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July 31, 2023

Mark E. Hamilton, AICP
Director of Community and Economic
Development
City of Chowchilla, Planning Department
130 S 2nd Street
Chowchilla, CA 93610

Subject: Chowchilla Residential Project Traffic Impact Study (TIS) Scoping Agreement
(LSA Project No. 20231491)

Dear Mr. Hamilton:

LSA will be preparing a Traffic Impact Study (TIS) for the proposed Chowchilla Residential Project (project) within an unincorporated area of Madera County (County) and proposed to be annexed in the City of Chowchilla (City). The 18.24-acre project site is bounded by residential developments to the north, Road 15 to the south, a dairy farm to the east, and Robertson Boulevard to the west. Figure 1 (all figures and table attached) illustrates the regional and project location.

The proposed project includes the demolition of an existing warehouse on the northwest corner of the site and the construction of two types of housing. The proposed project would construct 34 attached single-family residential units at the northeast portion of the project site and 160 multifamily residential units at the central and western sections of the project site. The multifamily component of the proposed project would be developed in two phases. Figure 2 illustrates the conceptual site plan.

Access to the project would be provided via three driveways, two along Road 15 and one connecting to the existing Palm Parkway. The current land use designation of the project site is High Density Residential (HDR) and zoned as Residential, Rural, Single-Family District (RRS). The project will require a general plan amendment (GPA) and annexation to the City.

LSA anticipates that the following scope of work will be required to prepare the TIS for the proposed project.

LOS ANALYSIS SCOPE OF WORK

While level of service (LOS) analysis is no longer a determinant of California Environmental Quality Act (CEQA) transportation impacts, consistency with the City's General Plan transportation goals and policies is still required. Therefore, this TIS will include an LOS analysis to determine whether the proposed project satisfies the City's General Plan transportation goals and policies.

Study Area Intersections

Since the project is located within the City's sphere of influence (suburban setting), intersections where the project is estimated to add 50 or more peak-hour trips are considered for evaluation.

Based on our preliminary understanding of the project, the following intersections are being proposed for the LOS analysis:

1. Road 15/Robertson Boulevard (California Department of Transportation [Caltrans])
2. Adams Drive/Robertson Boulevard (Caltrans)
3. 15th Street/Robertson Boulevard (Caltrans)
4. 11th Street/Robertson Boulevard (Caltrans)
5. Palm Parkway/Robertson Boulevard (Caltrans)
6. Road 15/Project Driveway 1 (City/County)
7. Road 15/Project Driveway 2 (City/County)

Figure 3 illustrates the study area intersections.

Intersection traffic operations will be analyzed for the weekday a.m. and p.m. peak hours. The a.m. peak hour is defined as the one hour of highest traffic volumes occurring between 7:00 and 9:00 a.m., while the p.m. peak hour is defined as the one hour of highest traffic volumes occurring between 4:00 and 6:00 p.m. Intersection LOS will be calculated using the *Highway Capacity Manual 7th Edition* (HCM 7) analysis methodologies and the Synchro 12 software.

Analysis Scenarios

Since the proposed project constitutes a GPA, the a.m. and p.m. peak-hour traffic operations at the study area intersections will be analyzed for the following scenarios:

- Existing Conditions
- Existing Plus Project Traffic Conditions
- Existing Plus Approved Project (EPAP) Conditions
- EPAP Plus Project Traffic Conditions
- Build-Out Conditions
- Build-Out Plus Project Traffic Conditions

Project Trip Generation

As previously stated, the proposed project includes single family attached and multifamily residential units. The trip generation for the proposed project was developed using the following rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (11th Edition):

- Land Use 215 – “Single-Family Attached Housing”
- Land Use 220 - “Land Use Code 220 - Multifamily Housing (Low Rise)”

Table A summarizes the project trip generation. As shown in Table A, the project is estimated to generate 1,323 net daily trips, including 80 trips during the a.m. peak hour and 101 trips during the p.m. peak hour.

Trip distribution patterns were developed based on the location of the proposed project in relation to surrounding land uses and the roadway network. Figure 4 illustrates the project trip distribution.

The project trip assignment at the study area intersections is the product of the project trip generation and the corresponding trip distribution percentages. Figure 5 depicts the project trip assignment at the study area intersections.

Volume Development and Analysis Methodology

Traffic volumes for existing conditions will be based on existing traffic count data collected at the study area intersections. Traffic volumes for EPAP conditions will be developed by adding trips from approved and pending projects within the vicinity of the proposed project that are estimated to contribute traffic within the study area. Build-out condition traffic volumes will be developed using the growth forecasts from the Madera County Transportation Commission (MCTC) Travel Demand Model (MCTDM).

Traffic volumes for existing, EPAP, and build-out plus project conditions will be developed by adding project traffic to the respective without project scenario traffic volumes.

As previously stated, the TIS will analyze study area intersections during the a.m. and p.m. peak hours. Intersection LOS will be calculated using the HCM 7 analysis methodologies and the Synchro 12 software.

Analysis of Traffic Operations and Recommended Circulation Improvements

LOS without the project will be compared to LOS with the project for all analysis scenarios to determine potential project-related operational deficiencies. Improvements will be recommended for locations operating at an unsatisfactory LOS or where the project would result in any operational deficiencies. Improvements may include addition of intersection turn lanes and signalization. The LOS with improvements will be calculated and summarized along with a comparison to the LOS without improvements.

Signal Warrant Analysis

A signal warrant analysis will be conducted for unsignalized intersections where a signal is recommended as a mitigation measure. Peak-hour approach volumes for the study area intersections will be examined to determine whether signalization may be warranted per the criteria defined in the most recent California supplement of the *Manual on Uniform Traffic Control Devices* (CA-MUTCD).

CEQA VMT ANALYSIS SCOPE OF WORK

The City follows the *Draft City of Chowchilla CEQA Transportation Impact Study Guidelines*, dated July 2021 (VMT Guidelines), for CEQA VMT Analysis. Therefore, the VMT analysis will be based on the recommended methodology and significant threshold criteria included in the VMT Guidelines. Based on its type, size, location, and estimated trip generation, the proposed project is not screened out, and a detailed VMT analysis is required. LSA will utilize the MCTDM to determine project VMT per capita and compare it with the appropriate threshold to determine if the proposed project will have a significant VMT impact.

If you have any questions, please do not hesitate to contact me at (949) 553-0666 or email me at Dean.Arizabal@lsa.net.

Sincerely,

LSA Associates, Inc.



Dean Arizabal
Principal

Attachment A: Figures and Table

Figure 1 – Regional and Project Location

Figure 2 – Conceptual Site Plan

Figure 3 – Study Area Intersections

Figure 4 – Project Trip Distribution

Figure 5 – Project Trip Assignment

Table A – Project Trip Generation

ATTACHMENT A

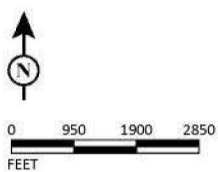
FIGURES AND TABLE



LSA

 Project Location

FIGURE 1



SOURCE: Google Earth, 2020; ESRI Streetmap, 2021.

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Chowchilla Residential Development Project
Traffic Impact Study
 Regional and Project Location

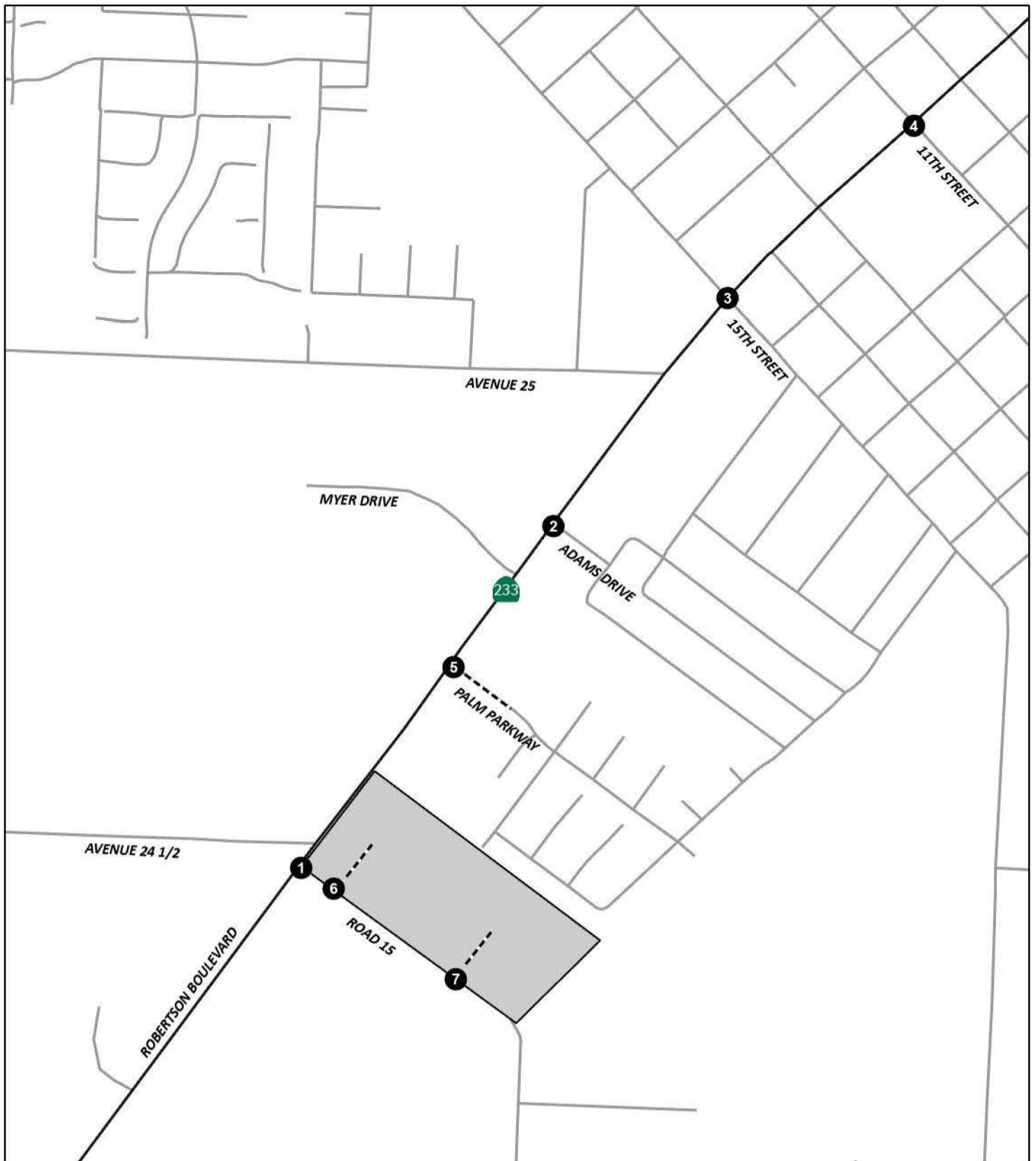


FIGURE 3

LSA

- Project Location
- Study Intersection
- Project Driveway



0 370 740
FEET

SOURCE: ESRI Streetmap, 2021

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Chowchilla Residential Development Project
Traffic Impact Study
Study Area Intersections

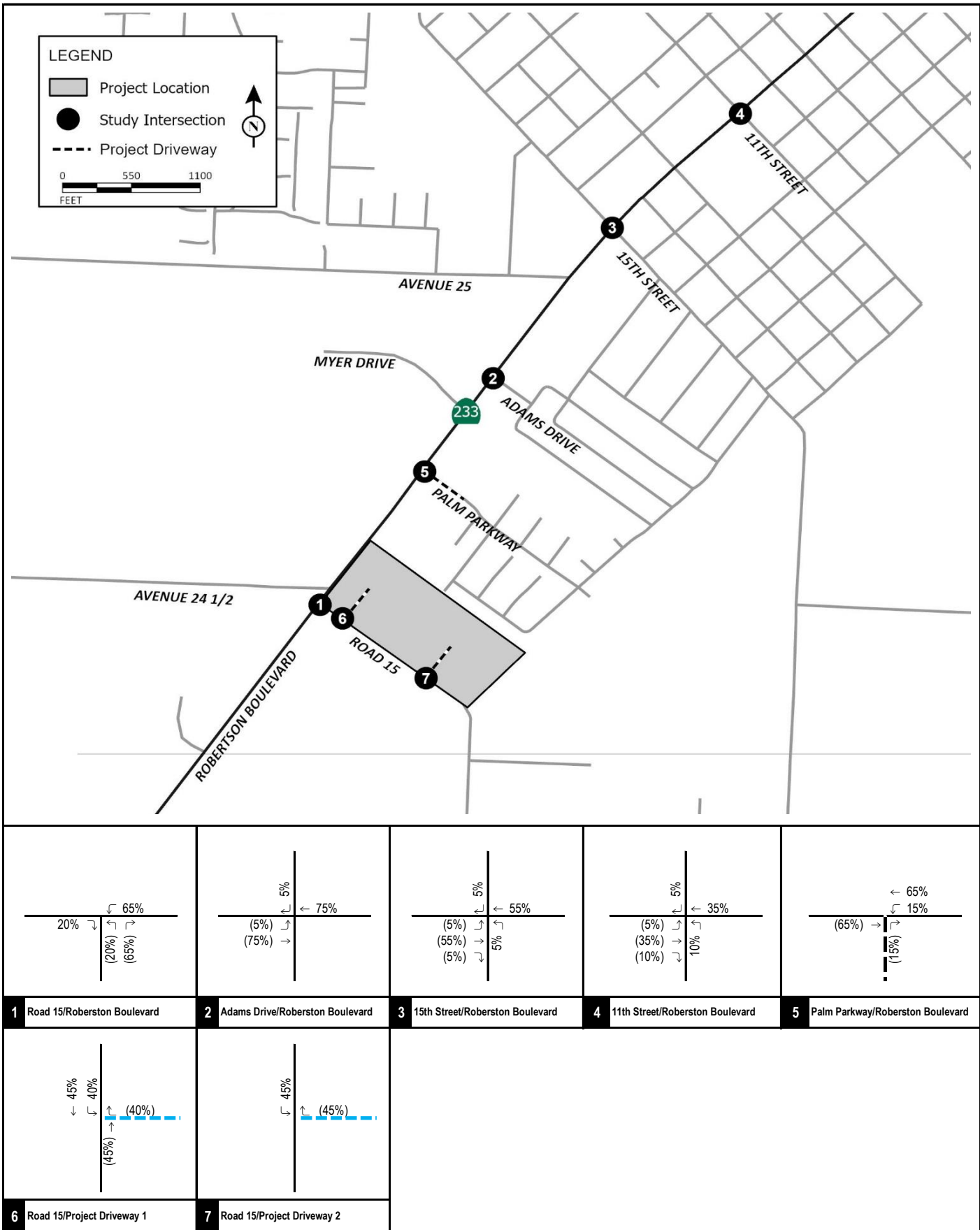


FIGURE 4

LSA

XX% (YY%)

Inbound (Outbound) Trip Distribution

--- Project Driveway

--- Future Segment

Chowchilla Residential Development Project
Traffic Impact Study

Project Trip Distribution

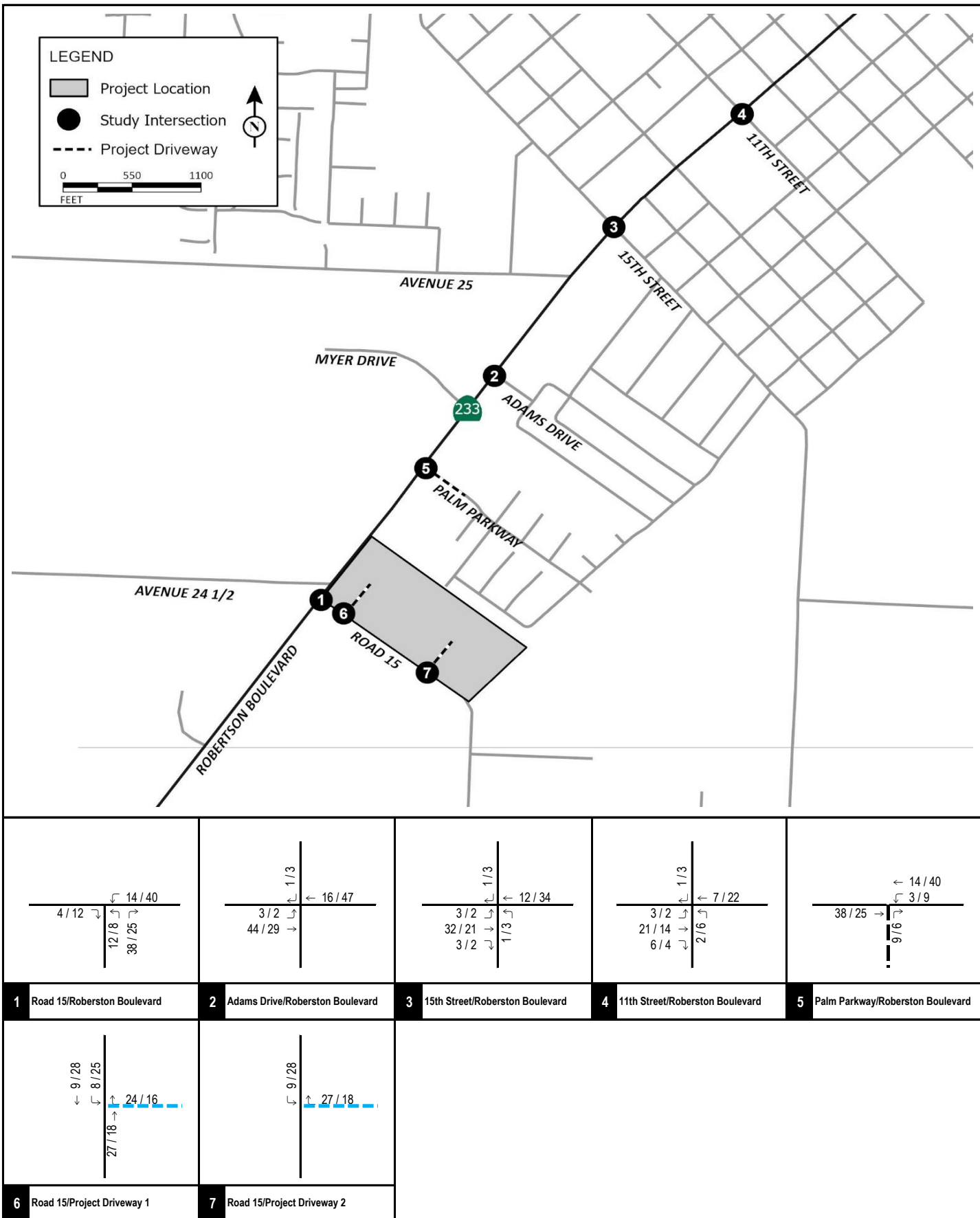


FIGURE 5

LSA

XX / YY

AM / PM Peak Hour Traffic Volumes

--- Project Driveway

--- Future Segment

Chowchilla Residential Development Project
Traffic Impact Study
Project Trip Assignment

Table A: Project Trip Generation

Land Use	Size	Unit	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Trip Rates ¹									
Multifamily Low-Rise		du	6.74	0.10	0.30	0.40	0.32	0.19	0.51
Single-Family Attached		du	7.20	0.15	0.33	0.48	0.32	0.25	0.57
Project Trip Generation									
Multifamily Low-Rise	160	du	1,078	16	48	64	51	30	81
Single-Family Attached	34	du	245	5	11	16	11	9	20
Total			1,323	21	59	80	62	39	101

¹ Trip rates from the Institute of Transportation Engineers (ITE) *Trip Generation* Manual, 11th Edition (2021).

Land Use Code 220 - Multifamily Housing (Low Rise) - 2 or 3 Levels

Land Use Code 215 - Single-Family Attached Housing

du = dwelling unit

TRAFFIC IMPACT STUDY

**CHOWCHILLA RESIDENTIAL DEVELOPMENT PROJECT
CHOWCHILLA, CALIFORNIA**



March 2025

TRAFFIC IMPACT STUDY

CHOWCHILLA RESIDENTIAL DEVELOPMENT PROJECT CHOWCHILLA, CALIFORNIA

Prepared for:

Krazan & Associates, Inc.
215 West Dakota Avenue
Clovis, California 93612

Prepared by:

LSA
1500 Iowa Avenue, Suite 200
Riverside, California 92507
951.781.9310

Project No. 20231491



March 2025

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LIST OF ABBREVIATIONS AND ACRONYMS

AWSC	All-Way Stop Control
CA-MUTCD	California – Manual on Uniform Traffic Control Devices
Caltrans	California Department of Transportation
CEQA	California Environmental Quality Act
County	County of Madera
CSTDM	California Statewide Travel Demand Model
HCM	<i>Highway Capacity Manual</i>
HCM 7	<i>Highway Capacity Manual 7th Edition</i>
HDM	(Caltrans) <i>Highway Design Manual</i>
ITE	Institute of Transportation Engineers
LOS	Level of Service
mph	Miles Per Hour
MCTC	Madera County Transportation Commission
NCHRP	National Cooperative Highway Research Program
OPR	Office of Planning and Research
SB 743	Senate Bill 743
TIS	Transportation Impact Study
TWSC	Two-Way Stop Control
v/c	Volume to Capacity
VMT	Vehicle Miles Traveled

1.0 INTRODUCTION

This Traffic Impact Study (TIS) has been prepared to assess the potential circulation impacts associated with the proposed Chowchilla Residential Development Project (project) within an unincorporated area of Madera County (County) and proposed to be annexed in the City of Chowchilla (City). The 18.24- acre project site is bounded by residential developments to the north, Road 15 to the south, a dairy farm to the east, and Robertson Boulevard to the west. The project site is currently vacant. Figure 1-1 illustrates the regional and project location. (Figures and tables are provided at the end of each chapter.)

While Level of Service (LOS) analysis is no longer a determinant of California Environmental Quality Act (CEQA) impacts, consistency with the City's General Plan goals and policies is still required. Additionally, pursuant to CEQA, a Vehicle Miles Traveled (VMT) analysis was conducted for the proposed project using the recommended methodologies included in *Draft City of Chowchilla CEQA Transportation Impact Study Guidelines*, dated July 2021 (VMT Guidelines).

The scope of work for this TIS, including trip generation, trip distribution, study area, and analysis methodologies, has been approved by City staff via the Scoping Agreement process. A copy of the Scoping Agreement is included as Appendix A.

This study examines traffic operations in the vicinity of the proposed project under the following six scenarios:

- Existing Conditions;
- Existing Plus Project Traffic Conditions;
- Existing Plus Approved Project (EPAP) Conditions
- EPAP Plus Project Traffic Conditions;
- Build-Out Conditions; and
- Build-Out Plus Project Traffic Conditions.

Traffic conditions at study intersections were examined for weekday a.m. and p.m. peak-hour conditions. The a.m. peak hour is defined as the one hour of highest traffic volumes occurring between 7:00 and 9:00 a.m. The p.m. peak hour is the one hour of highest traffic volumes occurring between 4:00 and 6:00 p.m.

1.1 PROJECT DESCRIPTION

The proposed project includes the demolition of an existing warehouse on the southwest corner of the site and construction of two types of housing. The proposed project would construct 34 attached single-family residential units at the northeast portion of the project site and a maximum of 160 multifamily residential units at the central and western sections of the project site. The multifamily component of the proposed project would develop in two phases. Figure 1-2 illustrates the conceptual site plan.

Access to the proposed project would be provided via three driveways, two along Road 15 and one connecting to the existing Palm Parkway. The proposed project requires a General Plan Amendment (GPA) and annexation to the City. The current land use designation of the project site is High Density Residential (HDR), and it is zoned as Residential, Rural, Single-Family District (RRS).

1.2 STUDY AREA

Study intersections for the analysis were approved by the City during the TIS scoping agreement process.

1.2.1 Study Intersections

Based on the anticipated project trip generation and as required by City staff, the study area includes the following intersections:

1. Robertson Boulevard/11th Street (Caltrans)
2. Robertson Boulevard/15th Street (Caltrans)
3. Robertson Boulevard/Washington Road (Caltrans)
4. Robertson Boulevard/Country Wood Shopping Center Driveway – Adams Drive (Caltrans)
5. Robertson Boulevard/Myer Drive – Anderson Pump Company Driveway (Caltrans)
6. Robertson Boulevard/Palm Parkway (Caltrans)
7. Robertson Boulevard/Avenue 24 1/2 (Caltrans)
8. Robertson Boulevard/Road 15 (Caltrans)
9. Road 15/Avenue 24 (Madera County)
10. Project Driveway 1/Road 15 (City/Madera County)
11. Project Driveway 2/Road 15 (City/Madera County)

Figure 1-3 illustrates the study intersections.

1.3 LIST OF CHAPTER 1.0 FIGURES

- Figure 1-1: Regional and Project Location
- Figure 1-2: Conceptual Site Plan
- Figure 1-3: Study Area Intersections



FIGURE 1-1

LSA

LEGEND

 Project Location



0 950 1900 2850
FEET

SOURCE: Google Earth, 2020; ESRI Streetmap, 2021.

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Chowchilla Residential Development Project
Traffic Impact Study
Regional and Project Location

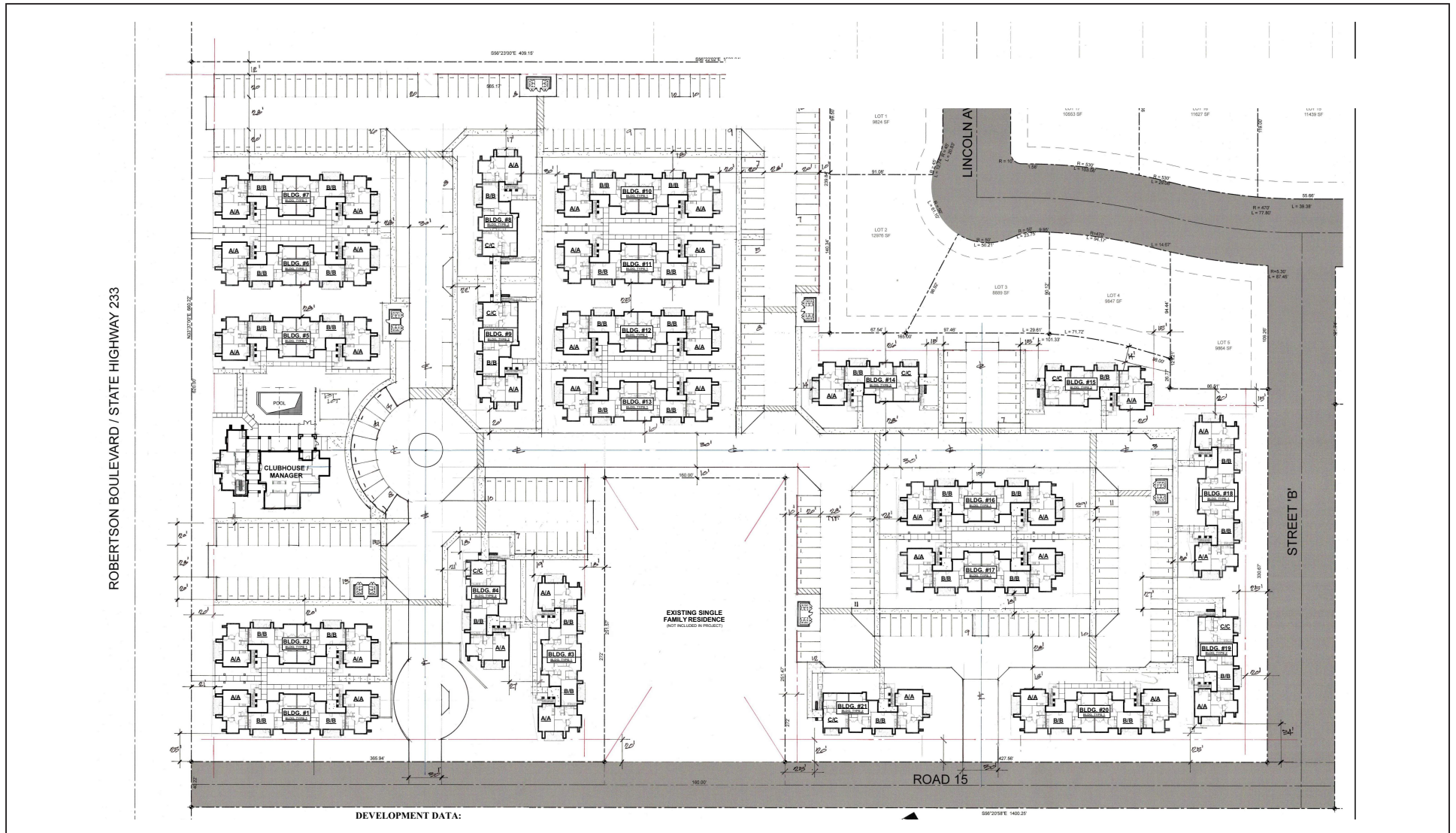


FIGURE 1-2

*Chowchilla Residential Development Project
Traffic Impact Study*

Conceptual Site Plan

SOURCE: R.L Davidson, Inc Architects, June, 2024.

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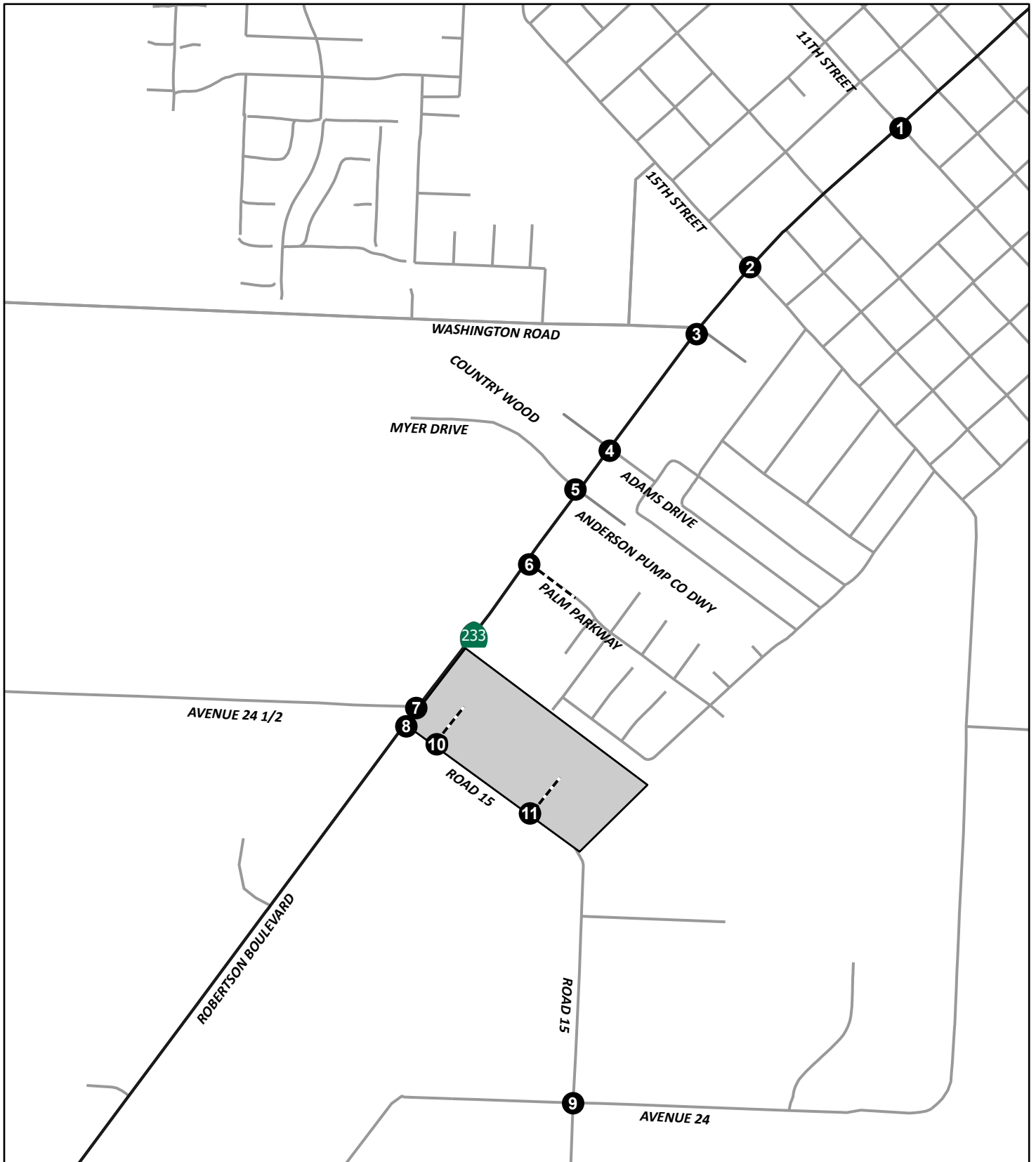


FIGURE 1-3

LSA

LEGEND

- Project Location
- Study Intersections
- Project Driveways



0 460 920
FEET

SOURCE: ESRI Streetmap, 2021

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Chowchilla Residential Development Project
Traffic Impact Study
Study Area Intersections

2.0 ANALYSIS METHODOLOGY

2.1 LEVEL OF SERVICE DEFINITIONS

LOS can be characterized for the whole intersection, each intersection approach, and by each lane group. Control delay alone is used to characterize LOS for the entire intersection. Control delay quantifies the increase in travel time due to the traffic signal control and is a surrogate measure of driver discomfort and fuel consumption.

A complete description of the meaning of LOS can be found in the Transportation Research Board Special Report 209, *Highway Capacity Manual* (HCM). The HCM establishes LOS A through F for intersections. A description of LOS for signalized and unsignalized intersections is summarized in Table 2-A.

Table 2-B shows the LOS criteria for unsignalized and signalized intersections. For all study area intersections, the *Highway Capacity Manual 7th Edition* (HCM 7) analysis methodologies were used to determine intersection LOS. Intersection LOS was calculated using the Synchro 12 software, which uses the HCM 7 methodologies.

2.2 LEVEL OF SERVICE PROCEDURES AND STANDARDS

Study intersections analyzed in this report are completely under the jurisdiction of Caltrans, City of Chowchilla, and Madera County.

As per the Circulation Element of the City of Chowchilla General Plan (2040), the City's goal is to maintain LOS C or better with instances of LOS D in the peak hour. The County of Madera uses LOS D as the minimum LOS criteria for all State and County roadways. LOS D was considered as the level of service standard for state highways and freeway ramps within the district jurisdiction. Caltrans does not have any operational deficiency criteria for study intersections. Therefore, an operational deficiency occurs when the project causes an unsatisfactory condition (deterioration from LOS A through D to E or F) for intersections or when the project contributes to an existing or forecast deficiency. The project needs to identify improvements to improve the intersection LOS to an acceptable level.

2.3 LIST OF CHAPTER 2.0 TABLES

- Table 2-A: Intersection Level of Service Definitions
- Table 2-B: Level of Service Criteria for Unsignalized and Signalized Intersections

Table 2-A: Intersection Level of Service Definitions

LOS	Description
A	Traffic operations with a control delay of 10 seconds per vehicle or less and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is exceptionally favorable, or the cycle length is very short. If LOS A is the result of favorable progression, most vehicles arrive during the green indication and travel through the intersection without stopping.
B	Traffic operations with control delay between 10 seconds per vehicle and 20 seconds per vehicle and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is low and either progression is highly favorable, or the cycle length is short. More vehicles stop than with LOS A.
C	Traffic operations with control delay between 20 and 35 seconds per vehicle and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when progression is favorable, or the cycle length is moderate. Individual cycle failures (i.e., one or more queued vehicles are not able to depart as a result of the insufficient capacity during the cycle) may begin to appear at this level. The number of vehicles stopping is significant, although many vehicles still pass through the intersection without stopping.
D	Traffic operations with control delay between 35 and 55 seconds per vehicle and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is high and either progression is ineffective, or the cycle length is long. Many vehicles stop and individual cycle failures are noticeable.
E	Traffic operations with control delay between 55 and 80 seconds per vehicle and a volume-to-capacity ratio no greater than 1.0. This level is typically assigned when volume-to-capacity ratio is high, progression is unfavorable, and the cycle length is long. Individual cycle failures are frequent.
F	Traffic operations with control delay exceeding 80 seconds per vehicle or a volume-to-capacity ratio greater than 1.0. This level is typically assigned when the volume-to-capacity ratio is very high, progression is very poor, and the cycle length is long. Most cycles fail to clear the queue.

Source: *Highway Capacity Manual* (7th Edition)

Table 2-B: Level of Service Criteria for Unsignalized and Signalized Intersections

Level of Service	Unsignalized Intersection Average Delay per Vehicle (sec.)	Signalized Intersection Average Delay per Vehicle (sec.)
A	≤ 10	≤ 10
B	> 10 and ≤ 15	> 10 and ≤ 20
C	> 15 and ≤ 25	> 20 and ≤ 35
D	> 25 and ≤ 35	> 35 and ≤ 55
E	> 35 and ≤ 50	> 55 and ≤ 80
F	> 50	> 80

Source: *Highway Capacity Manual* (7th Edition)

3.0 CIRCULATION NETWORK SETTING

3.1 EXISTING CIRCULATION NETWORK

The project study area includes the following major roadways as classified based on the roadway classification provided in the Circulation Element of the City's General Plan. Figure 3-1 summarizes the classifications of major roadways within the study area. Following is a brief description of these roadways:

- **Robertson Boulevard (SR-99):** Within the study area, Robertson Boulevard is designated as a Major Collector in the Chowchilla General Plan from 15th Street to Palm Parkway. Robertson Boulevard is designated as an Arterial from Palm Parkway to City's Limits. Robertson Boulevard is a conventional four-lane highway with a center two-way left-turn (TWLT) lane from 11th Street to Myer Drive. From Myer Drive, Robertson Boulevard is a two-lane undivided roadway within the study area. There is a Class III bike lane in this segment. Robertson Boulevard does not have designated on-street parking along either direction of this segment.
- **11th Street:** Within the study area, 11th Street is designated as a Local street in the Chowchilla General Plan. 11th Street is mostly a two-lane, undivided roadway within the study area. There is a Class III bike lane in this segment. There is no designated on-street parking along either direction of this segment.
- **15th Street:** Within the study area, 15th Street is designated as a Minor Collector on the west and Major Collector on the east in the Chowchilla General Plan. 15th Street is mostly a two-lane, undivided roadway within the study area. There are no bike facilities or designated on-street parking along either direction of this segment.
- **Washington Road:** Within the study area, Washington Road is designated as a Major Collector in the Chowchilla General Plan. Washington Road is mostly a two-lane, undivided roadway within the study area. There is a Class II bike lane in this segment. There is no designated on-street parking along either direction of this segment.
- **Adams Drive:** Within the study area, Adams Drive is designated as a Local street in the Chowchilla General Plan. Adams Drive is mostly a two-lane, undivided roadway within the study area. There are no bike facilities or designated on-street parking along either direction of this segment.
- **Palm Parkway:** Within the study area, Palm Parkway is designated as a Minor Collector in the Chowchilla General Plan. Palm Parkway is mostly a two-lane, undivided roadway within the study area. There are no bike facilities or designated on-street parking along either direction of this segment.
- **Avenue 24 ½:** Within the study area, Avenue 24 ½ is designated as a Local street in the Chowchilla General Plan. Avenue 24 1/2 is mostly a two-lane, undivided roadway within the study area. There are no bike facilities or designated on-street parking along either direction of this segment.

- **Road 15:** Within the study area, Road 15 is designated as a Local street. Road 15 is mostly a two-lane, undivided roadway within the study area. There are no bike facilities or designated on-street parking along either direction of this segment.
- **Avenue 24:** Within the study area, Avenue 24 is designated as a Local street. Avenue 24 is mostly a two-lane, undivided roadway within the study area. There are no bike facilities or designated on-street parking along either direction of this segment.

Figure 3-2 illustrates existing study intersection geometrics and traffic control.

It should be noted that the proposed project will widen Robertson Boulevard (SR-233) between Avenue 24 ½ and Road 15 from one lane to two lanes in the southbound direction. Given that the posted speed of this roadway segment is 50 mph, the project will construct a dedicated left-turn lane to reduce the potential for rear end collisions of southbound Robertson Blvd (SR-233) vehicles stopping in the existing through lane while waiting to make a left turn to eastbound Road 15.

Figure 3-3 illustrates study intersection geometrics and traffic control under 'plus project' scenarios.

3.2 BICYCLE, PEDESTRIAN, AND TRANSIT FACILITIES

3.2.1 Bicycle Network

The City of Chowchilla encourages bicycling and walking for recreation and mobility. To facilitate and encourage bicycle trips among other non-motorized modes of travel, the Madera County Active Transportation Plan (ATP) includes a trails system linking residential areas, schools, parks and commercial and employment centers so that residents can travel within the community without driving.

According to the ATP, the bikeway network within the City is classified into four categories: Class I, Class II, Class III, and Class IV. Class I bikeways are paths/trails that provides a separate right-of-way and are designated for the exclusive use of bicycles and pedestrian with minimal cross flows traffic. Class II bikeways are paths that provide a designated striped lane for bicyclists, adjacent to the other vehicle travel lanes. Class III bikeways are paths that provide enhanced mixed-traffic conditions for bicyclists through signage, striping, and/or traffic calming treatments, and provide continuity to a bikeway network. Class IV bikeways, also referred to as separated bikeways, are protected bikeways for the exclusive use of bicycle, which are physically separated from vehicle traffic. Within the project study area, there are Class III bike routes along Robertson Boulevard and 15th Street, as well as a Class II bike route along Washington Road.

Figures 3-4 illustrate the trails and bikeways network within the City of Chowchilla.

3.2.2 Pedestrian Network

The implementation of enhanced pedestrian linkage with a comprehensive trails system links residential areas, schools, parks, and commercial centers so that residents can travel within the community without driving. Safe and attractive sidewalks and walkways improve the walkability within urban areas. Typically, sidewalks are generally provided on both sides of the streets within urban areas. Additionally, standard paved trails and non-standard unpaved trails are frequently used

by bicyclists and pedestrians in the region. The existence of trails and sidewalks provides accessible facilities, provides safety features, and improves walkability in the study areas.

Currently, the project site has limited pedestrian access because there are no continuous sidewalks in the vicinity of or adjacent to the project site. However, within the study area, continuous sidewalks exist within downtown/core urban areas of Chowchilla. Within Chowchilla, continuous sidewalks exist in the Robertson Boulevard corridor to Myer Drive and along Washington Road, 15th Street and 11th Street.

3.2.3 Transit Network

Chowchilla Area Transit (CATX) is the Transportation Service Agency within the City and is responsible for coordinating transit services within its service area. CATX is a local curb-to-curb, on demand bus transit. CATX allows passengers to travel conveniently, by providing scheduling services for work, medical appointments, school, and shopping within City limits. In addition, Madera County Connection (MCC) provides five trips each Monday through Friday from Downtown Madera to Chowchilla. Figure 3-5 illustrates the Madera County Transit Services Map within the City of Chowchilla.

3.3 LIST OF CHAPTER 3.0 FIGURES

- Figure 3-1: City of Chowchilla Roadway Classification
- Figure 3-2: Existing Study Intersection Geometrics and Traffic Control
- Figure 3-3: Study Intersection Geometrics and Traffic Control under 'Plus Project' Scenarios
- Figure 3-4: City of Chowchilla Bicycle Facilities
- Figure 3-5: Madera County Transit Services Map

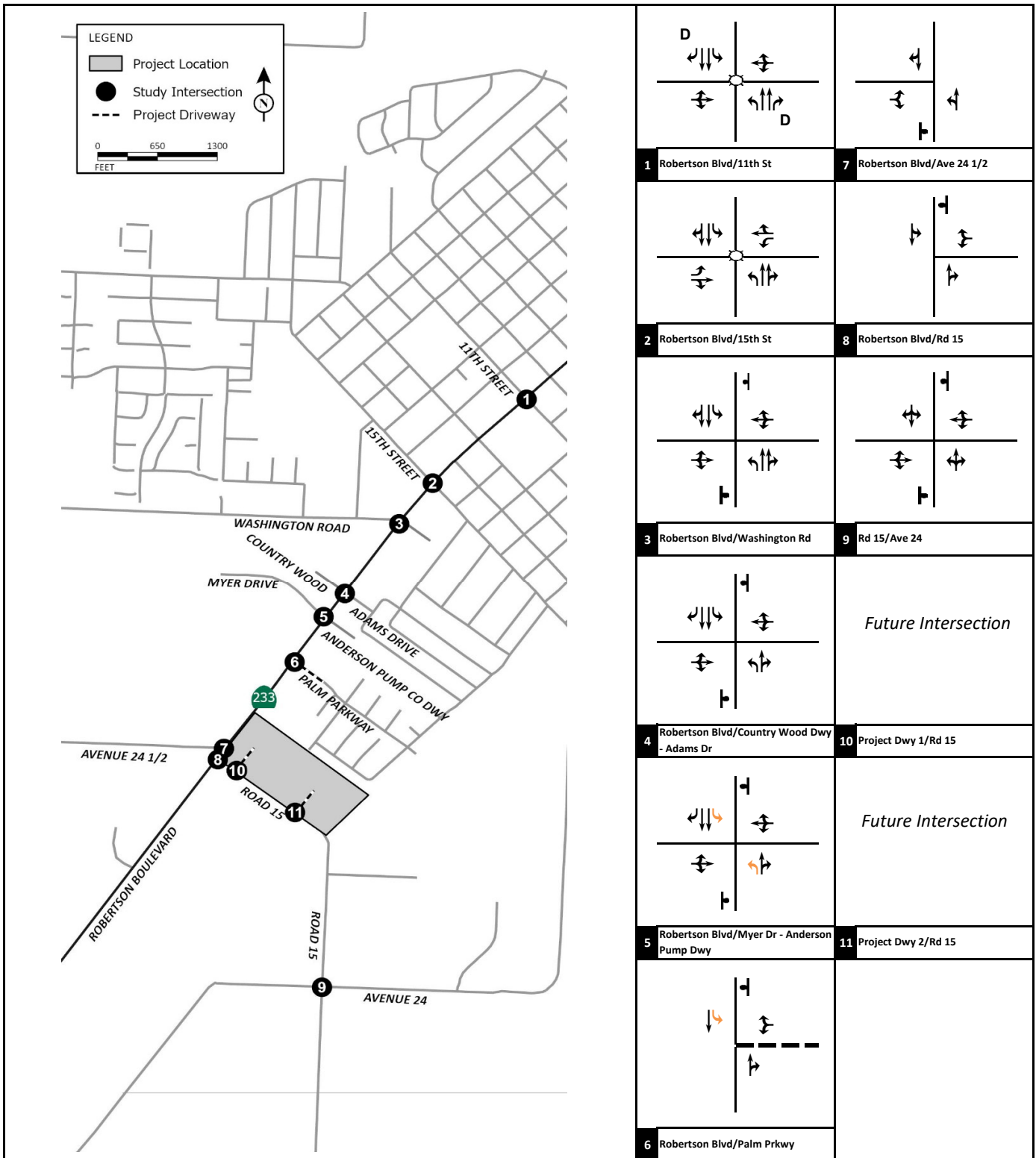


FIGURE 3-2

LSA

Legend

- Signal
- De-Facto Right Turn
- Project Driveway
- Stop Sign
- Free Right Turn
- Two Way Left Turn Lane

Chowchilla Residential Development Project
Traffic Impact Study

Existing Study Intersection Geometrics and Traffic Control

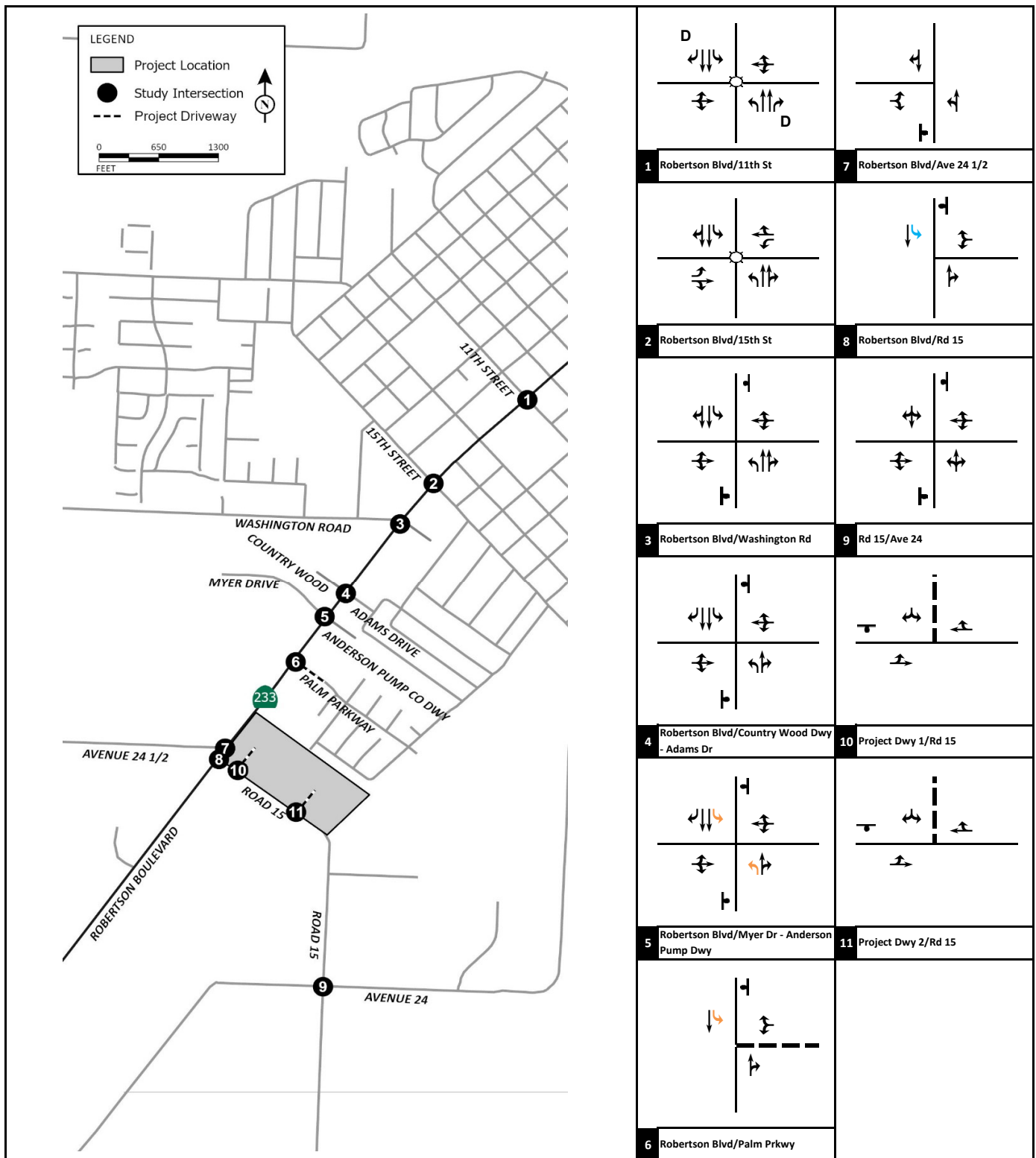


FIGURE 3-3

LSA

Legend

- Project Driveway
- Two Way Left Turn Lane
- Signal
- D De-Facto Right Turn
- Project Feature
- Stop Sign
- F Free Right Turn

Chowchilla Residential Development Project
Traffic Impact Study

Study Intersection Geometrics and Traffic Control under 'Plus Project' Scenarios

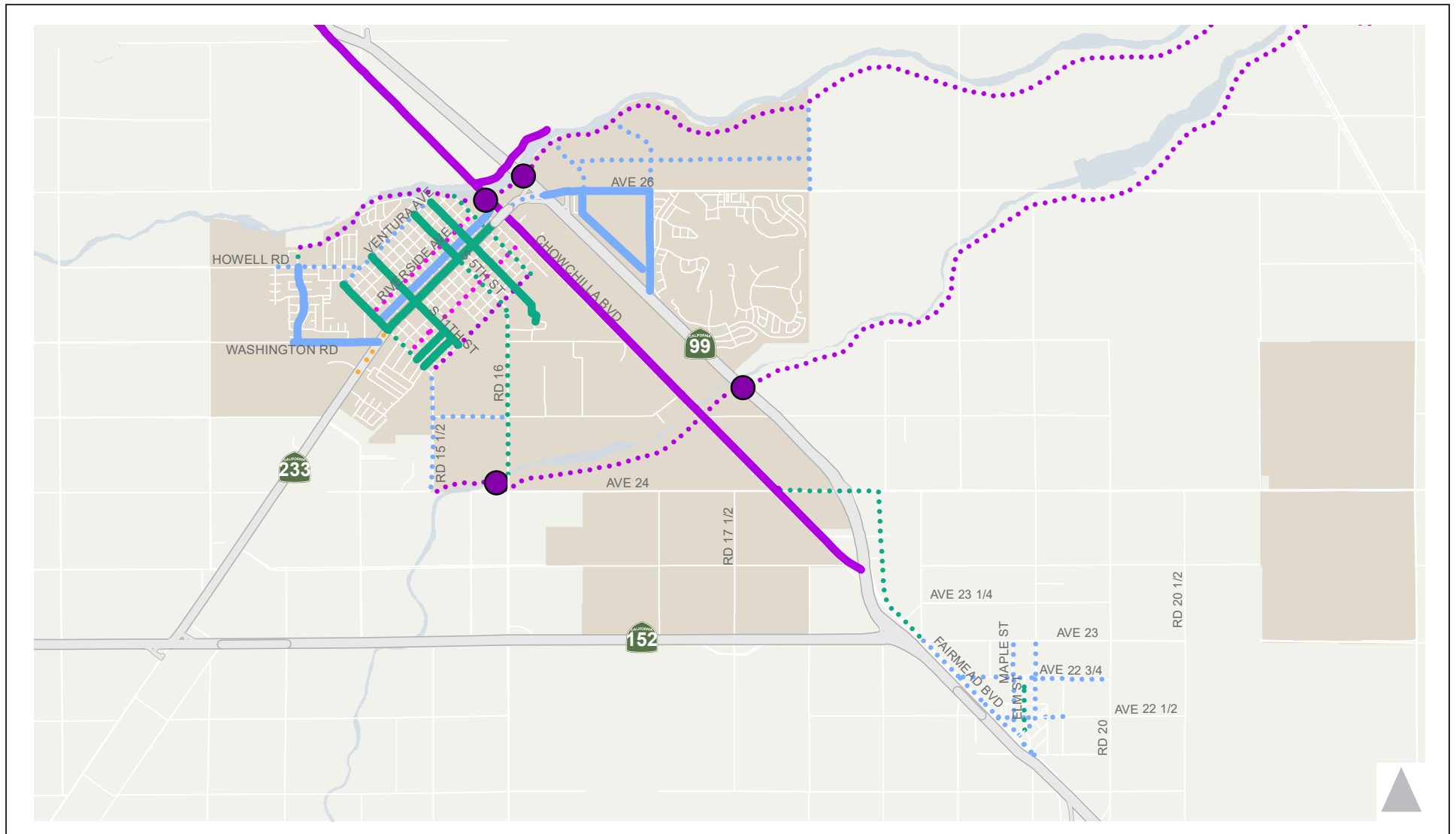


FIGURE 3-4



*Chowchilla Residential Development Project
Traffic Impact Study*

City of Chowchilla and Fairmead Bicycle Facilities

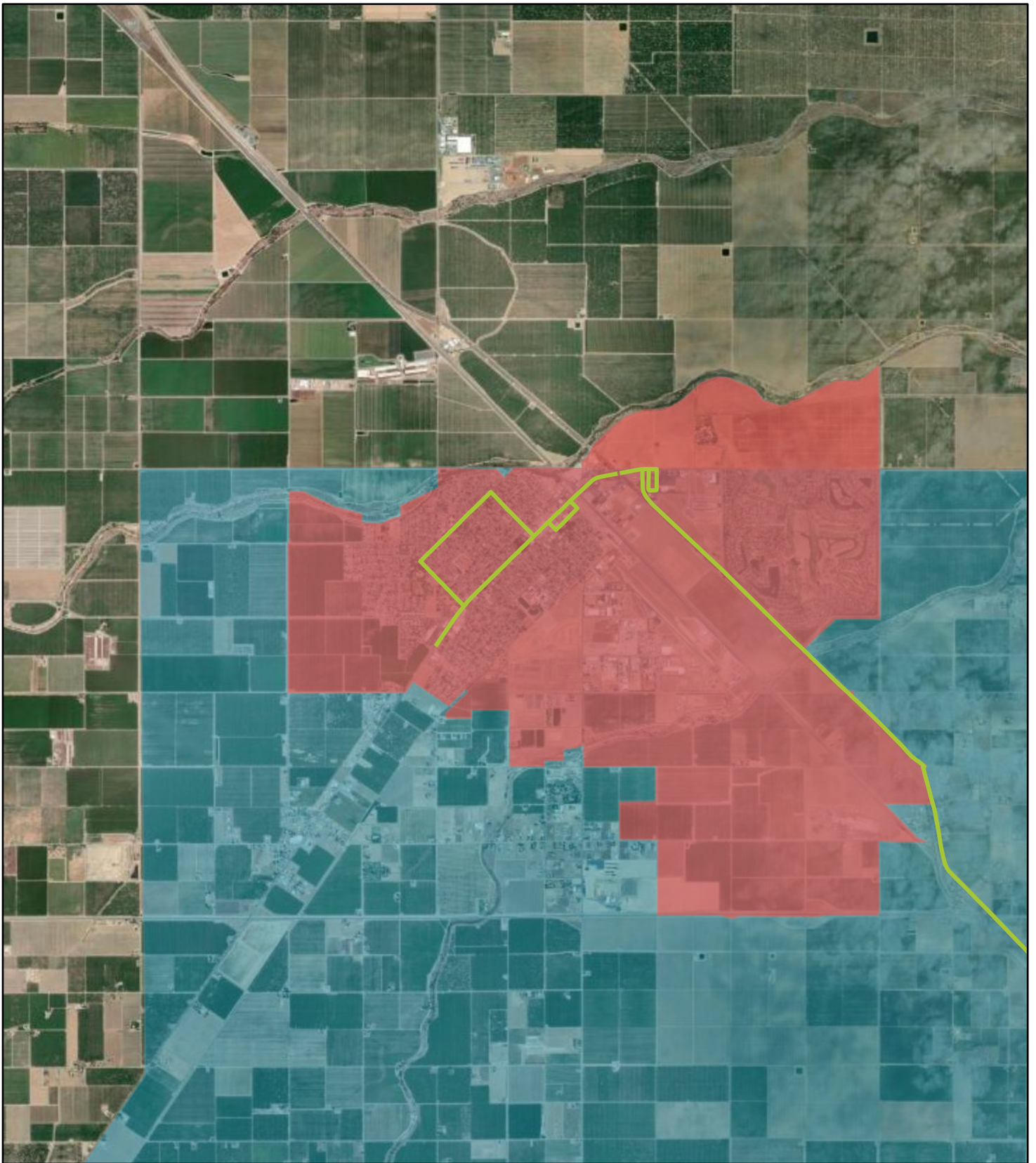


FIGURE 3-5

LSA



0 2500 5000
FEET

LEGEND

- MCC Chowchilla Fairmead Route
- CATX
- MCC

SOURCE: Earthstar Geographics

P:\20231491 Chowchilla Residential Project\PRODUCTS\Transportation\graphics\Report\fig1_RegProjLoc\fig1_RegProjLoc.aprx (1/3/2024)

Chowchilla Residential Development Project
Traffic Impact Study
Madera County Transit Services Map

4.0 TRAFFIC VOLUMES FOR WITHOUT PROJECT SCENARIOS

4.1 EXISTING TRAFFIC VOLUMES

Traffic volumes for existing conditions are based on recent count data collected by Counts Unlimited at study intersections.

