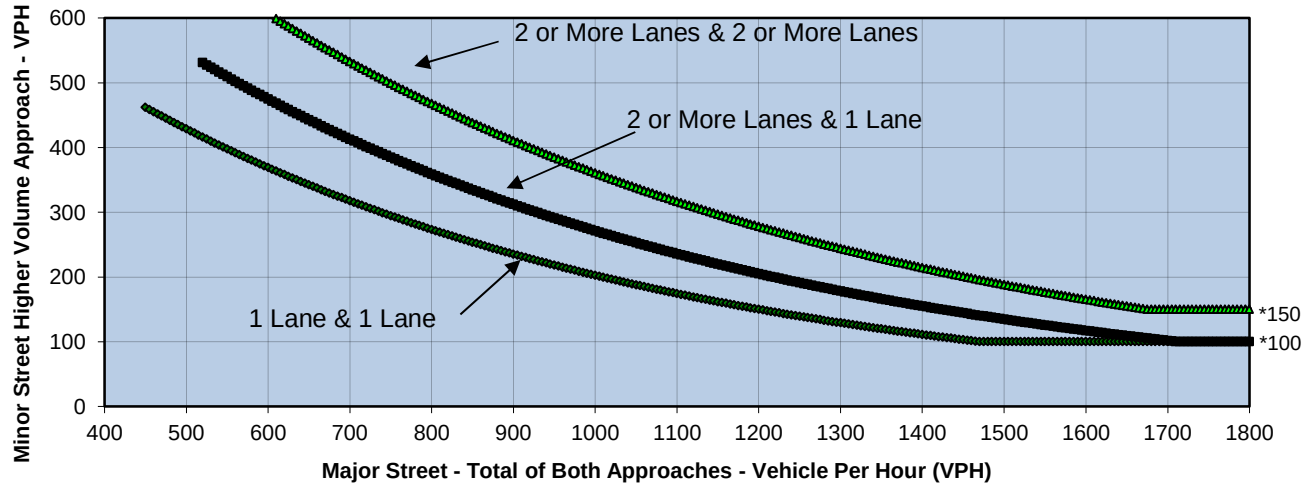
Existing_PM
2: Baker Street & San Elijo E

01/14/2020

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	86	0	0	49	91	52	1563	44	0	0	0
Future Volume (veh/h)	44	86	0	0	49	91	52	1563	44	0	0	0
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Work Zone On Approach		No			No			No				
Adj Sat Flow, veh/h/ln	1870	1870	0	0	1870	1870	1900	1870	1900			
Adj Flow Rate, veh/h	47	92	0	0	53	99	53	1579	44			
Peak Hour Factor	0.93	0.93	0.93	0.92	0.92	0.92	0.99	0.99	0.99			
Percent Heavy Veh, %	2	2	0	0	2	2	0	2	0			
Cap, veh/h	91	143	0	0	90	168	84	2613	76			
Arrive On Green	0.15	0.15	0.00	0.00	0.15	0.15	0.75	0.75	0.75			
Sat Flow, veh/h	243	927	0	0	584	1090	112	3502	102			
Grp Volume(v), veh/h	139	0	0	0	0	152	879	0	797			
Grp Sat Flow(s),veh/h/ln	1170	0	0	0	0	1674	1865	0	1852			
Q Serve(g_s), s	3.7	0.0	0.0	0.0	0.0	7.6	20.4	0.0	17.3			
Cycle Q Clear(g_c), s	11.3	0.0	0.0	0.0	0.0	7.6	20.4	0.0	17.3			
Prop In Lane	0.34		0.00	0.00		0.65	0.06		0.06			
Lane Grp Cap(c), veh/h	233	0	0	0	0	257	1391	0	1382			
V/C Ratio(X)	0.60	0.00	0.00	0.00	0.00	0.59	0.63	0.00	0.58			
Avail Cap(c_a), veh/h	440	0	0	0	0	474	1391	0	1382			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	0.00	0.00	0.00	0.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	36.8	0.0	0.0	0.0	0.0	35.4	5.5	0.0	5.1			
Incr Delay (d2), s/veh	2.4	0.0	0.0	0.0	0.0	2.2	2.2	0.0	1.8			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	3.1	0.0	0.0	0.0	0.0	3.2	7.0	0.0	5.8			
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	39.2	0.0	0.0	0.0	0.0	37.6	7.7	0.0	6.8			
LnGrp LOS	D	A	A	A	A	D	A	A	A			
Approach Vol, veh/h		139			152			1676				
Approach Delay, s/veh		39.2			37.6			7.3				
Approach LOS		D			D			A				
Timer - Assigned Phs		2		4				8				
Phs Duration (G+Y+Rc), s		71.7		18.3				18.3				
Change Period (Y+Rc), s		4.5		4.5				4.5				
Max Green Setting (Gmax), s		55.5		25.5				25.5				
Max Q Clear Time (g_c+I1), s		22.4		13.3				9.6				
Green Ext Time (p_c), s		18.1		0.5				0.7				
Intersection Summary												
HCM 6th Ctrl Delay				11.9								
HCM 6th LOS				B								