Vehicle classification counts were collected for the a.m. and p.m. peak hours at study intersections. Truck percentages for every approach at these intersections were obtained from the classification counts. For the remaining study intersections that do not include classification counts or future intersections, truck percentages for the various approaches were determined from the truck percentages at the adjacent intersections.

Figure 4-1 illustrates the peak-hour traffic volumes at the study intersection under existing conditions. Detailed count sheets are included in Appendix B.

4.2 EXISTING PLUS APPROVED PROJECT (EPAP) WITHOUT PROJECT TRAFFIC VOLUMES

As approved during the scoping agreement process (Appendix A), traffic volumes for EPAP conditions were developed by adding trips from cumulative projects in the area to existing traffic volumes.

Information for cumulative projects in the vicinity of the proposed project were obtained from City staff. Figure 4-2 illustrates the cumulative project locations. Trip generation for cumulative projects were either obtained from their respective traffic studies or developed using trip generation rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (11th Edition). Table 4-A summarizes the cumulative project trip generation. As shown in Table 4-B, the cumulative projects are estimated to generate 31,042 daily trips, including 2,427 a.m. peak-hour trips and 3,283 p.m. peak-hour trips.

Cumulative project trips were assigned to the roadway network based on either the distributions provided in the respective traffic studies or their locations in relation to surrounding land uses and the regional circulation network. Figure 4-3 illustrates the peak-hour cumulative project trip assignment at study intersections. Figure 4-4 illustrates the peak-hour traffic volumes at study intersections under EPAP conditions.

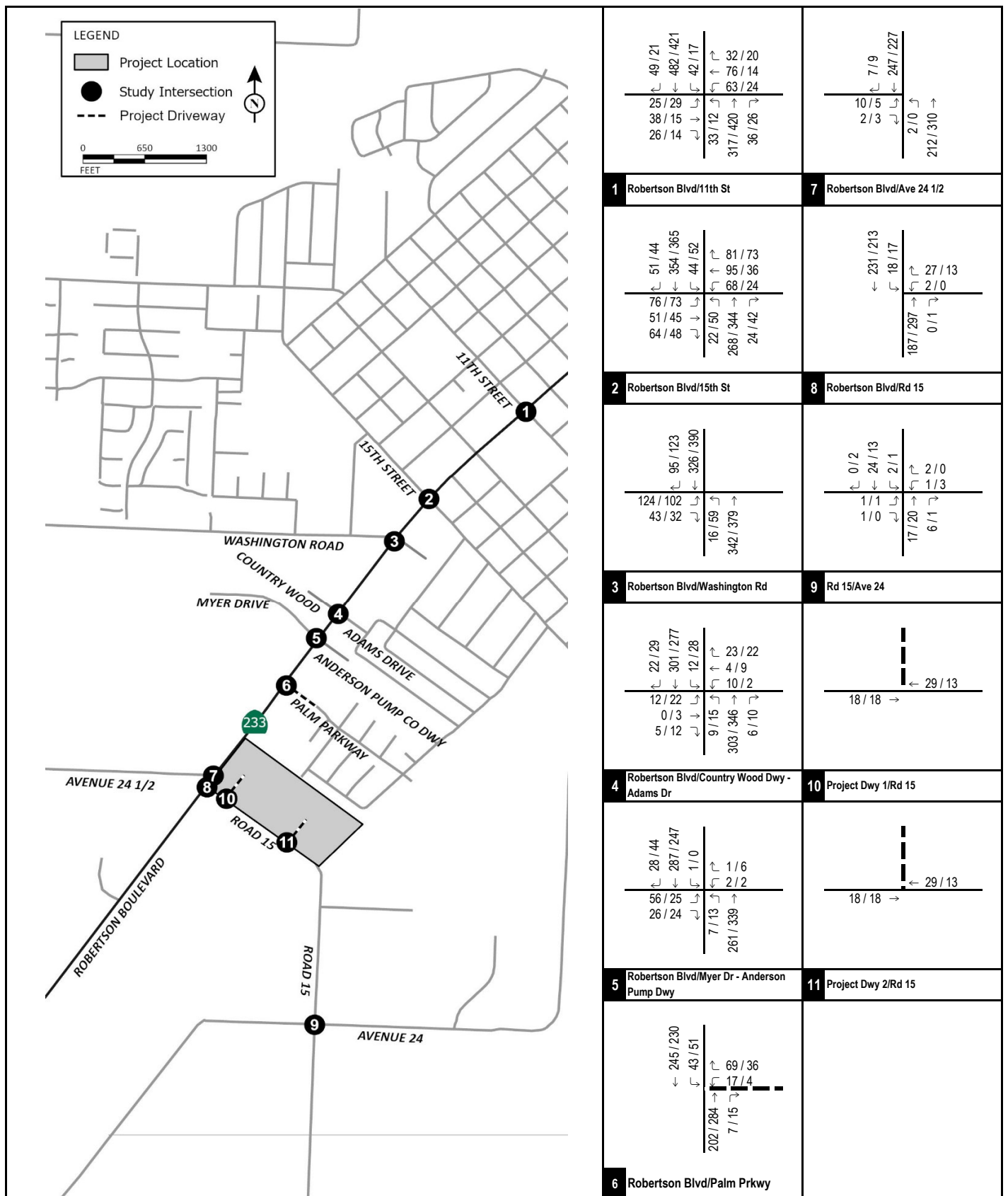
4.3 BUILD-OUT WITHOUT PROJECT TRAFFIC VOLUMES

Traffic volumes for build-out conditions were developed using the Madera County Transportation Commission (MCTC) travel demand model. The methodology used to develop build-out traffic volumes at all study intersections is consistent with the National Cooperative Highway Research Program (NCHRP) and TCAG's procedures for post-processing of modeled traffic volumes. Figure 4-5 illustrates the peak-hour traffic volumes at study intersections under build-out conditions.

Detailed volume development worksheets are included in Appendix C.

4.4 LIST OF CHAPTER 4.0 FIGURES AND TABLES

- Figure 4-1: Existing Peak Hour Traffic Volumes
- Figure 4-2: Cumulative Project Locations
- Figure 4-3: Cumulative Projects Trip Assignment
- Figure 4-4: Existing Plus Approved Project (EPAP) without Project Peak Hour Traffic Volumes
- Figure 4-5: Build-Out without Project Peak Hour Traffic Volumes
- Table 4-A: Cumulative Projects Trip Generation



LSA

XXX / YYY

AM / PM Peak Hour Traffic Volumes

*Chowchilla Residential Development Project
Traffic Impact Study*

Existing Peak Hour Traffic Volumes

FIGURE 4-1



FIGURE 4-2

LSA

LEGEND

- Project Location
- Cumulative Projects



0 1000 2000
FEET

SOURCE: Google Earth, 2020.

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Chowchilla Residential Development Project
Traffic Impact Study
Cumulative Project Locations

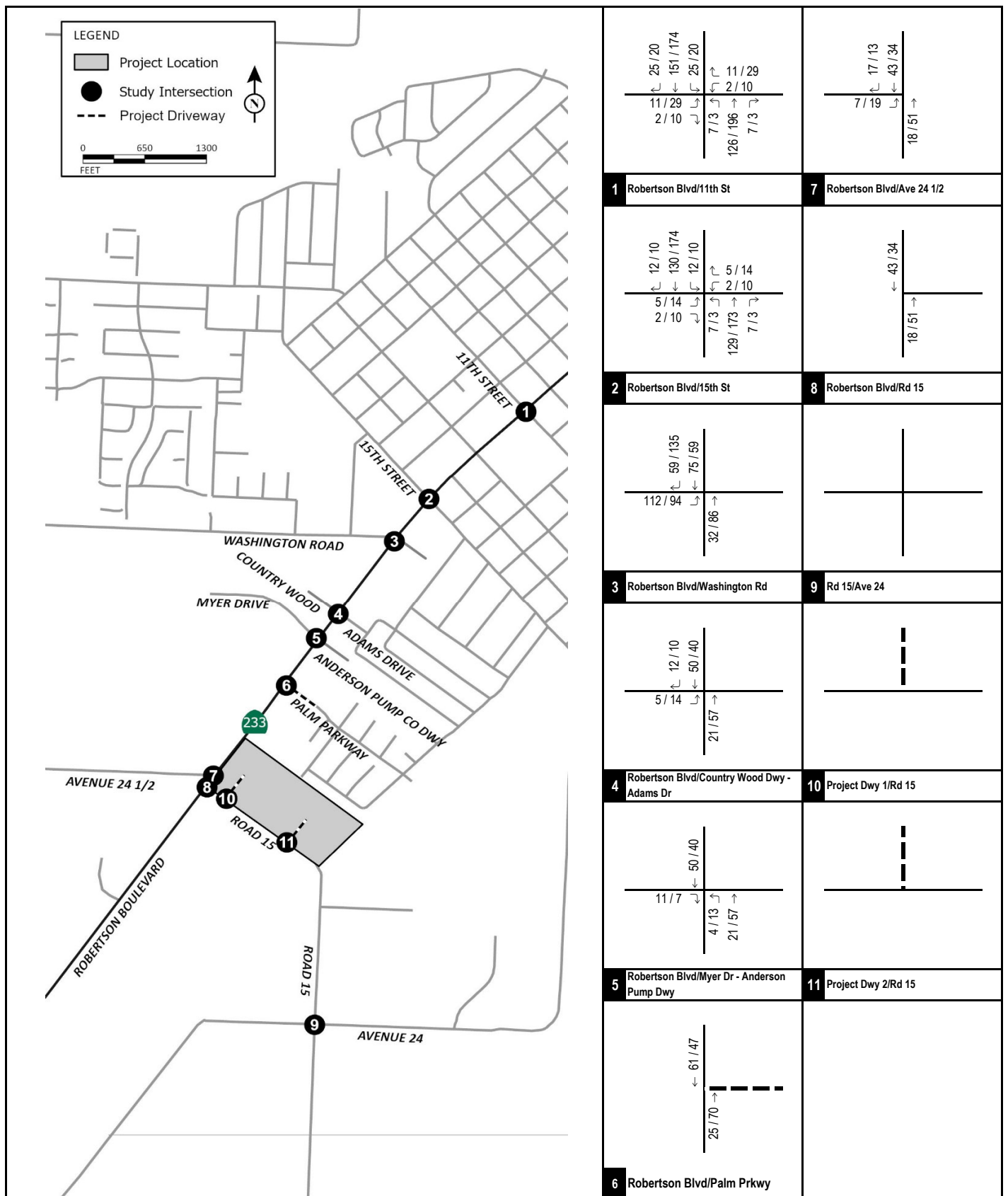


FIGURE 4-3

LSA

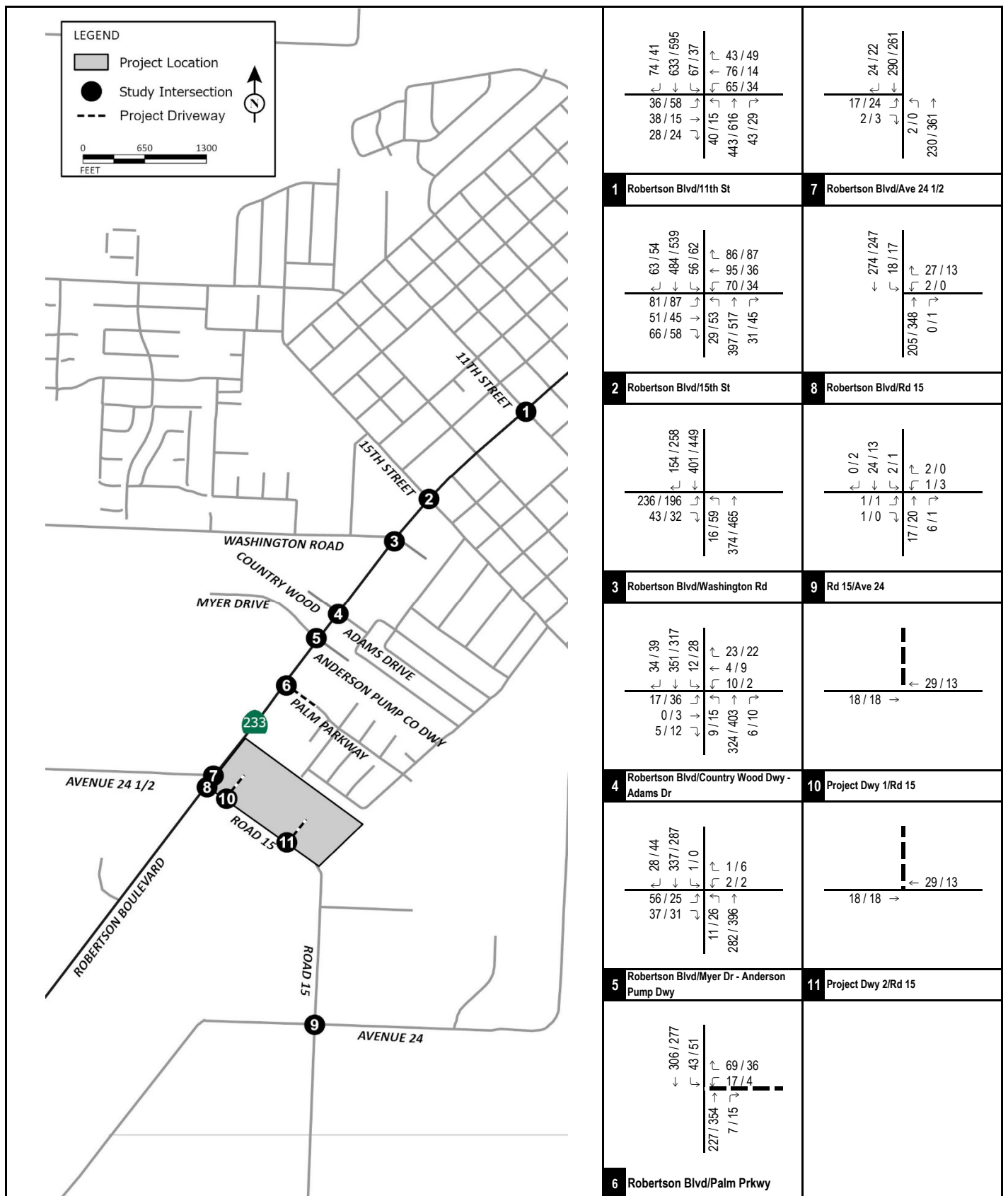
XXX / YYY

AM / PM Peak Hour Traffic Volumes

----- Project Driveway

*Chowchilla Residential Development Project
Traffic Impact Study*

Cumulative Projects Trip Assignment



LSA

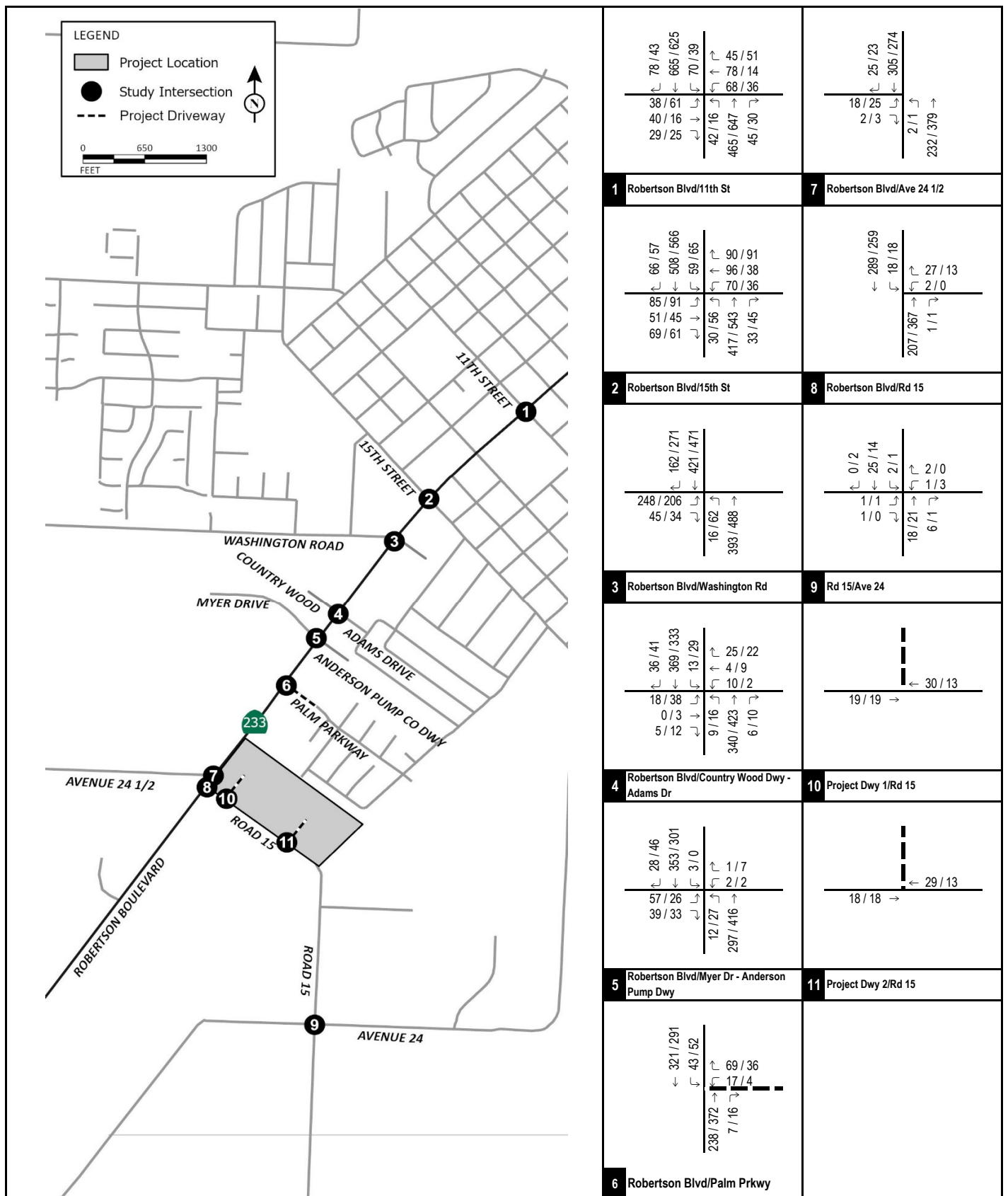
XXX / YYY

AM / PM Peak Hour Traffic Volumes

FIGURE 4-4

*Chowchilla Residential Development Project
Traffic Impact Study*

Existing Plus Approved Project (EPAP) without Project Peak Hour Traffic Volumes



LSA

XXX / YYY

AM / PM Peak Hour Traffic Volumes

FIGURE 4-5

*Chowchilla Residential Development Project
Traffic Impact Study*

Build-Out without Project Peak Hour Traffic Volumes

Table 4-A - Cumulative Projects Trip Generation

Project No.	Land Use/Builder/Applicant/Project Name	Units	A.M. Peak Hour			P.M. Peak Hour			Daily
			In	Out	Total	In	Out	Total	
1	. Sessions Subdivision ¹ North of Washington Road and West of Pines Street	200 DU	37	143	150	126	74	200	1,904
2	. Montgomery Farms South of Avenue 26 and East of Genoa Lake Way	91 DU	0.18	0.52	0.7	0.59	0.35	0.94	9.43
	Single-Family Detached Housing		16	47	63	54	32	86	858
3	. Rancho Calera Specific Plan Amendment ³ East of State Route 99 and North of Robertson Boulevard	1,822 DU Single Family 220 DU Multifamily 495 TSF Shopping Center 600 Students Elementary School	512	1,202	1,714	1,371	958	2,329	21,575
Total Net Trip Generation			565	1,392	1,927	1,551	1,064	2,615	24,337

Notes:

DU = Dwelling Units;

¹ Trip generation taken from "Sessions Subdivision" Transportation Impact Analysis by KD Anderson & Associates, Inc (March 2018).² Rates from ITE *Trip Generation Manual*, (11th Edition), Land Use 210 - "Single-Family Detached", Setting/Location - 'General Urban/Suburban'.³ Trip generation taken from "Rancho Calera Specific Plan Amendment" Transportation Impact Analysis by KD Anderson & Associates, Inc (March 2021).

5.0 PROJECT TRAFFIC

5.1 PROJECT TRIP GENERATION

The trip generation for the proposed project was developed using rates from the ITE *Trip Generation Manual* (11th Edition) for Land Use 215 – “Single-Family Attached Housing” and Land Use 220 – “Multifamily”. Table 5-A summarizes the project trip generation. As shown in Table 5-A, the proposed project is anticipated to generate 1,323 daily trips, with 80 trips during the a.m. peak hour and 101 trips during the p.m. peak hour.

5.2 PROJECT TRIP DISTRIBUTION AND ASSIGNMENT

Trip distribution percentages were developed based on the location of the proposed project in relation to surrounding land uses, project operational statement, the regional roadway network, and existing traffic volumes. Figure 5-1 illustrates the proposed project trip distribution at the study intersections. The project trip assignment at the study intersections is the product of the project trip generation and the corresponding trip distribution percentages. Figure 5-2 illustrates the project trip assignment.

5.3 LIST OF CHAPTER 5.0 FIGURES AND TABLES

- Figure 5-1: Project Trip Distribution
- Figure 5-2: Project Trip Assignment
- Table 5-A: Project Trip Generation

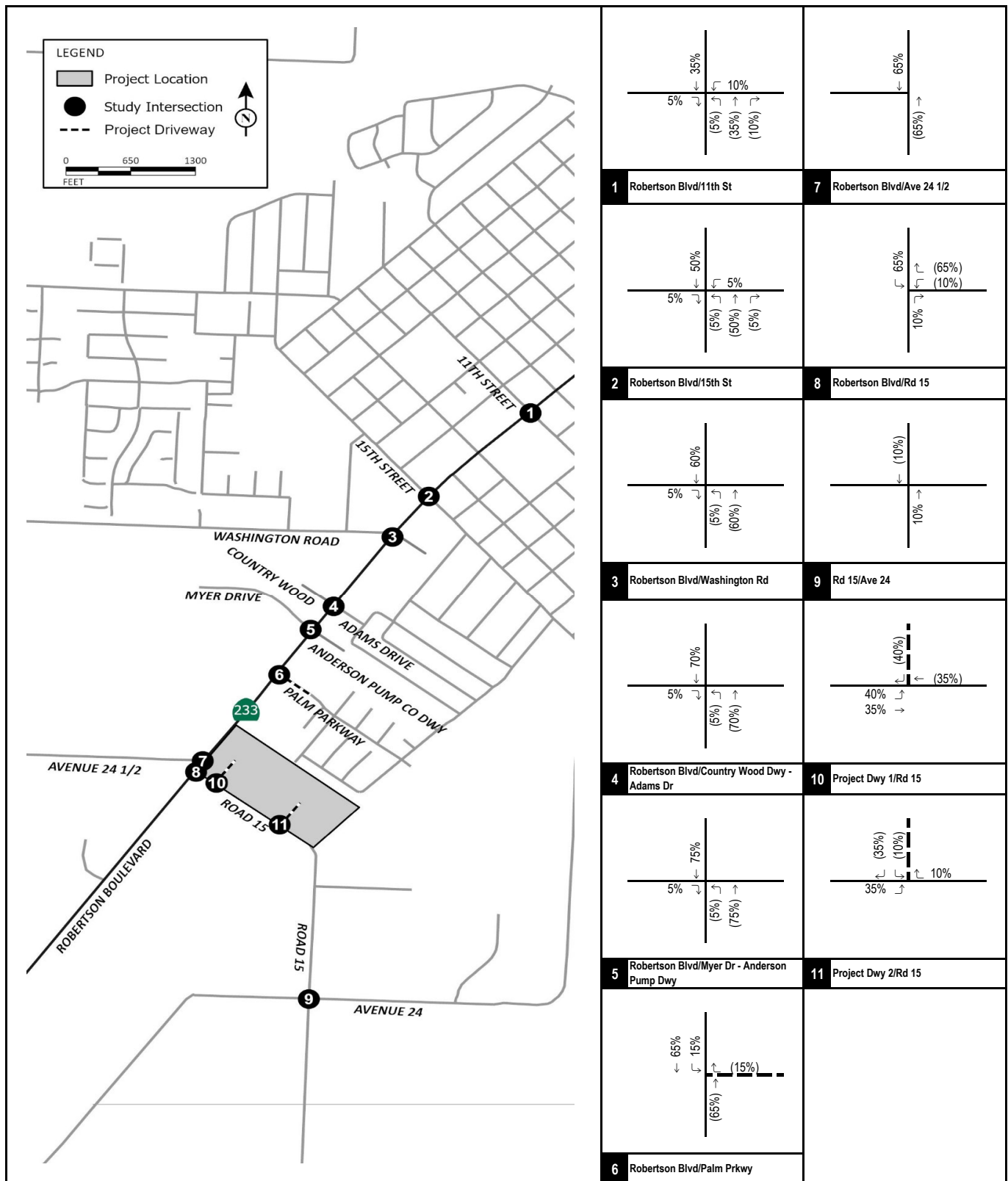


FIGURE 5-1

LSA

XX% (YY%)
Inbound (Outbound) Trip Distribution
--- Project Driveway

Chowchilla Residential Development Project
Traffic Impact Study
Project Trip Distribution

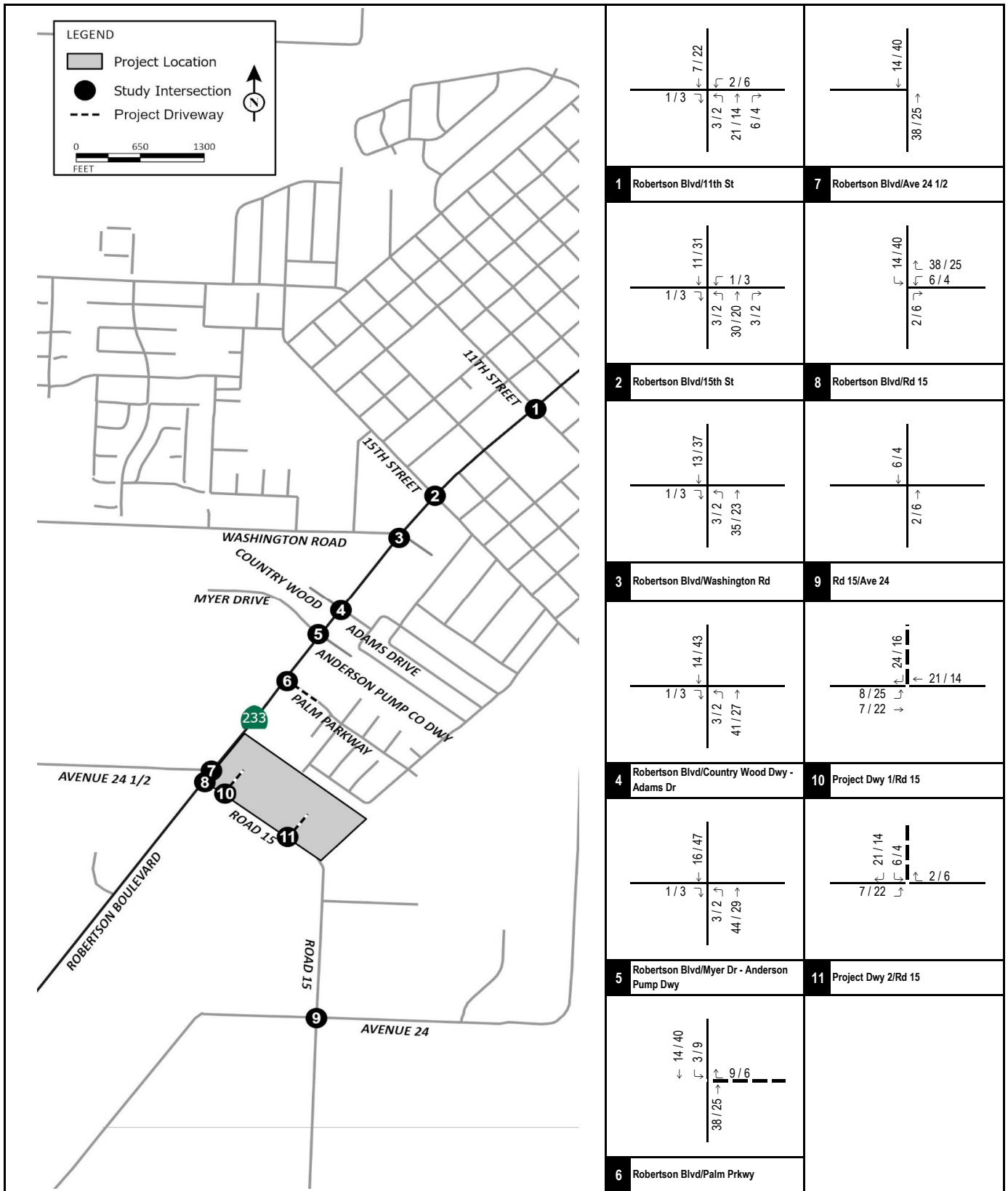


FIGURE 5-2

LSA

XX / YY

AM / PM Peak Hour Traffic Volumes

--- Project Driveway

Chowchilla Residential Development Project
Traffic Impact Study
Project Trip Assignment

Table 5-A: Project Trip Generation

Land Use	Size	Unit	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Trip Rates ¹									
Multifamily Low-Rise		du	6.74	0.10	0.30	0.40	0.32	0.19	0.51
Single-Family Attached		du	7.20	0.15	0.33	0.48	0.32	0.25	0.57
Project Trip Generation									
Multifamily Low-Rise	160	du	1,078	16	48	64	51	30	81
Single-Family Attached	34	du	245	5	11	16	11	9	20
Total			1,323	21	59	80	62	39	101

¹ Trip rates from the Institute of Transportation Engineers (ITE) *Trip Generation* Manual, 11th Edition (2021).

Land Use Code 220 - Multifamily Housing (Low Rise) - 2 or 3 Levels

Land Use Code 215 - Single-Family Attached Housing

du = dwelling unit

6.0 TRAFFIC VOLUMES FOR PLUS PROJECT SCENARIOS

Existing, existing plus approved project (EPAP), and build-out plus project traffic volumes were developed by adding project traffic to the traffic for the corresponding no project scenarios. Figures 6-1, 6-2 and 6-3 illustrate 'plus project' peak-hour traffic volumes at study intersections under existing, near-term, and cumulative year conditions, respectively.

Detailed volume development worksheets are included in Appendix C.

6.1 LIST OF CHAPTER 6.0 FIGURES

- Figure 6-1: Existing Plus Project Peak Hour Traffic Volumes
- Figure 6-2: Existing Plus Approved Project (EPAP) Plus Project Peak Hour Traffic Volumes
- Figure 6-3: Build-Out Plus Project Peak Hour Traffic Volumes

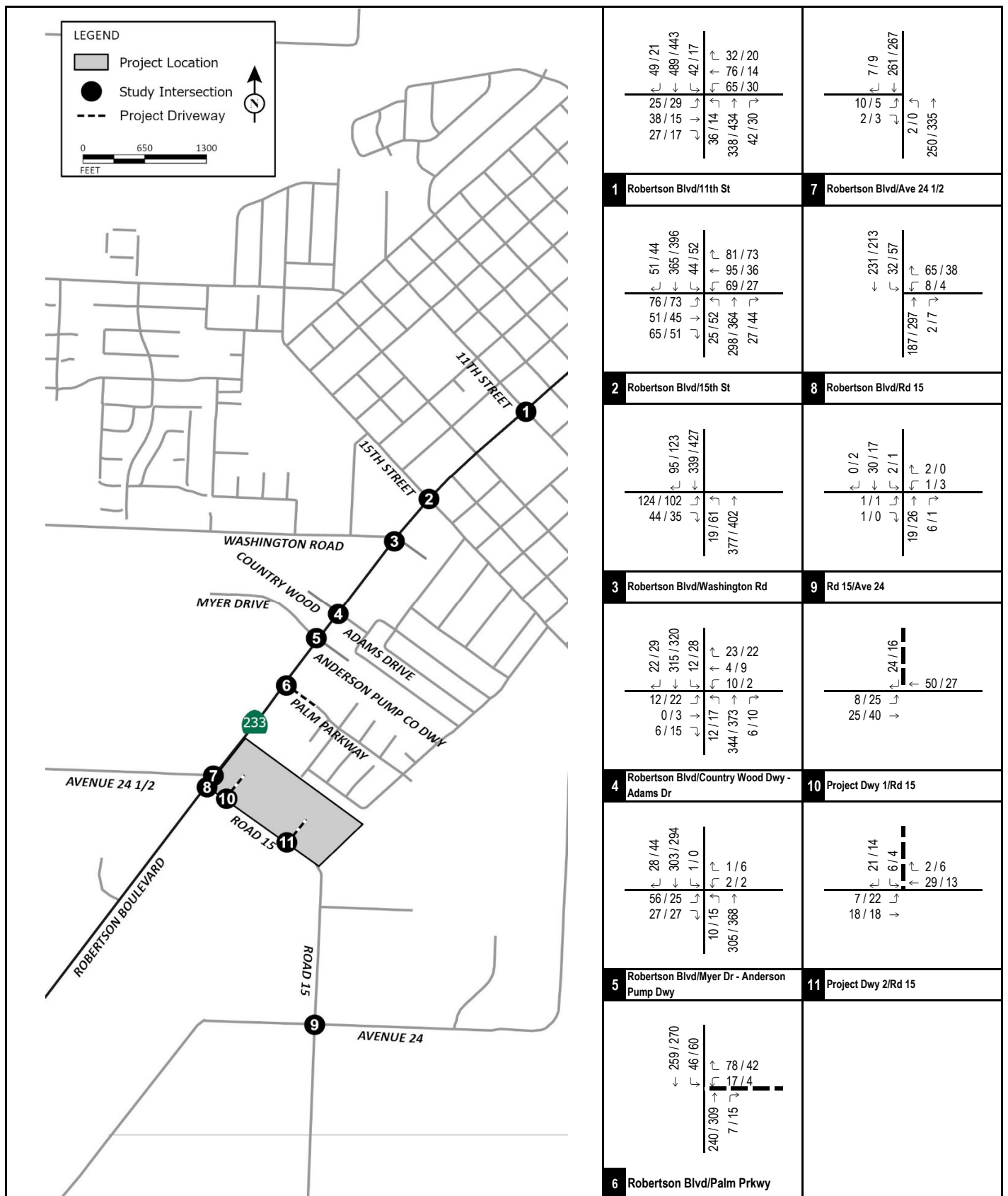


FIGURE 6-1

LSA

XXX / YYY

AM / PM Peak Hour Traffic Volumes

----- Project Driveway

*Chowchilla Residential Development Project
Traffic Impact Study*

Existing Plus Project Peak Hour Traffic Volumes

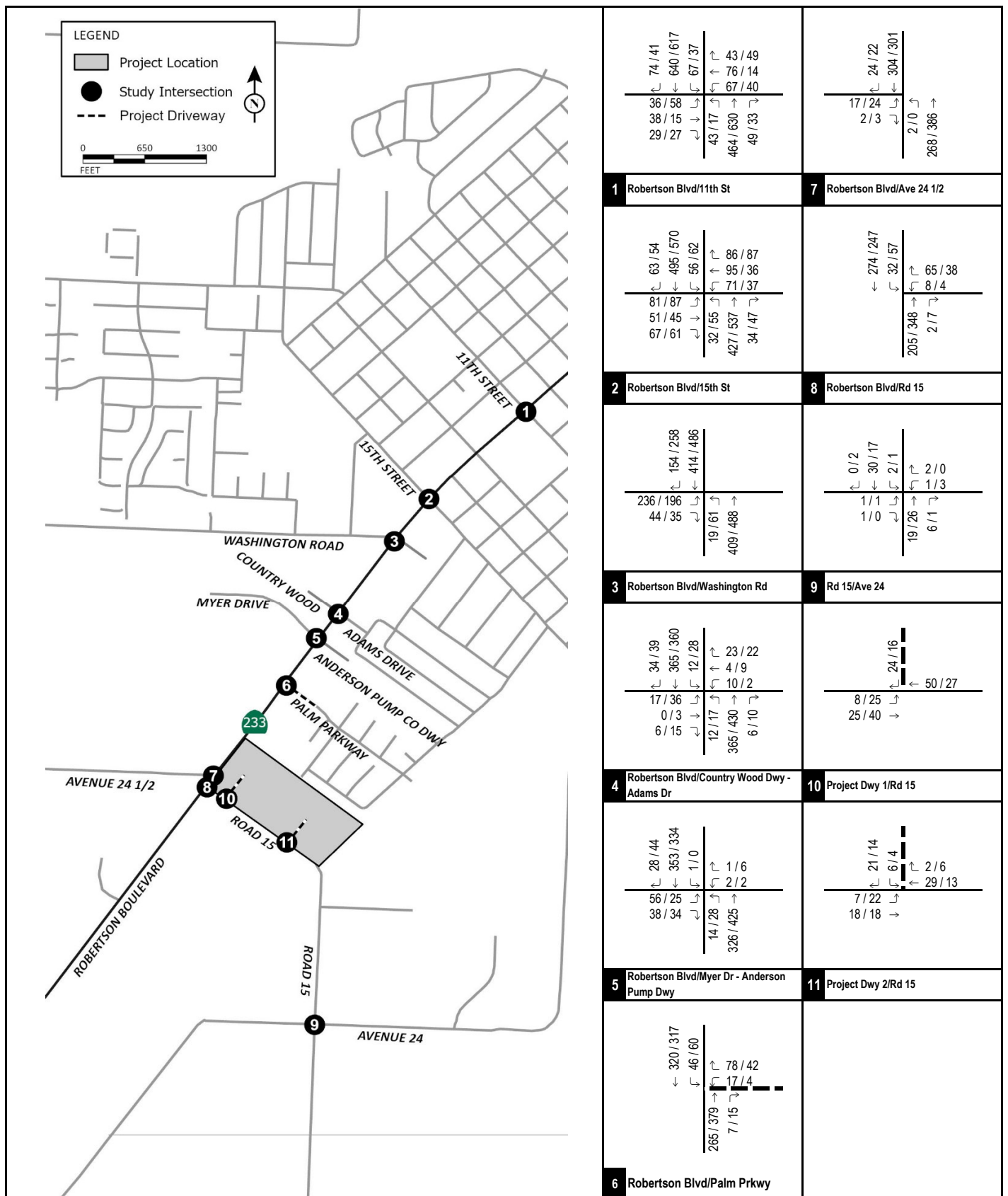


FIGURE 6-2

LSA

XXX / YYY

AM / PM Peak Hour Traffic Volumes

----- Project Driveway

*Chowchilla Residential Development Project
Traffic Impact Study*

Existing Plus Approved Project (EPAP) Plus Project Peak Hour Traffic Volumes

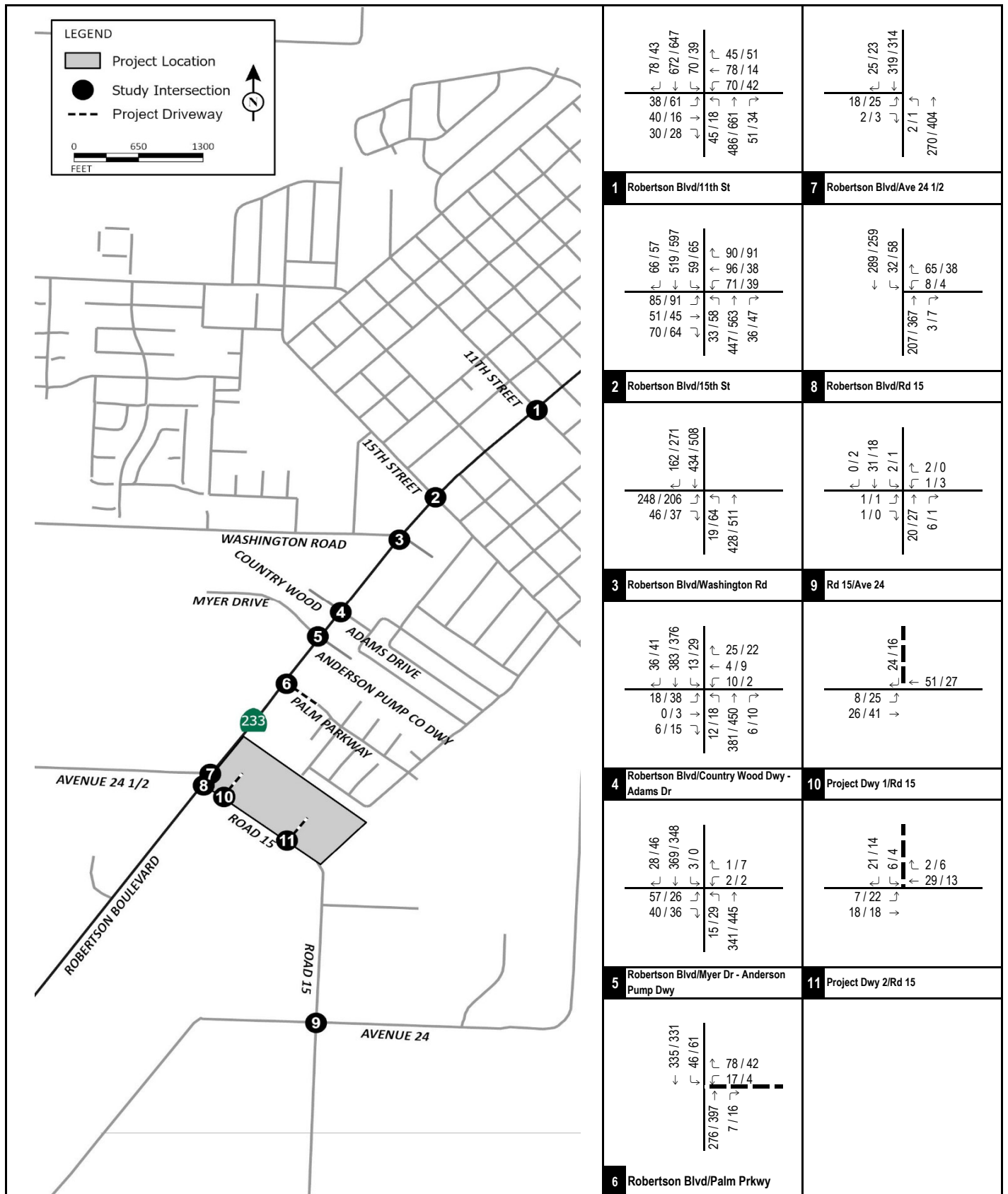


FIGURE 6-3

LSA

XXX / YYY

AM / PM Peak Hour Traffic Volumes

----- Project Driveway

Chowchilla Residential Development Project
Traffic Impact Study

Build-Out Plus Project Peak Hour Traffic Volumes

7.0 LEVELS OF SERVICE ANALYSIS

7.1 EXISTING LEVELS OF SERVICE

Figure 3-2 illustrates existing study intersection geometrics and traffic control. Detailed intersection LOS worksheets for existing conditions (and all other scenarios) are included in Appendix D.

7.1.1 Study Intersections

An intersection LOS analysis was conducted for existing conditions using the methodologies previously discussed. Table 7-A summarizes the results of this analysis and shows that all study intersections currently operate at a satisfactory LOS under existing conditions.

7.2 EXISTING PLUS PROJECT LEVELS OF SERVICE

Analysis of the existing plus project scenario is provided to identify direct project-related operational deficiency if the project were to be built and in operation today. Previously referenced Figure 3-3 illustrates the study intersection geometrics and traffic control under existing plus project conditions.

7.2.1 Study Intersections

An intersection LOS analysis was conducted for existing plus project conditions using the methodologies previously discussed. Table 7-A summarizes the results of this analysis and shows that the following intersection is forecast to operate at a deficient LOS under existing plus project conditions:

- Robertson Boulevard/Washington Road (a.m. and p.m. peak hours).

This intersection is currently operating at a deficient LOS. As such, the proposed project is forecast to add to the existing deficiency at this location. All other study intersections are forecast to operate at a satisfactory LOS under existing plus project conditions.

7.3 EXISTING PLUS APPROVED PROJECT (EPAP) LEVELS OF SERVICE

7.3.1 Study Intersections

An intersection LOS analysis was conducted for existing plus approved project conditions using the methodologies previously discussed. Table 7-B summarizes the results of this analysis and shows that the following intersection is forecast to operate at a deficient LOS under existing plus approved project conditions:

- Robertson Boulevard/Washington Road (a.m. and p.m. peak hours).

All other study intersections are forecast to operate at a satisfactory LOS under existing plus approved project conditions.

7.4 EXISTING PLUS APPROVED PROJECT (EPAP) PLUS PROJECT LEVELS OF SERVICE

7.4.1 Study Intersections

An intersection LOS analysis was conducted for existing plus approved project plus project conditions using the methodologies previously discussed. Table 7-B summarizes the results of this analysis and shows that the following intersection is forecast to operate at a deficient LOS under existing plus approved project plus project conditions:

- Robertson Boulevard/Washington Road (a.m. and p.m. peak hours).

This intersection is currently operating at a deficient LOS and is forecast to operate at a deficient LOS under existing plus approved project conditions. As such, the proposed project is forecast to add to the forecasted deficiency at this location. All other study intersections are forecast to operate at a satisfactory LOS existing plus approved project conditions.

7.5 BUILD-OUT LEVELS OF SERVICE

7.5.1 Study Intersections

An intersection LOS analysis was conducted for build-out conditions using the methodologies previously discussed. Table 7-C summarizes the results of this analysis and shows that the following intersection is forecast to operate at a deficient LOS under build-out conditions:

- Robertson Boulevard/Washington Road (a.m. and p.m. peak hours).

All other study intersections are forecast to operate at a satisfactory LOS under build-out conditions.

7.6 BUILD-OUT PLUS PROJECT LEVELS OF SERVICE

7.6.1 Study Intersections

An intersection LOS analysis was conducted for build-out plus project conditions using the methodologies previously discussed. Table 7-C summarizes the results of this analysis and shows that the following intersections are forecast to operate at a deficient LOS under build-out plus project conditions:

- Robertson Boulevard/Washington Road (a.m. and p.m. peak hours).

The intersection of Robertson Boulevard/Washington Road is forecast to operate at a deficient LOS under build-out conditions. As such, the proposed project is forecast to add to the forecasted deficiency at this location. All other study intersections are forecast to operate at a satisfactory LOS under build-out plus project conditions.

7.7 LIST OF CHAPTER 7.0 TABLES

- Table 7-A: Existing Intersection Levels of Service
- Table 7-B: Existing Plus Approved Project (EPAP) Intersection Levels of Service
- Table 7-C: Build-Out Intersection Levels of Service

Table 7-A - Existing Intersection Levels of Service

Intersection	Jurisdiction	LOS Standard	Control	Without Project				Control	Plus Project			
				A.M. Peak Hour		P.M. Peak Hour			A.M. Peak Hour		P.M. Peak Hour	
				Delay (sec.)	LOS	Delay (sec.)	LOS		Delay (sec.)	LOS	Delay (sec.)	LOS
1 . Robertson Boulevard/11th Street	Caltrans	D	Signal	14.8	B	10.9	B	Signal	15.0	B	11.0	B
2 . Robertson Boulevard/15th Street	Caltrans	D	Signal	17.2	B	14.7	B	Signal	17.5	B	14.7	B
3 . Robertson Boulevard/Washington Road	Caltrans	D	TWSC	32.6	D	31.4	D	TWSC	38.5	E *	37.1	E *
4 . Robertson Boulevard/Country Wood Shopping Center Driveway - Adams Drive	Caltrans	D	TWSC	17.3	C	16.4	C	TWSC	18.6	C	17.5	C
5 . Robertson Boulevard/Myer Drive - Anderson Pump Company Driveway	Caltrans	D	TWSC	17.9	C	12.9	B	TWSC	20.3	C	13.7	B
6 . Robertson Boulevard/Palm Parkway	Caltrans	D	OWSC	11.1	B	10.7	B	OWSC	11.6	B	11.0	B
7 . Robertson Boulevard/Avenue 24 1/2	Caltrans	D	OWSC	12.0	B	11.7	B	OWSC	12.6	B	12.3	B
8 . Robertson Boulevard/Road 15	Caltrans	D	OWSC	9.7	A	10.0	B	OWSC	10.3	B	10.7	B
9 . Road 15/Avenue 24	Madera County	D	TWSC	8.7	A	8.8	A	TWSC	8.7	A	8.9	A
10 . Project Driveway 1/Road 15	Madera County/Chowchilla	D	OWSC	Future Intersection		Future Intersection		OWSC	8.6	A	8.5	A
11 . Project Driveway 2/Road 15	Madera County/Chowchilla	D	OWSC	Future Intersection		Future Intersection		OWSC	8.6	A	8.6	A

Notes:

AWSC= All-Way Stop Control; OWSC = One-Way Stop Control; TWSC = Two-Way Stop Control; LOS = Level of Service

Delay = Average control delay in seconds (For OWSC/TWSC intersections, reported delay is for worst-case movement).

* Exceeds LOS Standard

Table 7-B - Existing Plus Approved Project (EPAP) Intersection Levels of Service

Intersection	Jurisdiction	LOS Standard	Control	Without Project				Control	Plus Project			
				A.M. Peak Hour		P.M. Peak Hour			A.M. Peak Hour		P.M. Peak Hour	
				Delay (sec.)	LOS	Delay (sec.)	LOS		Delay (sec.)	LOS	Delay (sec.)	LOS
1 . Robertson Boulevard/11th Street	Caltrans	D	Signal	16.5	B	12.0	B	Signal	16.7	B	12.2	B
2 . Robertson Boulevard/15th Street	Caltrans	D	Signal	19.3	B	16.1	C	Signal	19.6	B	16.3	B
3 . Robertson Boulevard/Washington Road	Caltrans	D	TWSC	>200	F *	>200	F *	TWSC	>200	F *	>200	F *
4 . Robertson Boulevard/Country Wood Shopping Center Driveway - Adams Drive	Caltrans	D	TWSC	20.8	C	21.1	C	TWSC	22.7	C	23.3	C
5 . Robertson Boulevard/Myer Drive - Anderson Pump Company Driveway	Caltrans	D	TWSC	20.4	C	14.1	B	TWSC	23.6	C	15.1	C
6 . Robertson Boulevard/Palm Parkway	Caltrans	D	OWSC	11.6	B	11.4	B	OWSC	12.2	B	11.8	B
7 . Robertson Boulevard/Avenue 24 1/2	Caltrans	D	OWSC	13.1	B	14.0	B	OWSC	13.8	B	15.0	C
8 . Robertson Boulevard/Road 15	Caltrans	D	OWSC	9.9	A	10.4	B	OWSC	10.5	B	11.2	B
9 . Road 15/Avenue 24	Madera County	D	TWSC	8.7	A	8.8	A	TWSC	8.7	A	8.9	A
10 . Project Driveway 1/Road 15	Madera County/Chowchilla	D	OWSC	Future Intersection		Future Intersection		OWSC	8.6	A	8.5	A
11 . Project Driveway 2/Road 15	Madera County/Chowchilla	D	OWSC	Future Intersection		Future Intersection		OWSC	8.6	A	8.6	A

Notes:

AWSC= All-Way Stop Control; OWSC = One-Way Stop Control; TWSC = Two-Way Stop Control; LOS = Level of Service

Delay = Average control delay in seconds (For OWSC/TWSC intersections, reported delay is for worst-case movement).

* Exceeds LOS Standard

Table 7-C - Build-Out Intersection Levels of Service

Intersection	Jurisdiction	LOS Standard	Without Project					Plus Project				
			Control	A.M. Peak Hour		P.M. Peak Hour		Control	A.M. Peak Hour		P.M. Peak Hour	
				Delay (sec.)	LOS	Delay (sec.)	LOS		Delay (sec.)	LOS	Delay (sec.)	LOS
1 . Robertson Boulevard/11th Street	Caltrans	D	Signal	14.6	B	12.2	B	OWSC	14.7	B	12.3	B
2 . Robertson Boulevard/15th Street	Caltrans	D	Signal	16.7	B	16.5	C	OWSC	16.9	B	16.7	B
3 . Robertson Boulevard/Washington Road	Caltrans	D	TWSC	106.3	F *	>200	F *	TWSC	133.0	F *	>200	F *
4 . Robertson Boulevard/Country Wood Shopping Center Driveway - Adams Drive	Caltrans	D	TWSC	17.8	C	23.0	C	TWSC	19.0	C	25.6	D
5 . Robertson Boulevard/Myer Drive - Anderson Pump Company Driveway	Caltrans	D	TWSC	16.3	C	14.6	B	TWSC	17.8	C	15.8	C
6 . Robertson Boulevard/Palm Parkway	Caltrans	D	OWSC	11.4	B	11.7	B	OWSC	11.9	B	12.0	B
7 . Robertson Boulevard/Avenue 24 1/2	Caltrans	D	OWSC	12.8	B	14.4	B	OWSC	13.4	B	15.3	C
8 . Robertson Boulevard/Road 15	Caltrans	D	OWSC	9.8	A	10.6	B	OWSC	10.4	B	11.4	B
9 . Road 15/Avenue 24	Madera County	D	TWSC	8.6	A	8.7	A	TWSC	8.6	A	8.8	A
10 . Project Driveway 1/Road 15	Madera County/Chowchilla	D	OWSC	Future Intersection		Future Intersection		OWSC	8.6	A	8.5	A
11 . Project Driveway 2/Road 15	Madera County/Chowchilla	D	OWSC	Future Intersection		Future Intersection		OWSC	8.6	A	8.6	A

Notes:

AWSC= All-Way Stop Control; OWSC = One-Way Stop Control; TWSC = Two-Way Stop Control; LOS = Level of Service

Delay = Average control delay in seconds (For OWSC/TWSC intersections, reported delay is for worst-case movement).

* Exceeds LOS Standard

8.0 SIGNAL WARRANT ANALYSIS

Per the approved scoping agreement, a signal warrant analysis was conducted at study intersections where installing a signal could be an appropriate and potential operational improvement. A Peak Hour Warrant (Warrant 3) was conducted for such locations. Peak-hour approach volumes for the study intersections were examined to determine whether signalization is warranted per the criteria defined in the latest version California supplement of the *Manual on Uniform Traffic Control Devices* (CA-MUTCD). The signal warrant analysis is summarized below.

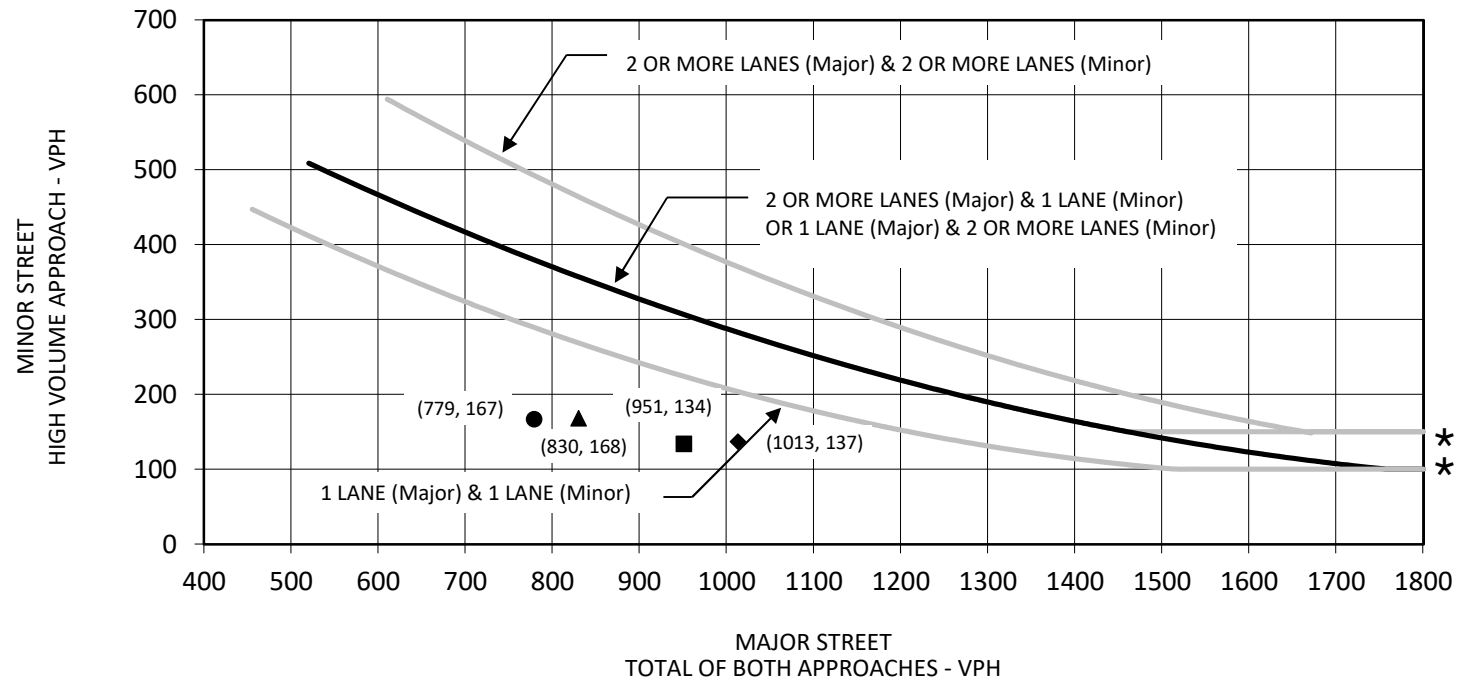
8.1 ROBERTSON BOULEVARD/WASHINGTON ROAD

Figures 8-1, 8-2, and 8-3 illustrate the Warrant 3 (peak hour) for this intersection under existing, existing plus approved project, and build-out conditions, respectively. As shown in these figures, Robertson Boulevard/Washington Road meets the signal warrant under existing plus approved project conditions and build-out conditions. As such, a signal is warranted at this location and is recommended as an operational improvement.

8.2 LIST OF CHAPTER 8.0 FIGURES

- Figure 8-1: Warrant 3: Peak Hour – Robertson Boulevard/Washington Road – Existing Conditions
- Figure 8-2: Warrant 3: Peak Hour – Robertson Boulevard/Washington Road – Existing Plus Approved Project Conditions
- Figure 8-3: Warrant 3: Peak Hour – Robertson Boulevard/Washington Road – Build-Out Conditions

WARRANT 3, PEAK HOUR



★ 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.

FIGURE 8-1

LSA

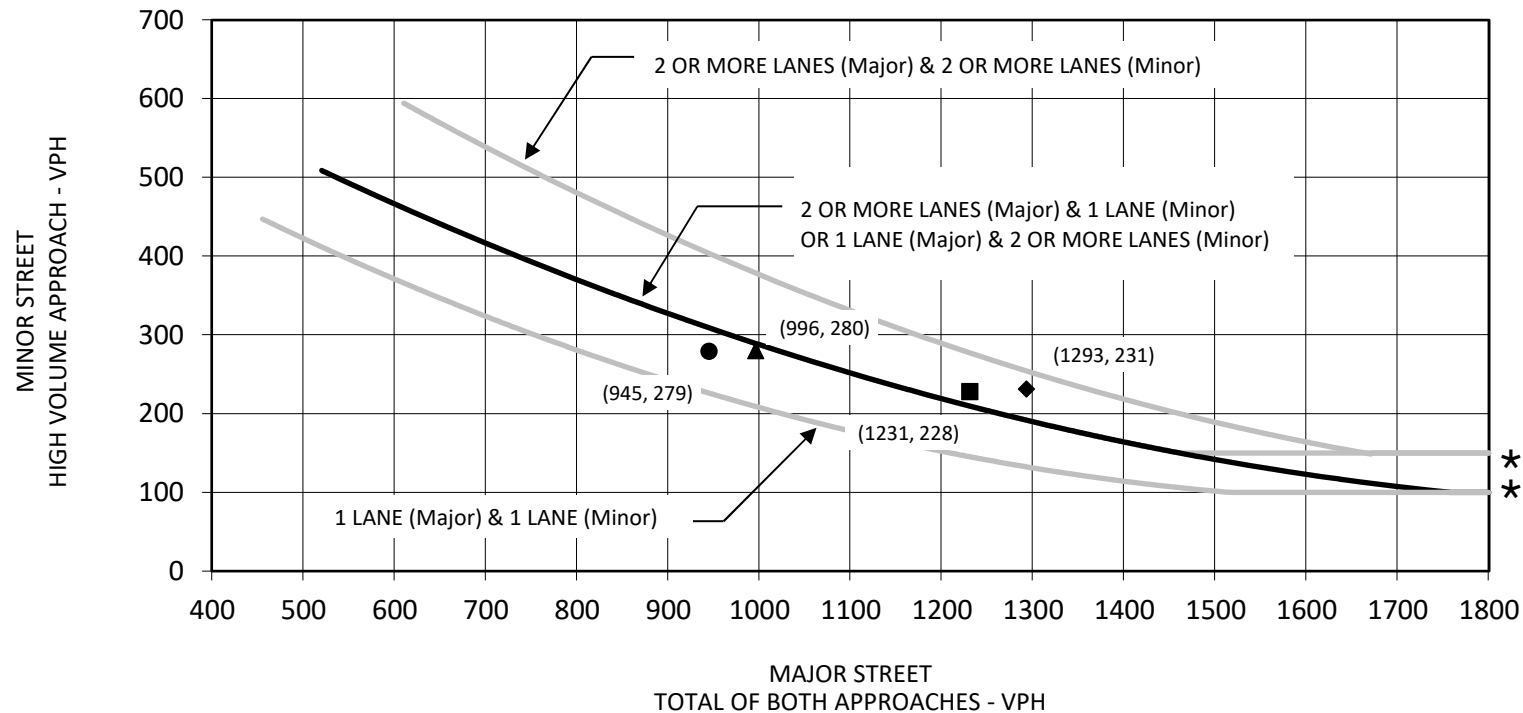
- | | |
|--------------------------------|-----------------------------|
| ● Without Project AM Peak Hour | ▲ Plus Project AM Peak Hour |
| ■ Without Project PM Peak Hour | ◆ Plus Project PM Peak Hour |

SOURCE: MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 4C-3

*Chowchilla Residential Development Project
Traffic Impact Study*

Warrant 3: Peak Hour – Robertson Boulevard/Washington Road – Existing Conditions

WARRANT 3, PEAK HOUR



★ 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.

LSA

- Without Project AM Peak Hour
 Plus Project AM Peak Hour
- Without Project PM Peak Hour
 Plus Project PM Peak Hour

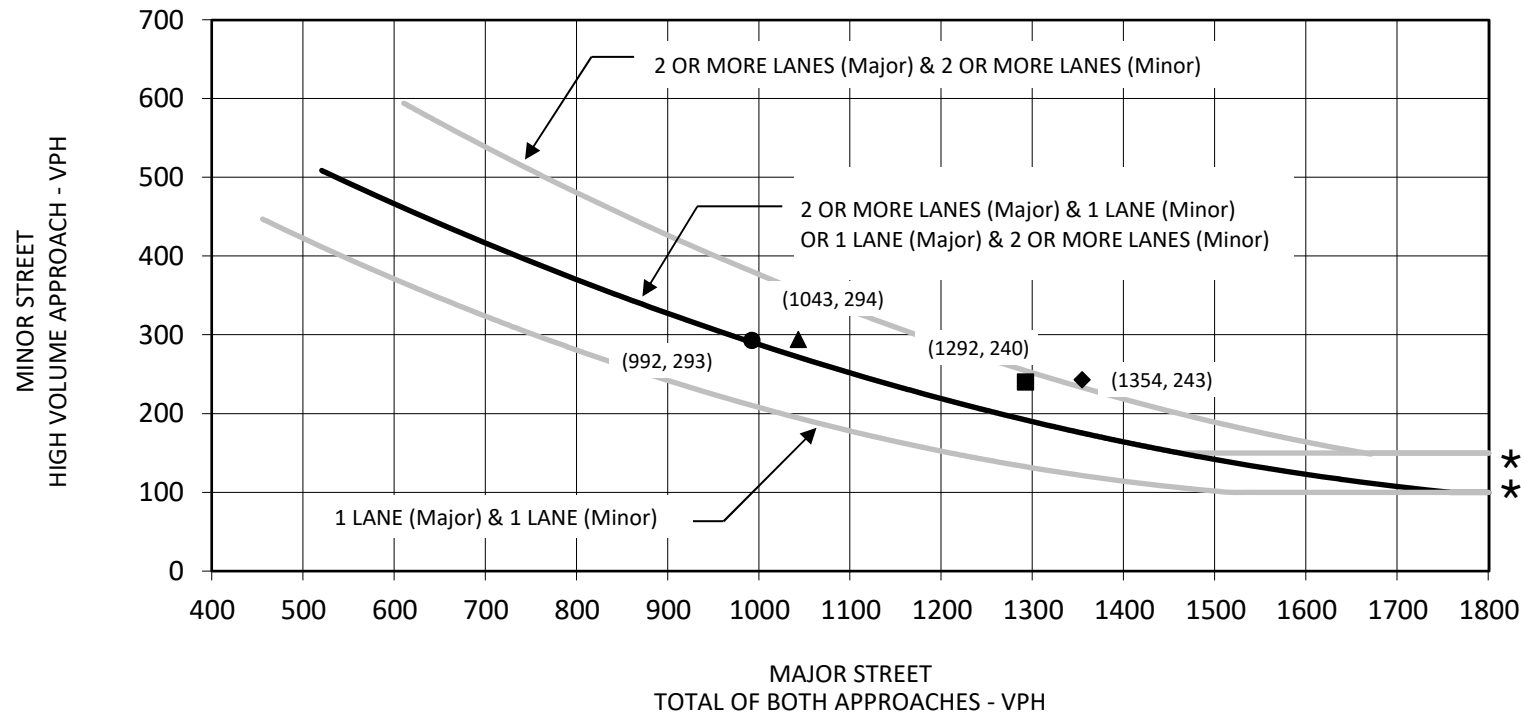
SOURCE: MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 4C-3

*Chowchilla Residential Development Project
Traffic Impact Study*

Warrant 3: Peak Hour – Robertson Boulevard/Washington Road – Existing Plus Approved Project Conditions

FIGURE 8-2

WARRANT 3, PEAK HOUR



★ 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.

LSA

- | | |
|--------------------------------|-----------------------------|
| ● Without Project AM Peak Hour | ▲ Plus Project AM Peak Hour |
| ■ Without Project PM Peak Hour | ◆ Plus Project PM Peak Hour |

SOURCE: MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, FIGURE 4C-3

*Chowchilla Residential Development Project
Traffic Impact Study*

Warrant 3: Peak Hour – Robertson Boulevard/Washington Road – Build-Out Conditions

FIGURE 8-3

9.0 CIRCULATION IMPROVEMENTS AND FUNDING SOURCES

9.1 RECOMMENDED IMPROVEMENTS

Improvements have been recommended at study intersections where an operational deficiency has been identified based on the results of the LOS analysis. Figure 9-1 illustrates the study intersection geometrics and traffic control under 'plus project' conditions with recommended improvements. Table 9-A summarizes the recommended improvements for study intersections for all analysis scenarios. Tables 9-B, 9-C, and 9-D summarize the post-improvement intersection LOS under existing, near-term, and horizon year conditions, respectively. Detailed LOS worksheets are included in Appendix D.

For the intersection of Robertson Boulevard/Washington Road, converting the existing two-way stop control (TWSC) to traffic signal is proposed to eliminate the forecasted operational deficiency under existing, existing plus approved project, and build-out conditions.

9.2 FUNDING SOURCES AND MECHANISMS

Where there is a funding mechanism (fee program) for the recommended improvements, payment into the fee program would be considered sufficient project obligation to alleviate project-related operational deficiencies. At study locations where the addition of project traffic creates an operational deficiency (plus project conditions) and there is no funding mechanism in place, the project will be responsible for the implementation of the improvement. At locations where the project adds to or creates a forecast deficiency and there is no funding mechanism in place, the project is responsible for its fair-share payment.

9.2.1 City of Chowchilla Development Impact Fee Program

The City's *Citywide Development Impact Fee Study Final Report*, dated May 11, 2022, has the primary objective to support and fund improvements to public facilities and purchase of equipment related to the provision of essential services based on demands created by new growth. As new development occurs in Chowchilla, the growth will lead to a continuous increase in service demand. The fee program will enable the City to continue to provide services at an increased rate based on growth. The study analyzes the impact of new developments on specific types of facilities such as parks land and improvements, fire protection facilities, police facilities, street improvements, traffic signals, public buildings, community and recreation centers, storm drainage improvements, water system, and sewer system. The installation of a traffic signal at the intersection of Robertson Boulevard/Washington Road (conversion from the existing TWSC) is included in the City's development impact fee (DIF) program.

9.3 LIST OF CHAPTER 9.0 FIGURES AND TABLES

- Figure 9-1: Study Intersection Geometrics and Traffic Control under 'Plus Project' Conditions with Improvements
- Table 9-A: Recommended Improvements for Intersections
- Table 9-B: Existing Plus Project with Recommended Improvements Intersection Levels of Service
- Table 9-C: Existing Plus Approved Project Plus Project with Recommended Improvements Intersection Levels of Service
- Table 9-D: Build-Out Plus Project with Recommended Improvements Intersection Levels of Service

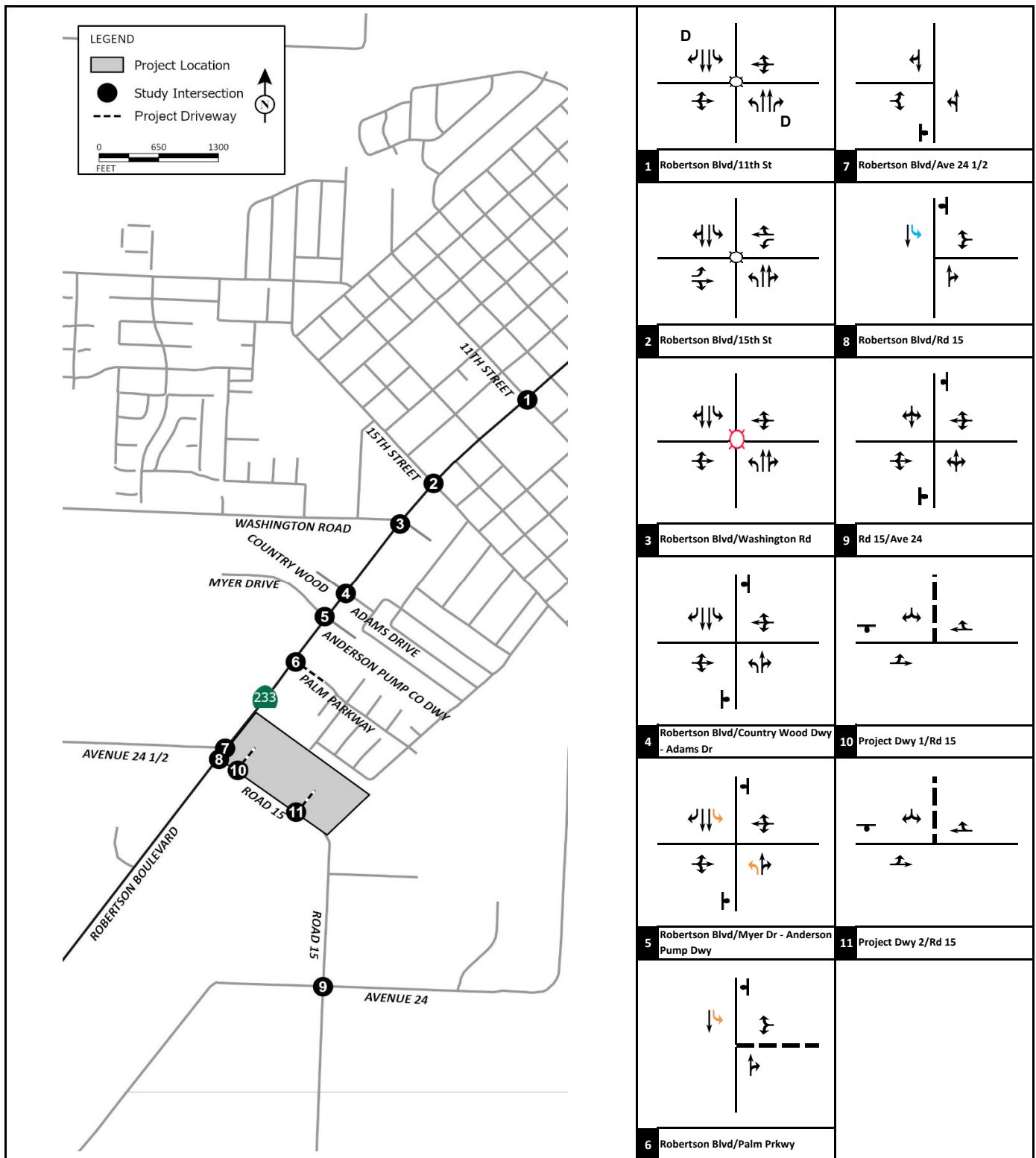


FIGURE 9-1

LSA

Legend

- Project Driveway
- Two Way Left Turn Lane
- Signal
- D De-Facto Right Turn
- Project Feature
- Stop Sign
- F Free Right Turn
- Recommended Improvements

*Chowchilla Residential Development Project
Traffic Impact Study*

Study Intersection Geometrics and Traffic Control under 'Plus Project' Conditions with Improvements

Table 9-A - Recommended Improvements for Intersections

Intersection	Jurisdiction	Existing Plus Project Improvements	Existing Plus Approved Project (EPAP) Plus Project Improvements	Build-Out Plus Project Improvements
3 . Robertson Boulevard/Washington Road	Caltrans	Install traffic signal	Install traffic signal	Install traffic signal

Notes:

NB = Northbound, SB = Southbound, EB = Eastbound, WB = Westbound

L = Left, T = Through, R = Right

Table 9-B - Existing Plus Project with Recommended Improvements Intersection Levels of Service

Intersection	Jurisdiction	LOS Standard	Plus Project Without Improvements						Plus Project With Improvements			
			Control	A.M. Peak Hour		P.M. Peak Hour		Control	A.M. Peak Hour		P.M. Peak Hour	
				Delay (sec.)	LOS	Delay (sec.)	LOS		Delay (sec.)	LOS	Delay (sec.)	LOS
3 . Robertson Boulevard/Washington Road	Caltrans	D	TWSC	38.5	E *	37.1	E *	Signal	8.2	A	8.0	A

Notes:

AWSC= All-Way Stop Control; OWSC = One-Way Stop Control; TWSC = Two-Way Stop Control; LOS = Level of Service

Delay = Average control delay in seconds (For OWSC/TWSC Intersections, reported delay is for worst-case movement).

* Exceeds LOS Standard

Table 9-C - Existing Plus Approved Project (EPAP) Plus Project with Recommended Improvements Intersection Levels of Service

Intersection	Jurisdiction	LOS Standard	Plus Project Without Improvements						Plus Project With Improvements									
			Control	A.M. Peak Hour			P.M. Peak Hour			Control	A.M. Peak Hour			P.M. Peak Hour				
				Delay (sec.)	LOS		Delay (sec.)	LOS			Delay (sec.)	LOS		Delay (sec.)	LOS			
3 . Robertson Boulevard/Washington Road	Caltrans	D	TWSC	>200	F	*		>200	F	*		Signal	11.0	B		10.2	B	

Notes:

AWSC= All-Way Stop Control; OWSC = One-Way Stop Control; TWSC = Two-Way Stop Control; LOS = Level of Service

Delay = Average control delay in seconds (For OWSC/TWSC intersections, reported delay is for worst-case movement).

* Exceeds LOS Standard

Table 9-D - Build-Out Plus Project with Recommended Improvements Intersection Levels of Service

Intersection	Jurisdiction	LOS Standard	Plus Project Without Improvements						Plus Project With Improvements					
			Control	A.M. Peak Hour		P.M. Peak Hour			A.M. Peak Hour		P.M. Peak Hour			
				Delay (sec.)	LOS	Delay (sec.)	LOS		Delay (sec.)	LOS	Delay (sec.)	LOS		
3 - Robertson Boulevard/Washington Road	Caltrans	D	TWSC	133.0	F *	>200	F *	Signal	9.9	A	10.4	B		

Notes:

AWSC= All-Way Stop Control; OWSC = One-Way Stop Control; TWSC = Two-Way Stop Control; LOS = Level of Service

Delay = Average control delay in seconds (For OWSC/TWSC intersections, reported delay is for worst-case movement).

* Exceeds LOS Standard

10.0 INTERSECTION QUEUING ANALYSIS

Tables 10-A, 10-B, and 10-C list the available turn-pocket storage lengths and summarize the 95th percentile back-of-queue lengths at the project driveway under existing, existing plus approved project, and build-out without project and plus project conditions. The queues for the signalized intersections have been reported from Synchro, while for unsignalized intersections, the SimTraffic queues have been reported since Synchro does not appropriately report queues at unsignalized intersections.

It also includes the recommended turn-pocket storage lengths at these intersections. The recommended turn pocket storage lengths have been calculated based on recommended lane geometry with improvements and availability of adequate right-of-way.

Tables 10-D, 10-E, and 10-F list the available turn-pocket storage lengths and summarize the 95th percentile back-of-queue lengths at the study area intersections under existing, existing plus approved project, and build-out conditions. As shown in Tables 10-D, 10-E, and 10-F, the expected queue length for the northbound left-turning movement at the intersection of Robertson Boulevard/15th Street may exceed the available turn-pocket storage lengths under build-out conditions. However, due to the proximity of an existing driveway relative to the intersection turn pocket, extending the storage length may not be feasible. Additionally, the project trips are expected to contribute only nominal queues at the study intersection turning movement. Furthermore, the northbound left-turn movement has a TWLT lane, which allows queueing capacity to extend beyond the striped turn pocket. The TWLTL effectively provides additional queue storage, reducing the potential for queue spill over. Therefore, no intersection turn pocket extensions are recommended.

Detailed queuing worksheets are included in Appendix E.

10.1 LIST OF CHAPTER 10.0 TABLES

- Table 10-A: Existing Queuing Analysis
- Table 10-B: Existing Plus Approved Project Queuing Analysis
- Table 10-C: Build-Out Queuing Analysis
- Table 10-D: Existing Plus Project with Improvements Queuing Analysis
- Table 10-E: Existing Plus Approved Project Plus Project with Improvements Queuing Analysis
- Table 10-F: Build-Out Plus Project with Improvements Queuing Analysis

Table 10-A - Existing Queuing Analysis

Intersection	Movement	Storage Length ¹ (ft/in)	Existing			
			Without Project ²		Plus Project ²	
			AM	PM	AM	PM
1 . Robertson Boulevard/11th Street	NBL	100	40	20	45	20
Signal	SBL	80	50	20	50	25
2 . Robertson Boulevard/15th Street	NBL	50	30	45	30	50
Signal	SBL	95	45	50	45	50
3 . Robertson Boulevard/Washington Road	NBL	60	10	30	15	25
TWSC	SBL	50	0	0	0	0
4 . Robertson Boulevard/Country Wood Shopping Center Driveway - Adams Drive	NBL	130	25	15	10	35
TWSC	SBL	385	15	35	0	30
	SBR	50	0	0	0	0
5 . Robertson Boulevard/Myer Drive - Anderson Pump Company Driveway	NBL	95	20	0	0	15
TWSC	SBL	100	10	0	0	0
	SBR	50	0	0	0	0
6 . Robertson Boulevard/Palm Parkway	SBL	100	35	30	25	35
OWSC						
8 . Robertson Boulevard/Road 15	SBL	75	--	--	15	35
OWSC						
10 . Project Driveway 1/Road 15	SBLR	100	--	--	45	35
OWSC						
11 . Project Driveway 2/Road 15	SBLR	100	--	--	40	40
OWSC						

Notes:

EB = Eastbound; WB = Westbound; NB = Northbound; SB = Southbound

L = Left; R = Right

Bold = Queue exceeds available storage.¹ Storage length for all movements obtained from Google Earth measurements and conceptual site plan.² All queues reported are 95th percentile queues. Queues for unsignalized intersections have been taken from SimTraffic.

Table 10-B - Existing Plus Approved Project (EPAP) Queuing Analysis

Intersection	Movement	Storage Length ¹ (ft/in)	Existing Plus Approved Project (EPAP)			
			Without Project ²		Plus Project ²	
			AM	PM	AM	PM
1 . Robertson Boulevard/11th Street	NBL	100	50	25	50	25
Signal	SBL	80	70	40	70	40
2 . Robertson Boulevard/15th Street	NBL	50	40	55	40	55
Signal	SBL	95	60	60	60	60
3 . Robertson Boulevard/Washington Road	NBL	60	15	40	20	40
TWSC	SBL	50	0	0	0	0
4 . Robertson Boulevard/Country Wood Shopping Center Driveway - Adams Drive	NBL	130	20	25	15	25
TWSC	SBL	385	20	30	15	25
	SBR	50	0	0	0	0
5 . Robertson Boulevard/Myer Drive - Anderson Pump Company Driveway	NBL	95	20	25	25	10
TWSC	SBL	100	0	0	0	0
	SBR	50	0	0	0	0
6 . Robertson Boulevard/Palm Parkway	SBL	100	20	50	40	40
OWSC						
8 . Robertson Boulevard/Road 15	SBL	75	--	--	30	40
OWSC						
10 . Project Driveway 1/Road 15	SBLR	100	--	--	45	40
OWSC						
11 . Project Driveway 2/Road 15	SBLR	100	--	--	40	40
OWSC						

Notes:

EB = Eastbound; WB = Westbound; NB = Northbound; SB = Southbound

L = Left; R = Right

Bold = Queue exceeds available storage.¹ Storage length for all movements obtained from Google Earth measurements and conceptual site plan.² All queues reported are 95th percentile queues. Queues for unsignalized intersections have been taken from SimTraffic.

Table 10-C - Build-Out Queueing Analysis

Intersection	Movement	Storage Length ¹ (ft/in)	Build-Out			
			Without Project ²		Plus Project ²	
			AM	PM	AM	PM
1 . Robertson Boulevard/11th Street	NBL	100	50	25	55	25
Signal	SBL	80	75	45	75	45
2 . Robertson Boulevard/15th Street	NBL	50	40	60	40	60
Signal	SBL	95	60	65	60	65
3 . Robertson Boulevard/Washington Road	NBL	60	25	35	15	35
TWSC	SBL	50	0	0	0	0
4 . Robertson Boulevard/Country Wood Shopping Center Driveway - Adams Drive	NBL	130	10	20	20	25
TWSC	SBL	385	30	35	20	45
	SBR	50	0	0	0	10
5 . Robertson Boulevard/Myer Drive - Anderson Pump Company Driveway	NBL	95	20	30	30	30
TWSC	SBL	100	10	0	0	0
	SBR	50	0	0	0	10
6 . Robertson Boulevard/Palm Parkway	SBL	100	35	40	35	40
OWSC						
8 . Robertson Boulevard/Road 15	SBL	75	--	--	25	35
OWSC						
10 . Project Driveway 1/Road 15	SBLR	100	--	--	40	40
OWSC						
11 . Project Driveway 2/Road 15	SBLR	100	--	--	40	30
OWSC						

Notes:

EB = Eastbound; WB = Westbound; NB = Northbound; SB = Southbound

L = Left; R = Right

Bold = Queue exceeds available storage.¹ Storage length for all movements obtained from Google Earth measurements and conceptual site plan.² All queues reported are 95th percentile queues. Queues for unsignalized intersections have been taken from SimTraffic.

Table 10-D - Existing Plus Project with Improvements Queuing Analysis

Intersection	Movement	Existing Storage Length ¹ (ft/ln)	Recommended Plus Project Storage Length (ft/ln)	Existing			
				Plus Project ²		Plus Project with Improvements ²	
				AM	PM	AM	PM
1 . Robertson Boulevard/11th Street	NBL	100	100	45	20	45	20
Signal	SBL	80	80	50	25	50	25
2 . Robertson Boulevard/15th Street	NBL	50	50	30	50	30	50
Signal	SBL	95	95	45	50	45	50
3 . Robertson Boulevard/Washington Road	NBL	60	60	15	25	20	45
Signal	SBL	50	50	0	0	0	0
4 . Robertson Boulevard/Country Wood Shopping Center Driveway - Adams Drive	NBL	130	130	10	35	20	25
TWSC	SBL	385	385	0	30	10	35
	SBR	50	50	0	0	0	10
5 . Robertson Boulevard/Myer Drive - Anderson Pump Company Driveway	NBL	95	95	0	15	10	20
TWSC	SBL	100	100	0	0	0	0
	SBR	50	50	0	0	0	0
6 . Robertson Boulevard/Palm Parkway	SBL	100	100	25	35	30	40
OWSC							
8 . Robertson Boulevard/Road 15	SBL	75	75	15	35	25	40
OWSC							
10 . Project Driveway 1/Road 15	SBLR	100	100	45	35	40	40
OWSC							
11 . Project Driveway 2/Road 15	SBLR	100	100	40	40	40	40
OWSC							

Notes:

EB = Eastbound; WB = Westbound; NB = Northbound; SB = Southbound

L = Left; R = Right

Bold = Queue exceeds available storage.¹ Storage length for all movements obtained from Google Earth measurements and conceptual site plan.² All queues reported are 95th percentile queues. Queues for unsignalized intersections have been taken from SimTraffic.

Table 10-E - Existing Plus Approved Project (EPAP) Plus Project with Improvements Queuing Analysis Queuing Analysis

Intersection	Movement	Existing Storage Length ¹ (ft/in)	Recommended Plus Project Storage Length (ft/in)	Existing Plus Approved Project (EPAP)			
				Plus Project ²		Plus Project with Improvements ²	
				AM	PM	AM	PM
1 . Robertson Boulevard/11th Street	NBL	100	100	50	25	50	25
Signal	SBL	80	80	70	40	70	40
2 . Robertson Boulevard/15th Street	NBL	50	50	40	55	40	55
Signal	SBL	95	95	60	60	60	60
3 . Robertson Boulevard/Washington Road	NBL	60	60	20	40	25	55
Signal	SBL	50	50	0	0	0	0
4 . Robertson Boulevard/Country Wood Shopping Center Driveway - Adams Drive	NBL	130	130	15	25	15	20
TWSC	SBL	385	385	15	25	15	25
	SBR	50	50	0	0	0	0
5 . Robertson Boulevard/Myer Drive - Anderson Pump Company Driveway	NBL	95	95	25	10	25	30
TWSC	SBL	100	100	0	0	0	0
	SBR	50	50	0	0	0	0
6 . Robertson Boulevard/Palm Parkway	SBL	100	100	40	40	30	40
OWSC							
8 . Robertson Boulevard/Road 15	SBL	75	75	30	40	25	40
OWSC							
10 . Project Driveway 1/Road 15	SBLR	100	100	45	40	45	45
OWSC							
11 . Project Driveway 2/Road 15	SBLR	100	100	40	40	45	45
OWSC							

Notes:

EB = Eastbound; WB = Westbound; NB = Northbound; SB = Southbound

L = Left; R = Right

Bold = Queue exceeds available storage.¹ Storage length for all movements obtained from Google Earth measurements and conceptual site plan.² All queues reported are 95th percentile queues. Queues for unsignalized intersections have been taken from SimTraffic.

Table 10-F - Build-Out Plus Project with Improvements Queuing Analysis

Intersection	Movement	Existing Storage Length ¹ (ft/ln)	Recommended Plus Project Storage Length (ft/ln)	Build-Out			
				Plus Project ²		Plus Project with Improvements ²	
				AM	PM	AM	PM
1 . Robertson Boulevard/11th Street	NBL	100	100	55	25	55	25
Signal	SBL	80	80	75	45	75	45
2 . Robertson Boulevard/15th Street	NBL	50	50	40	60	40	60
Signal	SBL	95	95	60	65	60	65
3 . Robertson Boulevard/Washington Road	NBL	60	60	15	35	25	55
Signal	SBL	50	50	0	0	0	0
4 . Robertson Boulevard/Country Wood Shopping Center Driveway - Adams Drive	NBL	130	130	20	25	30	25
TWSC	SBL	385	385	20	45	20	35
	SBR	50	50	0	10	0	0
5 . Robertson Boulevard/Myer Drive - Anderson Pump Company Driveway	NBL	95	95	30	30	30	35
TWSC	SBL	100	100	0	0	0	0
	SBR	50	50	0	10	0	10
6 . Robertson Boulevard/Palm Parkway	SBL	100	100	35	40	40	45
OWSC							
8 . Robertson Boulevard/Road 15	SBL	75	75	25	35	25	55
OWSC							
10 . Project Driveway 1/Road 15	SBLR	100	100	40	40	45	40
OWSC							
11 . Project Driveway 2/Road 15	SBLR	100	100	40	30	45	40
OWSC							

Notes:

EB = Eastbound; WB = Westbound; NB = Northbound; SB = Southbound

L = Left; R = Right

Bold = Queue exceeds available storage.¹ Storage length for all movements obtained from Google Earth measurements and conceptual site plan.² All queues reported are 95th percentile queues. Queues for unsignalized intersections have been taken from SimTraffic.

11.0 SUMMARY AND CONCLUSIONS

The proposed project would construct 34 attached single-family residential units at the northeast portion of the project site and a maximum of 160 multi-family residential units at the central and western sections of the project site. Access to the site will be provided via three driveways, two along Road 15 and one connection to the existing Palm Parkway. The proposed project would generate 1,323 daily trips, including 80 a.m. peak-hour trips and 101 p.m. peak-hour trips.

11.1 EXISTING CONDITIONS SUMMARY

Ten study intersections operate at a satisfactory LOS under existing and existing plus project conditions. One study intersection (Robertson Boulevard/Washington Road) operates at a deficient LOS under existing and existing plus project conditions.

11.2 EXISTING PLUS APPROVED PROJECT (EPAP) CONDITIONS SUMMARY

Ten study intersections are forecast to operate at a satisfactory LOS under existing plus approved project and existing plus approved project plus project conditions. One study intersection (Robertson Boulevard/Washington Road) is forecast to operate at a deficient LOS under existing plus approved project and existing plus approved project plus project conditions. This intersection meets signal warrant requirements under existing plus approved project and existing plus approved project plus project conditions.

11.3 BUILD-OUT CONDITIONS SUMMARY

Ten study intersections are forecast to operate at a satisfactory LOS under build-out and build-out plus project conditions. One study intersection (Robertson Boulevard/Washington Road) is forecast to operate at a deficient LOS under build-out and build-out plus project conditions. This intersection meets signal warrant requirements under build-out and build-out plus project conditions.

11.4 IMPROVEMENTS SUMMARY

Based on the improvements discussed in Section 9.1 “Recommended Improvements” of this report, the recommended improvement for the intersection of Robertson Boulevard/Washington Road is to convert the existing two-way stop control (TWSC) to a traffic signal. The recommended circulation improvement is covered by the City’s DIF program.

11.5 QUEUING ANALYSIS SUMMARY

The recommended turn pocket storage lengths at the study intersections are based on the availability of right-of-way and the 95th percentile back-of-queue lengths. For the intersection of Robertson Boulevard/15th Street, queues may exceed the available northbound left-turn pocket storage length under build-out conditions. Due to the proximity of an existing driveway relative to the intersection turn pocket, extending the storage length may not be feasible. The northbound left-turn movement has a TWLT lane, which provides additional queuing capacity beyond the striped turn pocket. As such, the TWLT lane effectively provides additional queue storage, reducing the potential for queue spill over. Therefore, no intersection turn pocket extensions are recommended.

APPENDIX A

SCOPING AGREEMENT



CARLSBAD
CLOVIS
IRVINE
LOS ANGELES
PALM SPRINGS
POINT RICHMOND
RIVERSIDE
ROSEVILLE
SAN LUIS OBISPO

October 12, 2023

Mark E. Hamilton, AICP
Director of Community and Economic
Development
City of Chowchilla, Planning Department
130 S 2nd Street
Chowchilla, CA 93610

Subject: Chowchilla Residential Development Project Traffic Impact Study (TIS) Scoping
Agreement (LSA Project No. 20231491)

Dear Mr. Hamilton:

LSA will be preparing a Traffic Impact Study (TIS) for the proposed Chowchilla Residential Development Project (project) within an unincorporated area of Madera County (County) and proposed to be annexed in the City of Chowchilla (City). The 18.24-acre project site is bounded by residential developments to the north, Road 15 to the south, a dairy farm to the east, and Robertson Boulevard to the west. Figure 1 (all figures and table attached) illustrates the regional and project location.

The proposed project includes the demolition of an existing warehouse on the southwest corner of the site and the construction of two types of housing. The proposed project would construct 34 attached single-family residential units at the northeast portion of the project site and 160 multifamily residential units at the central and western sections of the project site. The multifamily component of the proposed project would be developed in two phases. Figure 2 illustrates the conceptual site plan.

Access to the project would be provided via three driveways, two along Road 15 and one connecting to the existing Palm Parkway. The current land use designation of the project site is High Density Residential (HDR) and zoned as Residential, Rural, Single-Family District (RRS). The project will require a general plan amendment (GPA) and annexation to the City.

LSA anticipates that the following scope of work will be required to prepare the TIS for the proposed project.

LOS ANALYSIS SCOPE OF WORK

The TIS will include an LOS analysis to determine whether the proposed project will result in any potential operational deficiency. As such, the following tasks will be conducted for the project.

Study Area Intersections

Based on our preliminary understanding of the project, anticipated project trip generation, and recommendation from the city staff, the following intersections are being proposed for the LOS analysis:

1. Roberston Boulevard/11th Street (California Department of Transportation [Caltrans])
2. Roberston Boulevard/15th Street (Caltrans)
3. Roberston Boulevard/Washington Road (Caltrans)
4. Roberston Boulevard/Adams Drive (Caltrans)
5. Roberston Boulevard/Myer Drive (Caltrans)
6. Roberston Boulevard/Palm Parkway (Caltrans)
7. Roberston Boulevard/Avenue 24 1/2 (Caltrans)
8. Roberston Boulevard/Road 15 (Caltrans)
9. Road 15/Avenue 24 (County)
10. Project Driveway 1/Road 15 (City/County)
11. Project Driveway 2/Road 15 (City/County)

Figure 3 illustrates the study area intersections.

Intersection traffic operations will be analyzed for the weekday a.m. and p.m. peak hours. The a.m. peak hour is defined as the one hour of highest traffic volumes occurring between 7:00 and 9:00 a.m., while the p.m. peak hour is defined as the one hour of highest traffic volumes occurring between 4:00 and 6:00 p.m. Intersection LOS will be calculated using the *Highway Capacity Manual 7th Edition* (HCM 7) analysis methodologies and the Synchro 12 software.

Analysis Scenarios

Since the proposed project constitutes a GPA, the a.m. and p.m. peak-hour traffic operations at the study area intersections will be analyzed for the following scenarios:

- Existing Conditions
- Existing Plus Project Traffic Conditions
- Existing Plus Approved Project (EPAP) Conditions
- EPAP Plus Project Traffic Conditions
- Build-Out Conditions
- Build-Out Plus Project Traffic Conditions

Project Trip Generation

As previously stated, the proposed project includes single family attached and multifamily residential units. The trip generation for the proposed project was developed using the following rates from the Institute of Transportation Engineers (ITE) *Trip Generation Manual* (11th Edition):

- Land Use 215 – “Single-Family Attached Housing”
- Land Use 220 - “Land Use Code 220 - Multifamily Housing (Low Rise)”

Table A summarizes the project trip generation. As shown in Table A, the project is estimated to generate 1,323 net daily trips, including 80 trips during the a.m. peak hour and 101 trips during the p.m. peak hour.

Trip distribution patterns were developed based on the location of the proposed project in relation to surrounding land uses and the roadway network. Figure 4 illustrates the project trip distribution.

The project trip assignment at the study area intersections is the product of the project trip generation and the corresponding trip distribution percentages. Figure 5 depicts the project trip assignment at the study area intersections.

Volume Development and Analysis Methodology

Traffic volumes for existing conditions will be based on existing traffic count data collected at the study area intersections. Traffic volumes for EPAP conditions will be developed by adding trips from approved and pending projects within the vicinity of the proposed project that are estimated to contribute traffic within the study area. Build-out condition traffic volumes will be developed using the growth forecasts from the Madera County Transportation Commission (MCTC) Travel Demand Model (MCTDM).

Traffic volumes for existing, EPAP, and build-out plus project conditions will be developed by adding project traffic to the respective without project scenario traffic volumes.

As previously stated, the TIS will analyze study area intersections during the a.m. and p.m. peak hours. Intersection LOS will be calculated using the HCM 7 analysis methodologies and the Synchro 12 software.

Analysis of Traffic Operations and Recommended Circulation Improvements

LOS without the project will be compared to LOS with the project for all analysis scenarios to determine potential project-related operational deficiencies. Improvements will be recommended for locations operating at an unsatisfactory LOS or where the project would result in any operational deficiencies. Improvements may include addition of intersection turn lanes and signalization. The LOS with improvements will be calculated and summarized along with a comparison to the LOS without improvements.

Signal Warrant Analysis

A signal warrant analysis will be conducted for unsignalized intersections where a signal is recommended as a mitigation measure. Peak-hour approach volumes for the study area intersections will be examined to determine whether signalization may be warranted per the criteria defined in the most recent California supplement of the *Manual on Uniform Traffic Control Devices* (CA-MUTCD).

Intersection Queuing Analysis

As recommended by Caltrans, an intersection queuing analysis will be performed at all study intersections. Queues for signalized intersections will be obtained from Synchro, while queues for unsignalized intersections will be obtained from SimTraffic.

CEQA VMT ANALYSIS SCOPE OF WORK

The City follows the *Draft City of Chowchilla CEQA Transportation Impact Study Guidelines*, dated July 2021 (VMT Guidelines), for CEQA VMT Analysis. Therefore, the VMT analysis will be based on the recommended methodology and significant threshold criteria included in the VMT Guidelines. Based on its type, size, location, and estimated trip generation, the proposed project is not screened

out, and a detailed VMT analysis is required. LSA will utilize the MCTDM to determine project VMT per capita and compare it with the appropriate threshold to determine if the proposed project will have a significant VMT impact.

If you have any questions, please do not hesitate to contact me at (949) 553-0666 or email me at Dean.Arizabal@lsa.net.

Sincerely,

LSA Associates, Inc.



Dean Arizabal
Principal

Attachment A: Figures and Table
Figure 1 – Regional and Project Location
Figure 2 – Conceptual Site Plan
Figure 3 – Study Area Intersections
Figure 4 – Project Trip Distribution
Figure 5 – Project Trip Assignment
Table A – Project Trip Generation

ATTACHMENT A

FIGURES AND TABLE



FIGURE 1

LSA

LEGEND

 Project Location



0 950 1900 2850
FEET

SOURCE: Google Earth, 2020; ESRI Streetmap, 2021.

P:\20231491 Chowchilla Residential Project\PRODUCTS\Transportation\graphics\Report\fig1_RegProjLoc\fig1_RegProjLoc.aprx (07/07/2023)

Chowchilla Residential Development Project
Traffic Impact Study
Regional and Project Location

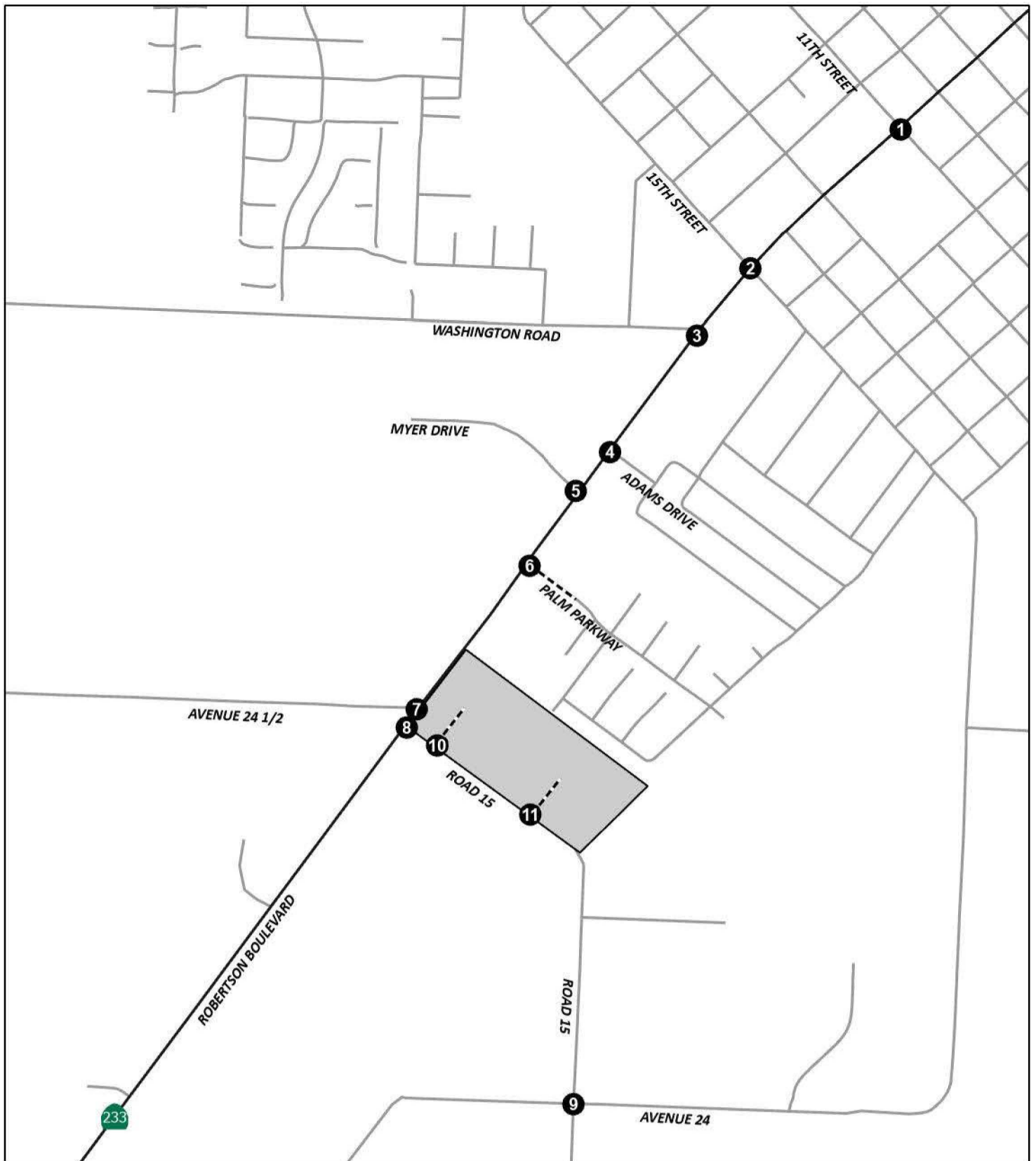


FIGURE 3

LSA

LEGEND

- Project Location
- Study Intersection
- Project Driveway

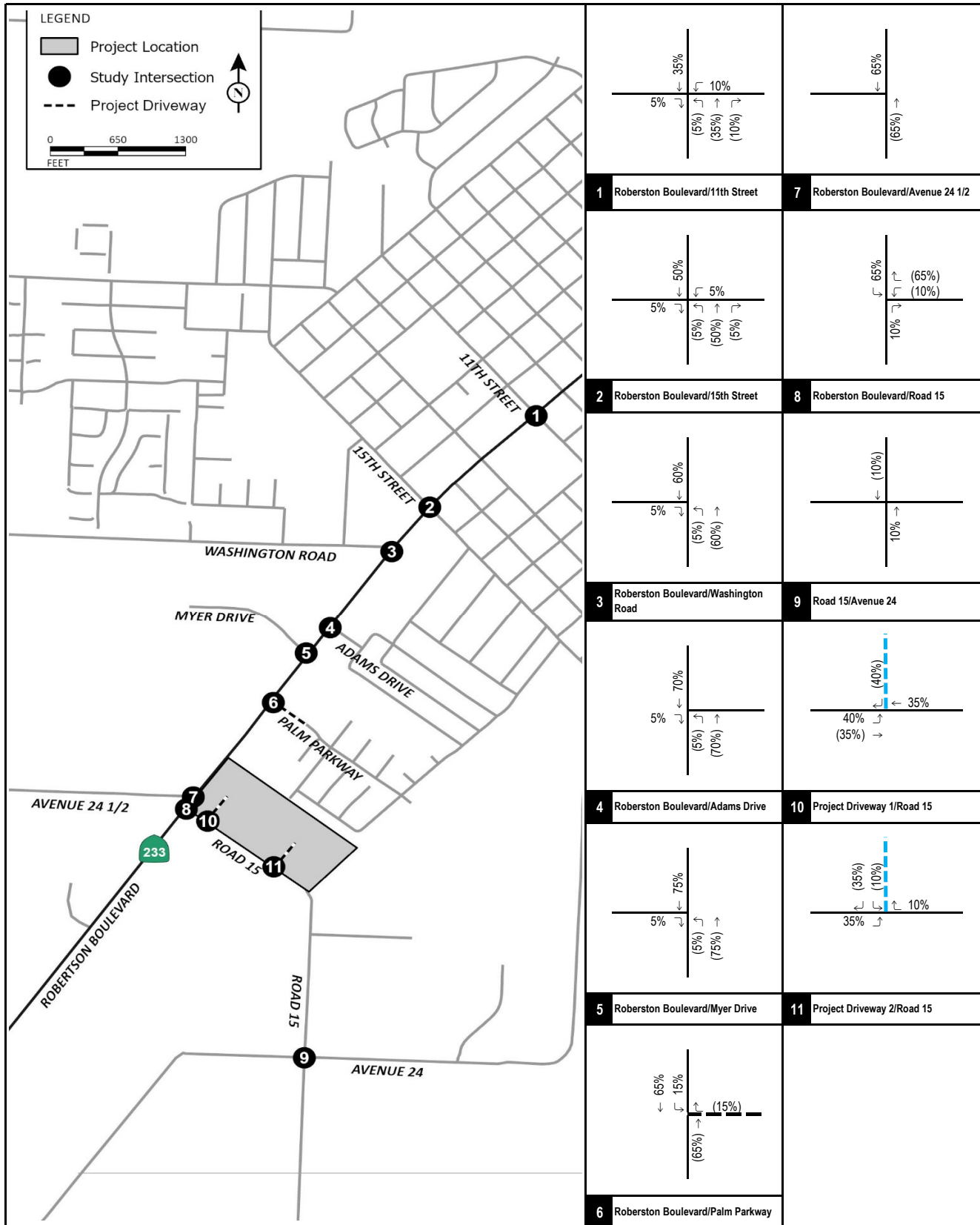


0 460 920
FEET

SOURCE: ESRI Streetmap, 2021

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Chowchilla Residential Development Project
Traffic Impact Study
Study Area Intersections



LSA

FIGURE 4

XX% (YY%)
Inbound (Outbound) Trip Distribution
--- Project Driveway
--- Future Segment

Chowchilla Residential Development Project
Traffic Impact Study
Project Trip Distribution

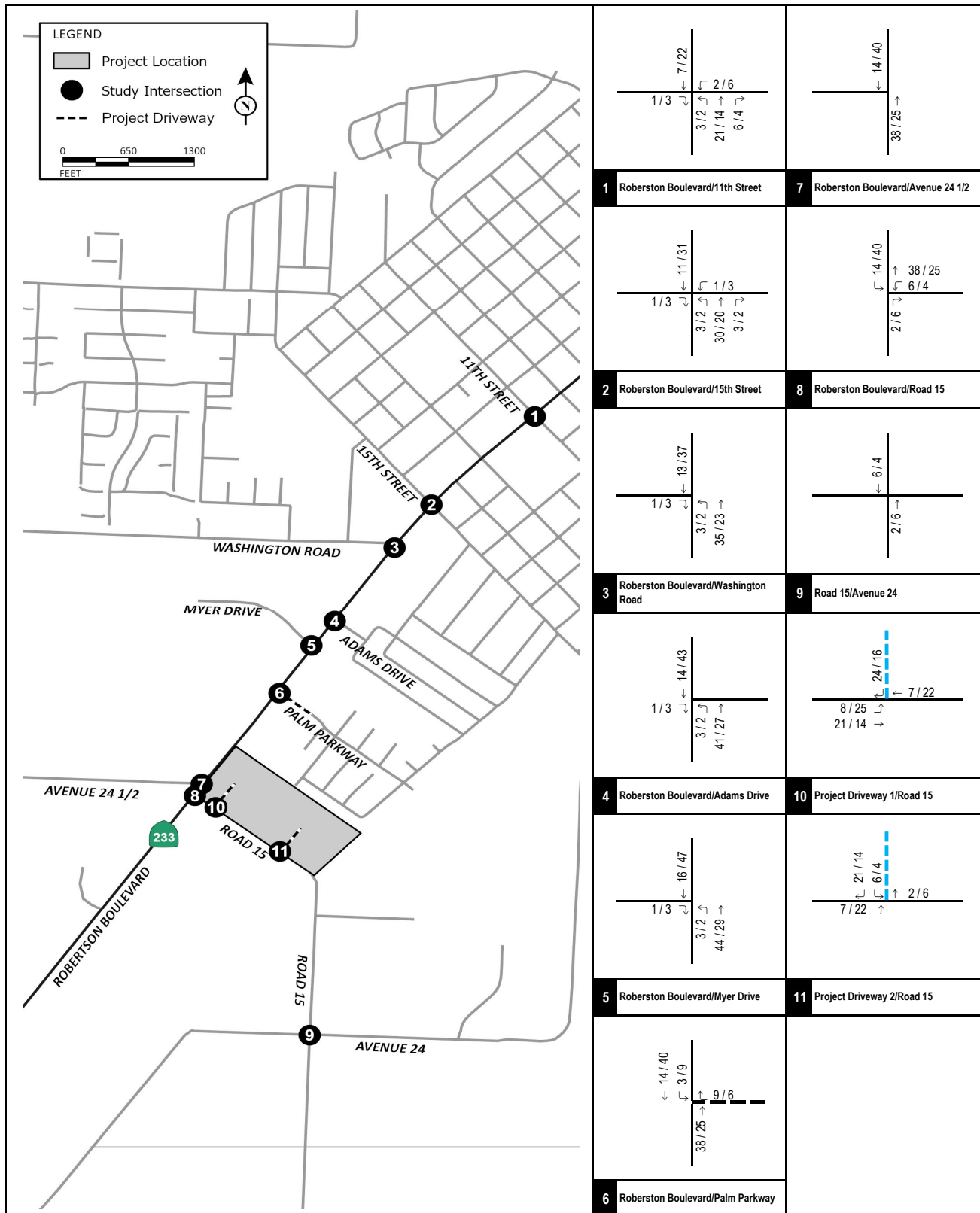


FIGURE 5

LSA

XX / YY

AM / PM Peak Hour Traffic Volumes

--- Project Driveway

--- Future Segment

Chowchilla Residential Development Project
Traffic Impact Study
Project Trip Assignment

Table A: Project Trip Generation

Land Use	Size	Unit	Daily	AM Peak Hour			PM Peak Hour		
				In	Out	Total	In	Out	Total
Trip Rates ¹									
Multifamily Low-Rise		du	6.74	0.10	0.30	0.40	0.32	0.19	0.51
Single-Family Attached		du	7.20	0.15	0.33	0.48	0.32	0.25	0.57
Project Trip Generation									
Multifamily Low-Rise	160	du	1,078	16	48	64	51	30	81
Single-Family Attached	34	du	245	5	11	16	11	9	20
Total			1,323	21	59	80	62	39	101

¹ Trip rates from the Institute of Transportation Engineers (ITE) *Trip Generation* Manual, 11th Edition (2021).