Attachment 4 – Signal Warrant Analysis

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

Major Street San Elijo Road
Minor Street Project Driveway

Project San Marcos Movie Studios
Scenario Existing
Peak Hour AM

Turn Movement Volumes

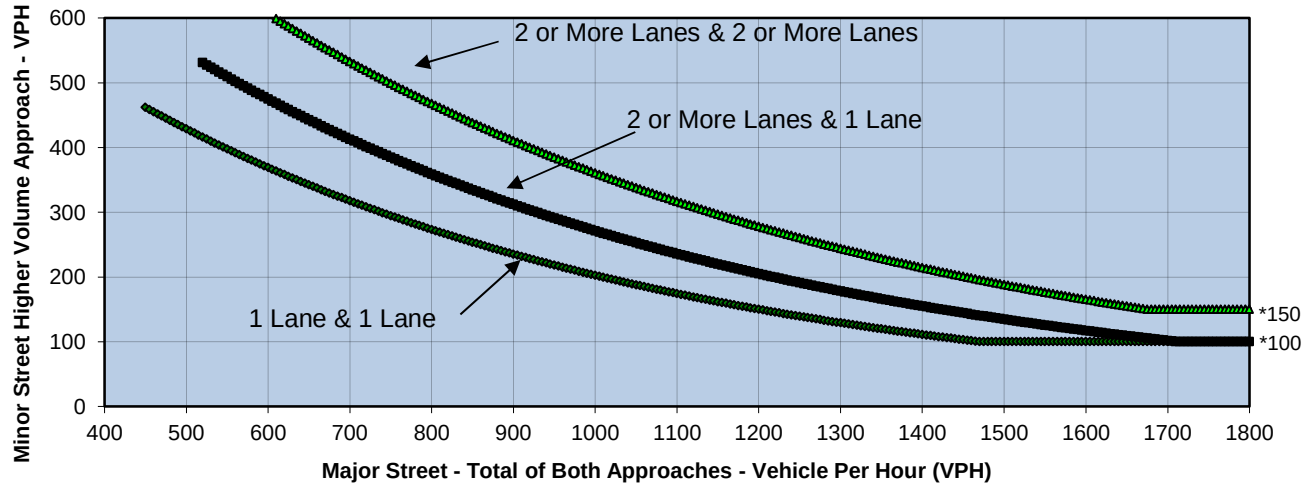
	NB	SB	EB	WB
Left	0	0	0	7
Through	0	0	1,025	2,013
Right	1	0	1	0
Total	1	0	1,026	2,020

Major Street Direction

	North/South
X	East/West

	Major Street San Elijo Road	Minor Street Project Driveway	Warrant Met
Number of Approach Lanes	2	1	<u>NO</u>
Traffic Volume (VPH) *	3,046	1	

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

Major Street San Elijo Road
Minor Street Project Driveway

Project San Marcos Movie Studios
Scenario Existing
Peak Hour PM

Turn Movement Volumes

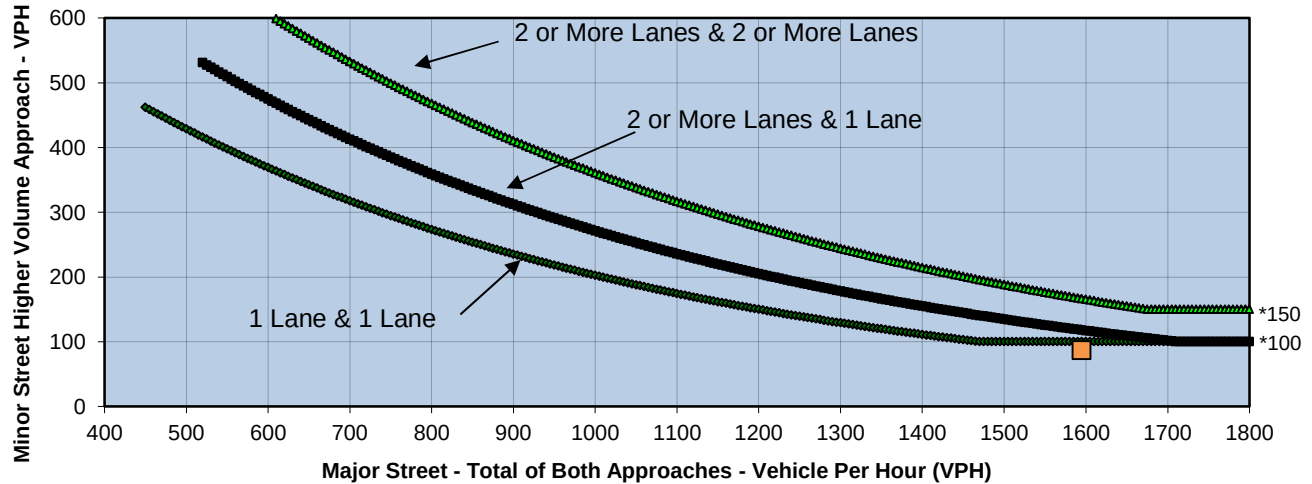
	NB	SB	EB	WB
Left	3	0	0	3
Through	0	0	1,697	939
Right	18	0	16	0
Total	21	0	1,713	942

Major Street Direction

	North/South
X	East/West

	Major Street San Elijo Road	Minor Street Project Driveway	Warrant Met
Number of Approach Lanes	2	1	<u>NO</u>
Traffic Volume (VPH) *	2,655	21	

Figure 4C-3
Warrant 3, Peak Hour



* Note: 150 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

Source: *California Manual on Uniform Traffic Control Devices*, Caltrans, 2006

Major Street San Elijo Road
Minor Street Project Driveway

Project San Marcos Movie Studios
Scenario Existing
Peak Hour Sunday Midday

Turn Movement Volumes

	NB	SB	EB	WB
Left	2	0	0	40
Through	0	0	739	779
Right	85	0	37	0
Total	87	0	776	819

Major Street Direction

	North/South
X	East/West

	Major Street San Elijo Road	Minor Street Project Driveway	Warrant Met
Number of Approach Lanes	2	1	<u>NO</u>
Traffic Volume (VPH) *	1,595	87	