Land Use Code 220 - Multifamily Housing (Low Rise) - 2 or 3 Levels

Land Use Code 215 - Single-Family Attached Housing

du = dwelling unit

APPENDIX B

TRAFFIC COUNT AND SIGNAL TIMING SHEETS

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Chowchilla
N/S: 11th Street
E/W: W Robertson Boulevard
Weather: Clear

File Name : 01_CHA_11th_Rob AM
Site Code : 00323913
Start Date : 10/4/2023
Page No : 1

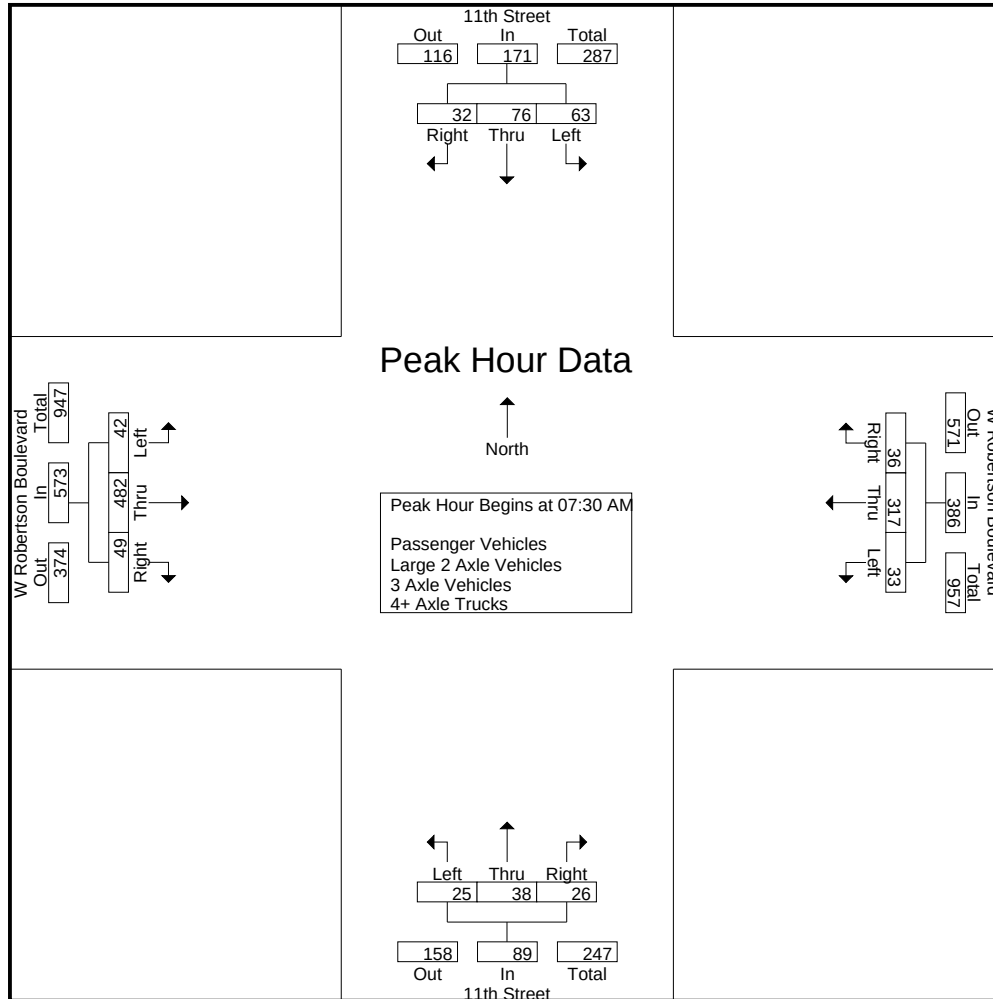
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	11th Street Southbound				W Robertson Boulevard Westbound				11th Street Northbound				W Robertson Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	4	0	1	5	0	47	8	55	1	1	0	2	3	48	2	53	115
07:15 AM	7	3	7	17	4	40	6	50	2	6	2	10	5	75	5	85	162
07:30 AM	17	32	9	58	7	70	16	93	4	12	3	19	11	121	6	138	308
07:45 AM	29	36	5	70	15	97	9	121	15	16	11	42	13	149	25	187	420
Total	57	71	22	150	26	254	39	319	22	35	16	73	32	393	38	463	1005
08:00 AM	10	7	11	28	11	74	7	92	3	8	11	22	16	107	11	134	276
08:15 AM	7	1	7	15	0	76	4	80	3	2	1	6	2	105	7	114	215
08:30 AM	4	2	5	11	3	69	2	74	1	3	0	4	4	78	1	83	172
08:45 AM	2	2	8	12	0	62	1	63	4	3	6	13	1	64	5	70	158
Total	23	12	31	66	14	281	14	309	11	16	18	45	23	354	24	401	821
Grand Total	80	83	53	216	40	535	53	628	33	51	34	118	55	747	62	864	1826
Apprch %	37	38.4	24.5		6.4	85.2	8.4		28	43.2	28.8		6.4	86.5	7.2		
Total %	4.4	4.5	2.9	11.8	2.2	29.3	2.9	34.4	1.8	2.8	1.9	6.5	3	40.9	3.4	47.3	
Passenger Vehicles	77	82	53	212	39	498	53	590	32	50	34	116	55	724	62	841	1759
% Passenger Vehicles	96.2	98.8	100	98.1	97.5	93.1	100	93.9	97	98	100	98.3	100	96.9	100	97.3	96.3
Large 2 Axle Vehicles	3	0	0	3	1	21	0	22	0	1	0	1	0	17	0	17	43
% Large 2 Axle Vehicles	3.8	0	0	1.4	2.5	3.9	0	3.5	0	2	0	0.8	0	2.3	0	2	2.4
3 Axle Vehicles	0	1	0	1	0	3	0	3	1	0	0	1	0	3	0	3	8
% 3 Axle Vehicles	0	1.2	0	0.5	0	0.6	0	0.5	3	0	0	0.8	0	0.4	0	0.3	0.4
4+ Axle Trucks	0	0	0	0	0	13	0	13	0	0	0	0	0	3	0	3	16
% 4+ Axle Trucks	0	0	0	0	0	2.4	0	2.1	0	0	0	0	0	0.4	0	0.3	0.9

	11th Street Southbound				W Robertson Boulevard Westbound				11th Street Northbound				W Robertson Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	17	32	9	58	7	70	16	93	4	12	3	19	11	121	6	138	308
07:45 AM	29	36	5	70	15	97	9	121	15	16	11	42	13	149	25	187	420
08:00 AM	10	7	11	28	11	74	7	92	3	8	11	22	16	107	11	134	276
08:15 AM	7	1	7	15	0	76	4	80	3	2	1	6	2	105	7	114	215
Total Volume	63	76	32	171	33	317	36	386	25	38	26	89	42	482	49	573	1219
% App. Total	36.8	44.4	18.7		8.5	82.1	9.3		28.1	42.7	29.2		7.3	84.1	8.6		
PHF	.543	.528	.727	.611	.550	.817	.563	.798	.417	.594	.591	.530	.656	.809	.490	.766	.726

City of Chowchilla
N/S: 11th Street
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Weather: Clear

File Name : 01_CHA_11th_Rob AM
Site Code : 00323913
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Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:30 AM				07:15 AM				07:30 AM			
+0 mins.	7	3	7	17	7	70	16	93	2	6	2	10	11	121	6	138
+15 mins.	17	32	9	58	15	97	9	121	4	12	3	19	13	149	25	187
+30 mins.	29	36	5	70	11	74	7	92	15	16	11	42	16	107	11	134
+45 mins.	10	7	11	28	0	76	4	80	3	8	11	22	2	105	7	114
Total Volume	63	78	32	173	33	317	36	386	24	42	27	93	42	482	49	573
% App. Total	36.4	45.1	18.5		8.5	82.1	9.3		25.8	45.2	29		7.3	84.1	8.6	
PHF	.543	.542	.727	.618	.550	.817	.563	.798	.400	.656	.614	.554	.656	.809	.490	.766

Counts Unlimited, Inc.
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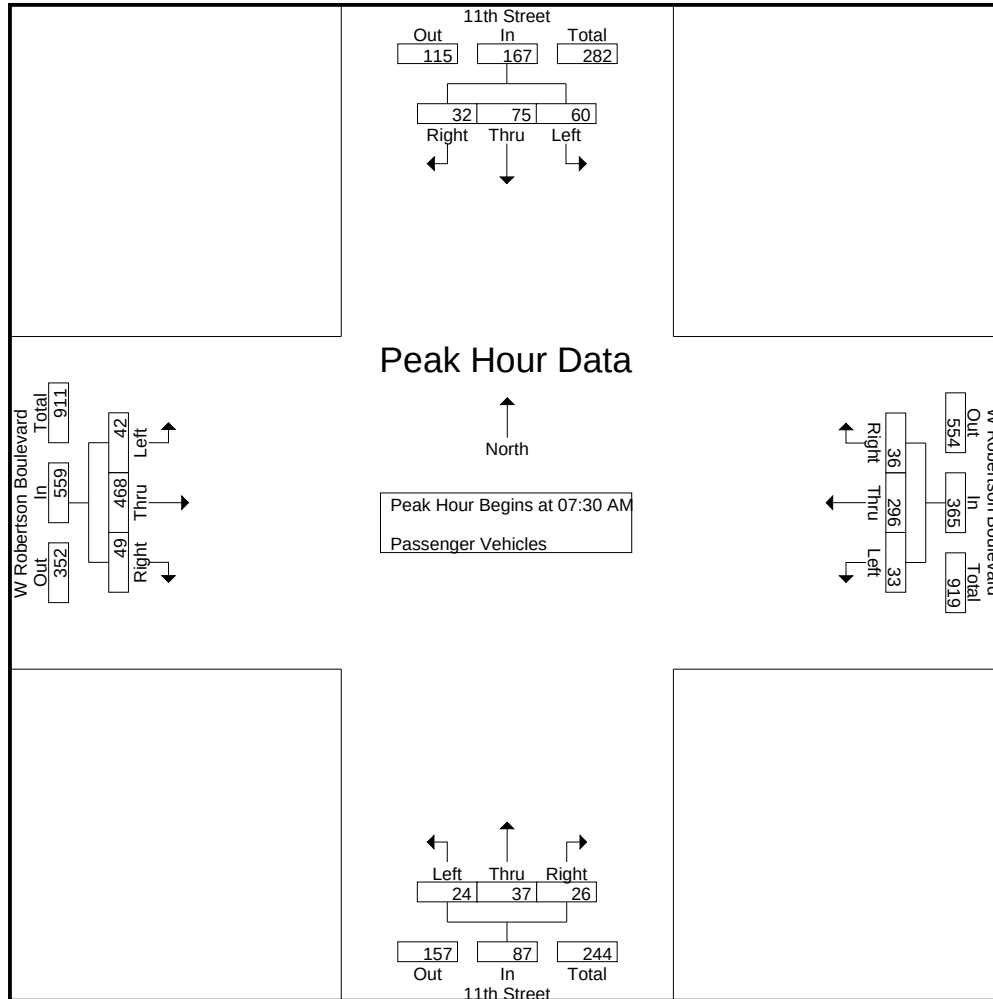
Groups Printed- Passenger Vehicles

	11th Street Southbound				W Robertson Boulevard Westbound				11th Street Northbound				W Robertson Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	4	0	1	5	0	45	8	53	1	1	0	2	3	45	2	50	110
07:15 AM	7	3	7	17	3	37	6	46	2	6	2	10	5	72	5	82	155
07:30 AM	17	32	9	58	7	63	16	86	4	12	3	19	11	115	6	132	295
07:45 AM	26	36	5	67	15	92	9	116	15	16	11	42	13	143	25	181	406
Total	54	71	22	147	25	237	39	301	22	35	16	73	32	375	38	445	966
08:00 AM	10	6	11	27	11	71	7	89	2	7	11	20	16	107	11	134	270
08:15 AM	7	1	7	15	0	70	4	74	3	2	1	6	2	103	7	112	207
08:30 AM	4	2	5	11	3	61	2	66	1	3	0	4	4	78	1	83	164
08:45 AM	2	2	8	12	0	59	1	60	4	3	6	13	1	61	5	67	152
Total	23	11	31	65	14	261	14	289	10	15	18	43	23	349	24	396	793
Grand Total	77	82	53	212	39	498	53	590	32	50	34	116	55	724	62	841	1759
Apprch %	36.3	38.7	25		6.6	84.4	9		27.6	43.1	29.3		6.5	86.1	7.4		
Total %	4.4	4.7	3	12.1	2.2	28.3	3	33.5	1.8	2.8	1.9	6.6	3.1	41.2	3.5	47.8	

	11th Street Southbound				W Robertson Boulevard Westbound				11th Street Northbound				W Robertson Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	17	32	9	58	7	63	16	86	4	12	3	19	11	115	6	132	295
07:45 AM	26	36	5	67	15	92	9	116	15	16	11	42	13	143	25	181	406
08:00 AM	10	6	11	27	11	71	7	89	2	7	11	20	16	107	11	134	270
08:15 AM	7	1	7	15	0	70	4	74	3	2	1	6	2	103	7	112	207
Total Volume	60	75	32	167	33	296	36	365	24	37	26	87	42	468	49	559	1178
% App. Total	35.9	44.9	19.2		9	81.1	9.9		27.6	42.5	29.9		7.5	83.7	8.8		
PHF	.577	.521	.727	.623	.550	.804	.563	.787	.400	.578	.591	.518	.656	.818	.490	.772	.725

City of Chowchilla
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Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	17	32	9	58	7	63	16	86	4	12	3	19	11	115	6	132
+15 mins.	26	36	5	67	15	92	9	116	15	16	11	42	13	143	25	181
+30 mins.	10	6	11	27	11	71	7	89	2	7	11	20	16	107	11	134
+45 mins.	7	1	7	15	0	70	4	74	3	2	1	6	2	103	7	112
Total Volume	60	75	32	167	33	296	36	365	24	37	26	87	42	468	49	559
% App. Total	35.9	44.9	19.2		9	81.1	9.9		27.6	42.5	29.9		7.5	83.7	8.8	
PHF	.577	.521	.727	.623	.550	.804	.563	.787	.400	.578	.591	.518	.656	.818	.490	.772

City of Chowchilla
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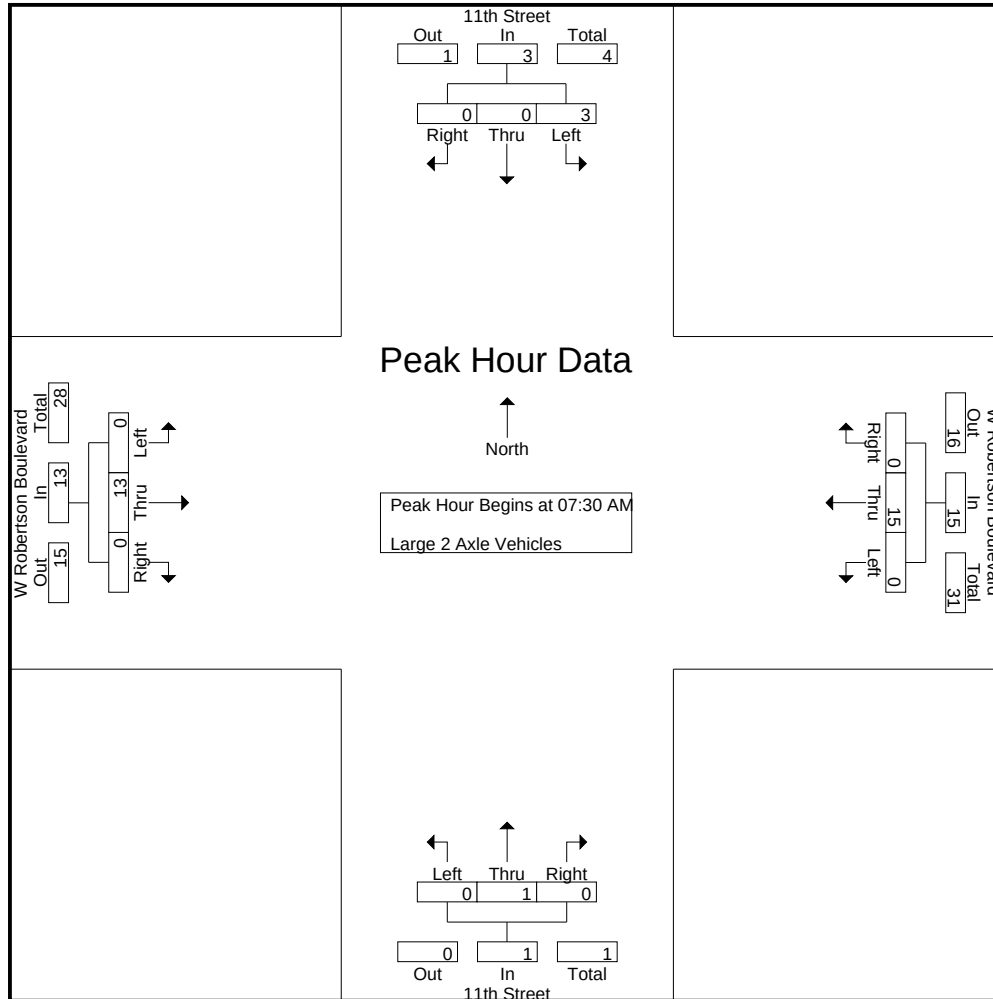
Groups Printed- Large 2 Axle Vehicles

	11th Street Southbound				W Robertson Boulevard Westbound				11th Street Northbound				W Robertson Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
07:15 AM	0	0	0	0	1	0	0	1	0	0	0	0	0	2	0	2	3
07:30 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	6	0	6	10
07:45 AM	3	0	0	3	0	4	0	4	0	0	0	0	0	5	0	5	12
Total	3	0	0	3	1	9	0	10	0	0	0	0	0	14	0	14	27
08:00 AM	0	0	0	0	0	1	0	1	0	1	0	1	0	0	0	0	2
08:15 AM	0	0	0	0	0	6	0	6	0	0	0	0	0	2	0	2	8
08:30 AM	0	0	0	0	0	5	0	5	0	0	0	0	0	0	0	0	5
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	12	0	12	0	1	0	1	0	3	0	3	16
Grand Total	3	0	0	3	1	21	0	22	0	1	0	1	0	17	0	17	43
Apprch %	100	0	0		4.5	95.5	0		0	100	0		0	100	0		
Total %	7	0	0	7	2.3	48.8	0	51.2	0	2.3	0	2.3	0	39.5	0	39.5	

	11th Street Southbound				W Robertson Boulevard Westbound				11th Street Northbound				W Robertson Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	0	4	0	4	0	0	0	0	0	6	0	6	10
07:45 AM	3	0	0	3	0	4	0	4	0	0	0	0	0	5	0	5	12
08:00 AM	0	0	0	0	0	1	0	1	0	1	0	1	0	0	0	0	2
08:15 AM	0	0	0	0	0	6	0	6	0	0	0	0	0	2	0	2	8
Total Volume	3	0	0	3	0	15	0	15	0	1	0	1	0	13	0	13	32
% App. Total	100	0	0		0	100	0		0	100	0		0	100	0		
PHF	.250	.000	.000	.250	.000	.625	.000	.625	.000	.250	.000	.250	.000	.542	.000	.542	.667

City of Chowchilla
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Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	0	0	0	0	4	0	4	0	0	0	0	0	6	0	6
+15 mins.	3	0	0	3	0	4	0	4	0	0	0	0	0	5	0	5
+30 mins.	0	0	0	0	0	1	0	1	0	1	0	1	0	0	0	0
+45 mins.	0	0	0	0	0	6	0	6	0	0	0	0	0	2	0	2
Total Volume	3	0	0	3	0	15	0	15	0	1	0	1	0	13	0	13
% App. Total	100	0	0		0	100	0		0	100	0		0	100	0	
PHF	.250	.000	.000	.250	.000	.625	.000	.625	.000	.250	.000	.250	.000	.542	.000	.542

City of Chowchilla
N/S: 11th Street
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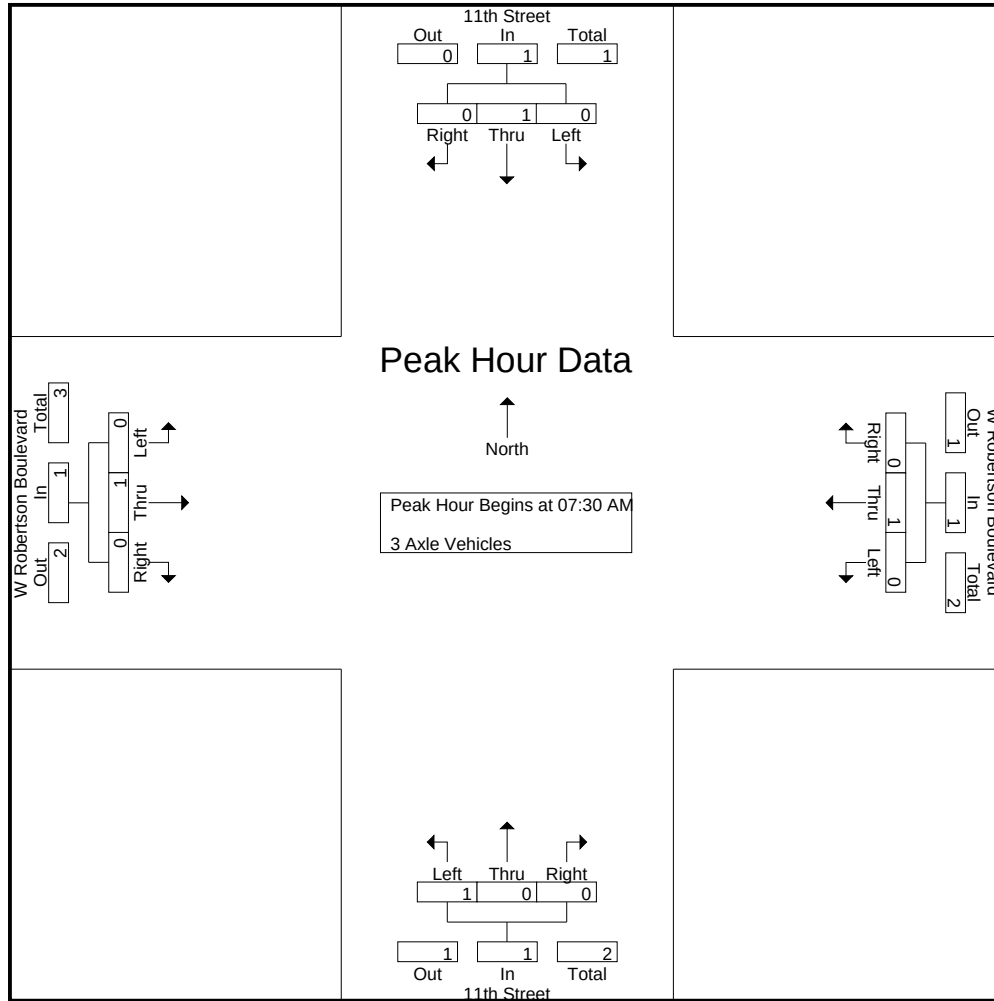
Groups Printed- 3 Axle Vehicles

	11th Street Southbound				W Robertson Boulevard Westbound				11th Street Northbound				W Robertson Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
07:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
Total	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
08:00 AM	0	1	0	1	0	0	0	0	1	0	0	1	0	0	0	0	2
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
08:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
Total	0	1	0	1	0	2	0	2	1	0	0	1	0	1	0	1	5
Grand Total	0	1	0	1	0	3	0	3	1	0	0	1	0	3	0	3	8
Apprch %	0	100	0		0	100	0		100	0	0		0	100	0		
Total %	0	12.5	0	12.5	0	37.5	0	37.5	12.5	0	0	12.5	0	37.5	0	37.5	

	11th Street Southbound				W Robertson Boulevard Westbound				11th Street Northbound				W Robertson Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
08:00 AM	0	1	0	1	0	0	0	0	1	0	0	1	0	0	0	0	2
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	0	1	0	1	0	1	1	0	0	1	0	1	0	1	4
% App. Total	0	100	0		0	100	0		100	0	0		0	100	0		
PHF	.000	.250	.000	.250	.000	.250	.000	.250	.250	.000	.000	.250	.000	.250	.000	.250	.500

City of Chowchilla
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Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
+30 mins.	0	1	0	1	0	0	0	0	1	0	0	1	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	0	1	0	1	0	1	1	0	0	1	0	1	0	1
% App. Total	0	100	0		0	100	0		100	0	0		0	100	0	
PHF	.000	.250	.000	.250	.000	.250	.000	.250	.250	.000	.000	.250	.000	.250	.000	.250

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City of Chowchilla
N/S: 11th Street
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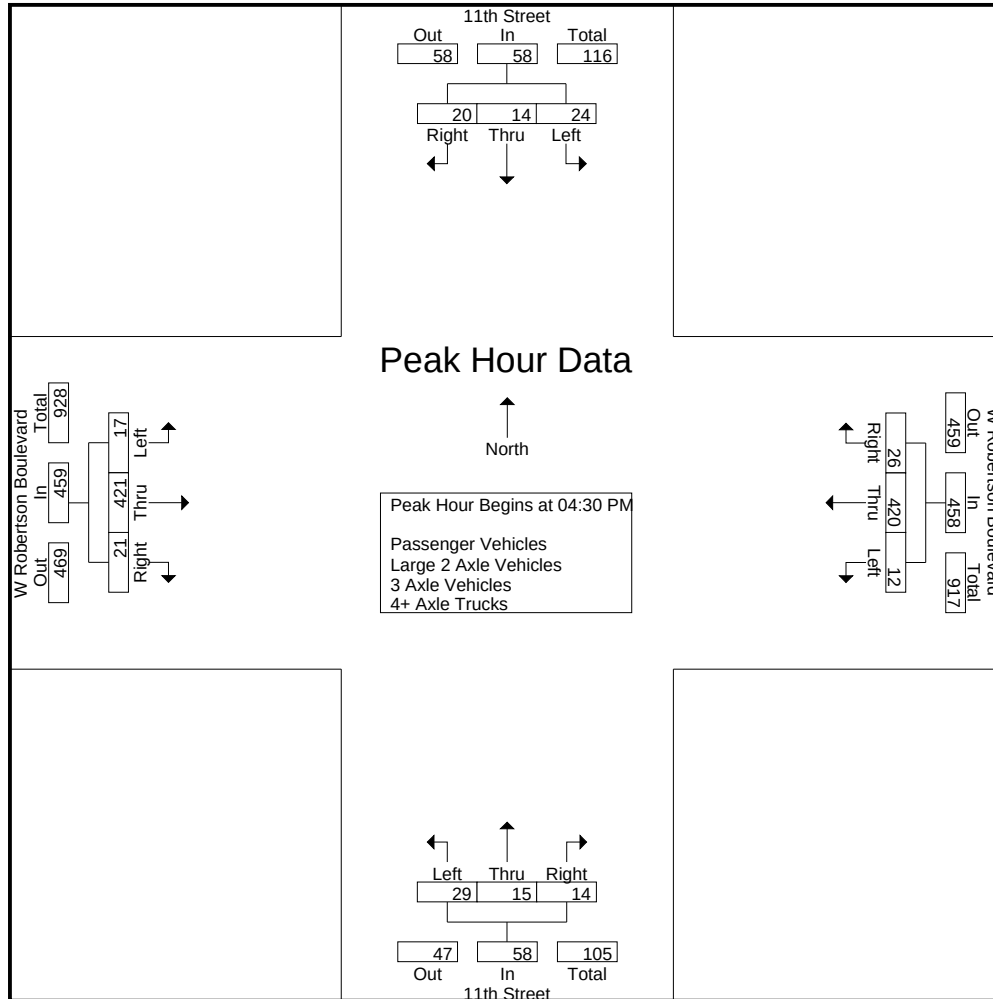
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	11th Street Southbound				W Robertson Boulevard Westbound				11th Street Northbound				W Robertson Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	6	1	7	14	1	114	6	121	3	1	6	10	2	118	1	121	266
04:15 PM	7	3	6	16	2	100	10	112	3	2	3	8	3	92	1	96	232
04:30 PM	8	5	4	17	4	112	5	121	2	3	2	7	6	111	8	125	270
04:45 PM	5	2	4	11	3	100	6	109	6	4	4	14	3	104	5	112	246
Total	26	11	21	58	10	426	27	463	14	10	15	39	14	425	15	454	1014
05:00 PM	8	6	4	18	1	114	7	122	11	6	5	22	4	86	6	96	258
05:15 PM	3	1	8	12	4	94	8	106	10	2	3	15	4	120	2	126	259
05:30 PM	8	3	5	16	3	111	5	119	8	3	2	13	4	103	6	113	261
05:45 PM	2	9	3	14	6	94	6	106	11	4	2	17	3	102	12	117	254
Total	21	19	20	60	14	413	26	453	40	15	12	67	15	411	26	452	1032
Grand Total	47	30	41	118	24	839	53	916	54	25	27	106	29	836	41	906	2046
Apprch %	39.8	25.4	34.7		2.6	91.6	5.8		50.9	23.6	25.5		3.2	92.3	4.5		
Total %	2.3	1.5	2	5.8	1.2	41	2.6	44.8	2.6	1.2	1.3	5.2	1.4	40.9	2	44.3	
Passenger Vehicles	47	30	40	117	24	814	53	891	54	25	27	106	29	823	40	892	2006
% Passenger Vehicles	100	100	97.6	99.2	100	97	100	97.3	100	100	100	100	100	98.4	97.6	98.5	98
Large 2 Axle Vehicles	0	0	1	1	0	9	0	9	0	0	0	0	0	6	1	7	17
% Large 2 Axle Vehicles	0	0	2.4	0.8	0	1.1	0	1	0	0	0	0	0	0.7	2.4	0.8	0.8
3 Axle Vehicles	0	0	0	0	0	3	0	3	0	0	0	0	0	3	0	3	6
% 3 Axle Vehicles	0	0	0	0	0	0.4	0	0.3	0	0	0	0	0	0.4	0	0.3	0.3
4+ Axle Trucks	0	0	0	0	0	13	0	13	0	0	0	0	0	4	0	4	17
% 4+ Axle Trucks	0	0	0	0	0	1.5	0	1.4	0	0	0	0	0	0.5	0	0.4	0.8

	11th Street Southbound				W Robertson Boulevard Westbound				11th Street Northbound				W Robertson Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	8	5	4	17	4	112	5	121	2	3	2	7	6	111	8	125	270
04:45 PM	5	2	4	11	3	100	6	109	6	4	4	14	3	104	5	112	246
05:00 PM	8	6	4	18	1	114	7	122	11	6	5	22	4	86	6	96	258
05:15 PM	3	1	8	12	4	94	8	106	10	2	3	15	4	120	2	126	259
Total Volume	24	14	20	58	12	420	26	458	29	15	14	58	17	421	21	459	1033
% App. Total	41.4	24.1	34.5		2.6	91.7	5.7		50	25.9	24.1		3.7	91.7	4.6		
PHF	.750	.583	.625	.806	.750	.921	.813	.939	.659	.625	.700	.659	.708	.877	.656	.911	.956

City of Chowchilla
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Weather: Clear

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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:15 PM				04:15 PM				05:00 PM				04:30 PM			
+0 mins.	7	3	6	16	2	100	10	112	11	6	5	22	6	111	8	125
+15 mins.	8	5	4	17	4	112	5	121	10	2	3	15	3	104	5	112
+30 mins.	5	2	4	11	3	100	6	109	8	3	2	13	4	86	6	96
+45 mins.	8	6	4	18	1	114	7	122	11	4	2	17	4	120	2	126
Total Volume	28	16	18	62	10	426	28	464	40	15	12	67	17	421	21	459
% App. Total	45.2	25.8	29		2.2	91.8	6		59.7	22.4	17.9		3.7	91.7	4.6	
PHF	.875	.667	.750	.861	.625	.934	.700	.951	.909	.625	.600	.761	.708	.877	.656	.911

City of Chowchilla
N/S: 11th Street
E/W: W Robertson Boulevard
Weather: Clear

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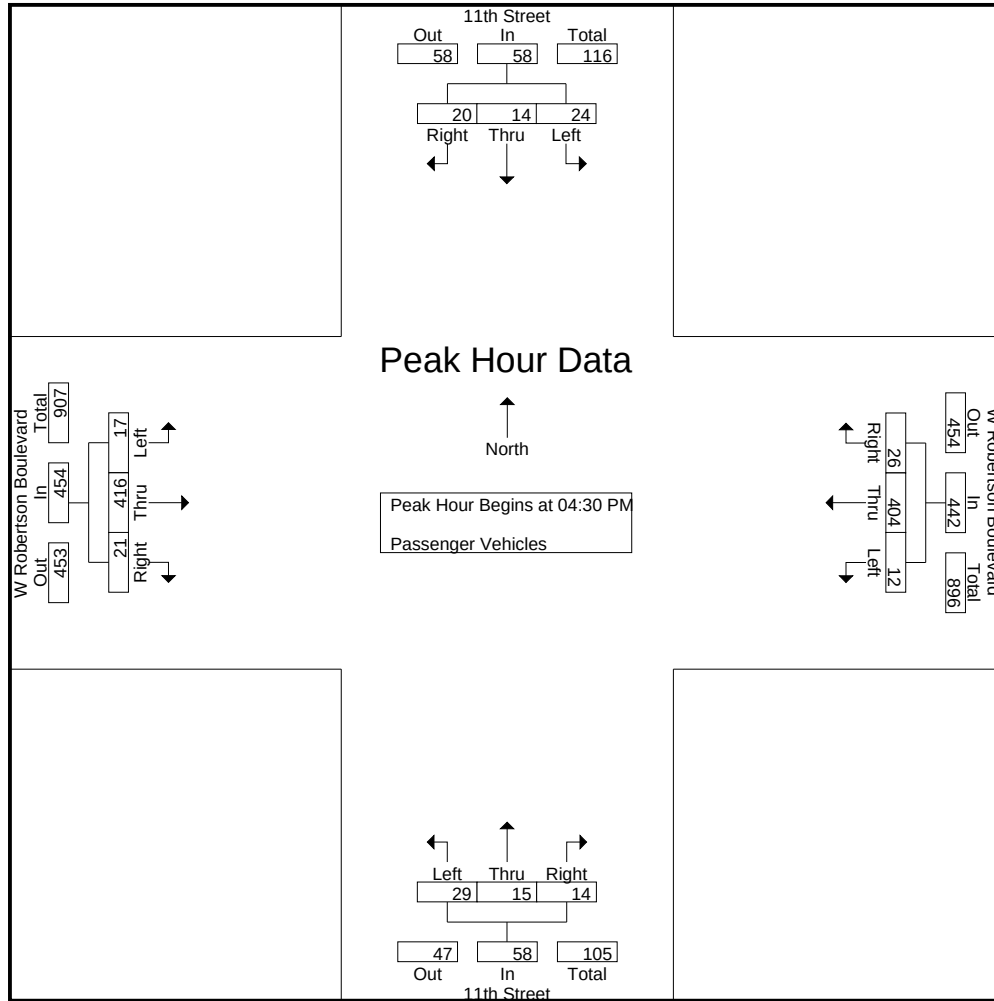
Groups Printed- Passenger Vehicles

	11th Street Southbound				W Robertson Boulevard Westbound				11th Street Northbound				W Robertson Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	6	1	6	13	1	109	6	116	3	1	6	10	2	118	1	121	260
04:15 PM	7	3	6	16	2	99	10	111	3	2	3	8	3	88	1	92	227
04:30 PM	8	5	4	17	4	107	5	116	2	3	2	7	6	107	8	121	261
04:45 PM	5	2	4	11	3	97	6	106	6	4	4	14	3	103	5	111	242
Total	26	11	20	57	10	412	27	449	14	10	15	39	14	416	15	445	990
05:00 PM	8	6	4	18	1	109	7	117	11	6	5	22	4	86	6	96	253
05:15 PM	3	1	8	12	4	91	8	103	10	2	3	15	4	120	2	126	256
05:30 PM	8	3	5	16	3	109	5	117	8	3	2	13	4	101	6	111	257
05:45 PM	2	9	3	14	6	93	6	105	11	4	2	17	3	100	11	114	250
Total	21	19	20	60	14	402	26	442	40	15	12	67	15	407	25	447	1016
Grand Total	47	30	40	117	24	814	53	891	54	25	27	106	29	823	40	892	2006
Apprch %	40.2	25.6	34.2		2.7	91.4	5.9		50.9	23.6	25.5		3.3	92.3	4.5		
Total %	2.3	1.5	2	5.8	1.2	40.6	2.6	44.4	2.7	1.2	1.3	5.3	1.4	41	2	44.5	

	11th Street Southbound				W Robertson Boulevard Westbound				11th Street Northbound				W Robertson Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	8	5	4	17	4	107	5	116	2	3	2	7	6	107	8	121	261
04:45 PM	5	2	4	11	3	97	6	106	6	4	4	14	3	103	5	111	242
05:00 PM	8	6	4	18	1	109	7	117	11	6	5	22	4	86	6	96	253
05:15 PM	3	1	8	12	4	91	8	103	10	2	3	15	4	120	2	126	256
Total Volume	24	14	20	58	12	404	26	442	29	15	14	58	17	416	21	454	1012
% App. Total	41.4	24.1	34.5		2.7	91.4	5.9		50	25.9	24.1		3.7	91.6	4.6		
PHF	.750	.583	.625	.806	.750	.927	.813	.944	.659	.625	.700	.659	.708	.867	.656	.901	.969

City of Chowchilla
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Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	8	5	4	17	4	107	5	116	2	3	2	7	6	107	8	121
+15 mins.	5	2	4	11	3	97	6	106	6	4	4	14	3	103	5	111
+30 mins.	8	6	4	18	1	109	7	117	11	6	5	22	4	86	6	96
+45 mins.	3	1	8	12	4	91	8	103	10	2	3	15	4	120	2	126
Total Volume	24	14	20	58	12	404	26	442	29	15	14	58	17	416	21	454
% App. Total	41.4	24.1	34.5		2.7	91.4	5.9		50	25.9	24.1		3.7	91.6	4.6	
PHF	.750	.583	.625	.806	.750	.927	.813	.944	.659	.625	.700	.659	.708	.867	.656	.901

City of Chowchilla
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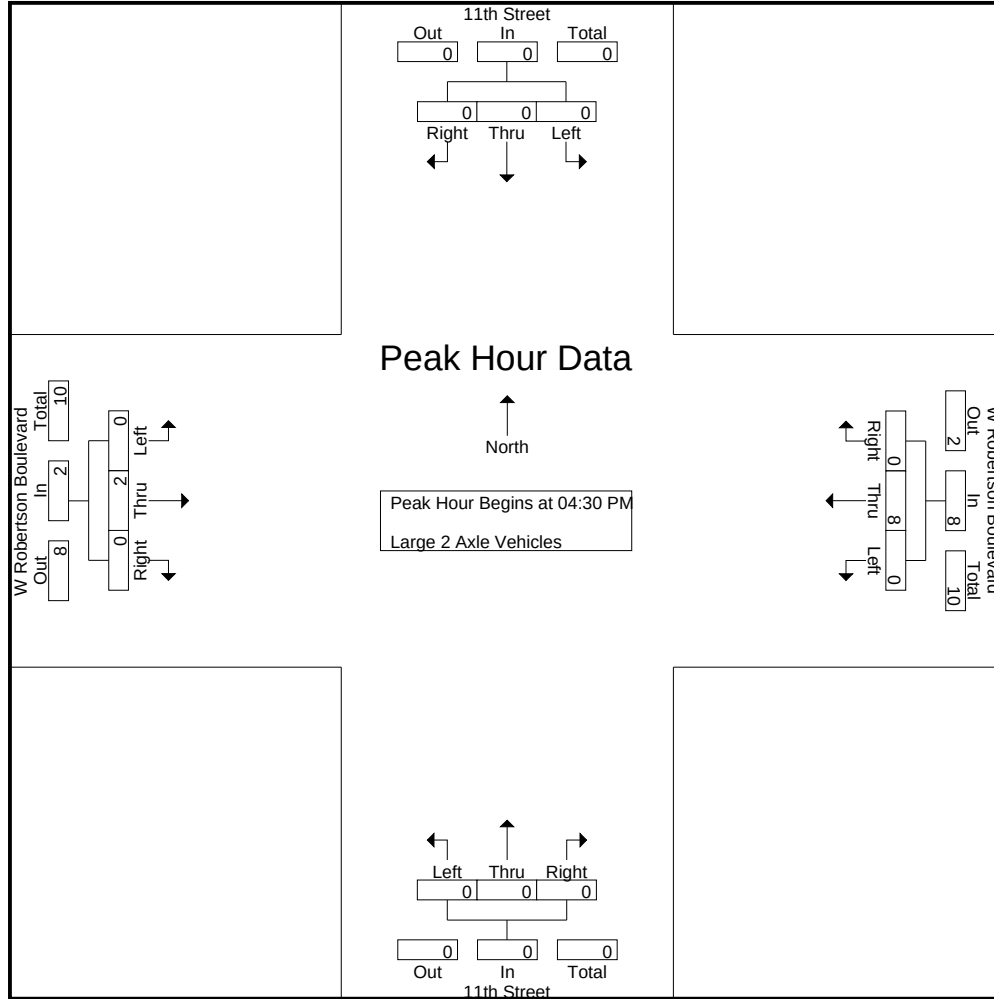
Groups Printed- Large 2 Axle Vehicles

	11th Street Southbound				W Robertson Boulevard Westbound				11th Street Northbound				W Robertson Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	1	1	0	1	0	1	0	0	0	0	0	0	0	0	2
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
04:30 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	1	0	1	4
04:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
Total	0	0	1	1	0	6	0	6	0	0	0	0	0	3	0	3	10
05:00 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	1	3	3
Total	0	0	0	0	0	3	0	3	0	0	0	0	0	3	1	4	7
Grand Total	0	0	1	1	0	9	0	9	0	0	0	0	0	6	1	7	17
Apprch %	0	0	100		0	100	0		0	0	0		0	85.7	14.3		
Total %	0	0	5.9	5.9	0	52.9	0	52.9	0	0	0	0	0	35.3	5.9	41.2	

	11th Street Southbound				W Robertson Boulevard Westbound				11th Street Northbound				W Robertson Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	0	0	0	3	0	3	0	0	0	0	0	1	0	1	4
04:45 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
05:00 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total Volume	0	0	0	0	0	8	0	8	0	0	0	0	0	2	0	2	10
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.667	.000	.667	.000	.000	.000	.000	.000	.500	.000	.500	.625

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Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	0	0	0	0	3	0	3	0	0	0	0	0	1	0	1
+15 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1
+30 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	8	0	8	0	0	0	0	0	2	0	2
% App. Total	0	0	0	0	0	100	0		0	0	0	0	0	100	0	
PHF	.000	.000	.000	.000	.000	.667	.000	.667	.000	.000	.000	.000	.000	.500	.000	.500

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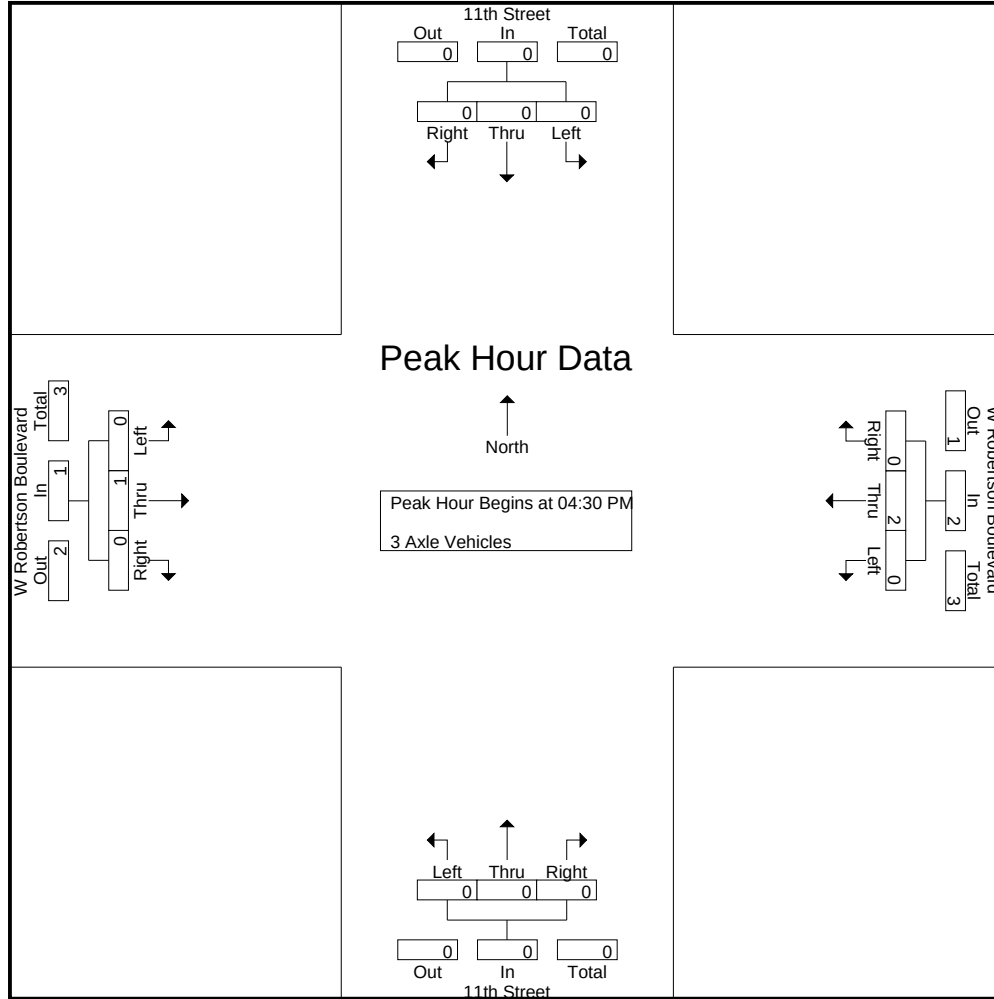
Groups Printed- 3 Axle Vehicles

	11th Street Southbound				W Robertson Boulevard Westbound				11th Street Northbound				W Robertson Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	3
05:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	3	0	3	0	0	0	0	0	0	0	0	3
Grand Total	0	0	0	0	0	3	0	3	0	0	0	0	0	3	0	3	6
Apprch %	0	0	0		0	100	0		0	0	0		0	100	0		
Total %	0	0	0	0	0	50	0	50	0	0	0	0	0	50	0	50	

	11th Street Southbound				W Robertson Boulevard Westbound				11th Street Northbound				W Robertson Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total Volume	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000	.000	.250	.000	.250	.750

City of Chowchilla
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Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1
% App. Total	0	0	0	0	0	100	0		0	0	0	0	0	100	0	
PHF	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000	.000	.250	.000	.250

City of Chowchilla
N/S: 11th Street
E/W: W Robertson Boulevard
Weather: Clear

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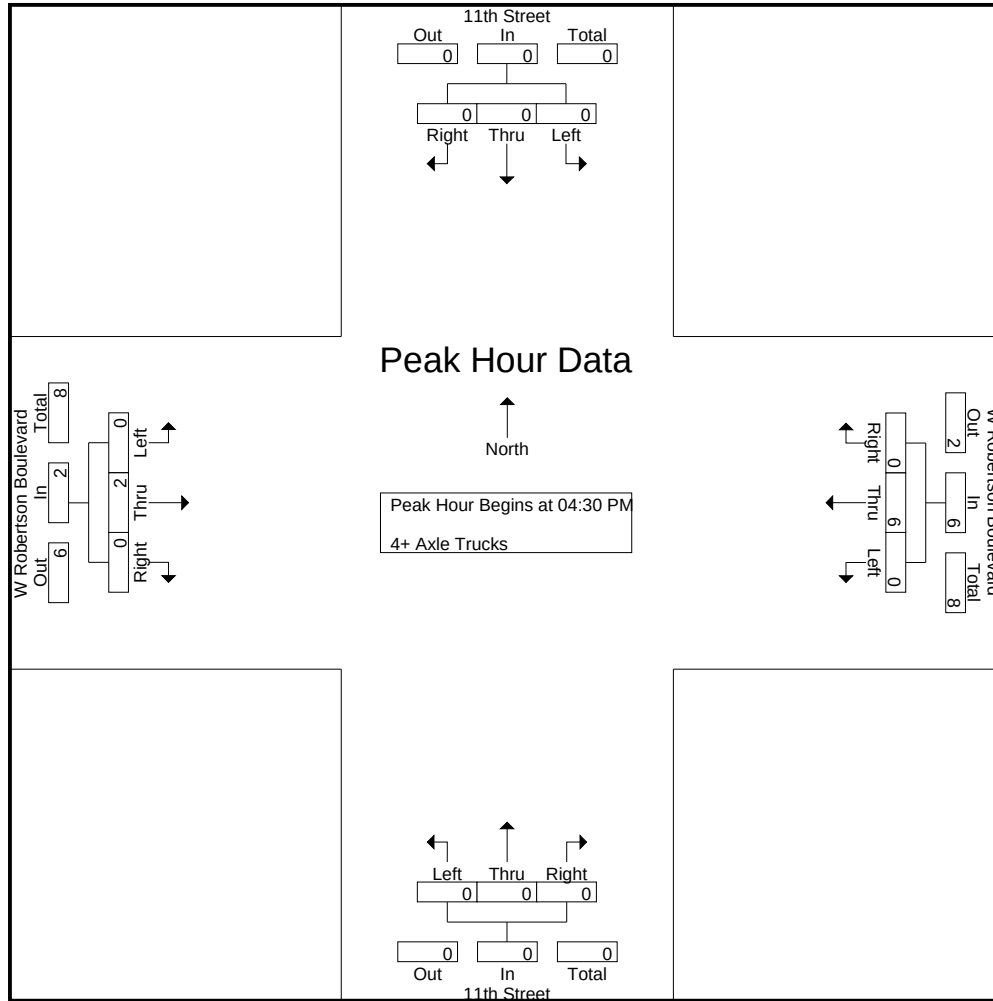
Groups Printed- 4+ Axle Trucks

	11th Street Southbound				W Robertson Boulevard Westbound				11th Street Northbound				W Robertson Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	4	0	4	0	0	0	0	0	0	0	0	4
04:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
04:30 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	8	0	8	0	0	0	0	0	3	0	3	11
05:00 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	2
05:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	5	0	5	0	0	0	0	0	1	0	1	6
Grand Total	0	0	0	0	0	13	0	13	0	0	0	0	0	4	0	4	17
Apprch %	0	0	0		0	100	0		0	0	0		0	100	0		
Total %	0	0	0	0	0	76.5	0	76.5	0	0	0	0	0	23.5	0	23.5	

	11th Street Southbound				W Robertson Boulevard Westbound				11th Street Northbound				W Robertson Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:00 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total Volume	0	0	0	0	0	6	0	6	0	0	0	0	0	2	0	2	8
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.750	.000	.750	.000	.000	.000	.000	.000	.250	.000	.250	.500

City of Chowchilla
N/S: 11th Street
E/W: W Robertson Boulevard
Weather: Clear

File Name : 01_CHA_11th_Rob PM
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Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2
+15 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	6	0	6	0	0	0	0	0	2	0	2
% App. Total	0	0	0	0	0	100	0		0	0	0	0	0	100	0	
PHF	.000	.000	.000	.000	.000	.750	.000	.750	.000	.000	.000	.000	.000	.250	.000	.250

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Chowchilla
N/S: 15th Street
E/W: W Robertson Boulevard
Weather: Clear

File Name : 02_CHA_15th_Rob AM
Site Code : 00323913
Start Date : 10/4/2023
Page No : 1

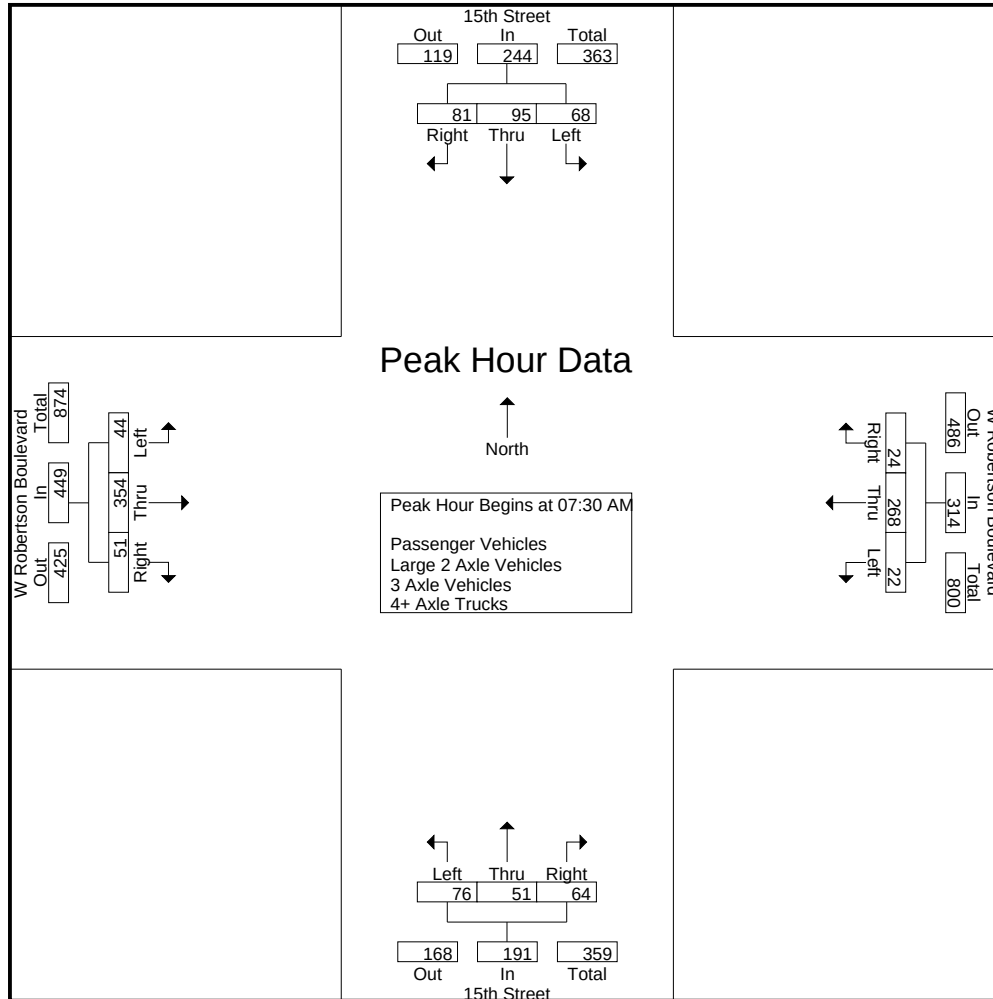
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	15th Street Southbound				W Robertson Boulevard Westbound				15th Street Northbound				W Robertson Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	6	4	10	20	4	41	1	46	7	7	8	22	3	33	3	39	127
07:15 AM	5	11	9	25	2	34	6	42	6	13	12	31	4	71	11	86	184
07:30 AM	17	27	19	63	8	52	5	65	10	21	19	50	16	92	13	121	299
07:45 AM	27	47	40	114	5	77	4	86	22	17	18	57	16	116	29	161	418
Total	55	89	78	222	19	204	16	239	45	58	57	160	39	312	56	407	1028
08:00 AM	18	15	17	50	5	74	7	86	39	9	17	65	6	61	6	73	274
08:15 AM	6	6	5	17	4	65	8	77	5	4	10	19	6	85	3	94	207
08:30 AM	5	2	14	21	6	42	8	56	9	5	8	22	6	61	3	70	169
08:45 AM	6	4	6	16	5	62	1	68	0	6	8	14	6	53	7	66	164
Total	35	27	42	104	20	243	24	287	53	24	43	120	24	260	19	303	814
Grand Total	90	116	120	326	39	447	40	526	98	82	100	280	63	572	75	710	1842
Apprch %	27.6	35.6	36.8		7.4	85	7.6		35	29.3	35.7		8.9	80.6	10.6		
Total %	4.9	6.3	6.5	17.7	2.1	24.3	2.2	28.6	5.3	4.5	5.4	15.2	3.4	31.1	4.1	38.5	
Passenger Vehicles	88	114	117	319	37	420	34	491	93	78	98	269	62	557	72	691	1770
% Passenger Vehicles	97.8	98.3	97.5	97.9	94.9	94	85	93.3	94.9	95.1	98	96.1	98.4	97.4	96	97.3	96.1
Large 2 Axle Vehicles	1	2	3	6	2	11	6	19	4	4	2	10	1	9	3	13	48
% Large 2 Axle Vehicles	1.1	1.7	2.5	1.8	5.1	2.5	15	3.6	4.1	4.9	2	3.6	1.6	1.6	4	1.8	2.6
3 Axle Vehicles	1	0	0	1	0	2	0	2	0	0	0	0	0	2	0	2	5
% 3 Axle Vehicles	1.1	0	0	0.3	0	0.4	0	0.4	0	0	0	0	0	0.3	0	0.3	0.3
4+ Axle Trucks	0	0	0	0	0	14	0	14	1	0	0	1	0	4	0	4	19
% 4+ Axle Trucks	0	0	0	0	0	3.1	0	2.7	1	0	0	0.4	0	0.7	0	0.6	1

	15th Street Southbound				W Robertson Boulevard Westbound				15th Street Northbound				W Robertson Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	17	27	19	63	8	52	5	65	10	21	19	50	16	92	13	121	299
07:45 AM	27	47	40	114	5	77	4	86	22	17	18	57	16	116	29	161	418
08:00 AM	18	15	17	50	5	74	7	86	39	9	17	65	6	61	6	73	274
08:15 AM	6	6	5	17	4	65	8	77	5	4	10	19	6	85	3	94	207
Total Volume	68	95	81	244	22	268	24	314	76	51	64	191	44	354	51	449	1198
% App. Total	27.9	38.9	33.2		7	85.4	7.6		39.8	26.7	33.5		9.8	78.8	11.4		
PHF	.630	.505	.506	.535	.688	.870	.750	.913	.487	.607	.842	.735	.688	.763	.440	.697	.717

City of Chowchilla
N/S: 15th Street
E/W: W Robertson Boulevard
Weather: Clear

File Name : 02_CHA_15th_Rob AM
Site Code : 00323913
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Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:30 AM				07:15 AM				07:30 AM			
+0 mins.	5	11	9	25	8	52	5	65	6	13	12	31	16	92	13	121
+15 mins.	17	27	19	63	5	77	4	86	10	21	19	50	16	116	29	161
+30 mins.	27	47	40	114	5	74	7	86	22	17	18	57	6	61	6	73
+45 mins.	18	15	17	50	4	65	8	77	39	9	17	65	6	85	3	94
Total Volume	67	100	85	252	22	268	24	314	77	60	66	203	44	354	51	449
% App. Total	26.6	39.7	33.7		7	85.4	7.6		37.9	29.6	32.5		9.8	78.8	11.4	
PHF	.620	.532	.531	.553	.688	.870	.750	.913	.494	.714	.868	.781	.688	.763	.440	.697

City of Chowchilla
N/S: 15th Street
E/W: W Robertson Boulevard
Weather: Clear

File Name : 02_CHA_15th_Rob AM
Site Code : 00323913
Start Date : 10/4/2023
Page No : 1

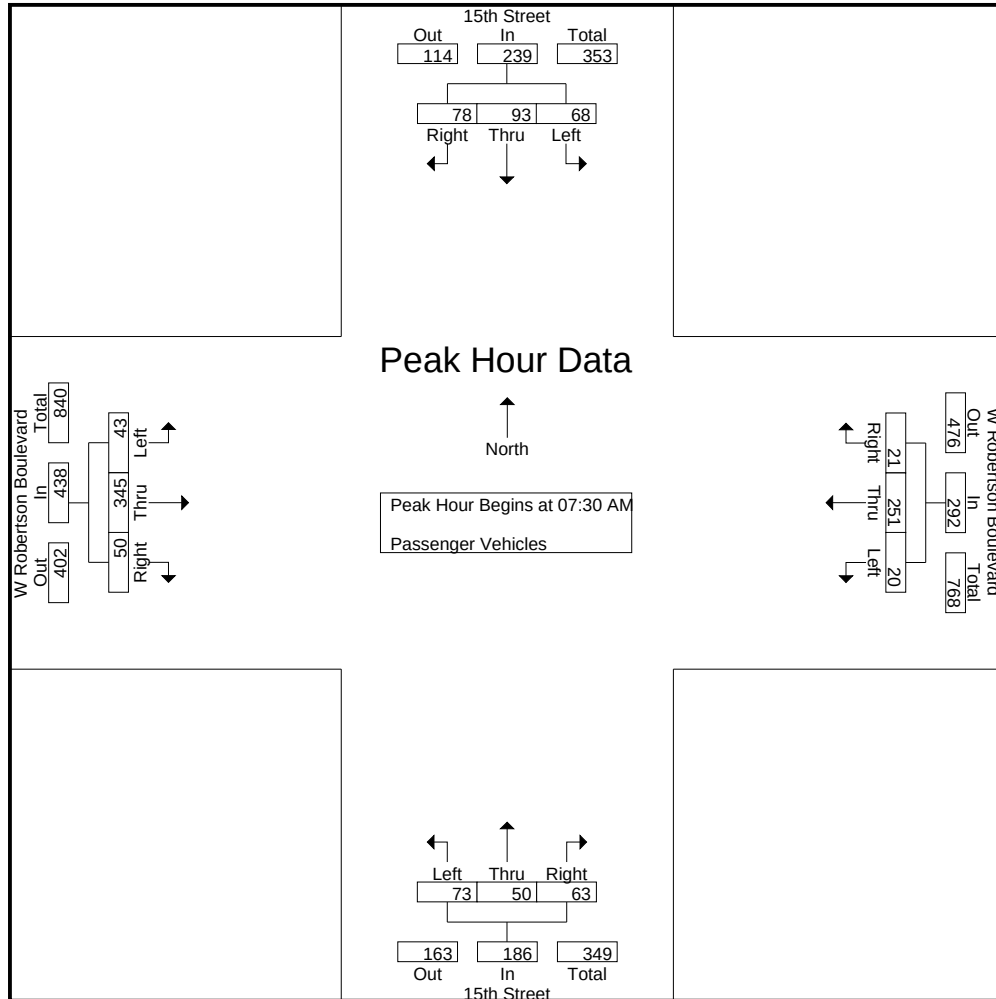
Groups Printed- Passenger Vehicles

	15th Street Southbound				W Robertson Boulevard Westbound				15th Street Northbound				W Robertson Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	5	4	10	19	4	39	1	44	7	7	8	22	3	31	2	36	121
07:15 AM	4	11	9	24	2	32	6	40	5	13	12	30	4	70	10	84	178
07:30 AM	17	26	17	60	7	46	4	57	7	21	19	47	15	89	12	116	280
07:45 AM	27	47	40	114	4	73	4	81	22	17	17	56	16	112	29	157	408
Total	53	88	76	217	17	190	15	222	41	58	56	155	38	302	53	393	987
08:00 AM	18	14	17	49	5	71	7	83	39	8	17	64	6	61	6	73	269
08:15 AM	6	6	4	16	4	61	6	71	5	4	10	19	6	83	3	92	198
08:30 AM	5	2	14	21	6	40	5	51	8	4	8	20	6	60	3	69	161
08:45 AM	6	4	6	16	5	58	1	64	0	4	7	11	6	51	7	64	155
Total	35	26	41	102	20	230	19	269	52	20	42	114	24	255	19	298	783
Grand Total	88	114	117	319	37	420	34	491	93	78	98	269	62	557	72	691	1770
Apprch %	27.6	35.7	36.7		7.5	85.5	6.9		34.6	29	36.4		9	80.6	10.4		
Total %	5	6.4	6.6	18	2.1	23.7	1.9	27.7	5.3	4.4	5.5	15.2	3.5	31.5	4.1	39	

	15th Street Southbound				W Robertson Boulevard Westbound				15th Street Northbound				W Robertson Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	17	26	17	60	7	46	4	57	7	21	19	47	15	89	12	116	280
07:45 AM	27	47	40	114	4	73	4	81	22	17	17	56	16	112	29	157	408
08:00 AM	18	14	17	49	5	71	7	83	39	8	17	64	6	61	6	73	269
08:15 AM	6	6	4	16	4	61	6	71	5	4	10	19	6	83	3	92	198
Total Volume	68	93	78	239	20	251	21	292	73	50	63	186	43	345	50	438	1155
% App. Total	28.5	38.9	32.6		6.8	86	7.2		39.2	26.9	33.9		9.8	78.8	11.4		
PHF	.630	.495	.488	.524	.714	.860	.750	.880	.468	.595	.829	.727	.672	.770	.431	.697	.708

City of Chowchilla
N/S: 15th Street
E/W: W Robertson Boulevard
Weather: Clear

File Name : 02_CHA_15th_Rob AM
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Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	17	26	17	60	7	46	4	57	7	21	19	47	15	89	12	116
+15 mins.	27	47	40	114	4	73	4	81	22	17	17	56	16	112	29	157
+30 mins.	18	14	17	49	5	71	7	83	39	8	17	64	6	61	6	73
+45 mins.	6	6	4	16	4	61	6	71	5	4	10	19	6	83	3	92
Total Volume	68	93	78	239	20	251	21	292	73	50	63	186	43	345	50	438
% App. Total	28.5	38.9	32.6		6.8	86	7.2		39.2	26.9	33.9		9.8	78.8	11.4	
PHF	.630	.495	.488	.524	.714	.860	.750	.880	.468	.595	.829	.727	.672	.770	.431	.697

City of Chowchilla
N/S: 15th Street
E/W: W Robertson Boulevard
Weather: Clear

File Name : 02_CHA_15th_Rob AM
Site Code : 00323913
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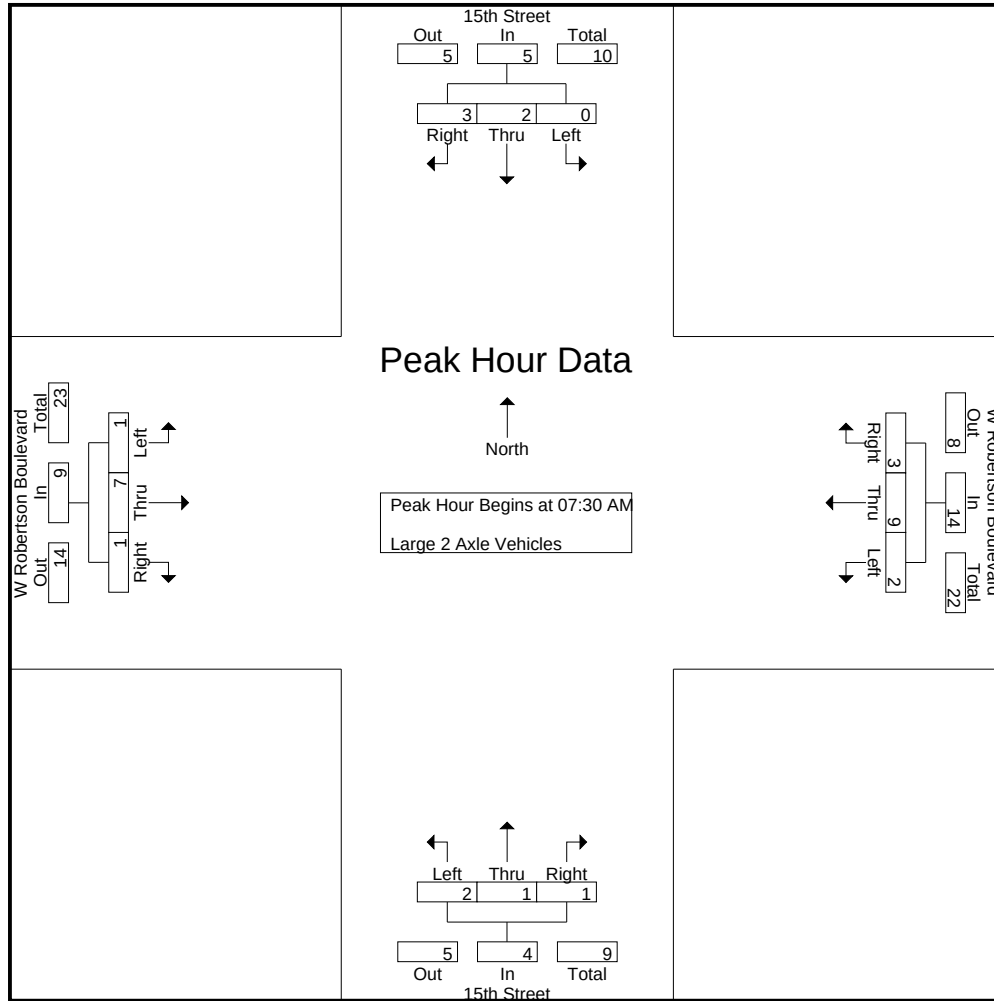
Groups Printed- Large 2 Axle Vehicles

	15th Street Southbound				W Robertson Boulevard Westbound				15th Street Northbound				W Robertson Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	1	0	0	1	0	1	0	1	0	0	0	0	0	0	1	1	3
07:15 AM	0	0	0	0	0	0	0	0	1	0	0	1	0	1	1	2	3
07:30 AM	0	1	2	3	1	2	1	4	2	0	0	2	1	3	1	5	14
07:45 AM	0	0	0	0	1	3	0	4	0	0	1	1	0	2	0	2	7
Total	1	1	2	4	2	6	1	9	3	0	1	4	1	6	3	10	27
08:00 AM	0	1	0	1	0	1	0	1	0	1	0	1	0	0	0	0	3
08:15 AM	0	0	1	1	0	3	2	5	0	0	0	0	0	2	0	2	8
08:30 AM	0	0	0	0	0	0	3	3	1	1	0	2	0	1	0	1	6
08:45 AM	0	0	0	0	0	1	0	1	0	2	1	3	0	0	0	0	4
Total	0	1	1	2	0	5	5	10	1	4	1	6	0	3	0	3	21
Grand Total	1	2	3	6	2	11	6	19	4	4	2	10	1	9	3	13	48
Apprch %	16.7	33.3	50		10.5	57.9	31.6		40	40	20		7.7	69.2	23.1		
Total %	2.1	4.2	6.2	12.5	4.2	22.9	12.5	39.6	8.3	8.3	4.2	20.8	2.1	18.8	6.2	27.1	

	15th Street Southbound				W Robertson Boulevard Westbound				15th Street Northbound				W Robertson Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	1	2	3	1	2	1	4	2	0	0	2	1	3	1	5	14
07:45 AM	0	0	0	0	1	3	0	4	0	0	1	1	0	2	0	2	7
08:00 AM	0	1	0	1	0	1	0	1	0	1	0	1	0	0	0	0	3
08:15 AM	0	0	1	1	0	3	2	5	0	0	0	0	0	2	0	2	8
Total Volume	0	2	3	5	2	9	3	14	2	1	1	4	1	7	1	9	32
% App. Total	0	40	60		14.3	64.3	21.4		50	25	25		11.1	77.8	11.1		
PHF	.000	.500	.375	.417	.500	.750	.375	.700	.250	.250	.250	.500	.250	.583	.250	.450	.571

City of Chowchilla
N/S: 15th Street
E/W: W Robertson Boulevard
Weather: Clear

File Name : 02_CHA_15th_Rob AM
Site Code : 00323913
Start Date : 10/4/2023
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Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	1	2	3	1	2	1	4	2	0	0	2	1	3	1	5
+15 mins.	0	0	0	0	1	3	0	4	0	0	1	1	0	2	0	2
+30 mins.	0	1	0	1	0	1	0	1	0	1	0	1	0	0	0	0
+45 mins.	0	0	1	1	0	3	2	5	0	0	0	0	0	2	0	2
Total Volume	0	2	3	5	2	9	3	14	2	1	1	4	1	7	1	9
% App. Total	0	40	60		14.3	64.3	21.4		50	25	25		11.1	77.8	11.1	
PHF	.000	.500	.375	.417	.500	.750	.375	.700	.250	.250	.250	.500	.250	.583	.250	.450

City of Chowchilla
N/S: 15th Street
E/W: W Robertson Boulevard
Weather: Clear

File Name : 02_CHA_15th_Rob AM
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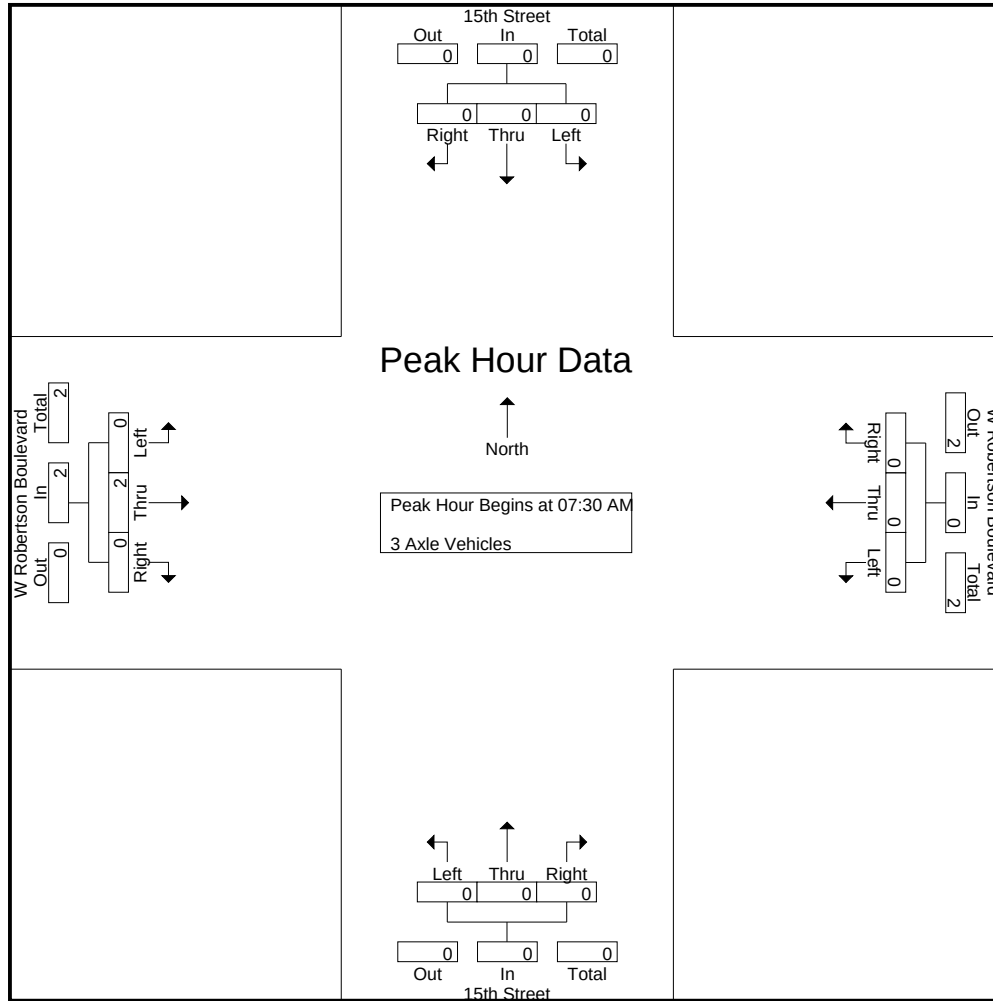
Groups Printed- 3 Axle Vehicles

	15th Street Southbound				W Robertson Boulevard Westbound				15th Street Northbound				W Robertson Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
Total	1	0	0	1	0	0	0	0	0	0	0	0	0	2	0	2	3
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
08:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
Grand Total	1	0	0	1	0	2	0	2	0	0	0	0	0	2	0	2	5
Apprch %	100	0	0		0	100	0		0	0	0		0	100	0		
Total %	20	0	0	20	0	40	0	40	0	0	0	0	0	40	0	40	

	15th Street Southbound				W Robertson Boulevard Westbound				15th Street Northbound				W Robertson Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
% App. Total	0	0	0		0	0	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.250	.250

City of Chowchilla
N/S: 15th Street
E/W: W Robertson Boulevard
Weather: Clear

File Name : 02_CHA_15th_Rob AM
Site Code : 00323913
Start Date : 10/4/2023
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Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
% App. Total	0	0	0	0	0	0	0	0	0	0	0	0	0	100	0	0
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.000	.250

City of Chowchilla
N/S: 15th Street
E/W: W Robertson Boulevard
Weather: Clear

File Name : 02_CHA_15th_Rob AM
Site Code : 00323913
Start Date : 10/4/2023
Page No : 1

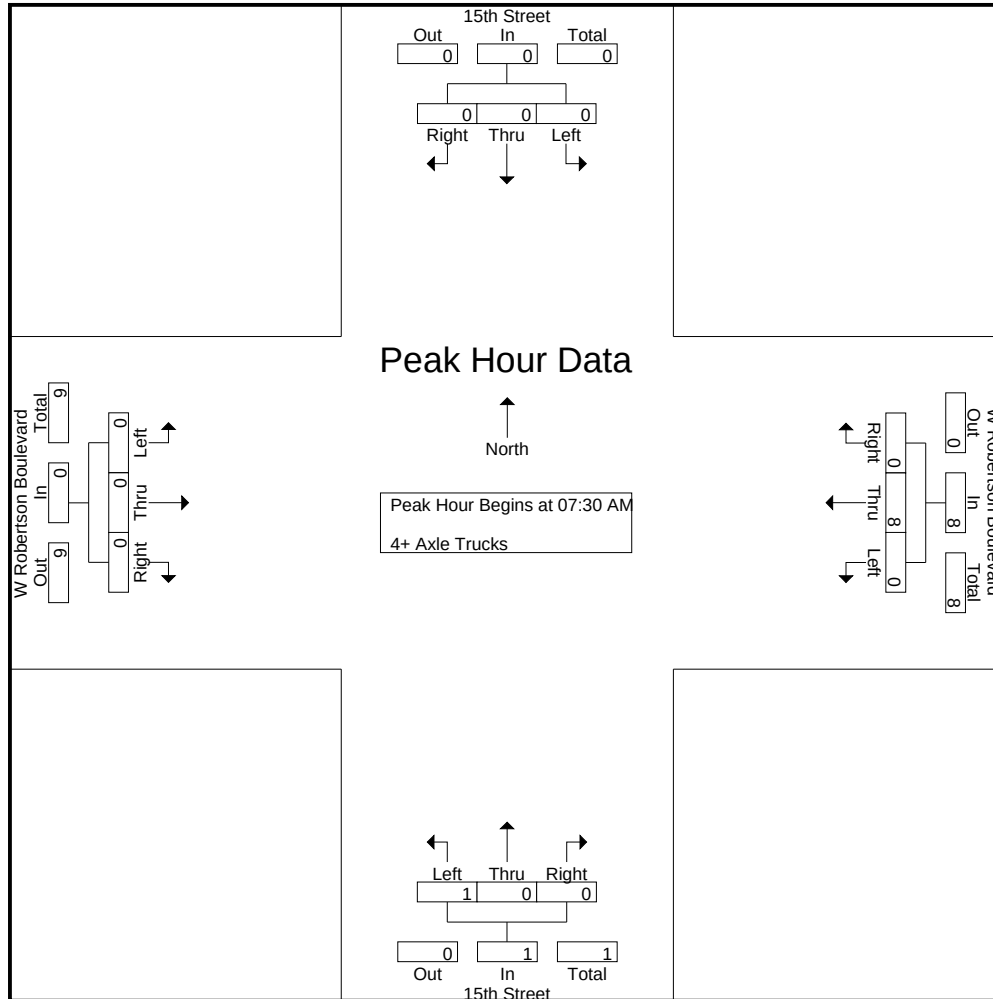
Groups Printed- 4+ Axle Trucks

	15th Street Southbound				W Robertson Boulevard Westbound				15th Street Northbound				W Robertson Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
07:15 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
07:30 AM	0	0	0	0	0	4	0	4	1	0	0	1	0	0	0	0	5
07:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	8	0	8	1	0	0	1	0	2	0	2	11
08:00 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
08:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
08:30 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
08:45 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
Total	0	0	0	0	0	6	0	6	0	0	0	0	0	2	0	2	8
Grand Total	0	0	0	0	0	14	0	14	1	0	0	1	0	4	0	4	19
Apprch %	0	0	0		0	100	0		100	0	0		0	100	0		
Total %	0	0	0	0	0	73.7	0	73.7	5.3	0	0	5.3	0	21.1	0	21.1	

	15th Street Southbound				W Robertson Boulevard Westbound				15th Street Northbound				W Robertson Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	0	0	0	0	0	4	0	4	1	0	0	1	0	0	0	0	5
07:45 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
08:00 AM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
08:15 AM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total Volume	0	0	0	0	0	8	0	8	1	0	0	1	0	0	0	0	9
% App. Total	0	0	0		0	100	0		100	0	0		0	0	0		
PHF	.000	.000	.000	.000	.000	.500	.000	.500	.250	.000	.000	.250	.000	.000	.000	.000	.450

City of Chowchilla
N/S: 15th Street
E/W: W Robertson Boulevard
Weather: Clear

File Name : 02_CHA_15th_Rob AM
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Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:30 AM				07:30 AM				07:30 AM			
+0 mins.	0	0	0	0	0	4	0	4	1	0	0	0	1	0	0	0
+15 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	8	0	8	1	0	0	1	0	0	0	0
% App. Total	0	0	0	0	0	100	0	100	100	0	0	100	0	0	0	0
PHF	.000	.000	.000	.000	.000	.500	.000	.500	.250	.000	.000	.250	.000	.000	.000	.000

City of Chowchilla
N/S: 15th Street
E/W: W Robertson Boulevard
Weather: Clear

File Name : 02_CHA_15th_Rob PM
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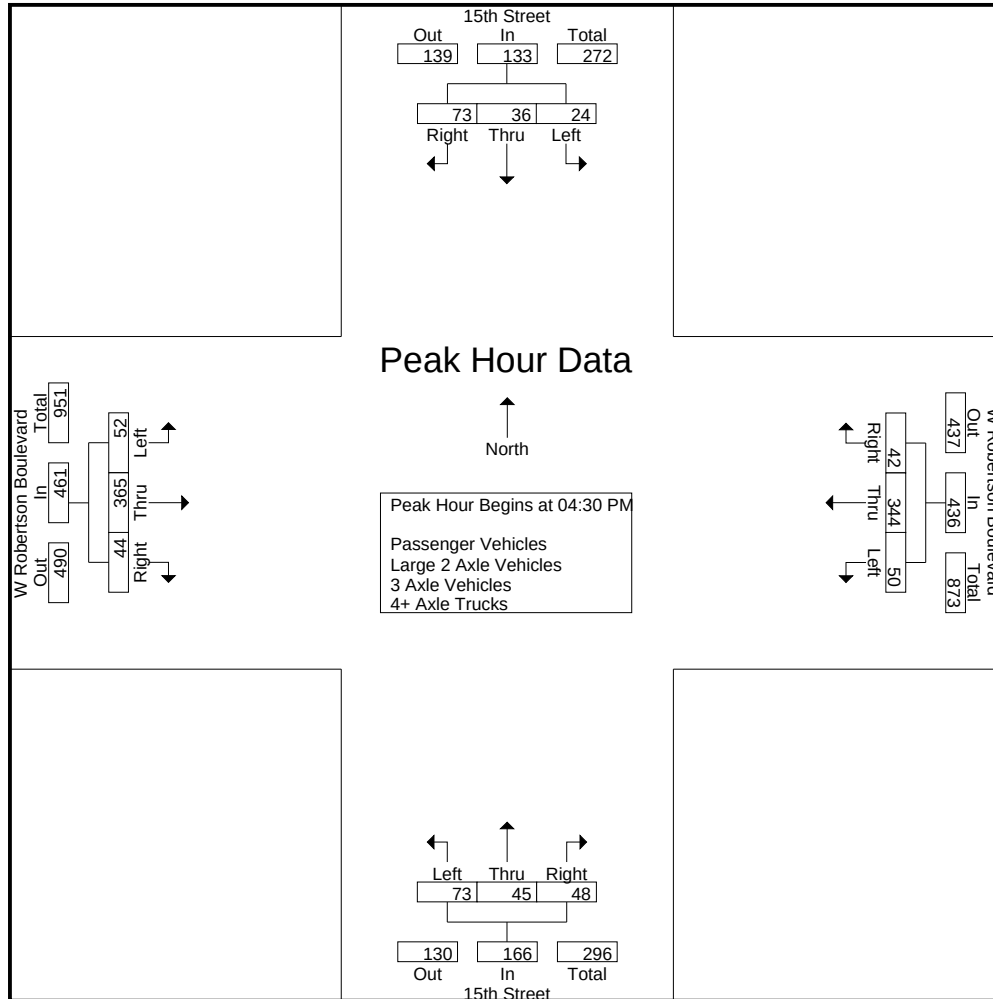
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	15th Street Southbound				W Robertson Boulevard Westbound				15th Street Northbound				W Robertson Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	6	10	11	27	8	93	7	108	14	12	8	34	9	101	6	116	285
04:15 PM	7	9	15	31	10	75	11	96	11	5	10	26	9	85	14	108	261
04:30 PM	8	10	15	33	13	81	12	106	27	12	13	52	17	101	14	132	323
04:45 PM	5	6	10	21	9	87	8	104	12	10	8	30	17	91	13	121	276
Total	26	35	51	112	40	336	38	414	64	39	39	142	52	378	47	477	1145
05:00 PM	6	11	20	37	11	100	12	123	16	11	14	41	13	67	6	86	287
05:15 PM	5	9	28	42	17	76	10	103	18	12	13	43	5	106	11	122	310
05:30 PM	14	9	15	38	15	84	13	112	12	11	14	37	14	87	4	105	292
05:45 PM	10	6	12	28	13	65	15	93	19	15	12	46	13	91	7	111	278
Total	35	35	75	145	56	325	50	431	65	49	53	167	45	351	28	424	1167
Grand Total	61	70	126	257	96	661	88	845	129	88	92	309	97	729	75	901	2312
Apprch %	23.7	27.2	49		11.4	78.2	10.4		41.7	28.5	29.8		10.8	80.9	8.3		
Total %	2.6	3	5.4	11.1	4.2	28.6	3.8	36.5	5.6	3.8	4	13.4	4.2	31.5	3.2	39	
Passenger Vehicles	61	69	126	256	96	638	85	819	129	86	92	307	96	713	75	884	2266
% Passenger Vehicles	100	98.6	100	99.6	100	96.5	96.6	96.9	100	97.7	100	99.4	99	97.8	100	98.1	98
Large 2 Axle Vehicles	0	1	0	1	0	7	3	10	0	2	0	2	1	5	0	6	19
% Large 2 Axle Vehicles	0	1.4	0	0.4	0	1.1	3.4	1.2	0	2.3	0	0.6	1	0.7	0	0.7	0.8
3 Axle Vehicles	0	0	0	0	0	3	0	3	0	0	0	0	0	5	0	5	8
% 3 Axle Vehicles	0	0	0	0	0	0.5	0	0.4	0	0	0	0	0	0.7	0	0.6	0.3
4+ Axle Trucks	0	0	0	0	0	13	0	13	0	0	0	0	0	6	0	6	19
% 4+ Axle Trucks	0	0	0	0	0	2	0	1.5	0	0	0	0	0	0.8	0	0.7	0.8

	15th Street Southbound				W Robertson Boulevard Westbound				15th Street Northbound				W Robertson Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	8	10	15	33	13	81	12	106	27	12	13	52	17	101	14	132	323
04:45 PM	5	6	10	21	9	87	8	104	12	10	8	30	17	91	13	121	276
05:00 PM	6	11	20	37	11	100	12	123	16	11	14	41	13	67	6	86	287
05:15 PM	5	9	28	42	17	76	10	103	18	12	13	43	5	106	11	122	310
Total Volume	24	36	73	133	50	344	42	436	73	45	48	166	52	365	44	461	1196
% App. Total	18	27.1	54.9		11.5	78.9	9.6		44	27.1	28.9		11.3	79.2	9.5		
PHF	.750	.818	.652	.792	.735	.860	.875	.886	.676	.938	.857	.798	.765	.861	.786	.873	.926

City of Chowchilla
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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	05:00 PM				04:45 PM				05:00 PM				04:00 PM			
+0 mins.	6	11	20	37	9	87	8	104	16	11	14	41	9	101	6	116
+15 mins.	5	9	28	42	11	100	12	123	18	12	13	43	9	85	14	108
+30 mins.	14	9	15	38	17	76	10	103	12	11	14	37	17	101	14	132
+45 mins.	10	6	12	28	15	84	13	112	19	15	12	46	17	91	13	121
Total Volume	35	35	75	145	52	347	43	442	65	49	53	167	52	378	47	477
% App. Total	24.1	24.1	51.7		11.8	78.5	9.7		38.9	29.3	31.7		10.9	79.2	9.9	
PHF	.625	.795	.670	.863	.765	.868	.827	.898	.855	.817	.946	.908	.765	.936	.839	.903

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Chowchilla
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File Name : 02_CHA_15th_Rob PM
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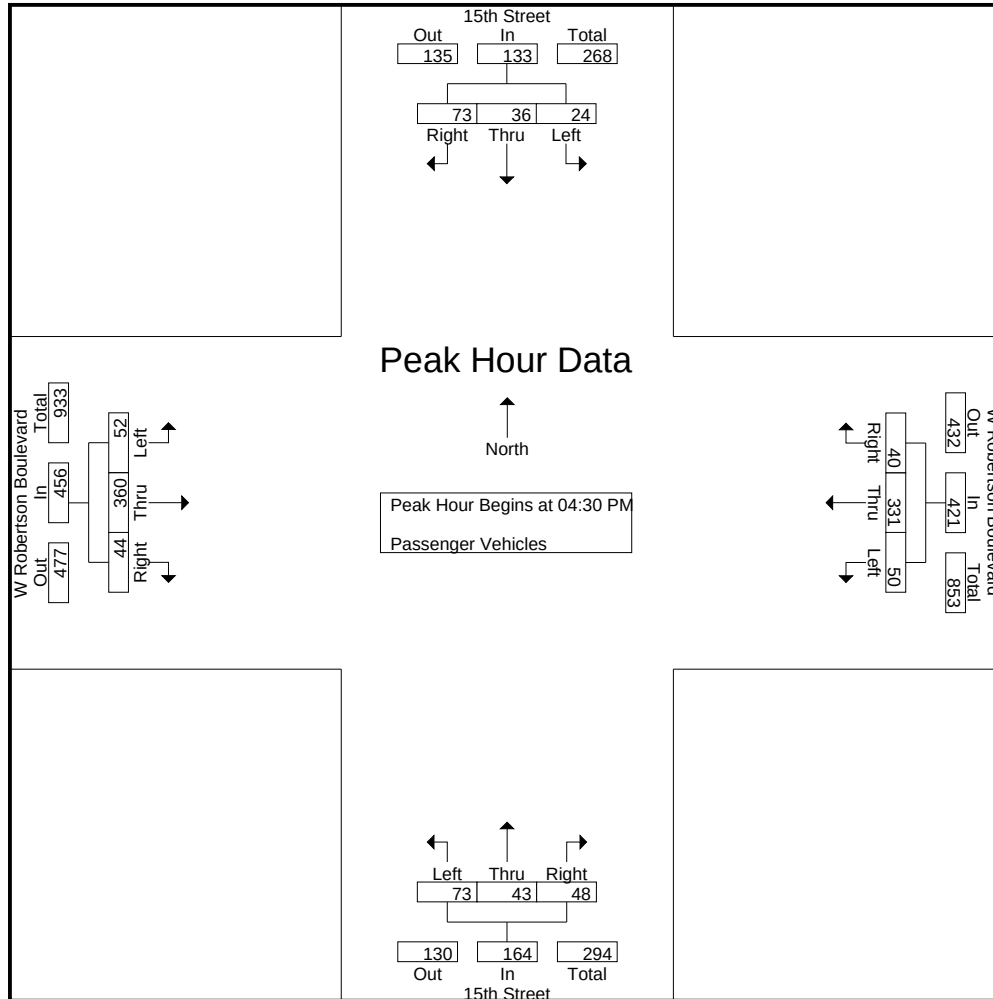
Groups Printed- Passenger Vehicles

	15th Street Southbound				W Robertson Boulevard Westbound				15th Street Northbound				W Robertson Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	6	9	11	26	8	87	7	102	14	12	8	34	9	101	6	116	278
04:15 PM	7	9	15	31	10	74	11	95	11	5	10	26	8	82	14	104	256
04:30 PM	8	10	15	33	13	76	11	100	27	12	13	52	17	97	14	128	313
04:45 PM	5	6	10	21	9	85	7	101	12	9	8	29	17	90	13	120	271
Total	26	34	51	111	40	322	36	398	64	38	39	141	51	370	47	468	1118
05:00 PM	6	11	20	37	11	96	12	119	16	11	14	41	13	67	6	86	283
05:15 PM	5	9	28	42	17	74	10	101	18	11	13	42	5	106	11	122	307
05:30 PM	14	9	15	38	15	82	12	109	12	11	14	37	14	84	4	102	286
05:45 PM	10	6	12	28	13	64	15	92	19	15	12	46	13	86	7	106	272
Total	35	35	75	145	56	316	49	421	65	48	53	166	45	343	28	416	1148
Grand Total	61	69	126	256	96	638	85	819	129	86	92	307	96	713	75	884	2266
Apprch %	23.8	27	49.2		11.7	77.9	10.4		42	28	30		10.9	80.7	8.5		
Total %	2.7	3	5.6	11.3	4.2	28.2	3.8	36.1	5.7	3.8	4.1	13.5	4.2	31.5	3.3	39	

	15th Street Southbound				W Robertson Boulevard Westbound				15th Street Northbound				W Robertson Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	8	10	15	33	13	76	11	100	27	12	13	52	17	97	14	128	313
04:45 PM	5	6	10	21	9	85	7	101	12	9	8	29	17	90	13	120	271
05:00 PM	6	11	20	37	11	96	12	119	16	11	14	41	13	67	6	86	283
05:15 PM	5	9	28	42	17	74	10	101	18	11	13	42	5	106	11	122	307
Total Volume	24	36	73	133	50	331	40	421	73	43	48	164	52	360	44	456	1174
% App. Total	18	27.1	54.9		11.9	78.6	9.5		44.5	26.2	29.3		11.4	78.9	9.6		
PHF	.750	.818	.652	.792	.735	.862	.833	.884	.676	.896	.857	.788	.765	.849	.786	.891	.938

City of Chowchilla
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Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	8	10	15	33	13	76	11	100	27	12	13	52	17	97	14	128
+15 mins.	5	6	10	21	9	85	7	101	12	9	8	29	17	90	13	120
+30 mins.	6	11	20	37	11	96	12	119	16	11	14	41	13	67	6	86
+45 mins.	5	9	28	42	17	74	10	101	18	11	13	42	5	106	11	122
Total Volume	24	36	73	133	50	331	40	421	73	43	48	164	52	360	44	456
% App. Total	18	27.1	54.9		11.9	78.6	9.5		44.5	26.2	29.3		11.4	78.9	9.6	
PHF	.750	.818	.652	.792	.735	.862	.833	.884	.676	.896	.857	.788	.765	.849	.786	.891

City of Chowchilla
N/S: 15th Street
E/W: W Robertson Boulevard
Weather: Clear

File Name : 02_CHA_15th_Rob PM
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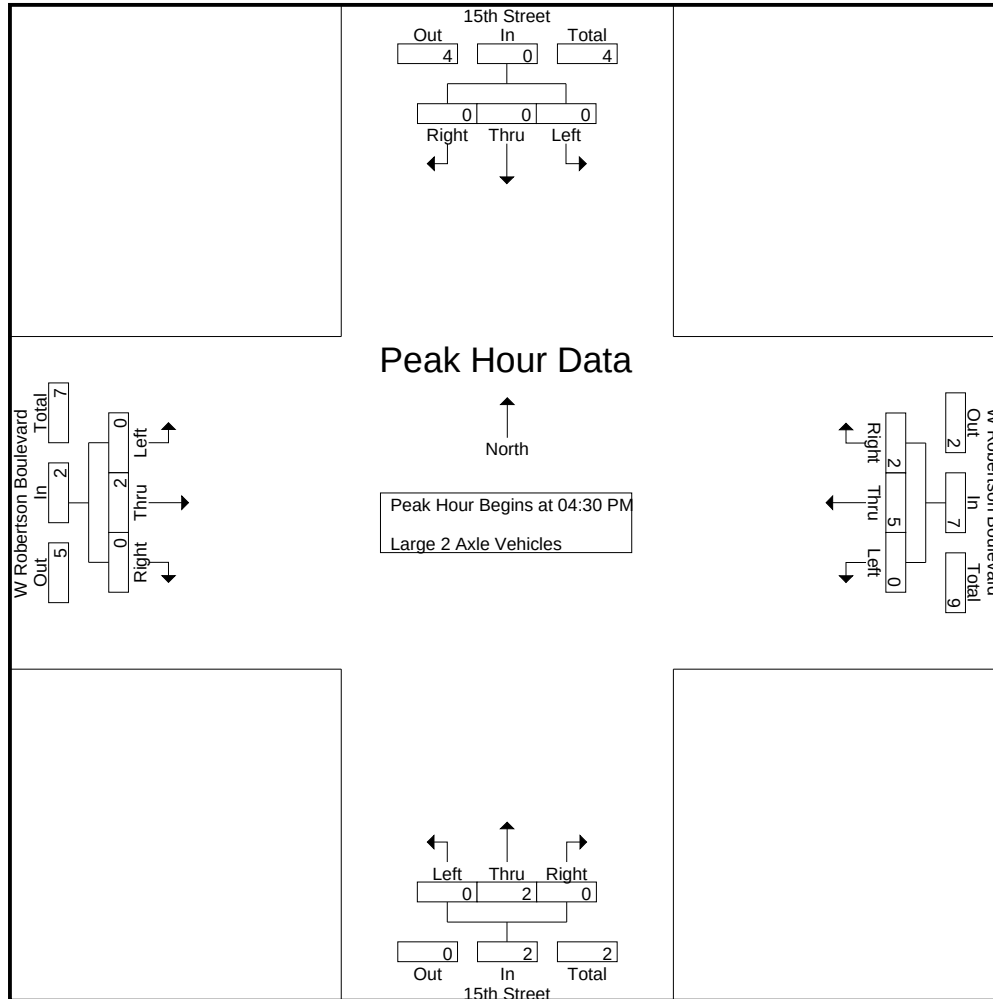
Groups Printed- Large 2 Axle Vehicles

	15th Street Southbound				W Robertson Boulevard Westbound				15th Street Northbound				W Robertson Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	1	0	1	0	2	0	2	0	0	0	0	0	0	0	0	3
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1
04:30 PM	0	0	0	0	0	3	1	4	0	0	0	0	0	1	0	1	5
04:45 PM	0	0	0	0	0	1	1	2	0	1	0	1	0	1	0	1	4
Total	0	1	0	1	0	6	2	8	0	1	0	1	1	2	0	3	13
05:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
05:30 PM	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	1	2
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
Total	0	0	0	0	0	1	1	2	0	1	0	1	0	3	0	3	6
Grand Total	0	1	0	1	0	7	3	10	0	2	0	2	1	5	0	6	19
Apprch %	0	100	0		0	70	30		0	100	0		16.7	83.3	0		
Total %	0	5.3	0	5.3	0	36.8	15.8	52.6	0	10.5	0	10.5	5.3	26.3	0	31.6	

	15th Street Southbound				W Robertson Boulevard Westbound				15th Street Northbound				W Robertson Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	0	0	0	3	1	4	0	0	0	0	0	1	0	1	5
04:45 PM	0	0	0	0	0	1	1	2	0	1	0	1	0	1	0	1	4
05:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total Volume	0	0	0	0	0	5	2	7	0	2	0	2	0	2	0	2	11
% App. Total	0	0	0		0	71.4	28.6		0	100	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.417	.500	.438	.000	.500	.000	.500	.000	.500	.000	.500	.550

City of Chowchilla
N/S: 15th Street
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Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	0	0	0	0	3	1	4	0	0	0	0	0	1	0	1
+15 mins.	0	0	0	0	0	1	1	2	0	1	0	1	0	1	0	1
+30 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
Total Volume	0	0	0	0	0	5	2	7	0	2	0	2	0	2	0	2
% App. Total	0	0	0	0	0	71.4	28.6		0	100	0		0	100	0	
PHF	.000	.000	.000	.000	.000	.417	.500	.438	.000	.500	.000	.500	.000	.500	.000	.500

City of Chowchilla
N/S: 15th Street
E/W: W Robertson Boulevard
Weather: Clear

File Name : 02_CHA_15th_Rob PM
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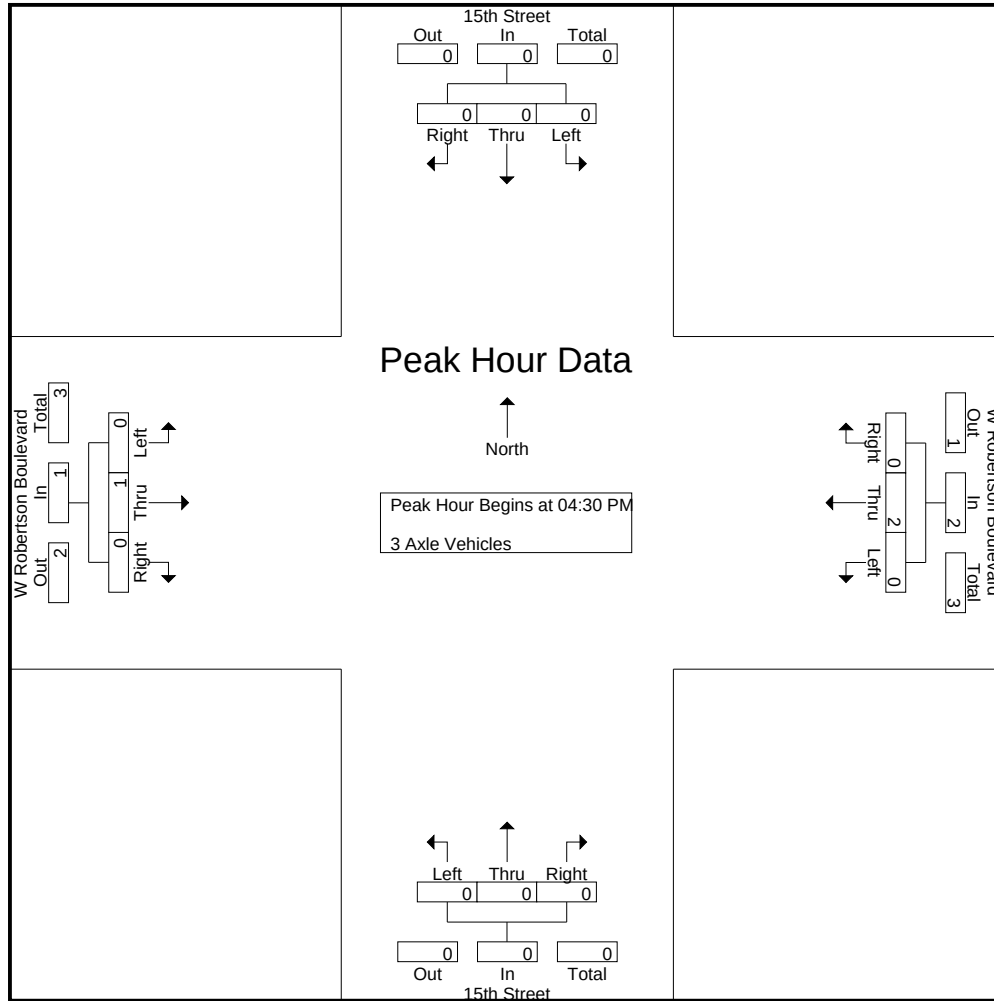
Groups Printed- 3 Axle Vehicles

	15th Street Southbound				W Robertson Boulevard Westbound				15th Street Northbound				W Robertson Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
04:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	2	2
05:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	3	3
Total	0	0	0	0	0	3	0	3	0	0	0	0	0	3	0	3	6
Grand Total	0	0	0	0	0	3	0	3	0	0	0	0	0	5	0	5	8
Apprch %	0	0	0		0	100	0		0	0	0		0	100	0		
Total %	0	0	0	0	0	37.5	0	37.5	0	0	0	0	0	62.5	0	62.5	

	15th Street Southbound				W Robertson Boulevard Westbound				15th Street Northbound				W Robertson Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total Volume	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1	3
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000	.000	.250	.000	.250	.750

City of Chowchilla
N/S: 15th Street
E/W: W Robertson Boulevard
Weather: Clear

File Name : 02_CHA_15th_Rob PM
Site Code : 00323913
Start Date : 10/4/2023
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Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	2	0	2	0	0	0	0	0	1	0	1
% App. Total	0	0	0	0	0	100	0		0	0	0	0	0	100	0	
PHF	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000	.000	.250	.000	.250

City of Chowchilla
N/S: 15th Street
E/W: W Robertson Boulevard
Weather: Clear

File Name : 02_CHA_15th_Rob PM
Site Code : 00323913
Start Date : 10/4/2023
Page No : 1

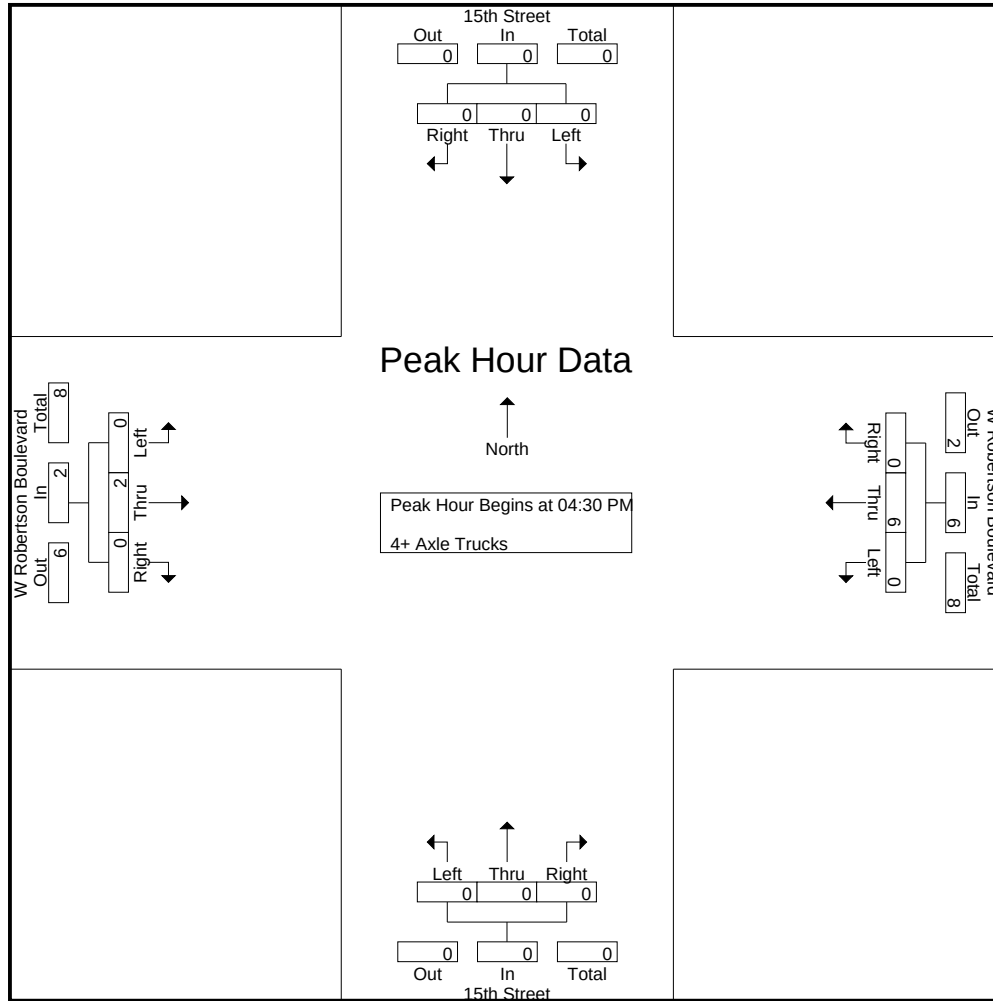
Groups Printed- 4+ Axle Trucks

	15th Street Southbound				W Robertson Boulevard Westbound				15th Street Northbound				W Robertson Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	0	0	0	0	4	0	4	0	0	0	0	0	0	0	0	4
04:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
04:30 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	8	0	8	0	0	0	0	0	4	0	4	12
05:00 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:30 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	2	0	2	3
05:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total	0	0	0	0	0	5	0	5	0	0	0	0	0	2	0	2	7
Grand Total	0	0	0	0	0	13	0	13	0	0	0	0	0	6	0	6	19
Apprch %	0	0	0		0	100	0		0	0	0		0	100	0		
Total %	0	0	0	0	0	68.4	0	68.4	0	0	0	0	0	31.6	0	31.6	

	15th Street Southbound				W Robertson Boulevard Westbound				15th Street Northbound				W Robertson Boulevard Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2	4
04:45 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
05:00 PM	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0	2
05:15 PM	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	1
Total Volume	0	0	0	0	0	6	0	6	0	0	0	0	0	2	0	2	8
% App. Total	0	0	0		0	100	0		0	0	0		0	100	0		
PHF	.000	.000	.000	.000	.000	.750	.000	.750	.000	.000	.000	.000	.000	.250	.000	.250	.500

City of Chowchilla
N/S: 15th Street
E/W: W Robertson Boulevard
Weather: Clear

File Name : 02_CHA_15th_Rob PM
Site Code : 00323913
Start Date : 10/4/2023
Page No : 2



Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	2	0	2
+15 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	2	0	2	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	6	0	6	0	0	0	0	0	2	0	2
% App. Total	0	0	0	0	0	100	0		0	0	0	0	0	100	0	
PHF	.000	.000	.000	.000	.000	.750	.000	.750	.000	.000	.000	.000	.000	.250	.000	.250

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Chowchilla
N/S: W Robertson Boulevard
E/W: Wasington Road
Weather: Clear

File Name : 03_CHA_Rob_Wash AM
Site Code : 00323913
Start Date : 10/4/2023
Page No : 1

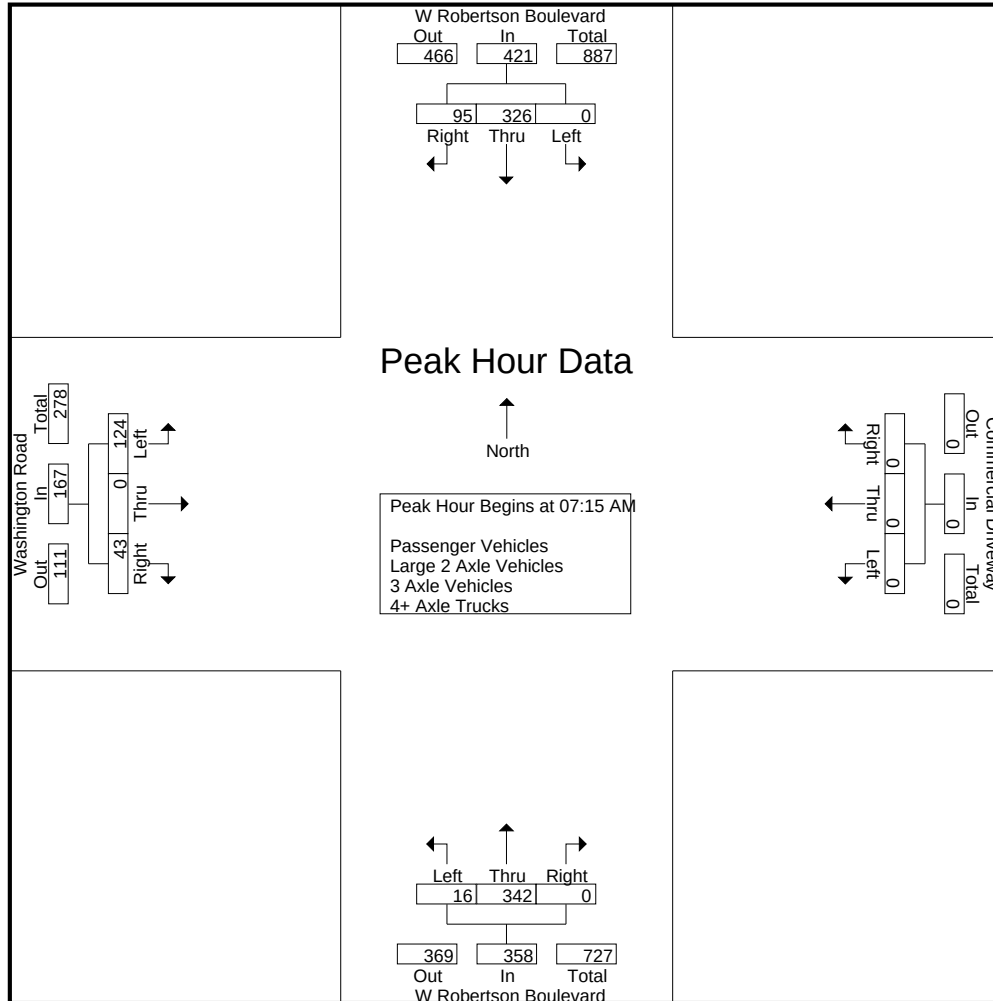
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	W Robertson Boulevard Southbound				Commercial Driveway Westbound				W Robertson Boulevard Northbound				Washington Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	43	4	47	0	0	0	0	2	35	0	37	13	0	15	28	112
07:15 AM	0	44	16	60	0	0	0	0	6	72	0	78	24	0	9	33	171
07:30 AM	0	65	13	78	0	0	0	0	1	108	0	109	40	0	17	57	244
07:45 AM	0	123	34	157	0	0	0	0	3	100	0	103	41	0	11	52	312
Total	0	275	67	342	0	0	0	0	12	315	0	327	118	0	52	170	839
08:00 AM	0	94	32	126	0	0	0	0	6	62	0	68	19	0	6	25	219
08:15 AM	0	53	16	69	0	0	0	0	3	61	0	64	19	0	7	26	159
08:30 AM	0	57	9	66	0	0	0	0	6	61	0	67	10	0	5	15	148
08:45 AM	0	50	19	69	0	0	0	0	1	52	0	53	12	0	3	15	137
Total	0	254	76	330	0	0	0	0	16	236	0	252	60	0	21	81	663
Grand Total	0	529	143	672	0	0	0	0	28	551	0	579	178	0	73	251	1502
Apprch %	0	78.7	21.3		0	0	0		4.8	95.2	0		70.9	0	29.1		
Total %	0	35.2	9.5	44.7	0	0	0	0	1.9	36.7	0	38.5	11.9	0	4.9	16.7	
Passenger Vehicles	0	505	134	639	0	0	0	0	26	533	0	559	174	0	71	245	1443
% Passenger Vehicles	0	95.5	93.7	95.1	0	0	0	0	92.9	96.7	0	96.5	97.8	0	97.3	97.6	96.1
Large 2 Axle Vehicles	0	9	6	15	0	0	0	0	1	12	0	13	3	0	0	3	31
% Large 2 Axle Vehicles	0	1.7	4.2	2.2	0	0	0	0	3.6	2.2	0	2.2	1.7	0	0	1.2	2.1
3 Axle Vehicles	0	3	0	3	0	0	0	0	0	3	0	3	0	0	0	0	6
% 3 Axle Vehicles	0	0.6	0	0.4	0	0	0	0	0	0.5	0	0.5	0	0	0	0	0.4
4+ Axle Trucks	0	12	3	15	0	0	0	0	1	3	0	4	1	0	2	3	22
% 4+ Axle Trucks	0	2.3	2.1	2.2	0	0	0	0	3.6	0.5	0	0.7	0.6	0	2.7	1.2	1.5

	W Robertson Boulevard Southbound				Commercial Driveway Westbound				W Robertson Boulevard Northbound				Washington Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	44	16	60	0	0	0	0	6	72	0	78	24	0	9	33	171
07:30 AM	0	65	13	78	0	0	0	0	1	108	0	109	40	0	17	57	244
07:45 AM	0	123	34	157	0	0	0	0	3	100	0	103	41	0	11	52	312
08:00 AM	0	94	32	126	0	0	0	0	6	62	0	68	19	0	6	25	219
Total Volume	0	326	95	421	0	0	0	0	16	342	0	358	124	0	43	167	946
% App. Total	0	77.4	22.6		0	0	0		4.5	95.5	0		74.3	0	25.7		
PHF	.000	.663	.699	.670	.000	.000	.000	.000	.667	.792	.000	.821	.756	.000	.632	.732	.758

City of Chowchilla
N/S: W Robertson Boulevard
E/W: Wasington Road
Weather: Clear

File Name : 03_CHA_Rob_Wash AM
Site Code : 00323913
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Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM				07:00 AM				07:15 AM				07:00 AM			
+0 mins.	0	65	13	78	0	0	0	0	6	72	0	78	13	0	15	28
+15 mins.	0	123	34	157	0	0	0	0	1	108	0	109	24	0	9	33
+30 mins.	0	94	32	126	0	0	0	0	3	100	0	103	40	0	17	57
+45 mins.	0	53	16	69	0	0	0	0	6	62	0	68	41	0	11	52
Total Volume	0	335	95	430	0	0	0	0	16	342	0	358	118	0	52	170
% App. Total	0	77.9	22.1		0	0	0	0	4.5	95.5	0		69.4	0	30.6	
PHF	.000	.681	.699	.685	.000	.000	.000	.000	.667	.792	.000	.821	.720	.000	.765	.746

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City of Chowchilla
N/S: W Robertson Boulevard
E/W: Wasington Road
Weather: Clear

File Name : 03_CHA_Rob_Wash AM
Site Code : 00323913
Start Date : 10/4/2023
Page No : 1

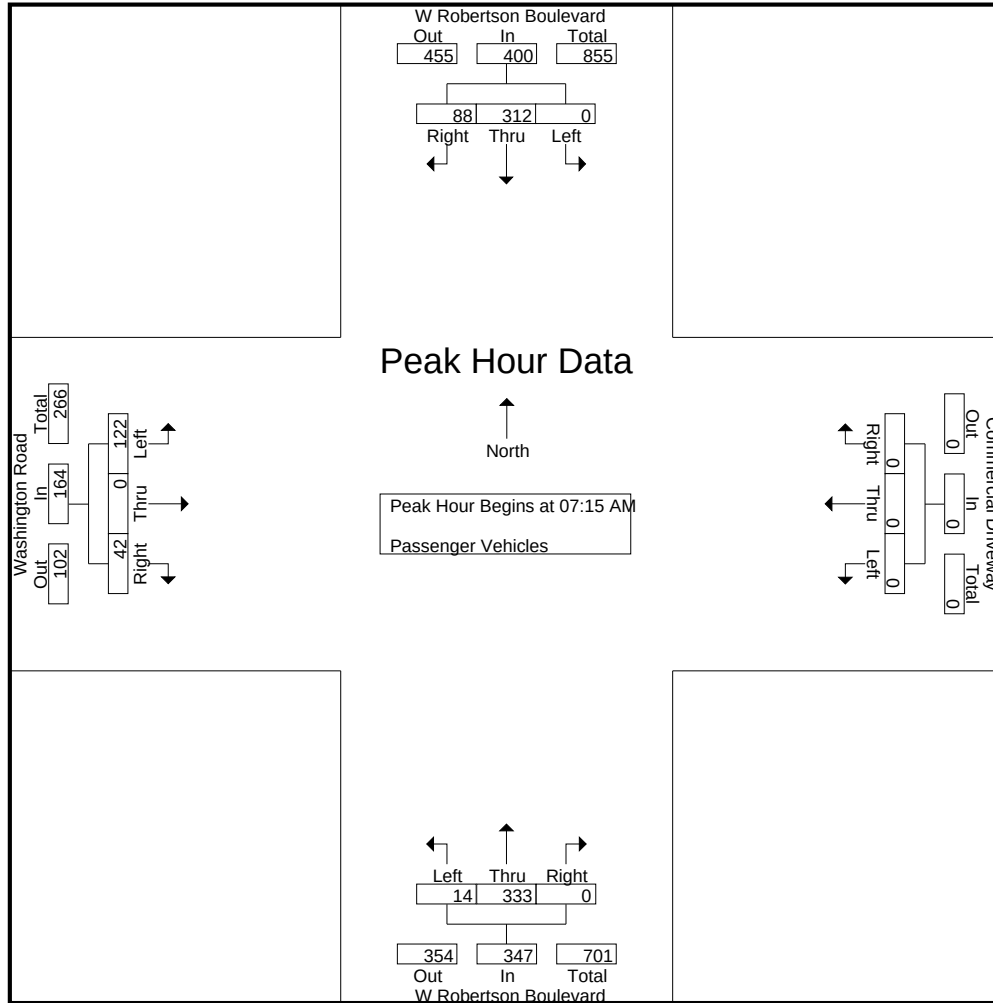
Groups Printed- Passenger Vehicles

	W Robertson Boulevard Southbound				Commercial Driveway Westbound				W Robertson Boulevard Northbound				Washington Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	42	4	46	0	0	0	0	2	30	0	32	13	0	15	28	106
07:15 AM	0	40	12	52	0	0	0	0	4	71	0	75	24	0	9	33	160
07:30 AM	0	60	13	73	0	0	0	0	1	102	0	103	38	0	17	55	231
07:45 AM	0	121	33	154	0	0	0	0	3	98	0	101	41	0	10	51	306
Total	0	263	62	325	0	0	0	0	10	301	0	311	116	0	51	167	803
08:00 AM	0	91	30	121	0	0	0	0	6	62	0	68	19	0	6	25	214
08:15 AM	0	52	14	66	0	0	0	0	3	60	0	63	17	0	6	23	152
08:30 AM	0	53	9	62	0	0	0	0	6	61	0	67	10	0	5	15	144
08:45 AM	0	46	19	65	0	0	0	0	1	49	0	50	12	0	3	15	130
Total	0	242	72	314	0	0	0	0	16	232	0	248	58	0	20	78	640
Grand Total	0	505	134	639	0	0	0	0	26	533	0	559	174	0	71	245	1443
Apprch %	0	79	21		0	0	0		4.7	95.3	0		71	0	29		
Total %	0	35	9.3	44.3	0	0	0	0	1.8	36.9	0	38.7	12.1	0	4.9	17	

	W Robertson Boulevard Southbound				Commercial Driveway Westbound				W Robertson Boulevard Northbound				Washington Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	40	12	52	0	0	0	0	4	71	0	75	24	0	9	33	160
07:30 AM	0	60	13	73	0	0	0	0	1	102	0	103	38	0	17	55	231
07:45 AM	0	121	33	154	0	0	0	0	3	98	0	101	41	0	10	51	306
08:00 AM	0	91	30	121	0	0	0	0	6	62	0	68	19	0	6	25	214
Total Volume	0	312	88	400	0	0	0	0	14	333	0	347	122	0	42	164	911
% App. Total	0	78	22		0	0	0		4	96	0		74.4	0	25.6		
PHF	.000	.645	.667	.649	.000	.000	.000	.000	.583	.816	.000	.842	.744	.000	.618	.745	.744

City of Chowchilla
N/S: W Robertson Boulevard
E/W: Wasington Road
Weather: Clear

File Name : 03_CHA_Rob_Wash AM
Site Code : 00323913
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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	40	12	52	0	0	0	0	4	71	0	75	24	0	9	33
+15 mins.	0	60	13	73	0	0	0	0	1	102	0	103	38	0	17	55
+30 mins.	0	121	33	154	0	0	0	0	3	98	0	101	41	0	10	51
+45 mins.	0	91	30	121	0	0	0	0	6	62	0	68	19	0	6	25
Total Volume	0	312	88	400	0	0	0	0	14	333	0	347	122	0	42	164
% App. Total	0	78	22		0	0	0		4	96	0		74.4	0	25.6	
PHF	.000	.645	.667	.649	.000	.000	.000	.000	.583	.816	.000	.842	.744	.000	.618	.745

City of Chowchilla
N/S: W Robertson Boulevard
E/W: Wasington Road
Weather: Clear

File Name : 03_CHA_Rob_Wash AM
Site Code : 00323913
Start Date : 10/4/2023
Page No : 1

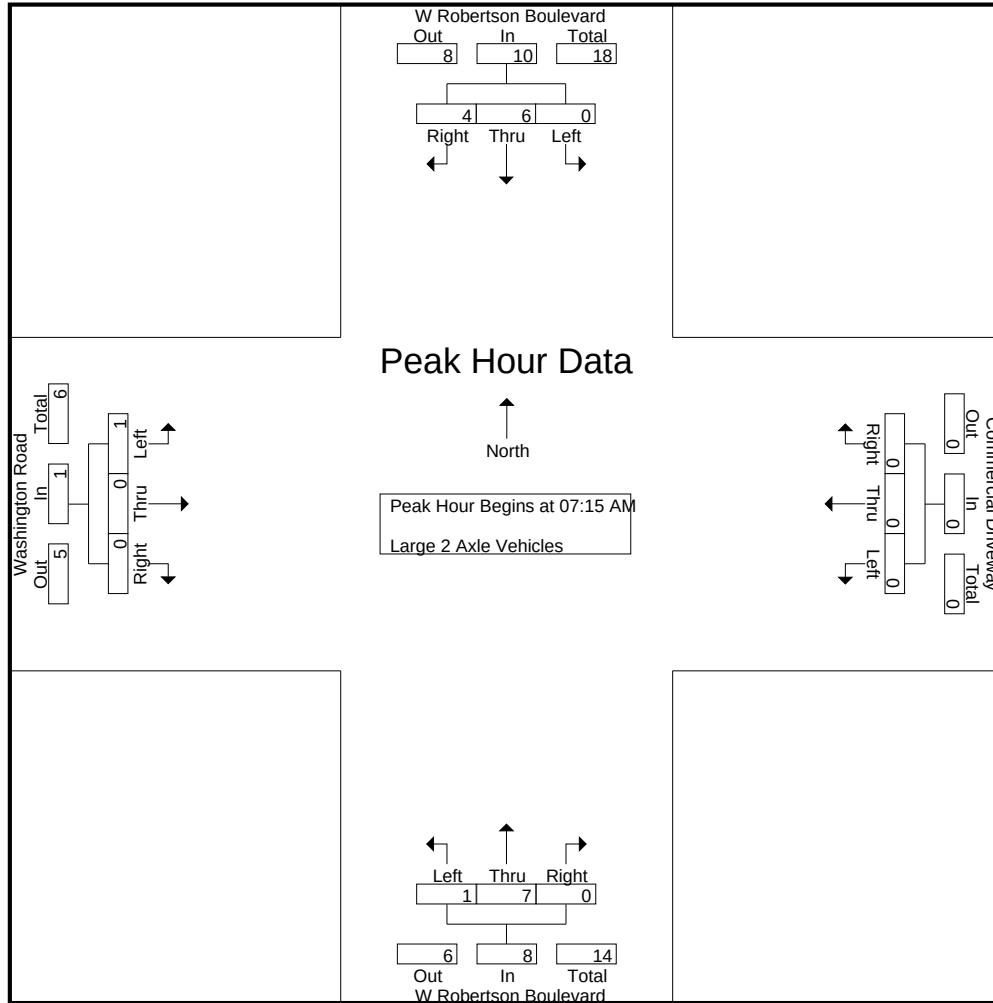
Groups Printed- Large 2 Axle Vehicles

	W Robertson Boulevard Southbound				Commercial Driveway Westbound				W Robertson Boulevard Northbound				Washington Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	3	0	3	0	0	0	0	3
07:15 AM	0	2	2	4	0	0	0	0	1	1	0	2	0	0	0	0	6
07:30 AM	0	2	0	2	0	0	0	0	0	5	0	5	1	0	0	1	8
07:45 AM	0	1	1	2	0	0	0	0	0	1	0	1	0	0	0	0	3
Total	0	5	3	8	0	0	0	0	1	10	0	11	1	0	0	1	20
08:00 AM	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	2
08:15 AM	0	1	2	3	0	0	0	0	0	1	0	1	2	0	0	2	6
08:30 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
08:45 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
Total	0	4	3	7	0	0	0	0	0	2	0	2	2	0	0	2	11
Grand Total	0	9	6	15	0	0	0	0	1	12	0	13	3	0	0	3	31
Apprch %	0	60	40		0	0	0		7.7	92.3	0		100	0	0		
Total %	0	29	19.4	48.4	0	0	0	0	3.2	38.7	0	41.9	9.7	0	0	9.7	

	W Robertson Boulevard Southbound				Commercial Driveway Westbound				W Robertson Boulevard Northbound				Washington Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	2	2	4	0	0	0	0	1	1	0	2	0	0	0	0	6
07:30 AM	0	2	0	2	0	0	0	0	0	5	0	5	1	0	0	1	8
07:45 AM	0	1	1	2	0	0	0	0	0	1	0	1	0	0	0	0	3
08:00 AM	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0	2
Total Volume	0	6	4	10	0	0	0	0	1	7	0	8	1	0	0	1	19
% App. Total	0	60	40		0	0	0		12.5	87.5	0		100	0	0		
PHF	.000	.750	.500	.625	.000	.000	.000	.000	.250	.350	.000	.400	.250	.000	.000	.250	.594

City of Chowchilla
N/S: W Robertson Boulevard
E/W: Wasington Road
Weather: Clear

File Name : 03_CHA_Rob_Wash AM
Site Code : 00323913
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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	2	2	4	0	0	0	0	1	1	0	2	0	0	0	0
+15 mins.	0	2	0	2	0	0	0	0	0	5	0	5	1	0	0	1
+30 mins.	0	1	1	2	0	0	0	0	0	1	0	1	0	0	0	0
+45 mins.	0	1	1	2	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	6	4	10	0	0	0	0	1	7	0	8	1	0	0	1
% App. Total	0	60	40		0	0	0	0	12.5	87.5	0		100	0	0	
PHF	.000	.750	.500	.625	.000	.000	.000	.000	.250	.350	.000	.400	.250	.000	.000	.250

City of Chowchilla
N/S: W Robertson Boulevard
E/W: Wasington Road
Weather: Clear

File Name : 03_CHA_Rob_Wash AM
Site Code : 00323913
Start Date : 10/4/2023
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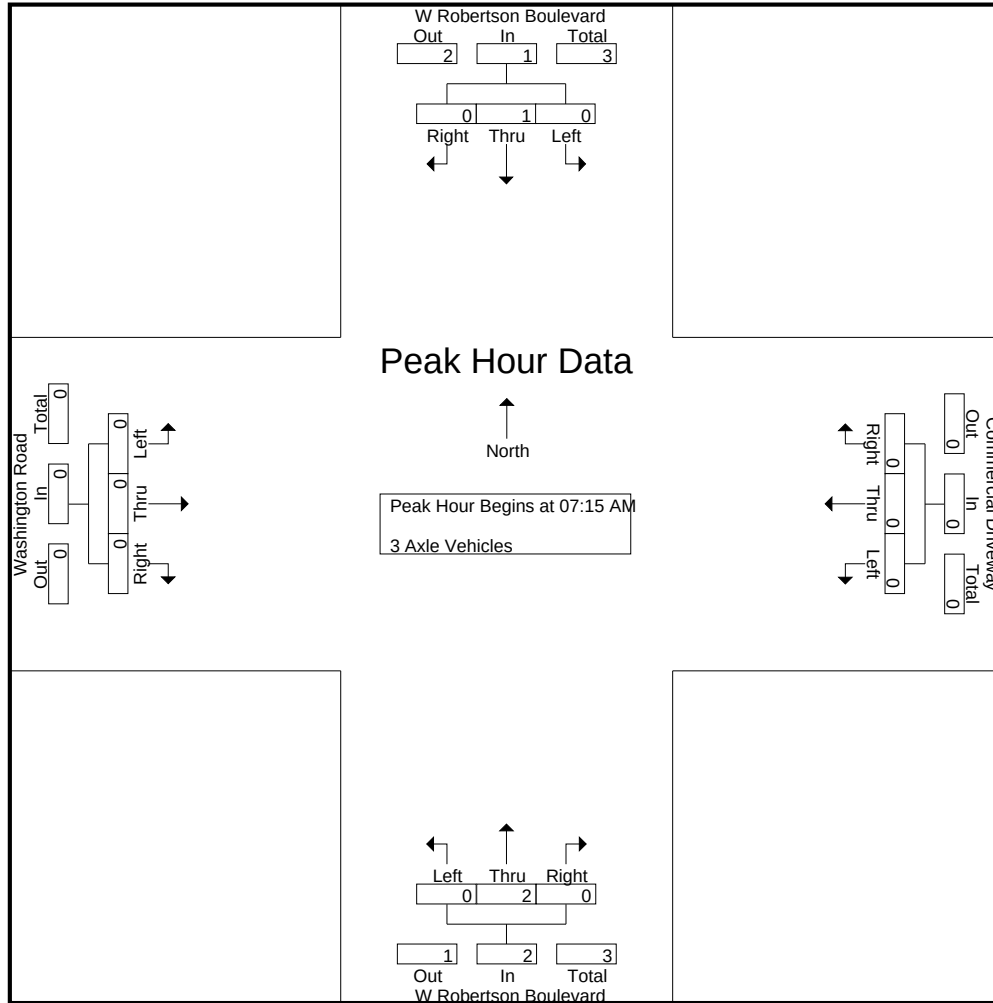
Groups Printed- 3 Axle Vehicles

	W Robertson Boulevard Southbound				Commercial Driveway Westbound				W Robertson Boulevard Northbound				Washington Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
07:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
Total	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
08:45 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
Total	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
Grand Total	0	3	0	3	0	0	0	0	0	3	0	3	0	0	0	0	6
Apprch %	0	100	0		0	0	0		0	100	0		0	0	0		
Total %	0	50	0	50	0	0	0	0	0	50	0	50	0	0	0	0	

	W Robertson Boulevard Southbound				Commercial Driveway Westbound				W Robertson Boulevard Northbound				Washington Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
07:45 AM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000	.375

City of Chowchilla
N/S: W Robertson Boulevard
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Weather: Clear

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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0	
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000

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City of Chowchilla
N/S: W Robertson Boulevard
E/W: Wasington Road
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File Name : 03_CHA_Rob_Wash AM
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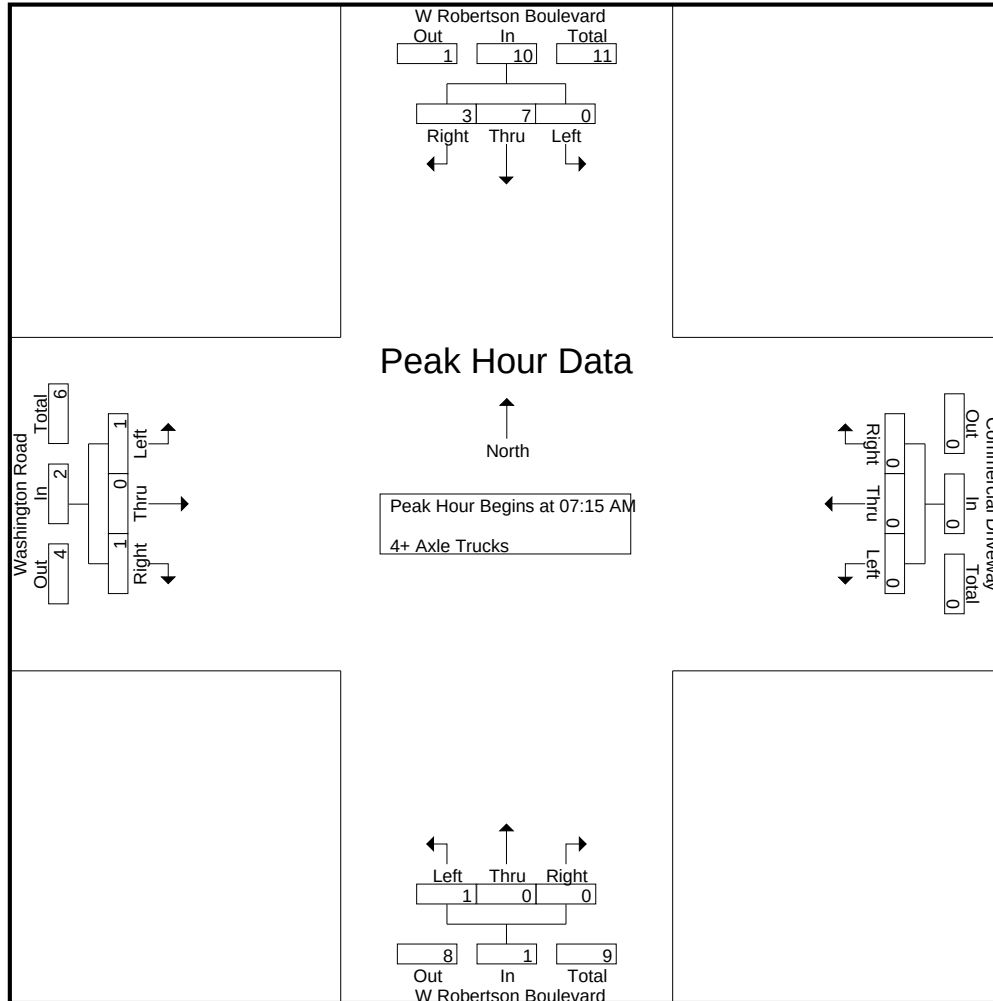
Groups Printed- 4+ Axle Trucks

	W Robertson Boulevard Southbound				Commercial Driveway Westbound				W Robertson Boulevard Northbound				Washington Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
07:15 AM	0	2	2	4	0	0	0	0	1	0	0	1	0	0	0	0	5
07:30 AM	0	2	0	2	0	0	0	0	0	0	0	0	1	0	0	1	3
07:45 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	1	2
Total	0	6	2	8	0	0	0	0	1	2	0	3	1	0	1	2	13
08:00 AM	0	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0	3
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1
08:30 AM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2
08:45 AM	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
Total	0	6	1	7	0	0	0	0	0	1	0	1	0	0	1	1	9
Grand Total	0	12	3	15	0	0	0	0	1	3	0	4	1	0	2	3	22
Apprch %	0	80	20		0	0	0		25	75	0		33.3	0	66.7		
Total %	0	54.5	13.6	68.2	0	0	0	0	4.5	13.6	0	18.2	4.5	0	9.1	13.6	

	W Robertson Boulevard Southbound				Commercial Driveway Westbound				W Robertson Boulevard Northbound				Washington Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	2	2	4	0	0	0	0	1	0	0	1	0	0	0	0	5
07:30 AM	0	2	0	2	0	0	0	0	0	0	0	0	1	0	0	1	3
07:45 AM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	1	2
08:00 AM	0	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0	3
Total Volume	0	7	3	10	0	0	0	0	1	0	0	1	1	0	1	2	13
% App. Total	0	70	30		0	0	0		100	0	0		50	0	50		
PHF	.000	.875	.375	.625	.000	.000	.000	.000	.250	.000	.000	.250	.250	.000	.250	.500	.650

City of Chowchilla
N/S: W Robertson Boulevard
E/W: Wasington Road
Weather: Clear

File Name : 03_CHA_Rob_Wash AM
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Peak Hour Analysis From 07:15 AM to 08:00 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:15 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	2	2	4	0	0	0	0	1	0	0	1	0	0	0	0
+15 mins.	0	2	0	2	0	0	0	0	0	0	0	0	1	0	0	1
+30 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	1
+45 mins.	0	2	1	3	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	7	3	10	0	0	0	0	1	0	0	1	1	0	1	2
% App. Total	0	70	30		0	0	0	0	100	0	0		50	0	50	
PHF	.000	.875	.375	.625	.000	.000	.000	.000	.250	.000	.000	.250	.250	.000	.250	.500

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City of Chowchilla
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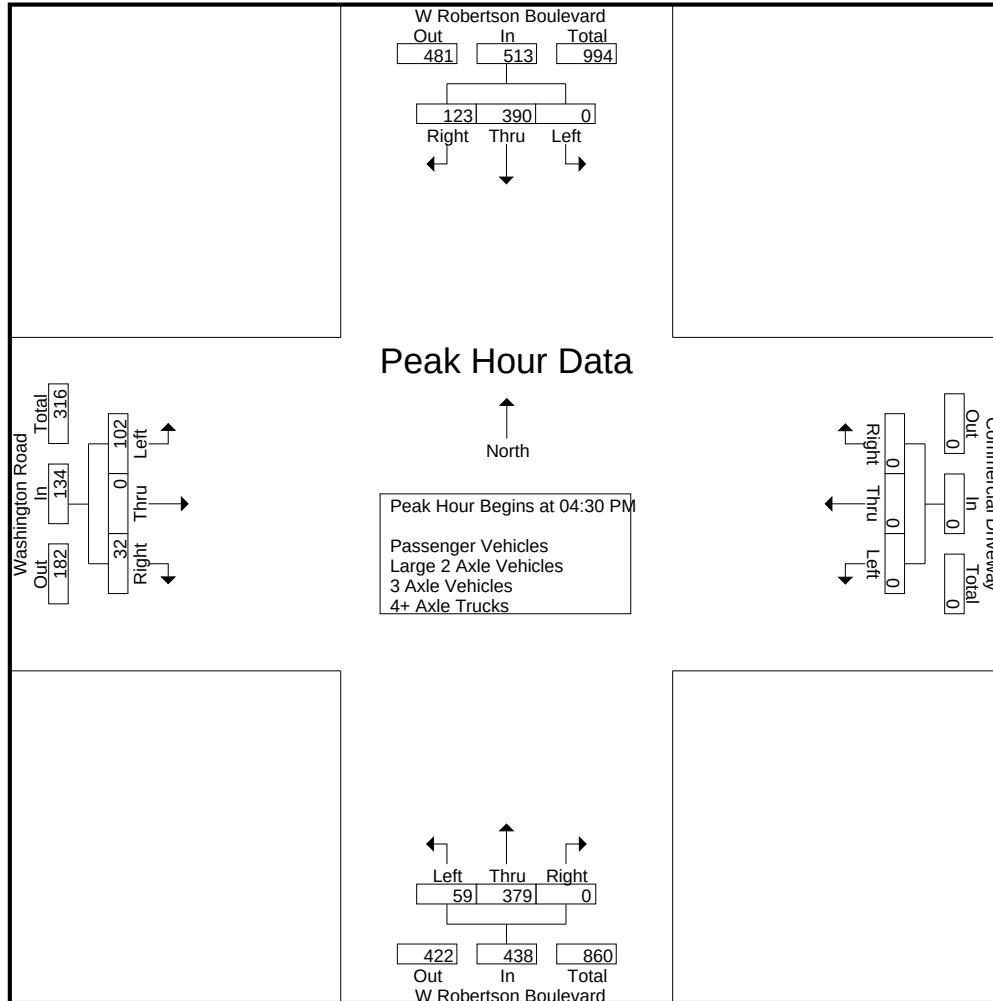
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	W Robertson Boulevard Southbound				Commercial Driveway Westbound				W Robertson Boulevard Northbound				Washington Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	84	29	113	0	0	0	0	12	93	0	105	17	0	5	22	240
04:15 PM	0	84	27	111	0	0	0	0	12	104	0	116	17	0	5	22	249
04:30 PM	0	103	42	145	0	0	0	0	16	107	0	123	30	0	7	37	305
04:45 PM	0	82	29	111	0	0	0	0	10	93	0	103	23	0	10	33	247
Total	0	353	127	480	0	0	0	0	50	397	0	447	87	0	27	114	1041
05:00 PM	0	109	25	134	0	0	0	0	18	78	0	96	26	0	8	34	264
05:15 PM	0	96	27	123	0	0	0	0	15	101	0	116	23	0	7	30	269
05:30 PM	0	75	40	115	0	0	0	0	13	79	0	92	20	0	6	26	233
05:45 PM	0	74	24	98	0	0	0	0	15	90	0	105	16	0	10	26	229
Total	0	354	116	470	0	0	0	0	61	348	0	409	85	0	31	116	995
Grand Total	0	707	243	950	0	0	0	0	111	745	0	856	172	0	58	230	2036
Apprch %	0	74.4	25.6		0	0	0		13	87	0		74.8	0	25.2		
Total %	0	34.7	11.9	46.7	0	0	0	0	5.5	36.6	0	42	8.4	0	2.8	11.3	
Passenger Vehicles	0	687	240	927	0	0	0	0	110	732	0	842	172	0	57	229	1998
% Passenger Vehicles	0	97.2	98.8	97.6	0	0	0	0	99.1	98.3	0	98.4	100	0	98.3	99.6	98.1
Large 2 Axle Vehicles	0	5	2	7	0	0	0	0	1	6	0	7	0	0	0	0	14
% Large 2 Axle Vehicles	0	0.7	0.8	0.7	0	0	0	0	0.9	0.8	0	0.8	0	0	0	0	0.7
3 Axle Vehicles	0	5	0	5	0	0	0	0	0	2	0	2	0	0	0	0	7
% 3 Axle Vehicles	0	0.7	0	0.5	0	0	0	0	0	0.3	0	0.2	0	0	0	0	0.3
4+ Axle Trucks	0	10	1	11	0	0	0	0	0	5	0	5	0	0	1	1	17
% 4+ Axle Trucks	0	1.4	0.4	1.2	0	0	0	0	0	0.7	0	0.6	0	0	1.7	0.4	0.8

	W Robertson Boulevard Southbound				Commercial Driveway Westbound				W Robertson Boulevard Northbound				Washington Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	103	42	145	0	0	0	0	16	107	0	123	30	0	7	37	305
04:45 PM	0	82	29	111	0	0	0	0	10	93	0	103	23	0	10	33	247
05:00 PM	0	109	25	134	0	0	0	0	18	78	0	96	26	0	8	34	264
05:15 PM	0	96	27	123	0	0	0	0	15	101	0	116	23	0	7	30	269
Total Volume	0	390	123	513	0	0	0	0	59	379	0	438	102	0	32	134	1085
% App. Total	0	76	24		0	0	0		13.5	86.5	0		76.1	0	23.9		
PHF	.000	.894	.732	.884	.000	.000	.000	.000	.819	.886	.000	.890	.850	.000	.800	.905	.889

City of Chowchilla
N/S: W Robertson Boulevard
E/W: Wasington Road
Weather: Clear

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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:00 PM				04:00 PM				04:30 PM			
+0 mins.	0	103	42	145	0	0	0	0	12	93	0	105	30	0	7	37
+15 mins.	0	82	29	111	0	0	0	0	12	104	0	116	23	0	10	33
+30 mins.	0	109	25	134	0	0	0	0	16	107	0	123	26	0	8	34
+45 mins.	0	96	27	123	0	0	0	0	10	93	0	103	23	0	7	30
Total Volume	0	390	123	513	0	0	0	0	50	397	0	447	102	0	32	134
% App. Total	0	76	24		0	0	0		11.2	88.8	0		76.1	0	23.9	
PHF	.000	.894	.732	.884	.000	.000	.000	.000	.781	.928	.000	.909	.850	.000	.800	.905

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City of Chowchilla
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File Name : 03_CHA_Rob_Wash PM
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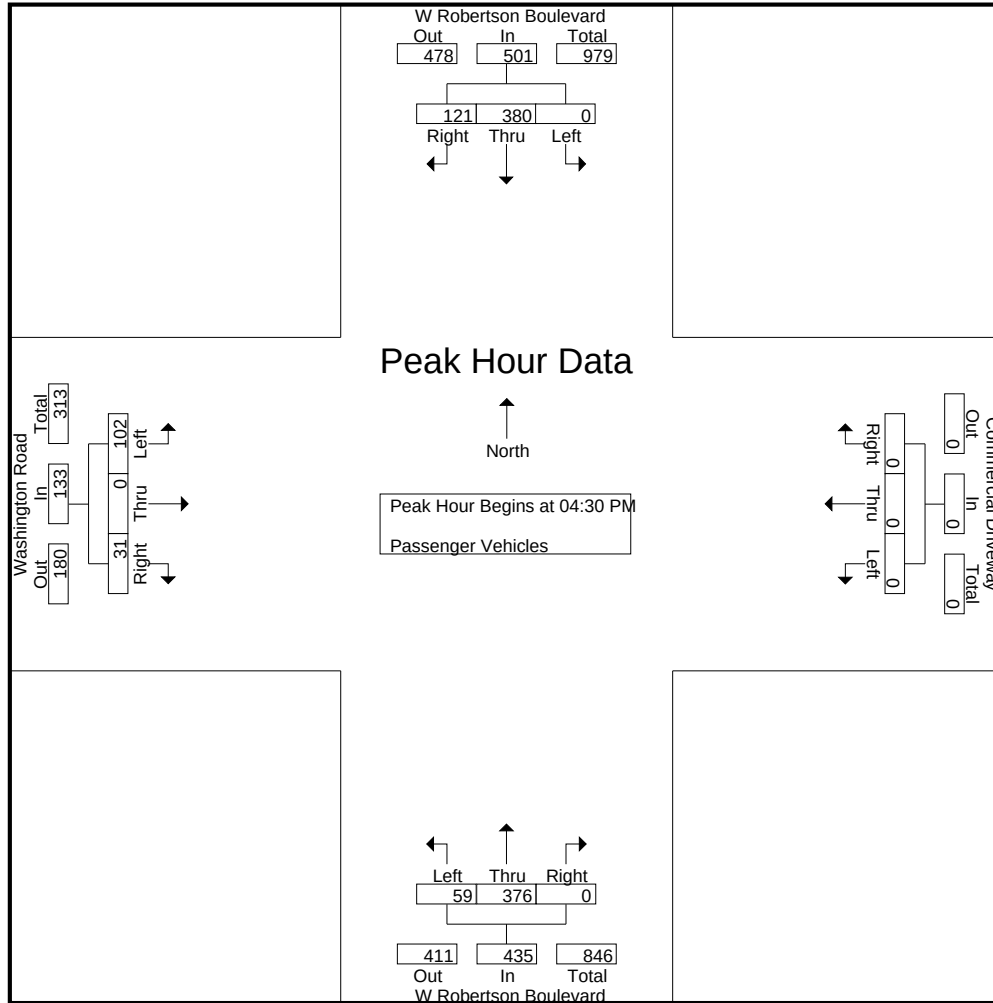
Groups Printed- Passenger Vehicles

	W Robertson Boulevard Southbound				Commercial Driveway Westbound				W Robertson Boulevard Northbound				Washington Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	79	28	107	0	0	0	0	11	92	0	103	17	0	5	22	232
04:15 PM	0	83	27	110	0	0	0	0	12	99	0	111	17	0	5	22	243
04:30 PM	0	100	41	141	0	0	0	0	16	105	0	121	30	0	6	36	298
04:45 PM	0	81	28	109	0	0	0	0	10	92	0	102	23	0	10	33	244
Total	0	343	124	467	0	0	0	0	49	388	0	437	87	0	26	113	1017
05:00 PM	0	104	25	129	0	0	0	0	18	78	0	96	26	0	8	34	259
05:15 PM	0	95	27	122	0	0	0	0	15	101	0	116	23	0	7	30	268
05:30 PM	0	73	40	113	0	0	0	0	13	78	0	91	20	0	6	26	230
05:45 PM	0	72	24	96	0	0	0	0	15	87	0	102	16	0	10	26	224
Total	0	344	116	460	0	0	0	0	61	344	0	405	85	0	31	116	981
Grand Total	0	687	240	927	0	0	0	0	110	732	0	842	172	0	57	229	1998
Apprch %	0	74.1	25.9		0	0	0		13.1	86.9	0		75.1	0	24.9		
Total %	0	34.4	12	46.4	0	0	0	0	5.5	36.6	0	42.1	8.6	0	2.9	11.5	

	W Robertson Boulevard Southbound				Commercial Driveway Westbound				W Robertson Boulevard Northbound				Washington Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	100	41	141	0	0	0	0	16	105	0	121	30	0	6	36	298
04:45 PM	0	81	28	109	0	0	0	0	10	92	0	102	23	0	10	33	244
05:00 PM	0	104	25	129	0	0	0	0	18	78	0	96	26	0	8	34	259
05:15 PM	0	95	27	122	0	0	0	0	15	101	0	116	23	0	7	30	268
Total Volume	0	380	121	501	0	0	0	0	59	376	0	435	102	0	31	133	1069
% App. Total	0	75.8	24.2		0	0	0		13.6	86.4	0		76.7	0	23.3		
PHF	.000	.913	.738	.888	.000	.000	.000	.000	.819	.895	.000	.899	.850	.000	.775	.924	.897

City of Chowchilla
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Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	100	41	141	0	0	0	0	16	105	0	121	30	0	6	36
+15 mins.	0	81	28	109	0	0	0	0	10	92	0	102	23	0	10	33
+30 mins.	0	104	25	129	0	0	0	0	18	78	0	96	26	0	8	34
+45 mins.	0	95	27	122	0	0	0	0	15	101	0	116	23	0	7	30
Total Volume	0	380	121	501	0	0	0	0	59	376	0	435	102	0	31	133
% App. Total	0	75.8	24.2		0	0	0		13.6	86.4	0		76.7	0	23.3	
PHF	.000	.913	.738	.888	.000	.000	.000	.000	.819	.895	.000	.899	.850	.000	.775	.924

City of Chowchilla
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E/W: Wasington Road
Weather: Clear

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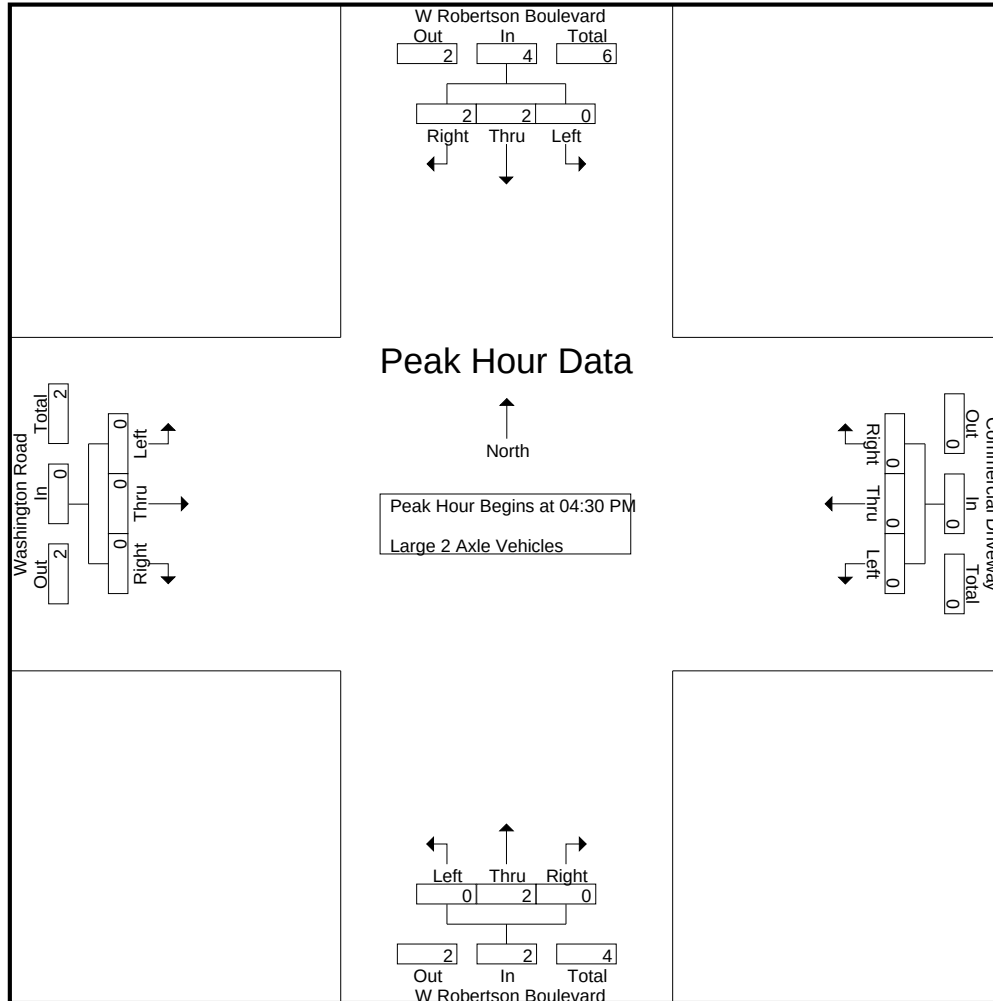
Groups Printed- Large 2 Axle Vehicles

	W Robertson Boulevard Southbound				Commercial Driveway Westbound				W Robertson Boulevard Northbound				Washington Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	2	0	2	0	0	0	0	1	0	0	1	0	0	0	0	3
04:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
04:30 PM	0	1	1	2	0	0	0	0	0	1	0	1	0	0	0	0	3
04:45 PM	0	0	1	1	0	0	0	0	0	1	0	1	0	0	0	0	2
Total	0	3	2	5	0	0	0	0	1	3	0	4	0	0	0	0	9
05:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	1	0	1	0	0	0	0	0	3	0	3	0	0	0	0	4
Total	0	2	0	2	0	0	0	0	0	3	0	3	0	0	0	0	5
Grand Total	0	5	2	7	0	0	0	0	1	6	0	7	0	0	0	0	14
Apprch %	0	71.4	28.6		0	0	0		14.3	85.7	0		0	0	0		
Total %	0	35.7	14.3	50	0	0	0	0	7.1	42.9	0	50	0	0	0	0	

	W Robertson Boulevard Southbound				Commercial Driveway Westbound				W Robertson Boulevard Northbound				Washington Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	1	1	2	0	0	0	0	0	1	0	1	0	0	0	0	3
04:45 PM	0	0	1	1	0	0	0	0	0	1	0	1	0	0	0	0	2
05:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	2	2	4	0	0	0	0	0	2	0	2	0	0	0	0	6
% App. Total	0	50	50		0	0	0		0	100	0		0	0	0		
PHF	.000	.500	.500	.500	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000	.500

City of Chowchilla
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Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	1	1	2	0	0	0	0	0	1	0	1	0	0	0	0
+15 mins.	0	0	1	1	0	0	0	0	0	1	0	1	0	0	0	0
+30 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	2	2	4	0	0	0	0	0	2	0	2	0	0	0	0
% App. Total	0	50	50		0	0	0		0	100	0		0	0	0	
PHF	.000	.500	.500	.500	.000	.000	.000	.000	.000	.500	.000	.500	.000	.000	.000	.000

City of Chowchilla
N/S: W Robertson Boulevard
E/W: Wasington Road
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File Name : 03_CHA_Rob_Wash PM
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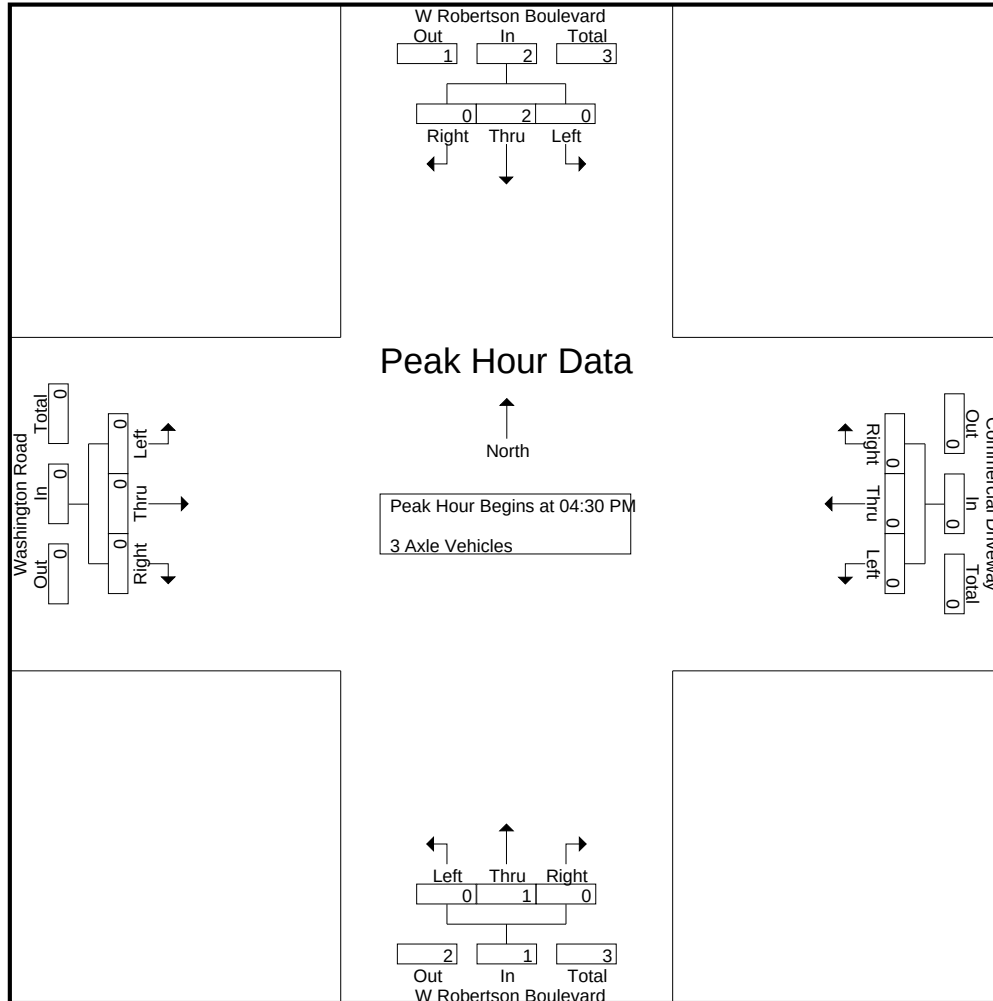
Groups Printed- 3 Axle Vehicles

	W Robertson Boulevard Southbound				Commercial Driveway Westbound				W Robertson Boulevard Northbound				Washington Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
04:15 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
04:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
05:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:15 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:30 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:45 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	4	0	4	0	0	0	0	0	0	0	0	0	0	0	0	4
Grand Total	0	5	0	5	0	0	0	0	0	2	0	2	0	0	0	0	7
Apprch %	0	100	0		0	0	0		0	100	0		0	0	0		
Total %	0	71.4	0	71.4	0	0	0	0	0	28.6	0	28.6	0	0	0	0	

	W Robertson Boulevard Southbound				Commercial Driveway Westbound				W Robertson Boulevard Northbound				Washington Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:00 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:15 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total Volume	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0	3
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0		
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000	.750

City of Chowchilla
N/S: W Robertson Boulevard
E/W: Wasington Road
Weather: Clear

File Name : 03_CHA_Rob_Wash PM
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Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	2	0	2	0	0	0	0	0	1	0	1	0	0	0	0
% App. Total	0	100	0		0	0	0		0	100	0		0	0	0	
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.250	.000	.250	.000	.000	.000	.000

City of Chowchilla
N/S: W Robertson Boulevard
E/W: Wasington Road
Weather: Clear

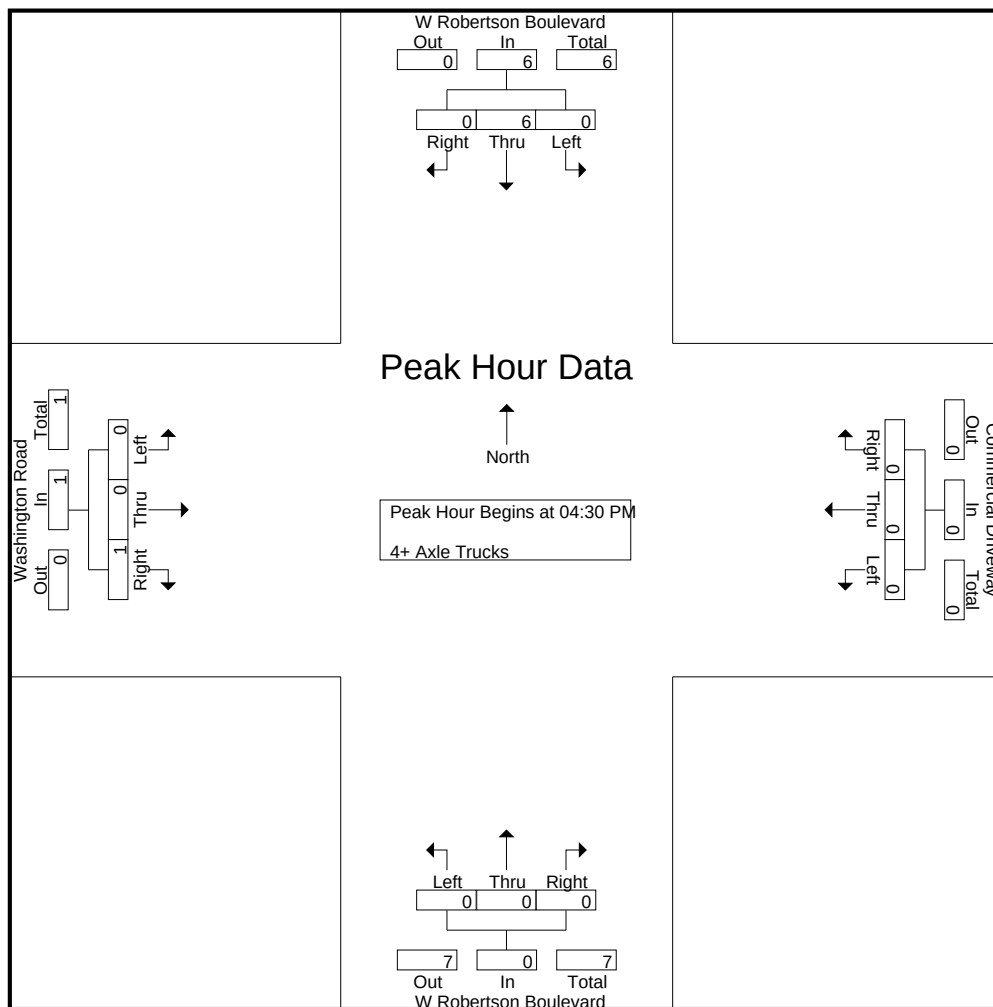
File Name : 03_CHA_Rob_Wash PM
Site Code : 00323913
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Groups Printed- 4+ Axle Trucks

	W Robertson Boulevard Southbound				Commercial Driveway Westbound				W Robertson Boulevard Northbound				Washington Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	2	1	3	0	0	0	0	0	1	0	1	0	0	0	0	4
04:15 PM	0	1	0	1	0	0	0	0	0	3	0	3	0	0	0	0	4
04:30 PM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	1	1	3
04:45 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	0	6	1	7	0	0	0	0	0	4	0	4	0	0	1	1	12
05:00 PM	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
05:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	4	0	4	0	0	0	0	0	1	0	1	0	0	0	0	5
Grand Total	0	10	1	11	0	0	0	0	0	5	0	5	0	0	1	1	17
Apprch %	0	90.9	9.1		0	0	0		0	100	0		0	0	100		
Total %	0	58.8	5.9	64.7	0	0	0	0	0	29.4	0	29.4	0	0	5.9	5.9	

	W Robertson Boulevard Southbound				Commercial Driveway Westbound				W Robertson Boulevard Northbound				Washington Road Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:30 PM to 05:15 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	2	0	2	0	0	0	0	0	0	0	0	0	0	1	1	3
04:45 PM	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
05:00 PM	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3
05:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	6	0	6	0	0	0	0	0	0	0	0	0	0	1	1	7
% App. Total	0	100	0		0	0	0		0	0	0		0	0	100		
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.250	.583

File Name : 03_CHA_Rob_Wash PM
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Peak Hour for Each Approach Begins at:

Each Hour For	Each Approach Begins At:															
	04:30 PM				04:30 PM				04:30 PM				04:30 PM			
+0 mins.	0	2	0	2	0	0	0	0	0	0	0	0	0	0	1	1
+15 mins.	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	3	0	3	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	6	0	6	0	0	0	0	0	0	0	0	0	0	1	1
% App. Total	0	100	0		0	0	0		0	0	0		0	0	100	
PHF	.000	.500	.000	.500	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.250

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City of Chowchilla
N/S: W Robertson Boulevard
E/W: Adams Drive
Weather: Clear

File Name : 04_CHA_Rob_Adams AM
Site Code : 00323913
Start Date : 10/4/2023
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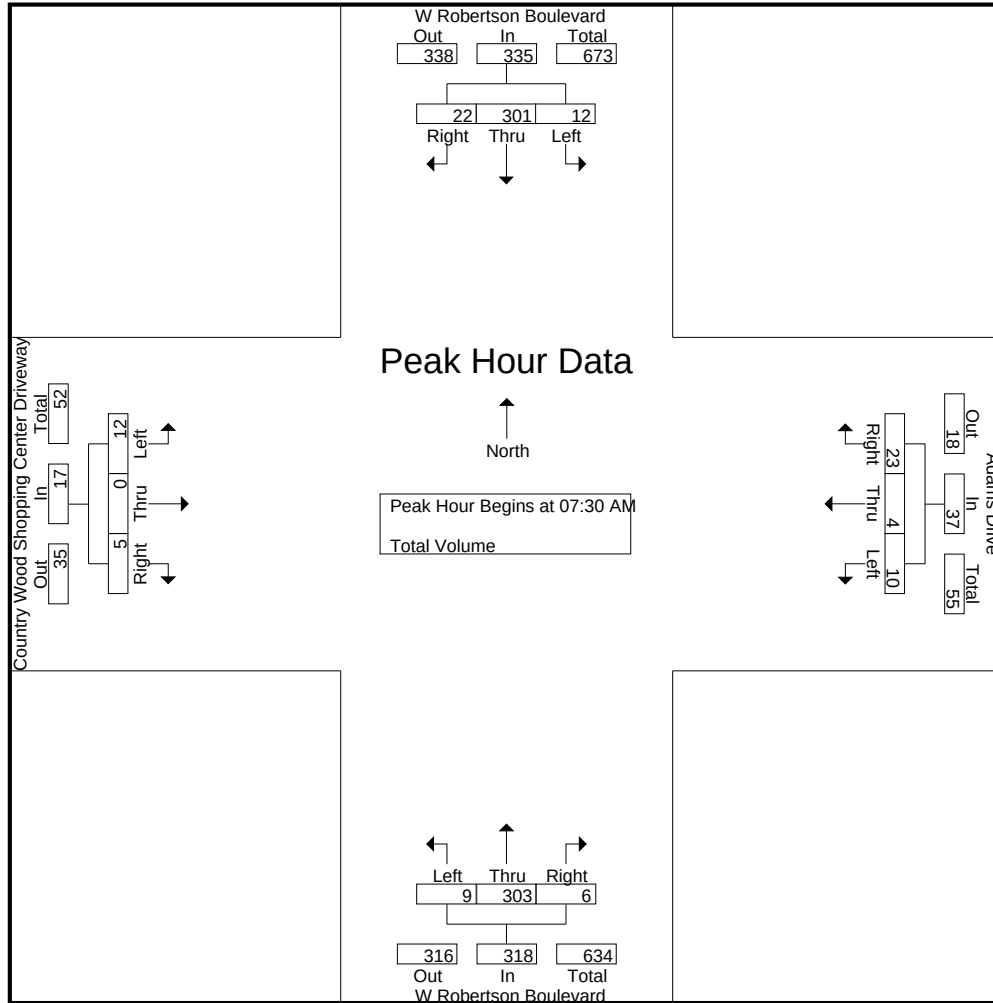
Groups Printed- Total Volume

	W Robertson Boulevard Southbound				Adams Drive Westbound				W Robertson Boulevard Northbound				Country Wood Shopping Center Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	3	55	1	59	0	1	4	5	1	28	0	29	3	0	1	4	97
07:15 AM	0	46	2	48	2	0	6	8	1	66	1	68	2	0	0	2	126
07:30 AM	2	67	3	72	1	1	4	6	2	78	4	84	2	0	0	2	164
07:45 AM	4	97	1	102	5	0	8	13	4	105	0	109	4	0	3	7	231
Total	9	265	7	281	8	2	22	32	8	277	5	290	11	0	4	15	618
08:00 AM	2	83	8	93	3	2	9	14	1	61	0	62	1	0	1	2	171
08:15 AM	4	54	10	68	1	1	2	4	2	59	2	63	5	0	1	6	141
08:30 AM	5	48	3	56	0	0	3	3	3	50	2	55	2	0	0	2	116
08:45 AM	4	40	3	47	3	0	2	5	1	44	0	45	2	0	0	2	99
Total	15	225	24	264	7	3	16	26	7	214	4	225	10	0	2	12	527
Grand Total	24	490	31	545	15	5	38	58	15	491	9	515	21	0	6	27	1145
Apprch %	4.4	89.9	5.7		25.9	8.6	65.5		2.9	95.3	1.7		77.8	0	22.2		
Total %	2.1	42.8	2.7	47.6	1.3	0.4	3.3	5.1	1.3	42.9	0.8	45	1.8	0	0.5	2.4	

	W Robertson Boulevard Southbound				Adams Drive Westbound				W Robertson Boulevard Northbound				Country Wood Shopping Center Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:30 AM																	
07:30 AM	2	67	3	72	1	1	4	6	2	78	4	84	2	0	0	2	164
07:45 AM	4	97	1	102	5	0	8	13	4	105	0	109	4	0	3	7	231
08:00 AM	2	83	8	93	3	2	9	14	1	61	0	62	1	0	1	2	171
08:15 AM	4	54	10	68	1	1	2	4	2	59	2	63	5	0	1	6	141
Total Volume	12	301	22	335	10	4	23	37	9	303	6	318	12	0	5	17	707
% App. Total	3.6	89.9	6.6		27	10.8	62.2		2.8	95.3	1.9		70.6	0	29.4		
PHF	.750	.776	.550	.821	.500	.500	.639	.661	.563	.721	.375	.729	.600	.000	.417	.607	.765

City of Chowchilla
N/S: W Robertson Boulevard
E/W: Adams Drive
Weather: Clear

File Name : 04_CHA_Rob_Adams AM
Site Code : 00323913
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Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:15 AM				07:15 AM				07:30 AM			
+0 mins.	2	67	3	72	2	0	6	8	1	66	1	68	2	0	0	2
+15 mins.	4	97	1	102	1	1	4	6	2	78	4	84	4	0	3	7
+30 mins.	2	83	8	93	5	0	8	13	4	105	0	109	1	0	1	2
+45 mins.	4	54	10	68	3	2	9	14	1	61	0	62	5	0	1	6
Total Volume	12	301	22	335	11	3	27	41	8	310	5	323	12	0	5	17
% App. Total	3.6	89.9	6.6		26.8	7.3	65.9		2.5	96	1.5		70.6	0	29.4	
PHF	.750	.776	.550	.821	.550	.375	.750	.732	.500	.738	.313	.741	.600	.000	.417	.607

City of Chowchilla
N/S: W Robertson Boulevard
E/W: Adams Drive
Weather: Clear

File Name : 04_CHA_Rob_Adams PM
Site Code : 00323913
Start Date : 10/4/2023
Page No : 1

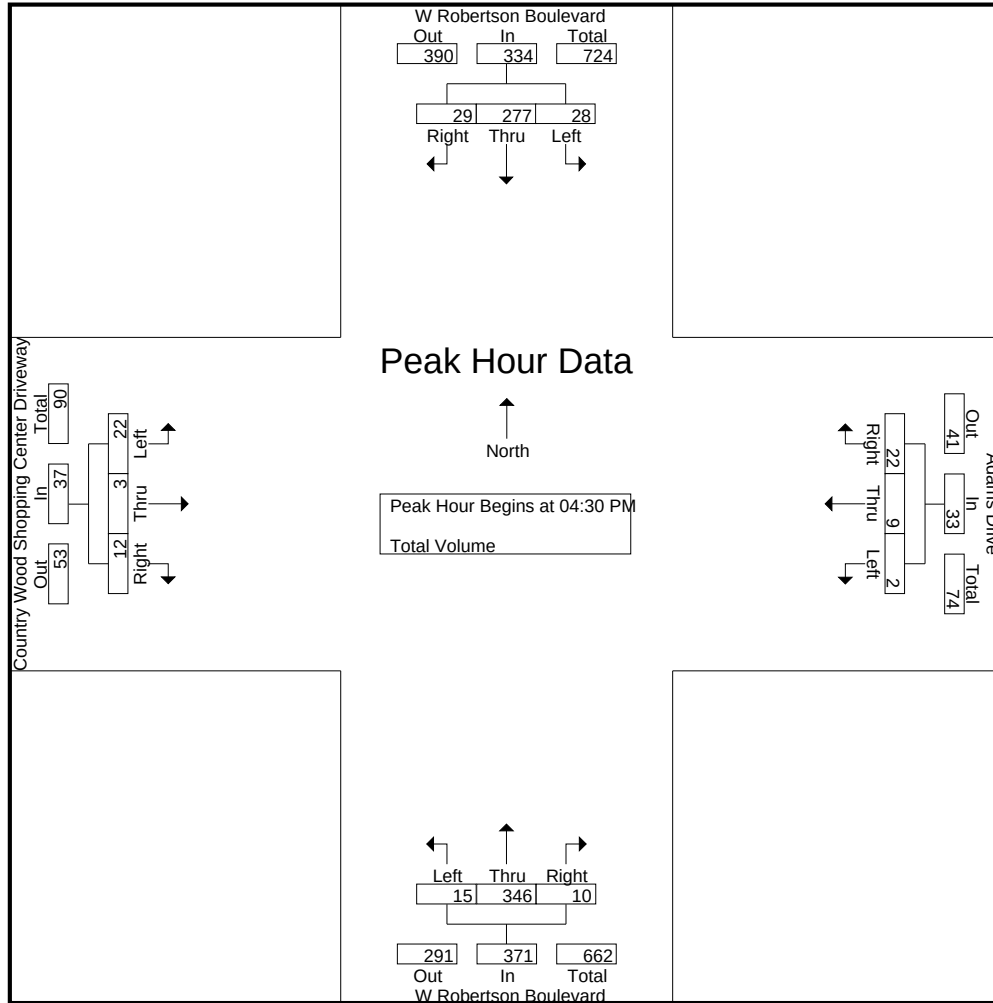
Groups Printed- Total Volume

	W Robertson Boulevard Southbound				Adams Drive Westbound				W Robertson Boulevard Northbound				Country Wood Shopping Center Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	7	47	6	60	2	2	2	6	2	75	1	78	9	2	5	16	160
04:15 PM	3	62	5	70	2	0	5	7	3	77	1	81	6	2	6	14	172
04:30 PM	7	61	12	80	0	1	2	3	3	105	6	114	4	1	2	7	204
04:45 PM	6	62	8	76	0	3	4	7	2	79	1	82	6	1	4	11	176
Total	23	232	31	286	4	6	13	23	10	336	9	355	25	6	17	48	712
05:00 PM	7	85	7	99	1	3	8	12	4	84	0	88	6	1	5	12	211
05:15 PM	8	69	2	79	1	2	8	11	6	78	3	87	6	0	1	7	184
05:30 PM	5	55	12	72	4	2	6	12	1	79	5	85	8	1	3	12	181
05:45 PM	1	51	8	60	1	1	7	9	4	81	0	85	8	1	3	12	166
Total	21	260	29	310	7	8	29	44	15	322	8	345	28	3	12	43	742
Grand Total	44	492	60	596	11	14	42	67	25	658	17	700	53	9	29	91	1454
Apprch %	7.4	82.6	10.1		16.4	20.9	62.7		3.6	94	2.4		58.2	9.9	31.9		
Total %	3	33.8	4.1	41	0.8	1	2.9	4.6	1.7	45.3	1.2	48.1	3.6	0.6	2	6.3	

	W Robertson Boulevard Southbound				Adams Drive Westbound				W Robertson Boulevard Northbound				Country Wood Shopping Center Driveway Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	7	61	12	80	0	1	2	3	3	105	6	114	4	1	2	7	204
04:45 PM	6	62	8	76	0	3	4	7	2	79	1	82	6	1	4	11	176
05:00 PM	7	85	7	99	1	3	8	12	4	84	0	88	6	1	5	12	211
05:15 PM	8	69	2	79	1	2	8	11	6	78	3	87	6	0	1	7	184
Total Volume	28	277	29	334	2	9	22	33	15	346	10	371	22	3	12	37	775
% App. Total	8.4	82.9	8.7		6.1	27.3	66.7		4	93.3	2.7		59.5	8.1	32.4		
PHF	.875	.815	.604	.843	.500	.750	.688	.688	.625	.824	.417	.814	.917	.750	.600	.771	.918

City of Chowchilla
N/S: W Robertson Boulevard
E/W: Adams Drive
Weather: Clear

File Name : 04_CHA_Rob_Adams PM
Site Code : 00323913
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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				05:00 PM				04:30 PM				04:00 PM			
+0 mins.	7	61	12	80	1	3	8	12	3	105	6	114	9	2	5	16
+15 mins.	6	62	8	76	1	2	8	11	2	79	1	82	6	2	6	14
+30 mins.	7	85	7	99	4	2	6	12	4	84	0	88	4	1	2	7
+45 mins.	8	69	2	79	1	1	7	9	6	78	3	87	6	1	4	11
Total Volume	28	277	29	334	7	8	29	44	15	346	10	371	25	6	17	48
% App. Total	8.4	82.9	8.7		15.9	18.2	65.9		4	93.3	2.7		52.1	12.5	35.4	
PHF	.875	.815	.604	.843	.438	.667	.906	.917	.625	.824	.417	.814	.694	.750	.708	.750

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City of Chowchilla
N/S: W Robertson Boulevard
E/W: Myer Drive
Weather: Clear

File Name : 05_CHA_Rob_Myer AM
Site Code : 00323913
Start Date : 10/4/2023
Page No : 1

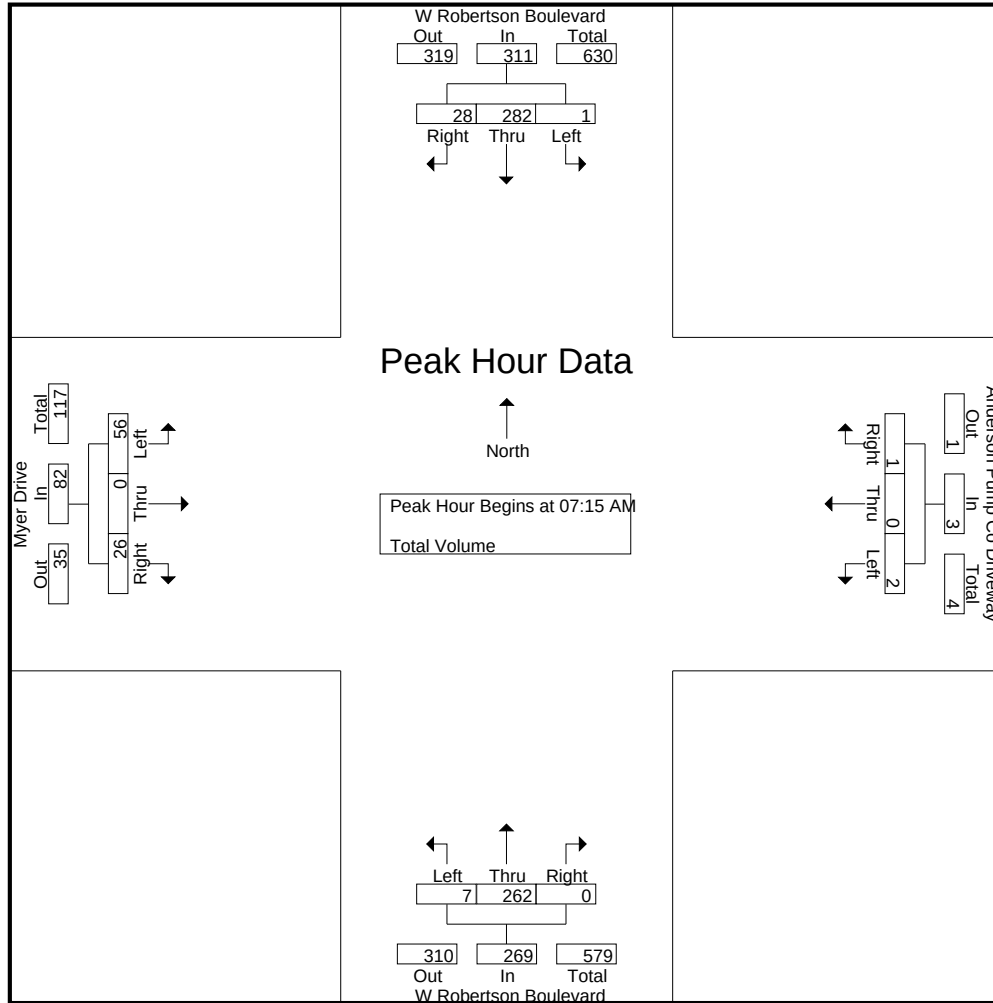
Groups Printed- Total Volume

	W Robertson Boulevard Southbound				Anderson Pump Co Driveway Westbound				W Robertson Boulevard Northbound				Myer Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	54	1	55	0	0	0	0	2	33	0	35	0	0	1	1	91
07:15 AM	0	47	0	47	0	0	0	0	2	59	0	61	9	0	8	17	125
07:30 AM	0	62	9	71	0	0	0	0	1	63	0	64	19	0	8	27	162
07:45 AM	1	91	11	103	1	0	1	2	2	85	0	87	24	0	5	29	221
Total	1	254	21	276	1	0	1	2	7	240	0	247	52	0	22	74	599
08:00 AM	0	82	8	90	1	0	0	1	2	55	0	57	4	0	5	9	157
08:15 AM	0	44	8	52	0	0	0	0	3	55	0	58	5	0	2	7	117
08:30 AM	0	42	5	47	0	0	0	0	1	50	0	51	8	0	8	16	114
08:45 AM	0	41	2	43	0	0	1	1	4	40	0	44	3	0	4	7	95
Total	0	209	23	232	1	0	1	2	10	200	0	210	20	0	19	39	483
Grand Total	1	463	44	508	2	0	2	4	17	440	0	457	72	0	41	113	1082
Apprch %	0.2	91.1	8.7		50	0	50		3.7	96.3	0		63.7	0	36.3		
Total %	0.1	42.8	4.1	47	0.2	0	0.2	0.4	1.6	40.7	0	42.2	6.7	0	3.8	10.4	

	W Robertson Boulevard Southbound				Anderson Pump Co Driveway Westbound				W Robertson Boulevard Northbound				Myer Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:15 AM																	
07:15 AM	0	47	0	47	0	0	0	0	2	59	0	61	9	0	8	17	125
07:30 AM	0	62	9	71	0	0	0	0	1	63	0	64	19	0	8	27	162
07:45 AM	1	91	11	103	1	0	1	2	2	85	0	87	24	0	5	29	221
08:00 AM	0	82	8	90	1	0	0	1	2	55	0	57	4	0	5	9	157
Total Volume	1	282	28	311	2	0	1	3	7	262	0	269	56	0	26	82	665
% App. Total	0.3	90.7	9		66.7	0	33.3		2.6	97.4	0		68.3	0	31.7		
PHF	.250	.775	.636	.755	.500	.000	.250	.375	.875	.771	.000	.773	.583	.000	.813	.707	.752

City of Chowchilla
N/S: W Robertson Boulevard
E/W: Myer Drive
Weather: Clear

File Name : 05_CHA_Rob_Myer AM
Site Code : 00323913
Start Date : 10/4/2023
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Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM				07:15 AM				07:15 AM				07:15 AM			
+0 mins.	0	62	9	71	0	0	0	0	2	59	0	61	9	0	8	17
+15 mins.	1	91	11	103	0	0	0	0	1	63	0	64	19	0	8	27
+30 mins.	0	82	8	90	1	0	1	2	2	85	0	87	24	0	5	29
+45 mins.	0	44	8	52	1	0	0	1	2	55	0	57	4	0	5	9
Total Volume	1	279	36	316	2	0	1	3	7	262	0	269	56	0	26	82
% App. Total	0.3	88.3	11.4		66.7	0	33.3		2.6	97.4	0		68.3	0	31.7	
PHF	.250	.766	.818	.767	.500	.000	.250	.375	.875	.771	.000	.773	.583	.000	.813	.707

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City of Chowchilla
N/S: W Robertson Boulevard
E/W: Myer Drive
Weather: Clear

File Name : 05_CHA_Rob_Myer PM
Site Code : 00323913
Start Date : 10/4/2023
Page No : 1

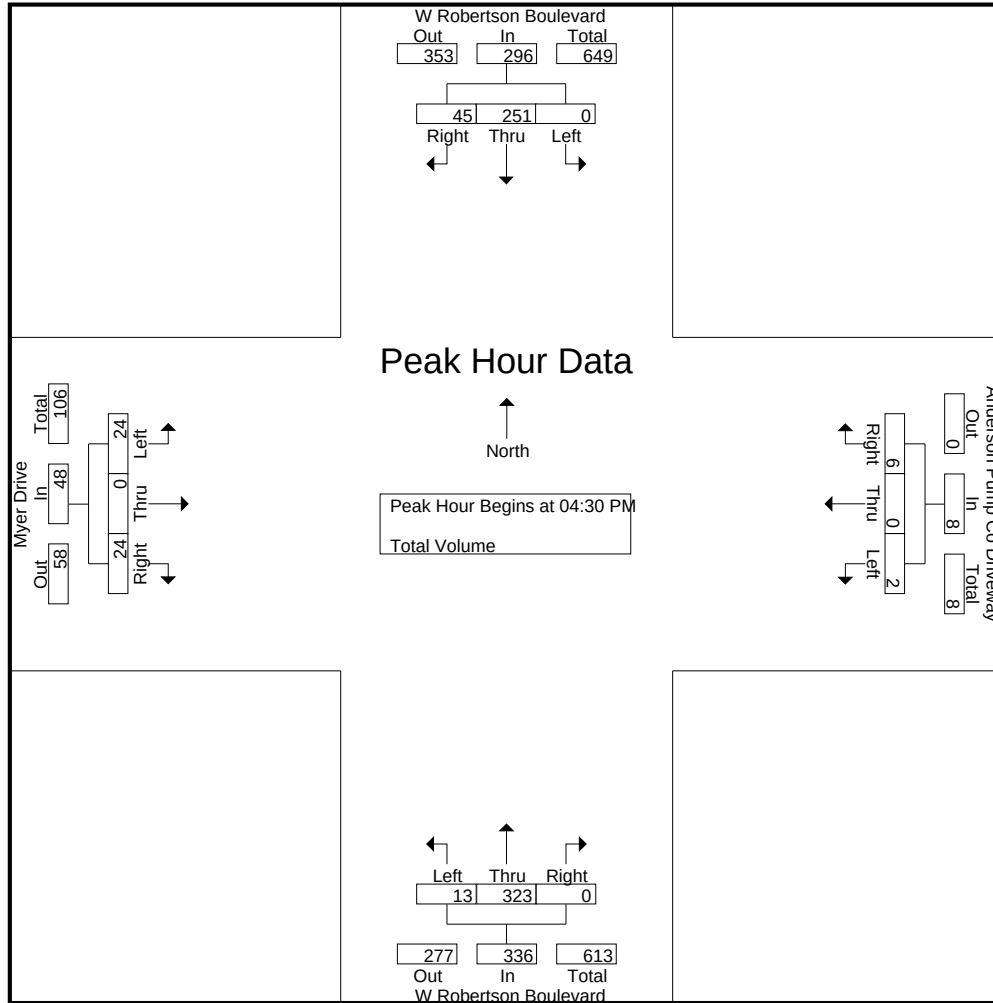
Groups Printed- Total Volume

	W Robertson Boulevard Southbound				Anderson Pump Co Driveway Westbound				W Robertson Boulevard Northbound				Myer Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	53	10	63	0	0	2	2	1	73	0	74	6	0	5	11	150
04:15 PM	0	55	7	62	0	0	0	0	4	76	0	80	10	0	3	13	155
04:30 PM	0	61	11	72	2	0	4	6	3	90	0	93	5	0	9	14	185
04:45 PM	0	55	7	62	0	0	0	0	2	75	0	77	10	0	6	16	155
Total	0	224	35	259	2	0	6	8	10	314	0	324	31	0	23	54	645
05:00 PM	0	72	19	91	0	0	2	2	4	78	0	82	3	0	6	9	184
05:15 PM	0	63	8	71	0	0	0	0	4	80	0	84	6	0	3	9	164
05:30 PM	0	60	7	67	0	0	0	0	10	69	0	79	13	0	3	16	162
05:45 PM	1	43	5	49	0	0	0	0	4	83	0	87	9	0	4	13	149
Total	1	238	39	278	0	0	2	2	22	310	0	332	31	0	16	47	659
Grand Total	1	462	74	537	2	0	8	10	32	624	0	656	62	0	39	101	1304
Apprch %	0.2	86	13.8		20	0	80		4.9	95.1	0		61.4	0	38.6		
Total %	0.1	35.4	5.7	41.2	0.2	0	0.6	0.8	2.5	47.9	0	50.3	4.8	0	3	7.7	

	W Robertson Boulevard Southbound				Anderson Pump Co Driveway Westbound				W Robertson Boulevard Northbound				Myer Drive Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:30 PM																	
04:30 PM	0	61	11	72	2	0	4	6	3	90	0	93	5	0	9	14	185
04:45 PM	0	55	7	62	0	0	0	0	2	75	0	77	10	0	6	16	155
05:00 PM	0	72	19	91	0	0	2	2	4	78	0	82	3	0	6	9	184
05:15 PM	0	63	8	71	0	0	0	0	4	80	0	84	6	0	3	9	164
Total Volume	0	251	45	296	2	0	6	8	13	323	0	336	24	0	24	48	688
% App. Total	0	84.8	15.2		25	0	75		3.9	96.1	0		50	0	50		
PHF	.000	.872	.592	.813	.250	.000	.375	.333	.813	.897	.000	.903	.600	.000	.667	.750	.930

City of Chowchilla
N/S: W Robertson Boulevard
E/W: Myer Drive
Weather: Clear

File Name : 05_CHA_Rob_Myer PM
Site Code : 00323913
Start Date : 10/4/2023
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM				04:00 PM				04:30 PM				04:00 PM			
+0 mins.	0	61	11	72	0	0	2	2	3	90	0	93	6	0	5	11
+15 mins.	0	55	7	62	0	0	0	0	2	75	0	77	10	0	3	13
+30 mins.	0	72	19	91	2	0	4	6	4	78	0	82	5	0	9	14
+45 mins.	0	63	8	71	0	0	0	0	4	80	0	84	10	0	6	16
Total Volume	0	251	45	296	2	0	6	8	13	323	0	336	31	0	23	54
% App. Total	0	84.8	15.2		25	0	75		3.9	96.1	0		57.4	0	42.6	
PHF	.000	.872	.592	.813	.250	.000	.375	.333	.813	.897	.000	.903	.775	.000	.639	.844

City of Chowchilla
N/S: Robertson Boulevard
E/W: Palm Parkway
Weather: Clear

File Name : 06_CHA_Rob_Palm AM
Site Code : 00323913
Start Date : 10/4/2023
Page No : 1

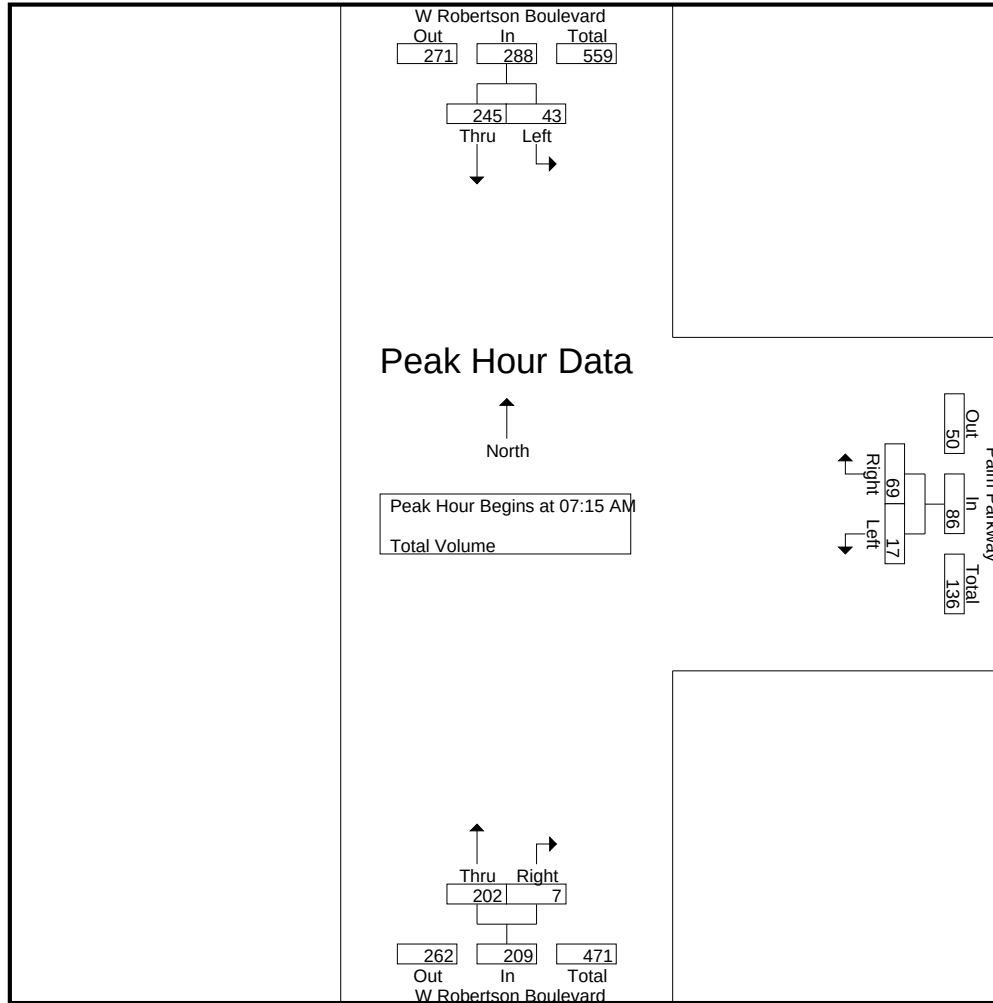
Groups Printed- Total Volume

	W Robertson Boulevard Southbound			Palm Parkway Westbound			W Robertson Boulevard Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	3	57	60	6	7	13	36	0	36	109
07:15 AM	3	44	47	6	21	27	42	2	44	118
07:30 AM	9	56	65	2	25	27	51	1	52	144
07:45 AM	17	73	90	4	17	21	55	4	59	170
Total	32	230	262	18	70	88	184	7	191	541
08:00 AM	14	72	86	5	6	11	54	0	54	151
08:15 AM	5	38	43	6	8	14	53	2	55	112
08:30 AM	7	36	43	2	10	12	38	2	40	95
08:45 AM	3	37	40	3	8	11	40	0	40	91
Total	29	183	212	16	32	48	185	4	189	449
Grand Total	61	413	474	34	102	136	369	11	380	990
Apprch %	12.9	87.1		25	75		97.1	2.9		
Total %	6.2	41.7	47.9	3.4	10.3	13.7	37.3	1.1	38.4	

	W Robertson Boulevard Southbound			Palm Parkway Westbound			W Robertson Boulevard Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:15 AM										
07:15 AM	3	44	47	6	21	27	42	2	44	118
07:30 AM	9	56	65	2	25	27	51	1	52	144
07:45 AM	17	73	90	4	17	21	55	4	59	170
08:00 AM	14	72	86	5	6	11	54	0	54	151
Total Volume	43	245	288	17	69	86	202	7	209	583
% App. Total	14.9	85.1		19.8	80.2		96.7	3.3		
PHF	.632	.839	.800	.708	.690	.796	.918	.438	.886	.857

City of Chowchilla
N/S: Robertson Boulevard
E/W: Palm Parkway
Weather: Clear

File Name : 06_CHA_Rob_Palm AM
Site Code : 00323913
Start Date : 10/4/2023
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Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM			07:00 AM			07:30 AM		
+0 mins.	3	44	47	6	7	13	51	1	52
+15 mins.	9	56	65	6	21	27	55	4	59
+30 mins.	17	73	90	2	25	27	54	0	54
+45 mins.	14	72	86	4	17	21	53	2	55
Total Volume	43	245	288	18	70	88	213	7	220
% App. Total	14.9	85.1		20.5	79.5		96.8	3.2	
PHF	.632	.839	.800	.750	.700	.815	.968	.438	.932

City of Chowchilla
N/S: Robertson Boulevard
E/W: Palm Parkway
Weather: Clear

File Name : 06_CHA_Rob_Palm PM
Site Code : 00323913
Start Date : 10/4/2023
Page No : 1

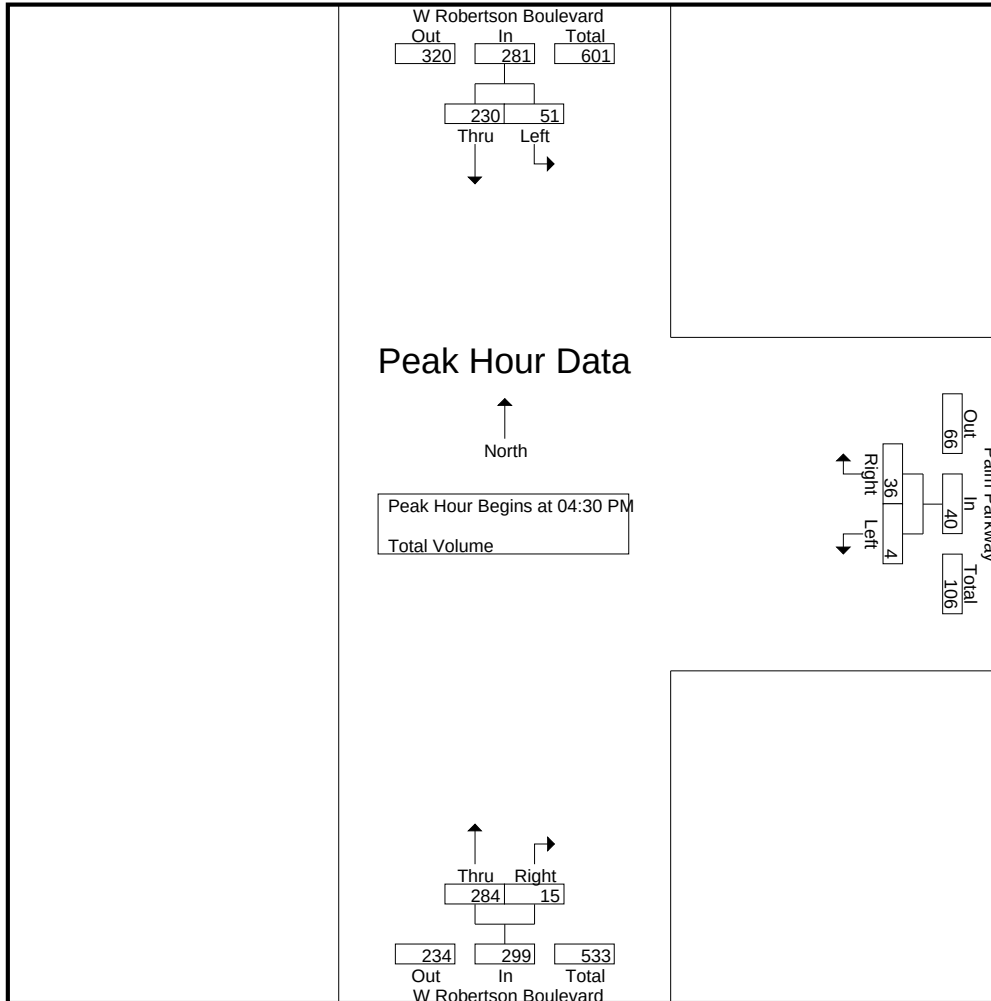
Groups Printed- Total Volume

	W Robertson Boulevard Southbound			Palm Parkway Westbound			W Robertson Boulevard Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	9	47	56	0	3	3	66	4	70	129
04:15 PM	12	51	63	2	7	9	72	3	75	147
04:30 PM	16	56	72	2	8	10	71	3	74	156
04:45 PM	15	46	61	1	9	10	62	2	64	135
Total	52	200	252	5	27	32	271	12	283	567
05:00 PM	10	73	83	1	8	9	70	7	77	169
05:15 PM	10	55	65	0	11	11	81	3	84	160
05:30 PM	11	46	57	0	11	11	63	6	69	137
05:45 PM	7	39	46	4	15	19	67	6	73	138
Total	38	213	251	5	45	50	281	22	303	604
Grand Total	90	413	503	10	72	82	552	34	586	1171
Apprch %	17.9	82.1		12.2	87.8		94.2	5.8		
Total %	7.7	35.3	43	0.9	6.1	7	47.1	2.9	50	

	W Robertson Boulevard Southbound			Palm Parkway Westbound			W Robertson Boulevard Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:30 PM										
04:30 PM	16	56	72	2	8	10	71	3	74	156
04:45 PM	15	46	61	1	9	10	62	2	64	135
05:00 PM	10	73	83	1	8	9	70	7	77	169
05:15 PM	10	55	65	0	11	11	81	3	84	160
Total Volume	51	230	281	4	36	40	284	15	299	620
% App. Total	18.1	81.9		10	90		95	5		
PHF	.797	.788	.846	.500	.818	.909	.877	.536	.890	.917

City of Chowchilla
N/S: Robertson Boulevard
E/W: Palm Parkway
Weather: Clear

File Name : 06_CHA_Rob_Palm PM
Site Code : 00323913
Start Date : 10/4/2023
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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM			05:00 PM			05:00 PM		
+0 mins.	16	56	72	1	8	9	70	7	77
+15 mins.	15	46	61	0	11	11	81	3	84
+30 mins.	10	73	83	0	11	11	63	6	69
+45 mins.	10	55	65	4	15	19	67	6	73
Total Volume	51	230	281	5	45	50	281	22	303
% App. Total	18.1	81.9		10	90		92.7	7.3	
PHF	.797	.788	.846	.313	.750	.658	.867	.786	.902

City of Chowchilla
N/S: Robertson Boulevard
E/W: Avenue 24 1/2
Weather: Clear

File Name : 07_CHA_Rob_A24 1-2 AM
Site Code : 00323913
Start Date : 10/4/2023
Page No : 1

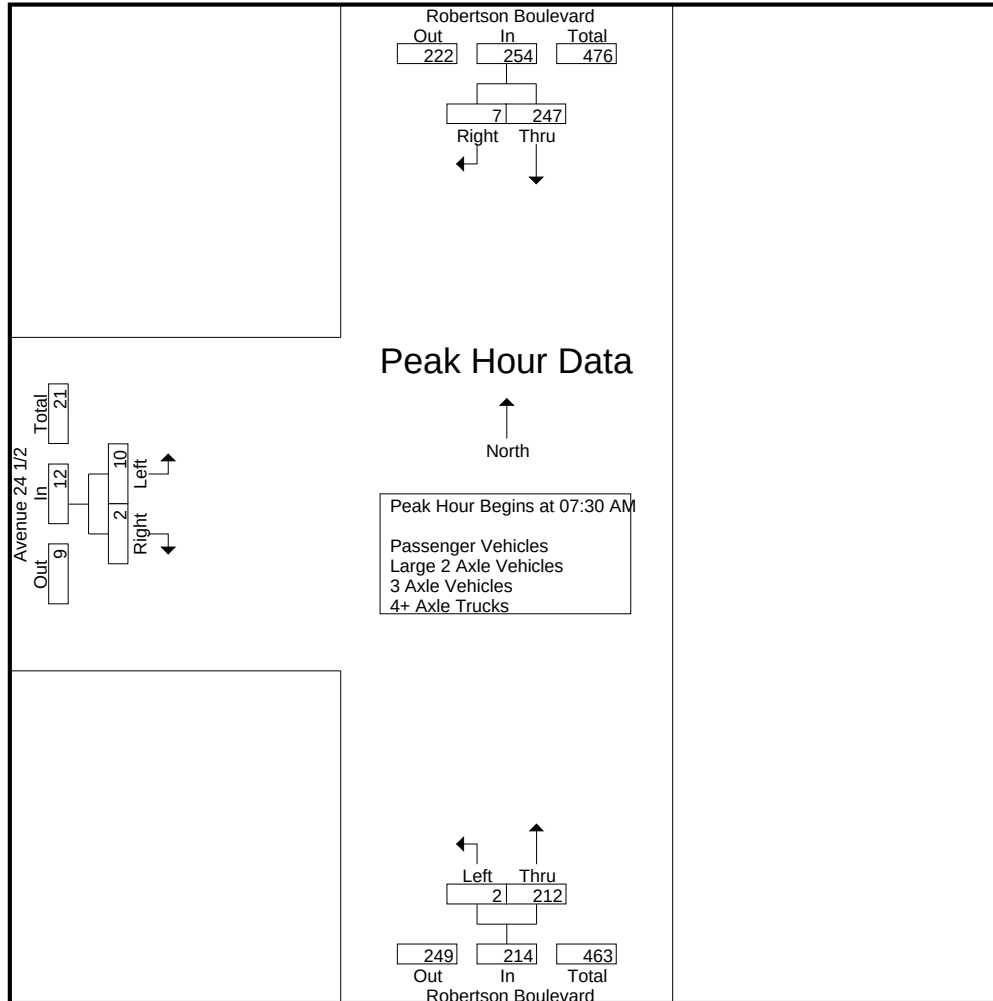
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Robertson Boulevard Southbound			Robertson Boulevard Northbound			Avenue 24 1/2 Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
07:00 AM	62	2	64	0	35	35	1	0	1	100
07:15 AM	49	1	50	1	45	46	2	0	2	98
07:30 AM	56	0	56	0	47	47	5	1	6	109
07:45 AM	79	1	80	1	58	59	2	0	2	141
Total	246	4	250	2	185	187	10	1	11	448
08:00 AM	67	3	70	0	53	53	2	0	2	125
08:15 AM	45	3	48	1	54	55	1	1	2	105
08:30 AM	40	0	40	0	39	39	1	1	2	81
08:45 AM	39	2	41	0	38	38	1	1	2	81
Total	191	8	199	1	184	185	5	3	8	392
Grand Total	437	12	449	3	369	372	15	4	19	840
Apprch %	97.3	2.7		0.8	99.2		78.9	21.1		
Total %	52	1.4	53.5	0.4	43.9	44.3	1.8	0.5	2.3	
Passenger Vehicles	410	12	422	2	355	357	14	4	18	797
% Passenger Vehicles	93.8	100	94	66.7	96.2	96	93.3	100	94.7	94.9
Large 2 Axle Vehicles	9	0	9	1	9	10	1	0	1	20
% Large 2 Axle Vehicles	2.1	0	2	33.3	2.4	2.7	6.7	0	5.3	2.4
3 Axle Vehicles	3	0	3	0	2	2	0	0	0	5
% 3 Axle Vehicles	0.7	0	0.7	0	0.5	0.5	0	0	0	0.6
4+ Axle Trucks	15	0	15	0	3	3	0	0	0	18
% 4+ Axle Trucks	3.4	0	3.3	0	0.8	0.8	0	0	0	2.1

	Robertson Boulevard Southbound			Robertson Boulevard Northbound			Avenue 24 1/2 Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:30 AM										
07:30 AM	56	0	56	0	47	47	5	1	6	109
07:45 AM	79	1	80	1	58	59	2	0	2	141
08:00 AM	67	3	70	0	53	53	2	0	2	125
08:15 AM	45	3	48	1	54	55	1	1	2	105
Total Volume	247	7	254	2	212	214	10	2	12	480
% App. Total	97.2	2.8		0.9	99.1		83.3	16.7		
PHF	.782	.583	.794	.500	.914	.907	.500	.500	.500	.851

City of Chowchilla
N/S: Robertson Boulevard
E/W: Avenue 24 1/2
Weather: Clear

File Name : 07_CHA_Rob_A24 1-2 AM
Site Code : 00323913
Start Date : 10/4/2023
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Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM			07:30 AM			07:45 AM		
+0 mins.	49	1	50	0	47	47	2	0	2
+15 mins.	56	0	56	1	58	59	5	1	6
+30 mins.	79	1	80	0	53	53	2	0	2
+45 mins.	67	3	70	1	54	55	2	0	2
Total Volume	251	5	256	2	212	214	11	1	12
% App. Total	98	2		0.9	99.1		91.7	8.3	
PHF	.794	.417	.800	.500	.914	.907	.550	.250	.500

City of Chowchilla
N/S: Robertson Boulevard
E/W: Avenue 24 1/2
Weather: Clear

File Name : 07_CHA_Rob_A24 1-2 AM
Site Code : 00323913
Start Date : 10/4/2023
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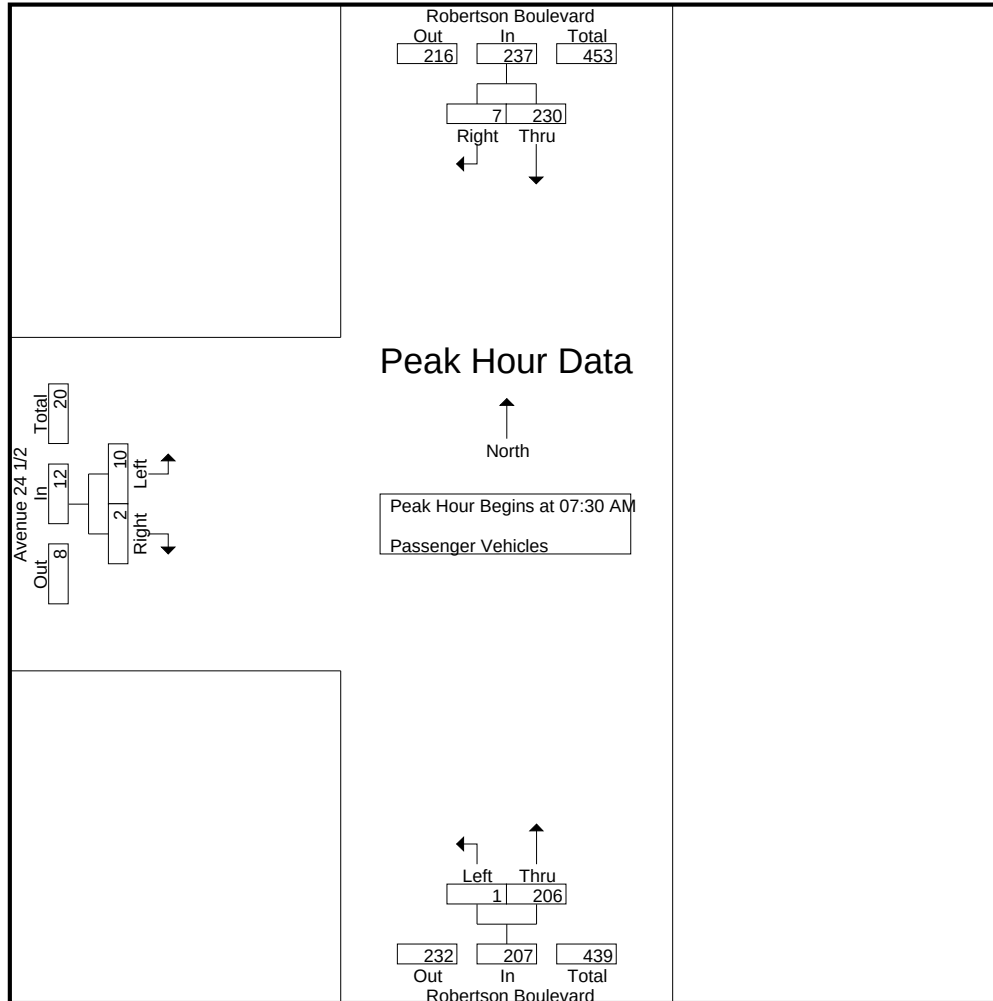
Groups Printed- Passenger Vehicles

	Robertson Boulevard Southbound			Robertson Boulevard Northbound			Avenue 24 1/2 Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
07:00 AM	60	2	62	0	30	30	1	0	1	93
07:15 AM	47	1	48	1	43	44	1	0	1	93
07:30 AM	52	0	52	0	44	44	5	1	6	102
07:45 AM	75	1	76	1	57	58	2	0	2	136
Total	234	4	238	2	174	176	9	1	10	424
08:00 AM	63	3	66	0	53	53	2	0	2	121
08:15 AM	40	3	43	0	52	52	1	1	2	97
08:30 AM	37	0	37	0	39	39	1	1	2	78
08:45 AM	36	2	38	0	37	37	1	1	2	77
Total	176	8	184	0	181	181	5	3	8	373
Grand Total	410	12	422	2	355	357	14	4	18	797
Apprch %	97.2	2.8		0.6	99.4		77.8	22.2		
Total %	51.4	1.5	52.9	0.3	44.5	44.8	1.8	0.5	2.3	

	Robertson Boulevard Southbound			Robertson Boulevard Northbound			Avenue 24 1/2 Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:30 AM										
07:30 AM	52	0	52	0	44	44	5	1	6	102
07:45 AM	75	1	76	1	57	58	2	0	2	136
08:00 AM	63	3	66	0	53	53	2	0	2	121
08:15 AM	40	3	43	0	52	52	1	1	2	97
Total Volume	230	7	237	1	206	207	10	2	12	456
% App. Total	97	3		0.5	99.5		83.3	16.7		
PHF	.767	.583	.780	.250	.904	.892	.500	.500	.500	.838

City of Chowchilla
N/S: Robertson Boulevard
E/W: Avenue 24 1/2
Weather: Clear

File Name : 07_CHA_Rob_A24 1-2 AM
Site Code : 00323913
Start Date : 10/4/2023
Page No : 2



Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM			07:30 AM			07:30 AM		
+0 mins.	52	0	52	0	44	44	5	1	6
+15 mins.	75	1	76	1	57	58	2	0	2
+30 mins.	63	3	66	0	53	53	2	0	2
+45 mins.	40	3	43	0	52	52	1	1	2
Total Volume	230	7	237	1	206	207	10	2	12
% App. Total	97	3		0.5	99.5		83.3	16.7	
PHF	.767	.583	.780	.250	.904	.892	.500	.500	.500

City of Chowchilla
N/S: Robertson Boulevard
E/W: Avenue 24 1/2
Weather: Clear

File Name : 07_CHA_Rob_A24 1-2 AM
Site Code : 00323913
Start Date : 10/4/2023
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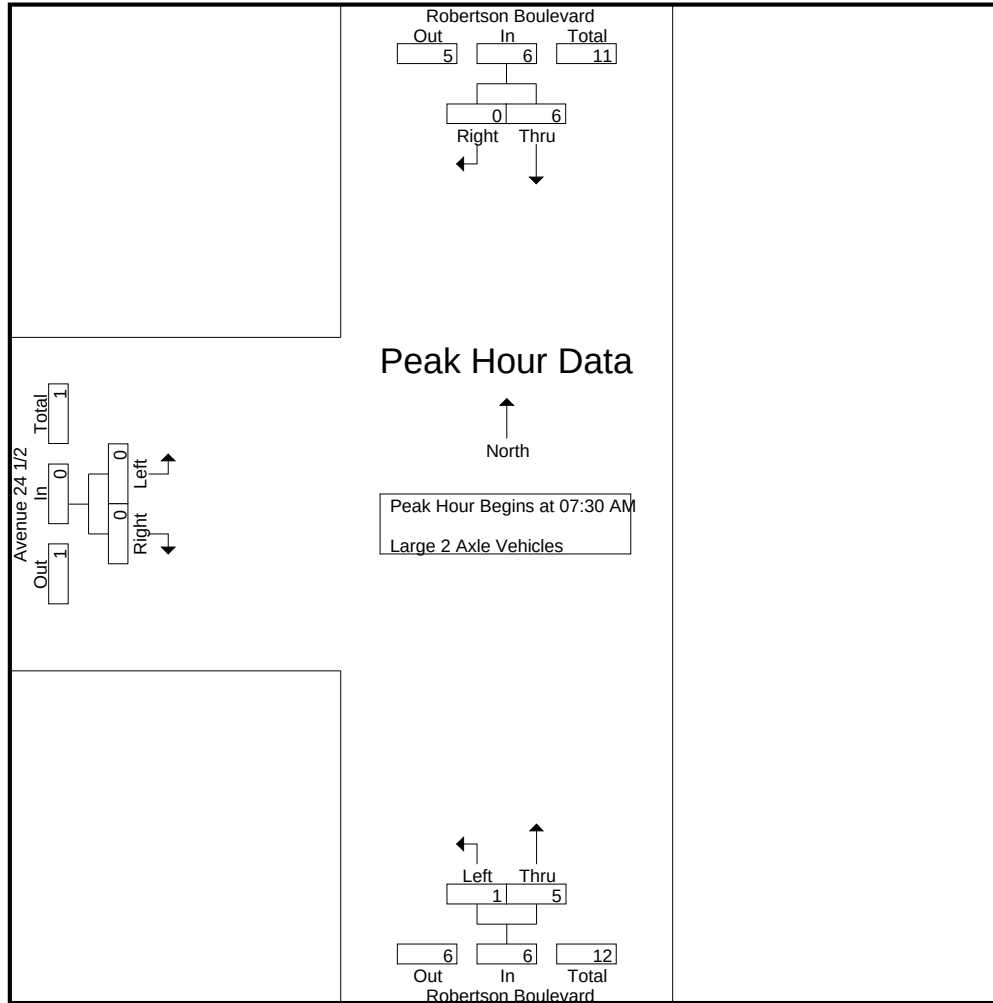
Groups Printed- Large 2 Axle Vehicles

	Robertson Boulevard Southbound			Robertson Boulevard Northbound			Avenue 24 1/2 Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	3	3	0	0	0	3
07:15 AM	0	0	0	0	1	1	1	0	1	2
07:30 AM	1	0	1	0	2	2	0	0	0	3
07:45 AM	1	0	1	0	1	1	0	0	0	2
Total	2	0	2	0	7	7	1	0	1	10
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	4	0	4	1	2	3	0	0	0	7
08:30 AM	1	0	1	0	0	0	0	0	0	1
08:45 AM	2	0	2	0	0	0	0	0	0	2
Total	7	0	7	1	2	3	0	0	0	10
Grand Total	9	0	9	1	9	10	1	0	1	20
Apprch %	100	0		10	90		100	0		
Total %	45	0	45	5	45	50	5	0	5	

	Robertson Boulevard Southbound			Robertson Boulevard Northbound			Avenue 24 1/2 Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:30 AM										
07:30 AM	1	0	1	0	2	2	0	0	0	3
07:45 AM	1	0	1	0	1	1	0	0	0	2
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	4	0	4	1	2	3	0	0	0	7
Total Volume	6	0	6	1	5	6	0	0	0	12
% App. Total	100	0		16.7	83.3		0	0		
PHF	.375	.000	.375	.250	.625	.500	.000	.000	.000	.429

City of Chowchilla
N/S: Robertson Boulevard
E/W: Avenue 24 1/2
Weather: Clear

File Name : 07_CHA_Rob_A24 1-2 AM
Site Code : 00323913
Start Date : 10/4/2023
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Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:30 AM			07:30 AM			07:30 AM		
+0 mins.	1	0	1	0	2	2	0	0	0
+15 mins.	1	0	1	0	1	1	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	4	0	4	1	2	3	0	0	0
Total Volume	6	0	6	1	5	6	0	0	0
% App. Total	100	0		16.7	83.3		0	0	
PHF	.375	.000	.375	.250	.625	.500	.000	.000	.000

City of Chowchilla
N/S: Robertson Boulevard
E/W: Avenue 24 1/2
Weather: Clear

File Name : 07_CHA_Rob_A24 1-2 AM
Site Code : 00323913
Start Date : 10/4/2023
Page No : 1

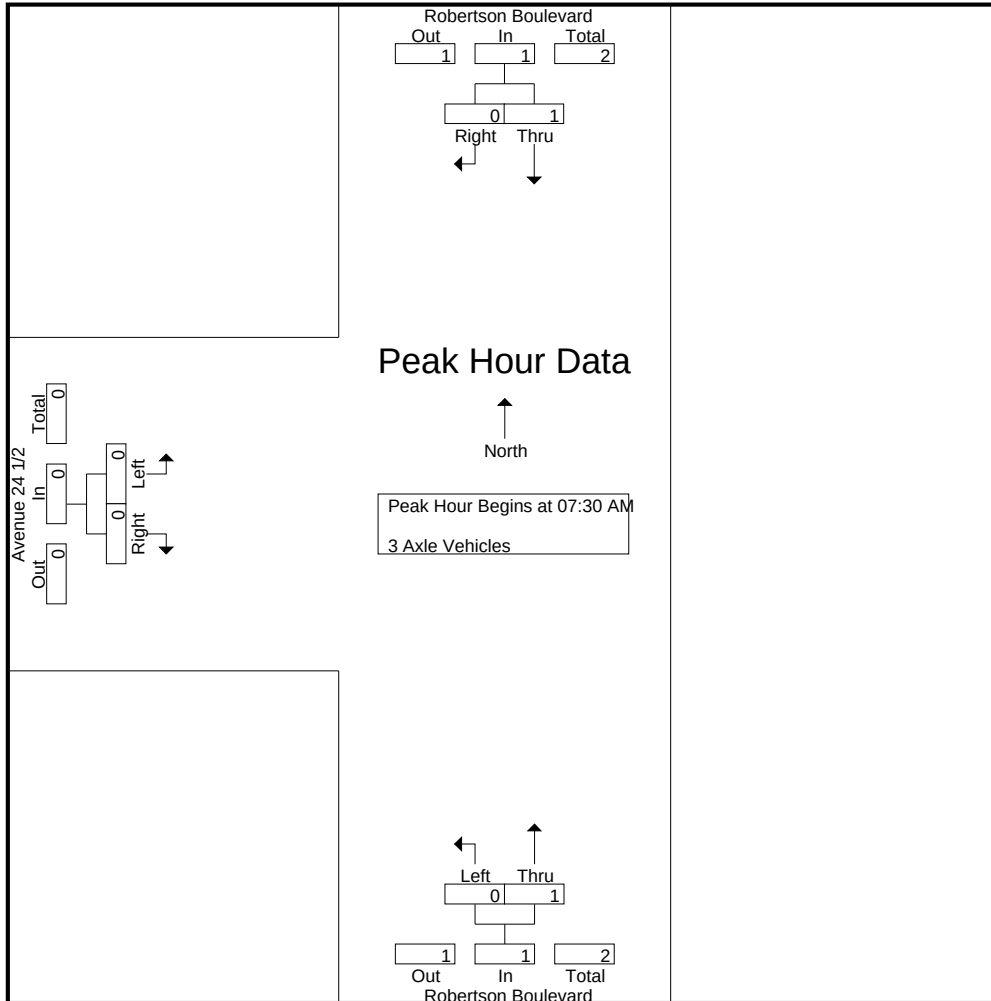
Groups Printed- 3 Axle Vehicles

	Robertson Boulevard Southbound			Robertson Boulevard Northbound			Avenue 24 1/2 Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	1	1	0	0	0	1
07:30 AM	1	0	1	0	1	1	0	0	0	2
07:45 AM	0	0	0	0	0	0	0	0	0	0
Total	1	0	1	0	2	2	0	0	0	3
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
08:30 AM	1	0	1	0	0	0	0	0	0	1
08:45 AM	1	0	1	0	0	0	0	0	0	1
Total	2	0	2	0	0	0	0	0	0	2
Grand Total	3	0	3	0	2	2	0	0	0	5
Apprch %	100	0		0	100		0	0		
Total %	60	0	60	0	40	40	0	0	0	

	Robertson Boulevard Southbound			Robertson Boulevard Northbound			Avenue 24 1/2 Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:30 AM										
07:30 AM	1	0	1	0	1	1	0	0	0	2
07:45 AM	0	0	0	0	0	0	0	0	0	0
08:00 AM	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0
Total Volume	1	0	1	0	1	1	0	0	0	2
% App. Total	100	0		0	100		0	0		
PHF	.250	.000	.250	.000	.250	.250	.000	.000	.000	.250

City of Chowchilla
N/S: Robertson Boulevard
E/W: Avenue 24 1/2
Weather: Clear

File Name : 07_CHA_Rob_A24 1-2 AM
Site Code : 00323913
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Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

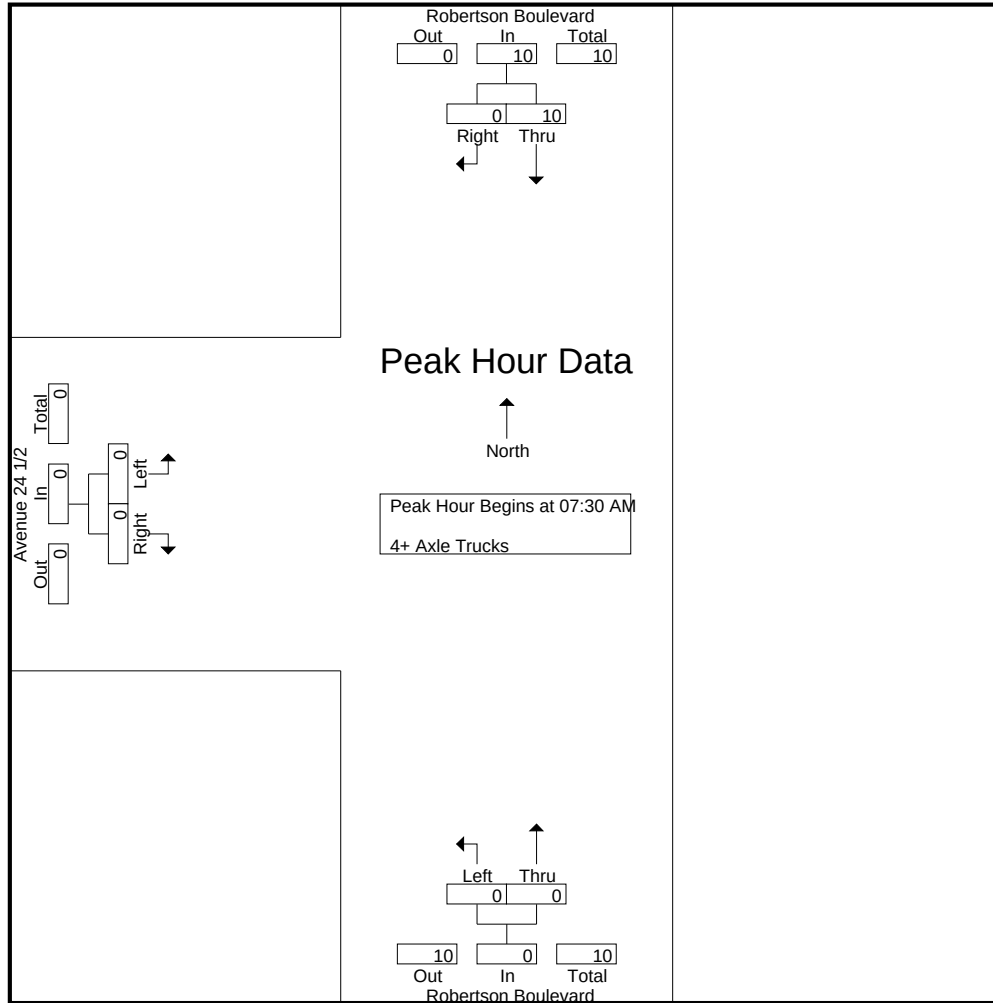
	07:30 AM			07:30 AM			07:30 AM		
+0 mins.	1	0	1	0	1	1	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	1	0	1	0	1	1	0	0	0
% App. Total	100	0		0	100		0	0	
PHF	.250	.000	.250	.000	.250	.250	.000	.000	.000

File Name : 07_CHA_Rob_A24 1-2 AM
Site Code : 00323913
Start Date : 10/4/2023
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[illegible]

City of Chowchilla
N/S: Robertson Boulevard
E/W: Avenue 24 1/2
Weather: Clear

File Name : 07_CHA_Rob_A24 1-2 AM
Site Code : 00323913
Start Date : 10/4/2023
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Peak Hour Analysis From 07:30 AM to 08:15 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:30 AM			07:30 AM			07:30 AM		
+0 mins.	2	0	2	0	0	0	0	0	0
+15 mins.	3	0	3	0	0	0	0	0	0
+30 mins.	4	0	4	0	0	0	0	0	0
+45 mins.	1	0	1	0	0	0	0	0	0
Total Volume	10	0	10	0	0	0	0	0	0
% App. Total	100	0		0	0		0	0	
PHF	.625	.000	.625	.000	.000	.000	.000	.000	.000

City of Chowchilla
N/S: Robertson Boulevard
E/W: Avenue 24 1/2
Weather: Clear

File Name : 07_CHA_Rob_A24 1-2 PM
Site Code : 00323913
Start Date : 10/4/2023
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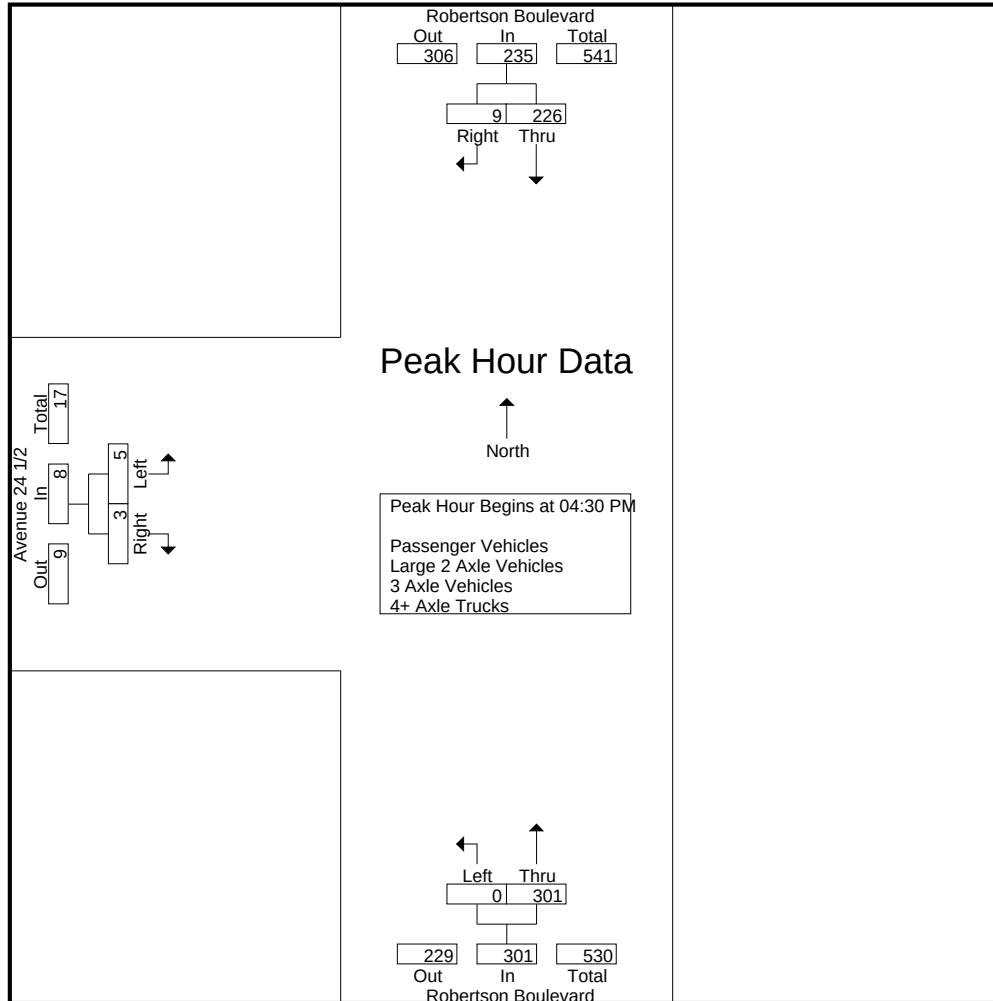
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Robertson Boulevard Southbound			Robertson Boulevard Northbound			Avenue 24 1/2 Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
04:00 PM	49	2	51	1	70	71	1	0	1	123
04:15 PM	50	2	52	1	71	72	4	1	5	129
04:30 PM	55	2	57	0	74	74	1	2	3	134
04:45 PM	47	1	48	0	65	65	2	1	3	116
Total	201	7	208	2	280	282	8	4	12	502
05:00 PM	70	4	74	0	76	76	1	0	1	151
05:15 PM	54	2	56	0	86	86	1	0	1	143
05:30 PM	42	5	47	2	69	71	1	1	2	120
05:45 PM	41	2	43	0	71	71	2	0	2	116
Total	207	13	220	2	302	304	5	1	6	530
Grand Total	408	20	428	4	582	586	13	5	18	1032
Apprch %	95.3	4.7		0.7	99.3		72.2	27.8		
Total %	39.5	1.9	41.5	0.4	56.4	56.8	1.3	0.5	1.7	
Passenger Vehicles	391	20	411	4	560	564	13	5	18	993
% Passenger Vehicles	95.8	100	96	100	96.2	96.2	100	100	100	96.2
Large 2 Axle Vehicles	2	0	2	0	10	10	0	0	0	12
% Large 2 Axle Vehicles	0.5	0	0.5	0	1.7	1.7	0	0	0	1.2
3 Axle Vehicles	2	0	2	0	5	5	0	0	0	7
% 3 Axle Vehicles	0.5	0	0.5	0	0.9	0.9	0	0	0	0.7
4+ Axle Trucks	13	0	13	0	7	7	0	0	0	20
% 4+ Axle Trucks	3.2	0	3	0	1.2	1.2	0	0	0	1.9

	Robertson Boulevard Southbound			Robertson Boulevard Northbound			Avenue 24 1/2 Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:30 PM										
04:30 PM	55	2	57	0	74	74	1	2	3	134
04:45 PM	47	1	48	0	65	65	2	1	3	116
05:00 PM	70	4	74	0	76	76	1	0	1	151
05:15 PM	54	2	56	0	86	86	1	0	1	143
Total Volume	226	9	235	0	301	301	5	3	8	544
% App. Total	96.2	3.8		0	100		62.5	37.5		
PHF	.807	.563	.794	.000	.875	.875	.625	.375	.667	.901

City of Chowchilla
N/S: Robertson Boulevard
E/W: Avenue 24 1/2
Weather: Clear

File Name : 07_CHA_Rob_A24 1-2 PM
Site Code : 00323913
Start Date : 10/4/2023
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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:30 PM			05:00 PM			04:00 PM		
+0 mins.	55	2	57	0	76	76	1	0	1
+15 mins.	47	1	48	0	86	86	4	1	5
+30 mins.	70	4	74	2	69	71	1	2	3
+45 mins.	54	2	56	0	71	71	2	1	3
Total Volume	226	9	235	2	302	304	8	4	12
% App. Total	96.2	3.8		0.7	99.3		66.7	33.3	
PHF	.807	.563	.794	.250	.878	.884	.500	.500	.600

City of Chowchilla
N/S: Robertson Boulevard
E/W: Avenue 24 1/2
Weather: Clear

File Name : 07_CHA_Rob_A24 1-2 PM
Site Code : 00323913
Start Date : 10/4/2023
Page No : 1

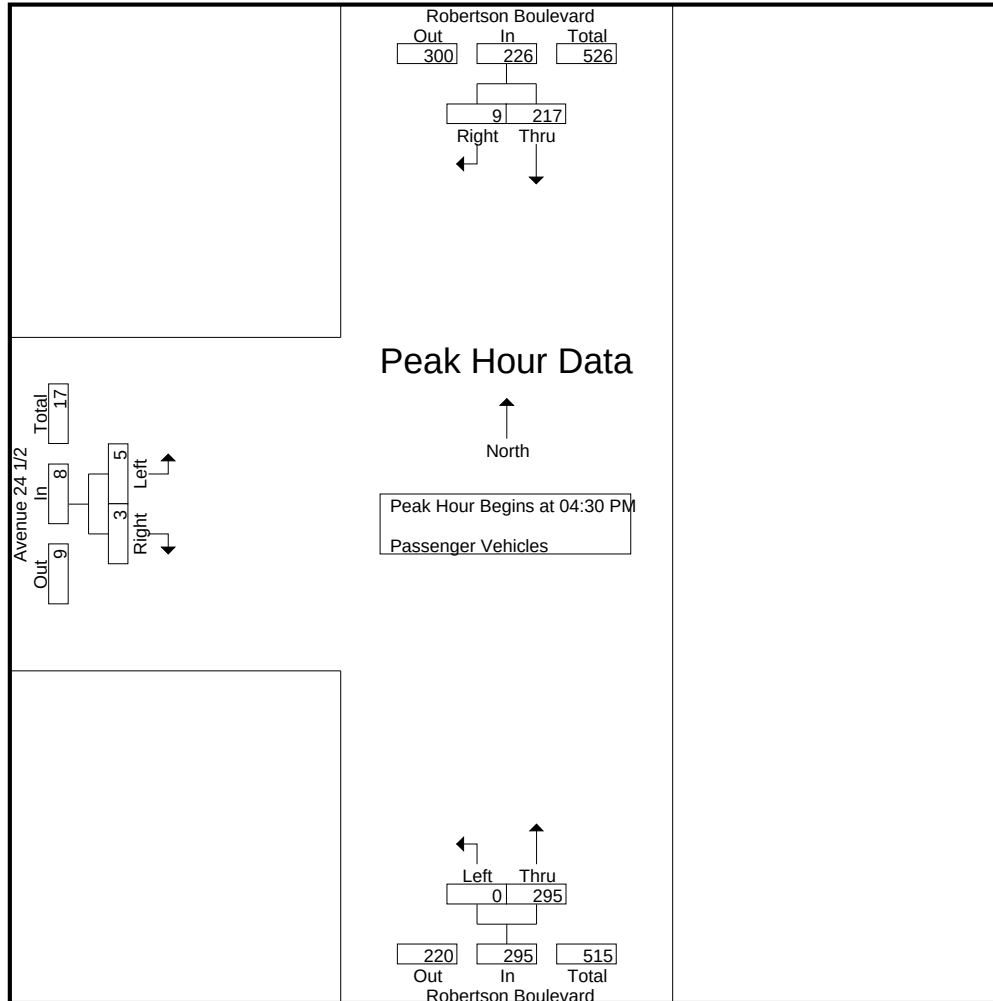
Groups Printed- Passenger Vehicles

	Robertson Boulevard Southbound			Robertson Boulevard Northbound			Avenue 24 1/2 Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
04:00 PM	45	2	47	1	65	66	1	0	1	114
04:15 PM	49	2	51	1	66	67	4	1	5	123
04:30 PM	51	2	53	0	72	72	1	2	3	128
04:45 PM	46	1	47	0	62	62	2	1	3	112
Total	191	7	198	2	265	267	8	4	12	477
05:00 PM	67	4	71	0	76	76	1	0	1	148
05:15 PM	53	2	55	0	85	85	1	0	1	141
05:30 PM	40	5	45	2	68	70	1	1	2	117
05:45 PM	40	2	42	0	66	66	2	0	2	110
Total	200	13	213	2	295	297	5	1	6	516
Grand Total	391	20	411	4	560	564	13	5	18	993
Apprch %	95.1	4.9		0.7	99.3		72.2	27.8		
Total %	39.4	2	41.4	0.4	56.4	56.8	1.3	0.5	1.8	

	Robertson Boulevard Southbound			Robertson Boulevard Northbound			Avenue 24 1/2 Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:15 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:30 PM										
04:30 PM	51	2	53	0	72	72	1	2	3	128
04:45 PM	46	1	47	0	62	62	2	1	3	112
05:00 PM	67	4	71	0	76	76	1	0	1	148
05:15 PM	53	2	55	0	85	85	1	0	1	141
Total Volume	217	9	226	0	295	295	5	3	8	529
% App. Total	96	4		0	100		62.5	37.5		
PHF	.810	.563	.796	.000	.868	.868	.625	.375	.667	.894

City of Chowchilla
N/S: Robertson Boulevard
E/W: Avenue 24 1/2
Weather: Clear

File Name : 07_CHA_Rob_A24 1-2 PM
Site Code : 00323913
Start Date : 10/4/2023
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Peak Hour Analysis From 04:00 PM to 05:15 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:30 PM			04:30 PM			04:00 PM		
+0 mins.	51	2	53	0	72	72	1	0	1
+15 mins.	46	1	47	0	62	62	4	1	5
+30 mins.	67	4	71	0	76	76	1	2	3
+45 mins.	53	2	55	0	85	85	2	1	3
Total Volume	217	9	226	0	295	295	8	4	12
% App. Total	96	4		0	100		66.7	33.3	
PHF	.810	.563	.796	.000	.868	.868	.500	.500	.600

City of Chowchilla
N/S: Robertson Boulevard
E/W: Avenue 24 1/2
Weather: Clear

File Name : 07_CHA_Rob_A24 1-2 PM
Site Code : 00323913
Start Date : 10/4/2023
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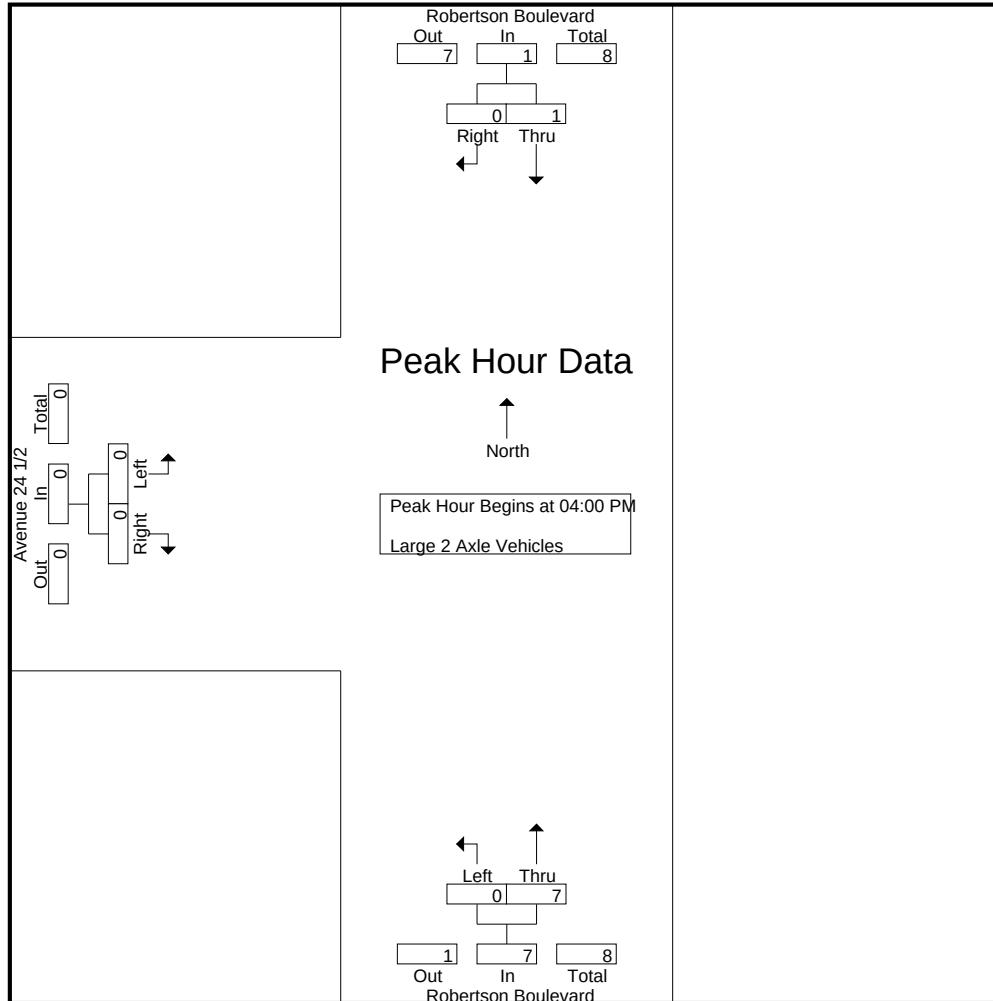
Groups Printed- Large 2 Axle Vehicles

	Robertson Boulevard Southbound			Robertson Boulevard Northbound			Avenue 24 1/2 Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
04:00 PM	1	0	1	0	2	2	0	0	0	3
04:15 PM	0	0	0	0	2	2	0	0	0	2
04:30 PM	0	0	0	0	1	1	0	0	0	1
04:45 PM	0	0	0	0	2	2	0	0	0	2
Total	1	0	1	0	7	7	0	0	0	8
05:00 PM	1	0	1	0	0	0	0	0	0	1
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	0	0	0	0	0	0	0	0	0	0
05:45 PM	0	0	0	0	3	3	0	0	0	3
Total	1	0	1	0	3	3	0	0	0	4
Grand Total	2	0	2	0	10	10	0	0	0	12
Apprch %	100	0		0	100		0	0		
Total %	16.7	0	16.7	0	83.3	83.3	0	0	0	

	Robertson Boulevard Southbound			Robertson Boulevard Northbound			Avenue 24 1/2 Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:15 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	1	0	1	0	2	2	0	0	0	3
04:15 PM	0	0	0	0	2	2	0	0	0	2
04:30 PM	0	0	0	0	1	1	0	0	0	1
04:45 PM	0	0	0	0	2	2	0	0	0	2
Total Volume	1	0	1	0	7	7	0	0	0	8
% App. Total	100	0		0	100		0	0		
PHF	.250	.000	.250	.000	.875	.875	.000	.000	.000	.667

City of Chowchilla
N/S: Robertson Boulevard
E/W: Avenue 24 1/2
Weather: Clear

File Name : 07_CHA_Rob_A24 1-2 PM
Site Code : 00323913
Start Date : 10/4/2023
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Peak Hour Analysis From 04:00 PM to 05:15 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM			04:00 PM			04:00 PM		
+0 mins.	1	0	1	0	2	2	0	0	0
+15 mins.	0	0	0	0	2	2	0	0	0
+30 mins.	0	0	0	0	1	1	0	0	0
+45 mins.	0	0	0	0	2	2	0	0	0
Total Volume	1	0	1	0	7	7	0	0	0
% App. Total	100	0		0	100		0	0	
PHF	.250	.000	.250	.000	.875	.875	.000	.000	.000

City of Chowchilla
N/S: Robertson Boulevard
E/W: Avenue 24 1/2
Weather: Clear

File Name : 07_CHA_Rob_A24 1-2 PM
Site Code : 00323913
Start Date : 10/4/2023
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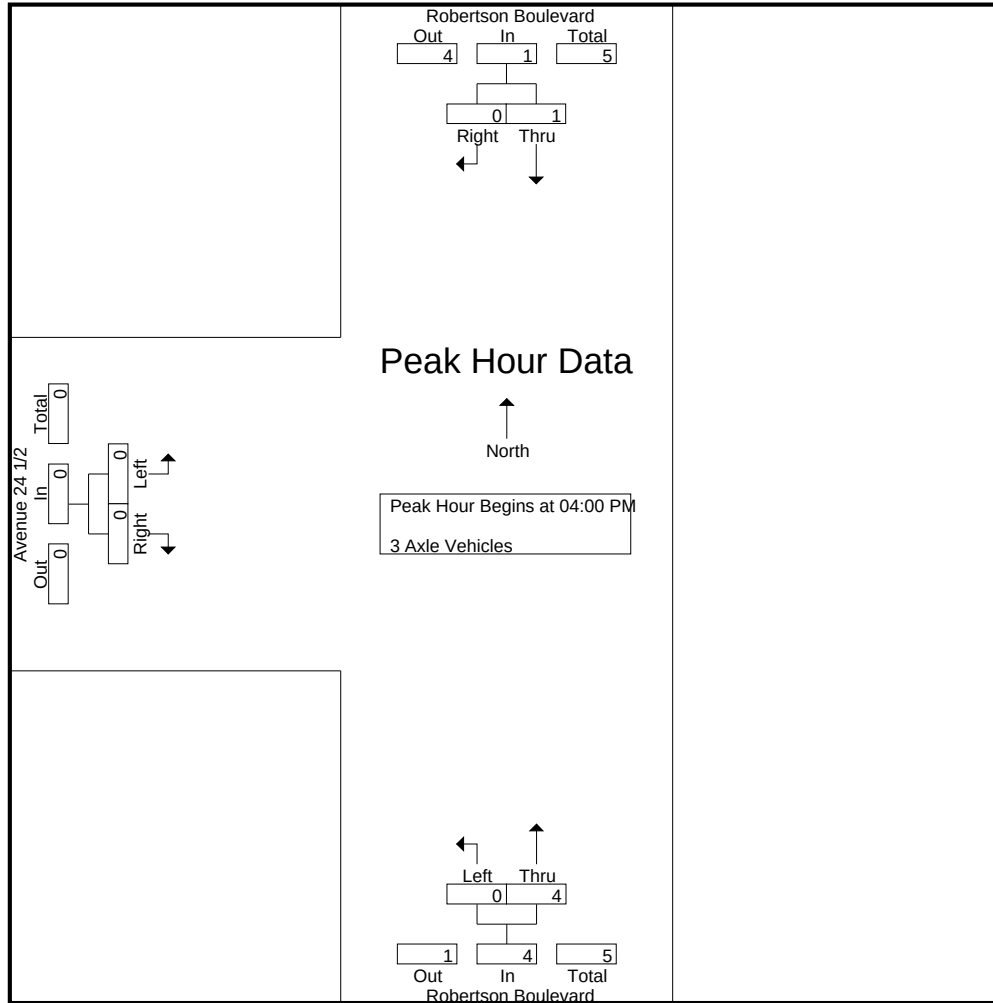
Groups Printed- 3 Axle Vehicles

	Robertson Boulevard Southbound			Robertson Boulevard Northbound			Avenue 24 1/2 Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
04:00 PM	1	0	1	0	2	2	0	0	0	3
04:15 PM	0	0	0	0	1	1	0	0	0	1
04:30 PM	0	0	0	0	1	1	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total	1	0	1	0	4	4	0	0	0	5
05:00 PM	0	0	0	0	0	0	0	0	0	0
05:15 PM	0	0	0	0	0	0	0	0	0	0
05:30 PM	1	0	1	0	0	0	0	0	0	1
05:45 PM	0	0	0	0	1	1	0	0	0	1
Total	1	0	1	0	1	1	0	0	0	2
Grand Total	2	0	2	0	5	5	0	0	0	7
Apprch %	100	0		0	100		0	0		
Total %	28.6	0	28.6	0	71.4	71.4	0	0	0	

	Robertson Boulevard Southbound			Robertson Boulevard Northbound			Avenue 24 1/2 Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:15 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	1	0	1	0	2	2	0	0	0	3
04:15 PM	0	0	0	0	1	1	0	0	0	1
04:30 PM	0	0	0	0	1	1	0	0	0	1
04:45 PM	0	0	0	0	0	0	0	0	0	0
Total Volume	1	0	1	0	4	4	0	0	0	5
% App. Total	100	0		0	100		0	0		
PHF	.250	.000	.250	.000	.500	.500	.000	.000	.000	.417

City of Chowchilla
N/S: Robertson Boulevard
E/W: Avenue 24 1/2
Weather: Clear

File Name : 07_CHA_Rob_A24 1-2 PM
Site Code : 00323913
Start Date : 10/4/2023
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Peak Hour Analysis From 04:00 PM to 05:15 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM			04:00 PM			04:00 PM		
+0 mins.	1	0	1	0	2	2	0	0	0
+15 mins.	0	0	0	0	1	1	0	0	0
+30 mins.	0	0	0	0	1	1	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0
Total Volume	1	0	1	0	4	4	0	0	0
% App. Total	100	0		0	100		0	0	
PHF	.250	.000	.250	.000	.500	.500	.000	.000	.000

City of Chowchilla
N/S: Robertson Boulevard
E/W: Avenue 24 1/2
Weather: Clear

File Name : 07_CHA_Rob_A24 1-2 PM
Site Code : 00323913
Start Date : 10/4/2023
Page No : 1

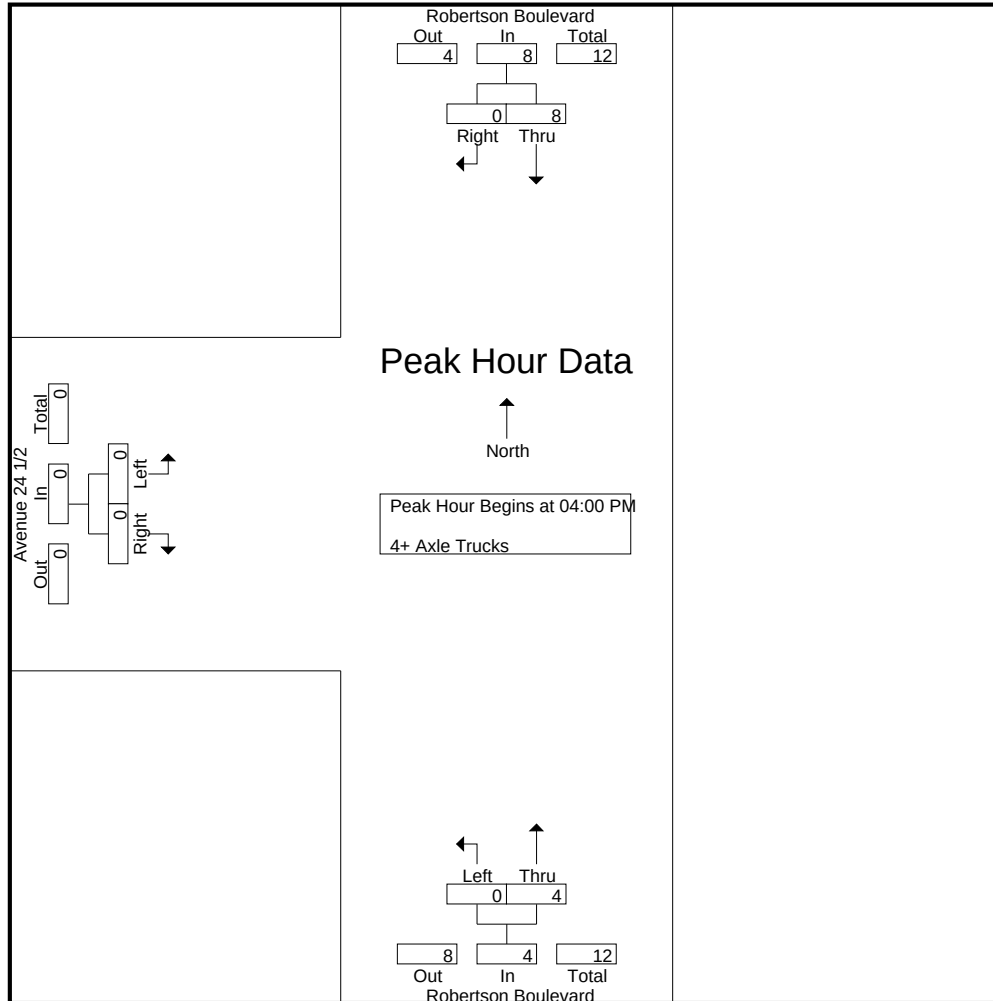
Groups Printed- 4+ Axle Trucks

	Robertson Boulevard Southbound			Robertson Boulevard Northbound			Avenue 24 1/2 Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
04:00 PM	2	0	2	0	1	1	0	0	0	3
04:15 PM	1	0	1	0	2	2	0	0	0	3
04:30 PM	4	0	4	0	0	0	0	0	0	4
04:45 PM	1	0	1	0	1	1	0	0	0	2
Total	8	0	8	0	4	4	0	0	0	12
05:00 PM	2	0	2	0	0	0	0	0	0	2
05:15 PM	1	0	1	0	1	1	0	0	0	2
05:30 PM	1	0	1	0	1	1	0	0	0	2
05:45 PM	1	0	1	0	1	1	0	0	0	2
Total	5	0	5	0	3	3	0	0	0	8
Grand Total	13	0	13	0	7	7	0	0	0	20
Apprch %	100	0		0	100		0	0		
Total %	65	0	65	0	35	35	0	0	0	

	Robertson Boulevard Southbound			Robertson Boulevard Northbound			Avenue 24 1/2 Eastbound			
Start Time	Thru	Right	App. Total	Left	Thru	App. Total	Left	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:15 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:00 PM										
04:00 PM	2	0	2	0	1	1	0	0	0	3
04:15 PM	1	0	1	0	2	2	0	0	0	3
04:30 PM	4	0	4	0	0	0	0	0	0	4
04:45 PM	1	0	1	0	1	1	0	0	0	2
Total Volume	8	0	8	0	4	4	0	0	0	12
% App. Total	100	0		0	100		0	0		
PHF	.500	.000	.500	.000	.500	.500	.000	.000	.000	.750

City of Chowchilla
N/S: Robertson Boulevard
E/W: Avenue 24 1/2
Weather: Clear

File Name : 07_CHA_Rob_A24 1-2 PM
Site Code : 00323913
Start Date : 10/4/2023
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Peak Hour Analysis From 04:00 PM to 05:15 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:00 PM			04:00 PM			04:00 PM		
+0 mins.	2	0	2	0	1	1	0	0	0
+15 mins.	1	0	1	0	2	2	0	0	0
+30 mins.	4	0	4	0	0	0	0	0	0
+45 mins.	1	0	1	0	1	1	0	0	0
Total Volume	8	0	8	0	4	4	0	0	0
% App. Total	100	0		0	100		0	0	
PHF	.500	.000	.500	.000	.500	.500	.000	.000	.000

City of Chowchilla
N/S: Robertson Boulevard
E/W: Road 15
Weather: Clear

File Name : 08_CHA_Rob_Rd 15 AM
Site Code : 00323913
Start Date : 10/4/2023
Page No : 1

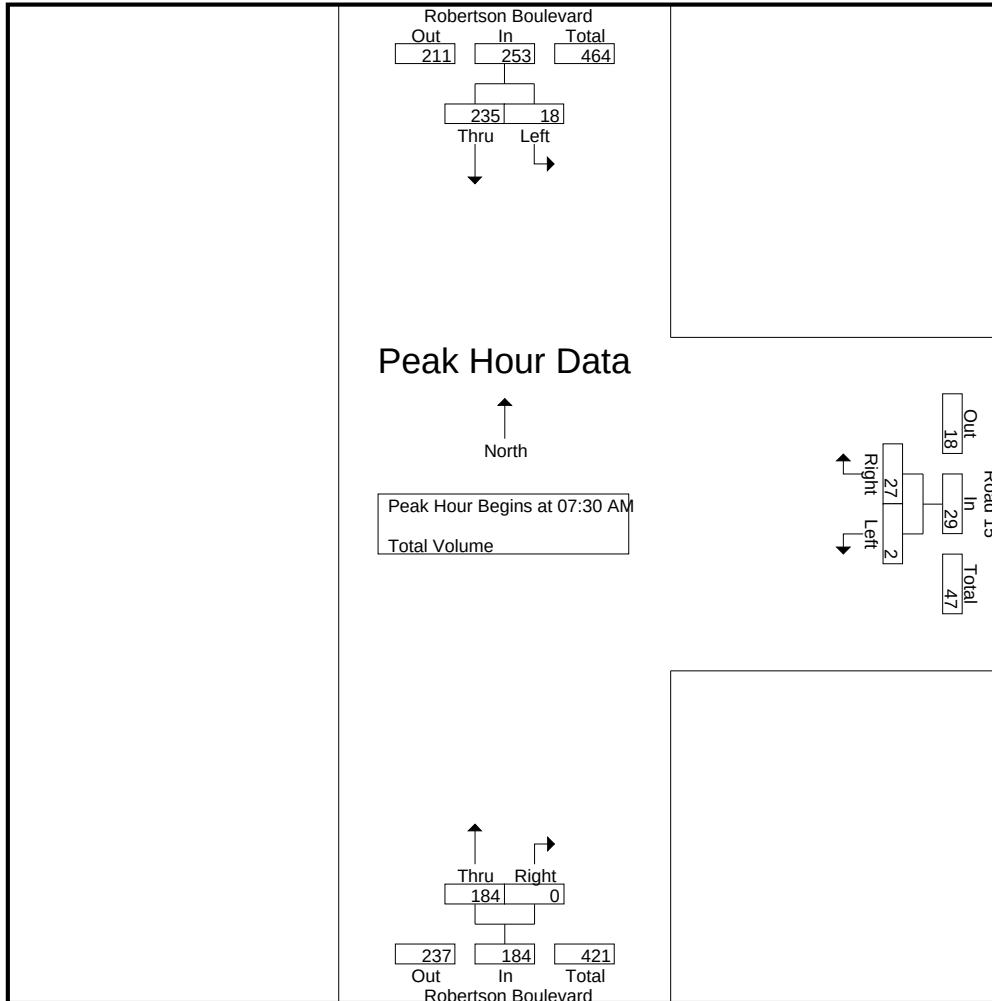
Groups Printed- Total Volume

	Robertson Boulevard Southbound			Road 15 Westbound			Robertson Boulevard Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
07:00 AM	4	57	61	0	5	5	28	0	28	94
07:15 AM	7	40	47	0	5	5	38	0	38	90
07:30 AM	10	51	61	1	7	8	38	0	38	107
07:45 AM	3	67	70	0	7	7	50	0	50	127
Total	24	215	239	1	24	25	154	0	154	418
08:00 AM	3	75	78	1	5	6	50	0	50	134
08:15 AM	2	42	44	0	8	8	46	0	46	98
08:30 AM	2	42	44	0	4	4	35	0	35	83
08:45 AM	2	37	39	0	3	3	31	0	31	73
Total	9	196	205	1	20	21	162	0	162	388
Grand Total	33	411	444	2	44	46	316	0	316	806
Apprch %	7.4	92.6		4.3	95.7		100	0		
Total %	4.1	51	55.1	0.2	5.5	5.7	39.2	0	39.2	

	Robertson Boulevard Southbound			Road 15 Westbound			Robertson Boulevard Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 07:30 AM										
07:30 AM	10	51	61	1	7	8	38	0	38	107
07:45 AM	3	67	70	0	7	7	50	0	50	127
08:00 AM	3	75	78	1	5	6	50	0	50	134
08:15 AM	2	42	44	0	8	8	46	0	46	98
Total Volume	18	235	253	2	27	29	184	0	184	466
% App. Total	7.1	92.9		6.9	93.1		100	0		
PHF	.450	.783	.811	.500	.844	.906	.920	.000	.920	.869

City of Chowchilla
N/S: Robertson Boulevard
E/W: Road 15
Weather: Clear

File Name : 08_CHA_Rob_Rd 15 AM
Site Code : 00323913
Start Date : 10/4/2023
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	07:15 AM			07:30 AM			07:30 AM		
+0 mins.	7	40	47	1	7	8	38	0	38
+15 mins.	10	51	61	0	7	7	50	0	50
+30 mins.	3	67	70	1	5	6	50	0	50
+45 mins.	3	75	78	0	8	8	46	0	46
Total Volume	23	233	256	2	27	29	184	0	184
% App. Total	9	91		6.9	93.1		100	0	
PHF	.575	.777	.821	.500	.844	.906	.920	.000	.920

City of Chowchilla
N/S: Robertson Boulevard
E/W: Road 15
Weather: Clear

File Name : 08_CHA_Rob_Rd 15 PM
Site Code : 00323913
Start Date : 10/4/2023
Page No : 1

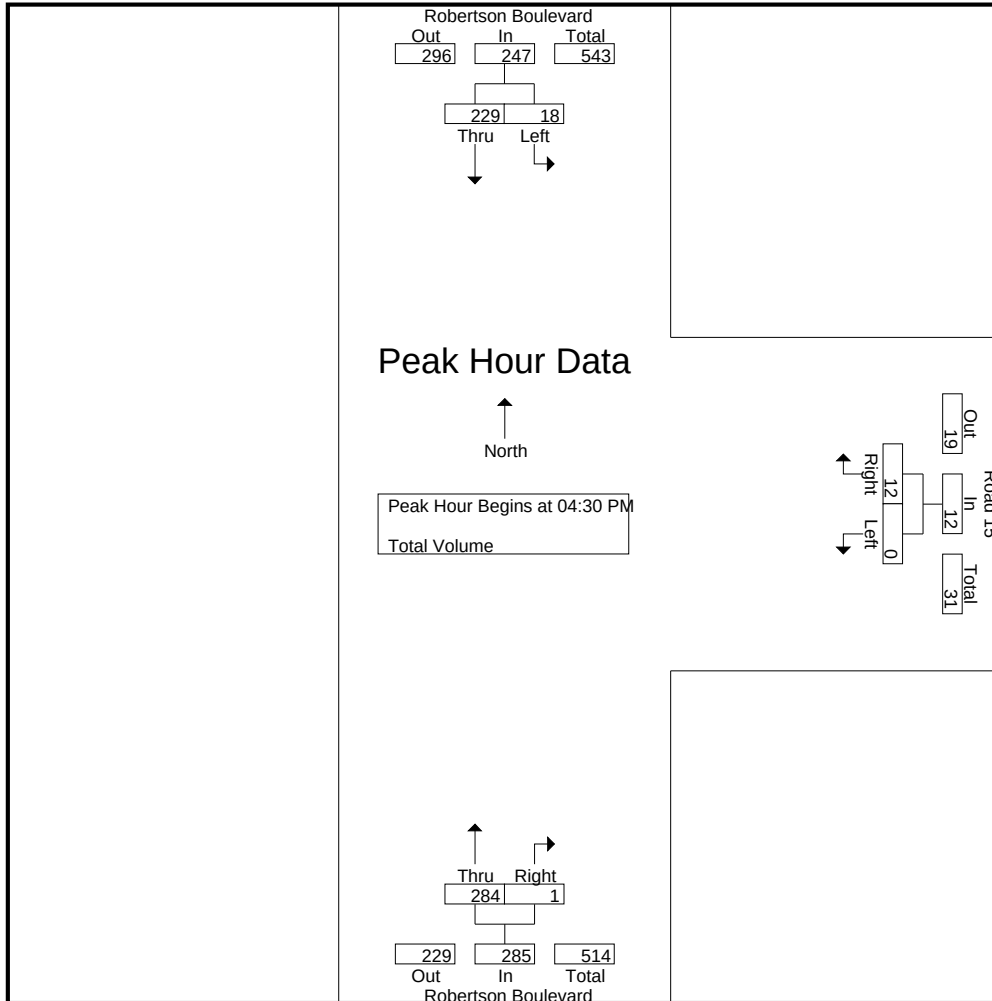
Groups Printed- Total Volume

	Robertson Boulevard Southbound			Road 15 Westbound			Robertson Boulevard Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
04:00 PM	1	50	51	0	10	10	59	1	60	121
04:15 PM	7	36	43	0	9	9	61	0	61	113
04:30 PM	5	60	65	0	2	2	72	0	72	139
04:45 PM	3	51	54	0	3	3	65	0	65	122
Total	16	197	213	0	24	24	257	1	258	495
05:00 PM	4	69	73	0	4	4	68	0	68	145
05:15 PM	6	49	55	0	3	3	79	1	80	138
05:30 PM	4	38	42	0	5	5	67	0	67	114
05:45 PM	3	37	40	0	8	8	65	0	65	113
Total	17	193	210	0	20	20	279	1	280	510
Grand Total	33	390	423	0	44	44	536	2	538	1005
Apprch %	7.8	92.2		0	100		99.6	0.4		
Total %	3.3	38.8	42.1	0	4.4	4.4	53.3	0.2	53.5	

	Robertson Boulevard Southbound			Road 15 Westbound			Robertson Boulevard Northbound			
Start Time	Left	Thru	App. Total	Left	Right	App. Total	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1										
Peak Hour for Entire Intersection Begins at 04:30 PM										
04:30 PM	5	60	65	0	2	2	72	0	72	139
04:45 PM	3	51	54	0	3	3	65	0	65	122
05:00 PM	4	69	73	0	4	4	68	0	68	145
05:15 PM	6	49	55	0	3	3	79	1	80	138
Total Volume	18	229	247	0	12	12	284	1	285	544
% App. Total	7.3	92.7		0	100		99.6	0.4		
PHF	.750	.830	.846	.000	.750	.750	.899	.250	.891	.938

City of Chowchilla
N/S: Robertson Boulevard
E/W: Road 15
Weather: Clear

File Name : 08_CHA_Rob_Rd 15 PM
Site Code : 00323913
Start Date : 10/4/2023
Page No : 2



Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1

Peak Hour for Each Approach Begins at:

	04:30 PM			04:00 PM			04:30 PM		
+0 mins.	5	60	65	0	10	10	72	0	72
+15 mins.	3	51	54	0	9	9	65	0	65
+30 mins.	4	69	73	0	2	2	68	0	68
+45 mins.	6	49	55	0	3	3	79	1	80
Total Volume	18	229	247	0	24	24	284	1	285
% App. Total	7.3	92.7		0	100		99.6	0.4	
PHF	.750	.830	.846	.000	.600	.600	.899	.250	.891

Counts Unlimited, Inc.
PO Box 1178
Corona, CA 92878
(951) 268-6268

City of Chowchilla
N/S: Road 15
E/W: Avenue 24
Weather: Clear

File Name : 09_CHA_Rd 15_Ave24 AM
Site Code : 00323913
Start Date : 10/4/2023
Page No : 1

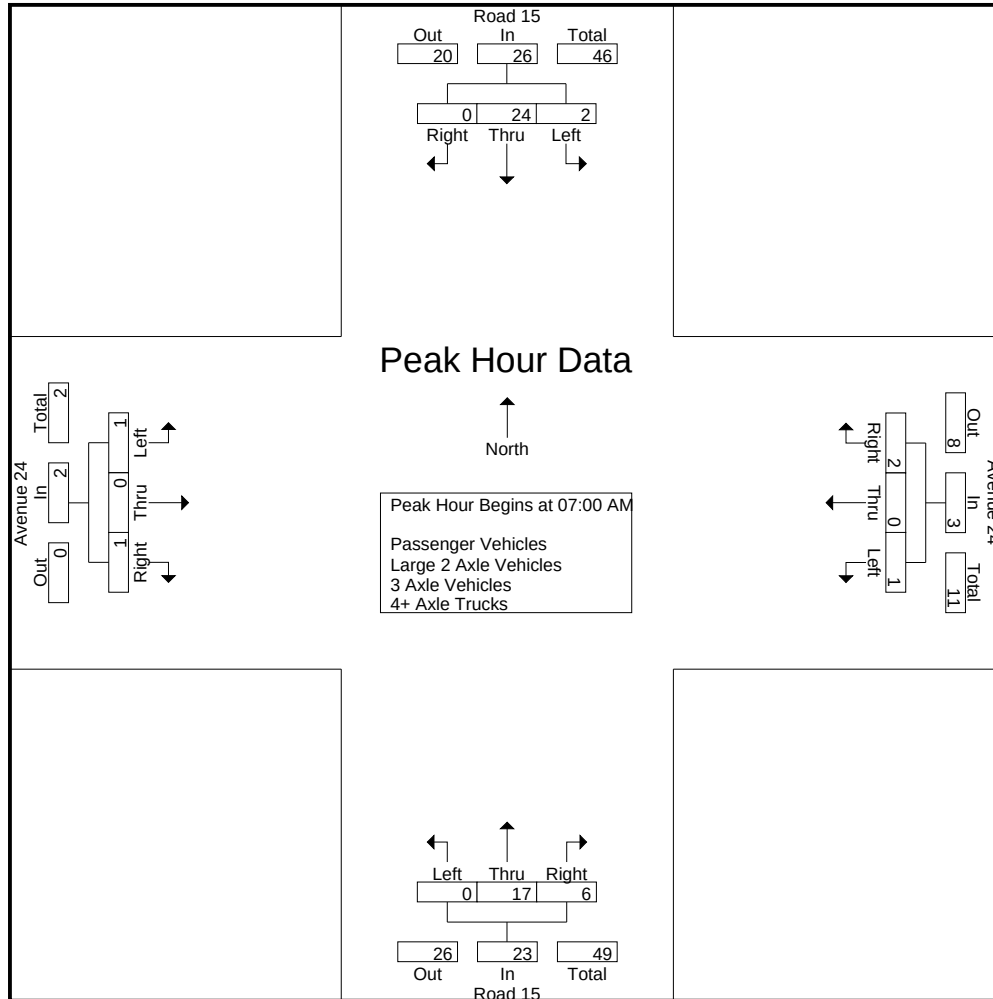
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Road 15 Southbound				Avenue 24 Westbound				Road 15 Northbound				Avenue 24 Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	2	0	2	1	0	0	1	0	6	2	8	0	0	0	0	11
07:15 AM	1	9	0	10	0	0	0	0	0	2	2	4	0	0	1	1	15
07:30 AM	1	10	0	11	0	0	2	2	0	4	2	6	1	0	0	1	20
07:45 AM	0	3	0	3	0	0	0	0	0	5	0	5	0	0	0	0	8
Total	2	24	0	26	1	0	2	3	0	17	6	23	1	0	1	2	54
08:00 AM	0	1	0	1	2	0	0	2	0	4	0	4	0	0	0	0	7
08:15 AM	1	2	0	3	2	0	2	4	0	6	0	6	0	0	0	0	13
08:30 AM	0	2	0	2	0	0	0	0	0	3	0	3	0	0	0	0	5
08:45 AM	1	0	0	1	0	0	0	0	0	2	0	2	0	0	0	0	3
Total	2	5	0	7	4	0	2	6	0	15	0	15	0	0	0	0	28
Grand Total	4	29	0	33	5	0	4	9	0	32	6	38	1	0	1	2	82
Apprch %	12.1	87.9	0		55.6	0	44.4		0	84.2	15.8		50	0	50		
Total %	4.9	35.4	0	40.2	6.1	0	4.9	11	0	39	7.3	46.3	1.2	0	1.2	2.4	
Passenger Vehicles	3	28	0	31	5	0	3	8	0	30	3	33	1	0	1	2	74
% Passenger Vehicles	75	96.6	0	93.9	100	0	75	88.9	0	93.8	50	86.8	100	0	100	100	90.2
Large 2 Axle Vehicles	1	1	0	2	0	0	1	1	0	2	1	3	0	0	0	0	6
% Large 2 Axle Vehicles	25	3.4	0	6.1	0	0	25	11.1	0	6.2	16.7	7.9	0	0	0	0	7.3
3 Axle Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% 3 Axle Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	2
% 4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0	33.3	5.3	0	0	0	0	2.4

	Road 15 Southbound				Avenue 24 Westbound				Road 15 Northbound				Avenue 24 Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	2	0	2	1	0	0	1	0	6	2	8	0	0	0	0	11
07:15 AM	1	9	0	10	0	0	0	0	0	2	2	4	0	0	1	1	15
07:30 AM	1	10	0	11	0	0	2	2	0	4	2	6	1	0	0	1	20
07:45 AM	0	3	0	3	0	0	0	0	0	5	0	5	0	0	0	0	8
Total Volume	2	24	0	26	1	0	2	3	0	17	6	23	1	0	1	2	54
% App. Total	7.7	92.3	0		33.3	0	66.7		0	73.9	26.1		50	0	50		
PHF	.500	.600	.000	.591	.250	.000	.250	.375	.000	.708	.750	.719	.250	.000	.250	.500	.675

City of Chowchilla
N/S: Road 15
E/W: Avenue 24
Weather: Clear

File Name : 09_CHA_Rd 15_Ave24 AM
Site Code : 00323913
Start Date : 10/4/2023
Page No : 2



Peak Hour Analysis From 07:00 AM to 08:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				07:30 AM				07:00 AM				07:00 AM			
+0 mins.	0	2	0	2	0	0	2	2	0	6	2	8	0	0	0	0
+15 mins.	1	9	0	10	0	0	0	0	0	2	2	4	0	0	1	1
+30 mins.	1	10	0	11	2	0	0	2	0	4	2	6	1	0	0	1
+45 mins.	0	3	0	3	2	0	2	4	0	5	0	5	0	0	0	0
Total Volume	2	24	0	26	4	0	4	8	0	17	6	23	1	0	1	2
% App. Total	7.7	92.3	0		50	0	50		0	73.9	26.1		50	0	50	
PHF	.500	.600	.000	.591	.500	.000	.500	.500	.000	.708	.750	.719	.250	.000	.250	.500

City of Chowchilla
N/S: Road 15
E/W: Avenue 24
Weather: Clear

File Name : 09_CHA_Rd 15_Ave24 AM
Site Code : 00323913
Start Date : 10/4/2023
Page No : 1

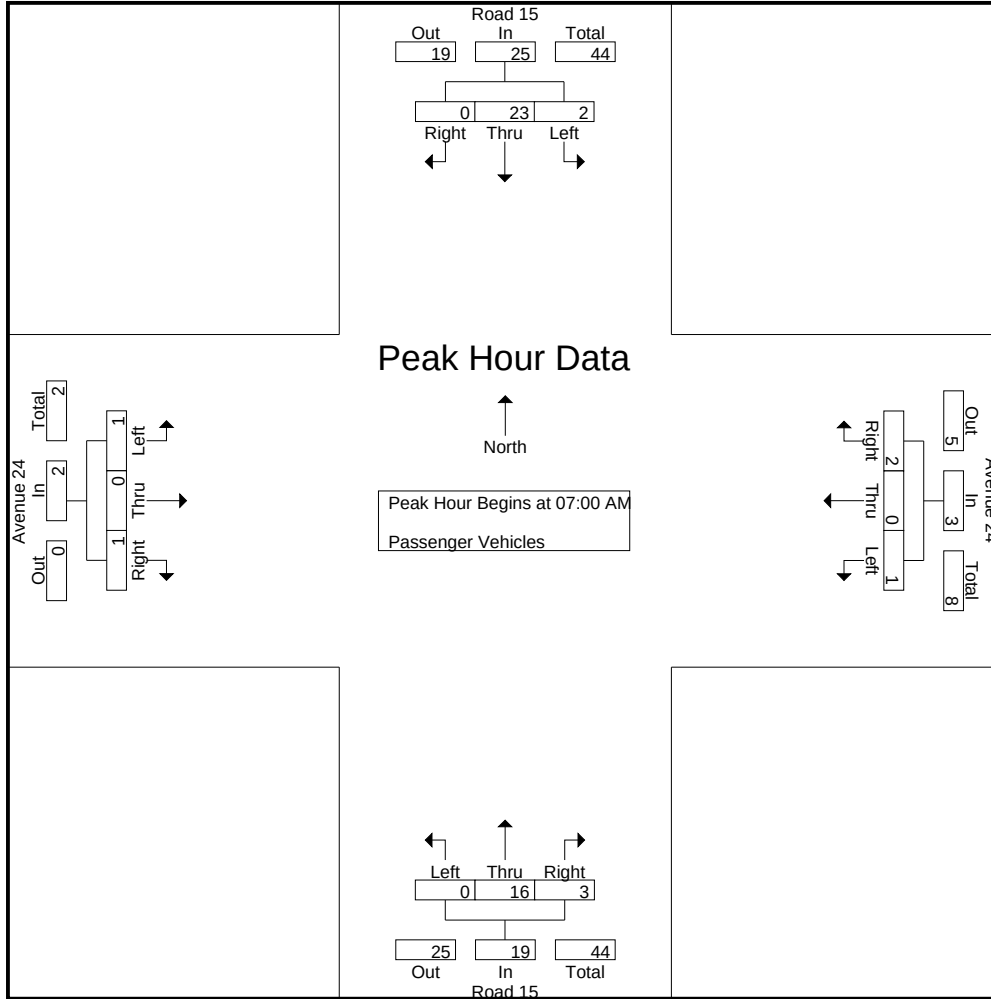
Groups Printed- Passenger Vehicles

	Road 15 Southbound				Avenue 24 Westbound				Road 15 Northbound				Avenue 24 Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	2	0	2	1	0	0	1	0	6	2	8	0	0	0	0	11
07:15 AM	1	9	0	10	0	0	0	0	0	2	0	2	0	0	1	1	13
07:30 AM	1	9	0	10	0	0	2	2	0	3	1	4	1	0	0	1	17
07:45 AM	0	3	0	3	0	0	0	0	0	5	0	5	0	0	0	0	8
Total	2	23	0	25	1	0	2	3	0	16	3	19	1	0	1	2	49
08:00 AM	0	1	0	1	2	0	0	2	0	4	0	4	0	0	0	0	7
08:15 AM	1	2	0	3	2	0	1	3	0	5	0	5	0	0	0	0	11
08:30 AM	0	2	0	2	0	0	0	0	0	3	0	3	0	0	0	0	5
08:45 AM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	2
Total	1	5	0	6	4	0	1	5	0	14	0	14	0	0	0	0	25
Grand Total	3	28	0	31	5	0	3	8	0	30	3	33	1	0	1	2	74
Apprch %	9.7	90.3	0		62.5	0	37.5		0	90.9	9.1		50	0	50		
Total %	4.1	37.8	0	41.9	6.8	0	4.1	10.8	0	40.5	4.1	44.6	1.4	0	1.4	2.7	

	Road 15 Southbound				Avenue 24 Westbound				Road 15 Northbound				Avenue 24 Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	2	0	2	1	0	0	1	0	6	2	8	0	0	0	0	11
07:15 AM	1	9	0	10	0	0	0	0	0	2	0	2	0	0	1	1	13
07:30 AM	1	9	0	10	0	0	2	2	0	3	1	4	1	0	0	1	17
07:45 AM	0	3	0	3	0	0	0	0	0	5	0	5	0	0	0	0	8
Total Volume	2	23	0	25	1	0	2	3	0	16	3	19	1	0	1	2	49
% App. Total	8	92	0		33.3	0	66.7		0	84.2	15.8		50	0	50		
PHF	.500	.639	.000	.625	.250	.000	.250	.375	.000	.667	.375	.594	.250	.000	.250	.500	.721

City of Chowchilla
N/S: Road 15
E/W: Avenue 24
Weather: Clear

File Name : 09_CHA_Rd 15_Ave24 AM
Site Code : 00323913
Start Date : 10/4/2023
Page No : 2



Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	2	0	2	1	0	0	1	0	6	2	8	0	0	0	0
+15 mins.	1	9	0	10	0	0	0	0	0	2	0	2	0	0	1	1
+30 mins.	1	9	0	10	0	0	2	2	0	3	1	4	1	0	0	1
+45 mins.	0	3	0	3	0	0	0	0	0	5	0	5	0	0	0	0
Total Volume	2	23	0	25	1	0	2	3	0	16	3	19	1	0	1	2
% App. Total	8	92	0		33.3	0	66.7		0	84.2	15.8		50	0	50	
PHF	.500	.639	.000	.625	.250	.000	.250	.375	.000	.667	.375	.594	.250	.000	.250	.500

City of Chowchilla
N/S: Road 15
E/W: Avenue 24
Weather: Clear

File Name : 09_CHA_Rd 15_Ave24 AM
Site Code : 00323913
Start Date : 10/4/2023
Page No : 1

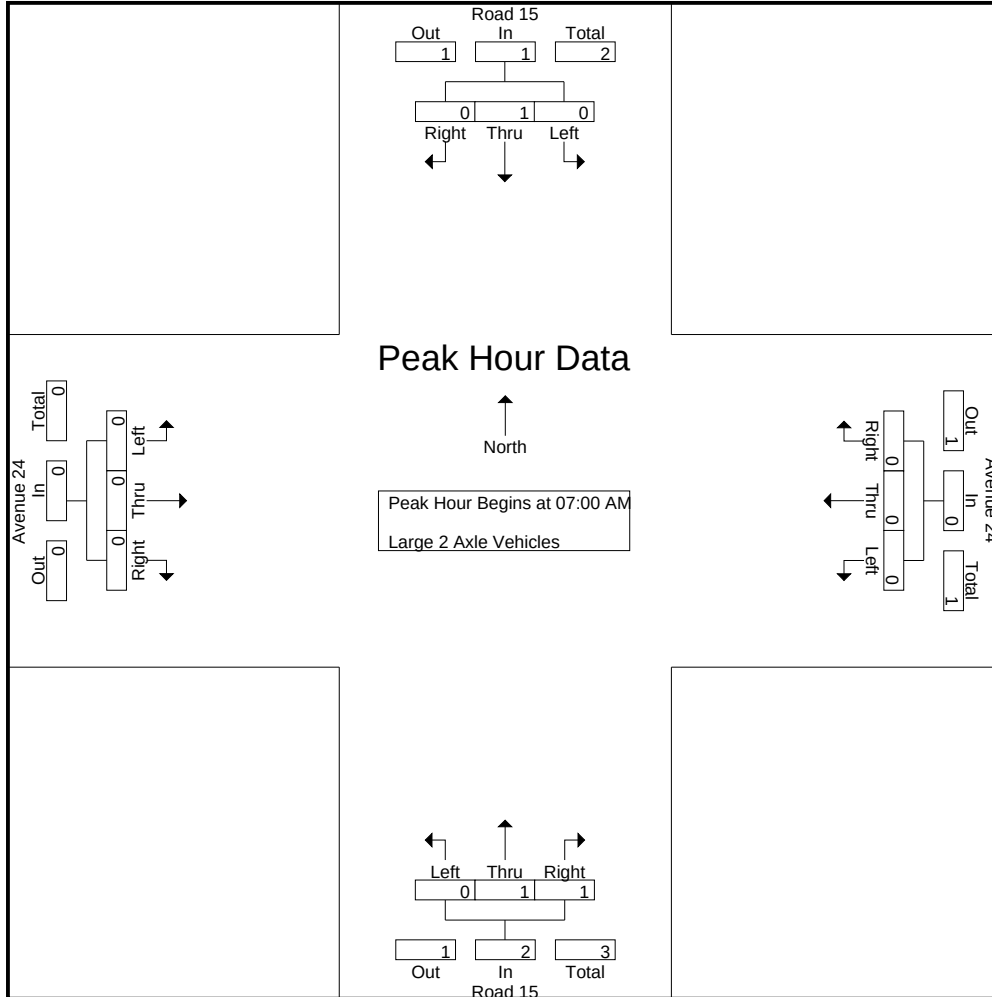
Groups Printed- Large 2 Axle Vehicles

	Road 15 Southbound				Avenue 24 Westbound				Road 15 Northbound				Avenue 24 Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	1	0	1	0	0	0	0	0	1	1	2	0	0	0	0	3
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	1	0	1	0	0	0	0	0	1	1	2	0	0	0	0	3
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	1	1	0	1	0	1	0	0	0	0	2
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Total	1	0	0	1	0	0	1	1	0	1	0	1	0	0	0	0	3
Grand Total	1	1	0	2	0	0	1	1	0	2	1	3	0	0	0	0	6
Apprch %	50	50	0		0	0	100		0	66.7	33.3		0	0	0		
Total %	16.7	16.7	0	33.3	0	0	16.7	16.7	0	33.3	16.7	50	0	0	0	0	

	Road 15 Southbound				Avenue 24 Westbound				Road 15 Northbound				Avenue 24 Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:30 AM	0	1	0	1	0	0	0	0	0	1	1	2	0	0	0	0	3
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	0	1	0	0	0	0	0	1	1	2	0	0	0	0	3
% App. Total	0	100	0		0	0	0		0	50	50		0	0	0		
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.250	.250	.250	.000	.000	.000	.000	.250

City of Chowchilla
N/S: Road 15
E/W: Avenue 24
Weather: Clear

File Name : 09_CHA_Rd 15_Ave24 AM
Site Code : 00323913
Start Date : 10/4/2023
Page No : 2



Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+30 mins.	0	1	0	1	0	0	0	0	0	1	1	2	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	1	0	1	0	0	0	0	0	1	1	2	0	0	0	0
% App. Total	0	100	0		0	0	0		0	50	50		0	0	0	
PHF	.000	.250	.000	.250	.000	.000	.000	.000	.000	.250	.250	.250	.000	.000	.000	.000

File Name : 09_CHA_Rd 15_Ave24 AM
Site Code : 00323913
Start Date : 10/4/2023
Page No : 1

City of Chowchilla
N/S: Road 15
E/W: Avenue 24
Weather: Clear

File Name : 09_CHA_Rd 15_Ave24 AM
Site Code : 00323913
Start Date : 10/4/2023
Page No : 1

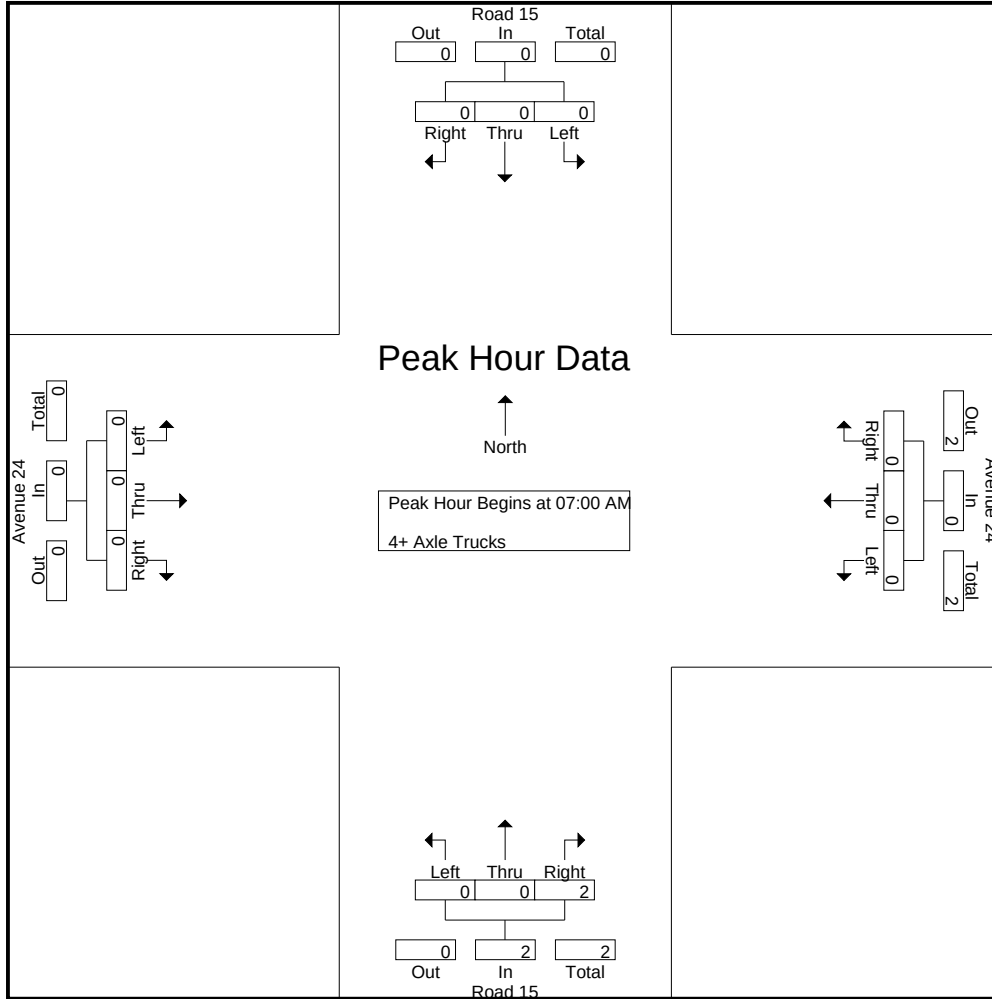
Groups Printed- 4+ Axle Trucks

	Road 15 Southbound				Avenue 24 Westbound				Road 15 Northbound				Avenue 24 Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	2
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	2
08:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:15 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
08:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grand Total	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	2
Apprch %	0	0	0		0	0	0		0	0	100		0	0	0		
Total %	0	0	0	0	0	0	0	0	0	0	100	100	0	0	0	0	

	Road 15 Southbound				Avenue 24 Westbound				Road 15 Northbound				Avenue 24 Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 07:00 AM																	
07:00 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:15 AM	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	2
07:30 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
07:45 AM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0	2
% App. Total	0	0	0		0	0	0		0	0	100		0	0	0		
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.250	.000	.000	.000	.000	.250

City of Chowchilla
N/S: Road 15
E/W: Avenue 24
Weather: Clear

File Name : 09_CHA_Rd 15_Ave24 AM
Site Code : 00323913
Start Date : 10/4/2023
Page No : 2



Peak Hour Analysis From 07:00 AM to 07:45 AM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	07:00 AM				07:00 AM				07:00 AM				07:00 AM			
+0 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+15 mins.	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0
+30 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
+45 mins.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Volume	0	0	0	0	0	0	0	0	0	0	2	2	0	0	0	0
% App. Total	0	0	0	0	0	0	0	0	0	0	100		0	0	0	
PHF	.000	.000	.000	.000	.000	.000	.000	.000	.000	.000	.250	.250	.000	.000	.000	.000

City of Chowchilla
N/S: Road 15
E/W: Avenue 24
Weather: Clear

File Name : 09_CHA_Rd 15_Ave24 PM
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Page No : 1

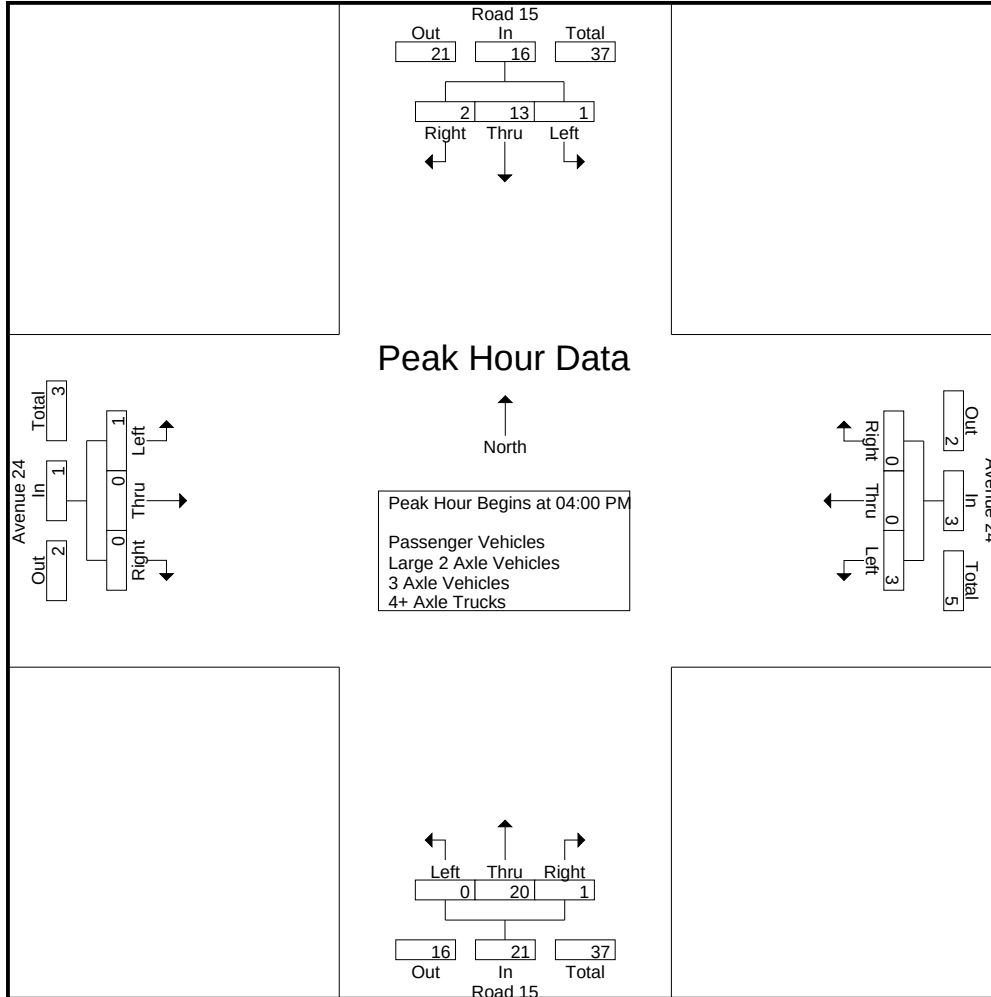
Groups Printed- Passenger Vehicles - Large 2 Axle Vehicles - 3 Axle Vehicles - 4+ Axle Trucks

	Road 15 Southbound				Avenue 24 Westbound				Road 15 Northbound				Avenue 24 Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	4	0	4	1	0	0	1	0	10	0	10	1	0	0	1	16
04:15 PM	0	5	1	6	0	0	0	0	0	6	0	6	0	0	0	0	12
04:30 PM	1	2	1	4	1	0	0	1	0	2	1	3	0	0	0	0	8
04:45 PM	0	2	0	2	1	0	0	1	0	2	0	2	0	0	0	0	5
Total	1	13	2	16	3	0	0	3	0	20	1	21	1	0	0	1	41
05:00 PM	0	2	0	2	1	0	0	1	0	3	1	4	0	0	0	0	7
05:15 PM	1	4	1	6	1	0	0	1	0	2	0	2	0	0	0	0	9
05:30 PM	0	2	0	2	1	0	0	1	0	4	0	4	0	0	0	0	7
05:45 PM	0	6	0	6	0	0	0	0	0	9	0	9	0	0	0	0	15
Total	1	14	1	16	3	0	0	3	0	18	1	19	0	0	0	0	38
Grand Total	2	27	3	32	6	0	0	6	0	38	2	40	1	0	0	1	79
Apprch %	6.2	84.4	9.4		100	0	0		0	95	5		100	0	0		
Total %	2.5	34.2	3.8	40.5	7.6	0	0	7.6	0	48.1	2.5	50.6	1.3	0	0	1.3	
Passenger Vehicles	2	26	3	31	6	0	0	6	0	37	2	39	1	0	0	1	77
% Passenger Vehicles	100	96.3	100	96.9	100	0	0	100	0	97.4	100	97.5	100	0	0	100	97.5
Large 2 Axle Vehicles	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	2
% Large 2 Axle Vehicles	0	3.7	0	3.1	0	0	0	0	0	2.6	0	2.5	0	0	0	0	2.5
3 Axle Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% 3 Axle Vehicles	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
% 4+ Axle Trucks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

	Road 15 Southbound				Avenue 24 Westbound				Road 15 Northbound				Avenue 24 Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	4	0	4	1	0	0	1	0	10	0	10	1	0	0	1	16
04:15 PM	0	5	1	6	0	0	0	0	0	6	0	6	0	0	0	0	12
04:30 PM	1	2	1	4	1	0	0	1	0	2	1	3	0	0	0	0	8
04:45 PM	0	2	0	2	1	0	0	1	0	2	0	2	0	0	0	0	5
Total Volume	1	13	2	16	3	0	0	3	0	20	1	21	1	0	0	1	41
% App. Total	6.2	81.2	12.5		100	0	0		0	95.2	4.8		100	0	0		
PHF	.250	.650	.500	.667	.750	.000	.000	.750	.000	.500	.250	.525	.250	.000	.000	.250	.641

City of Chowchilla
N/S: Road 15
E/W: Avenue 24
Weather: Clear

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Peak Hour Analysis From 04:00 PM to 05:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:30 PM				04:00 PM				04:00 PM			
+0 mins.	0	4	0	4	1	0	0	1	0	10	0	10	1	0	0	1
+15 mins.	0	5	1	6	1	0	0	1	0	6	0	6	0	0	0	0
+30 mins.	1	2	1	4	1	0	0	1	0	2	1	3	0	0	0	0
+45 mins.	0	2	0	2	1	0	0	1	0	2	0	2	0	0	0	0
Total Volume	1	13	2	16	4	0	0	4	0	20	1	21	1	0	0	1
% App. Total	6.2	81.2	12.5		100	0	0		0	95.2	4.8		100	0	0	
PHF	.250	.650	.500	.667	1.000	.000	.000	1.000	.000	.500	.250	.525	.250	.000	.000	.250

City of Chowchilla
N/S: Road 15
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Weather: Clear

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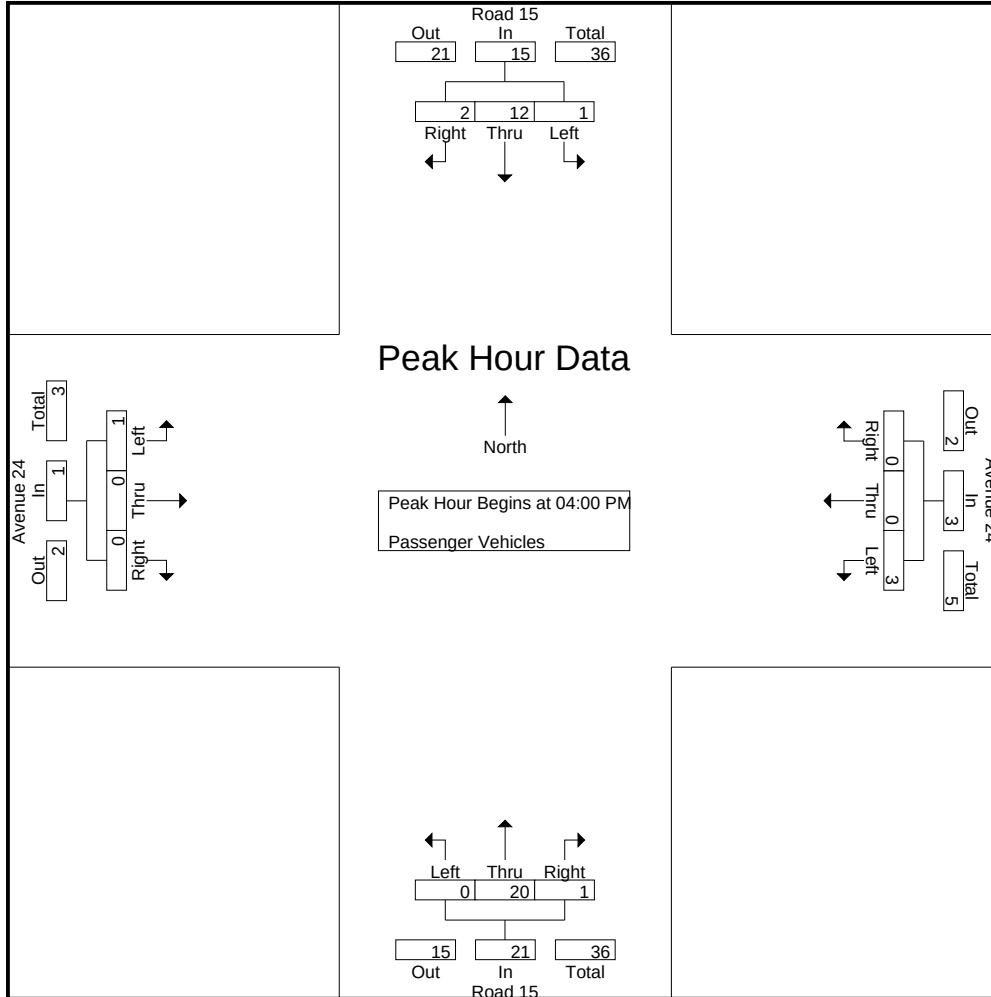
Groups Printed- Passenger Vehicles

	Road 15 Southbound				Avenue 24 Westbound				Road 15 Northbound				Avenue 24 Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
04:00 PM	0	3	0	3	1	0	0	1	0	10	0	10	1	0	0	1	15
04:15 PM	0	5	1	6	0	0	0	0	0	6	0	6	0	0	0	0	12
04:30 PM	1	2	1	4	1	0	0	1	0	2	1	3	0	0	0	0	8
04:45 PM	0	2	0	2	1	0	0	1	0	2	0	2	0	0	0	0	5
Total	1	12	2	15	3	0	0	3	0	20	1	21	1	0	0	1	40
05:00 PM	0	2	0	2	1	0	0	1	0	3	1	4	0	0	0	0	7
05:15 PM	1	4	1	6	1	0	0	1	0	2	0	2	0	0	0	0	9
05:30 PM	0	2	0	2	1	0	0	1	0	4	0	4	0	0	0	0	7
05:45 PM	0	6	0	6	0	0	0	0	0	8	0	8	0	0	0	0	14
Total	1	14	1	16	3	0	0	3	0	17	1	18	0	0	0	0	37
Grand Total	2	26	3	31	6	0	0	6	0	37	2	39	1	0	0	1	77
Apprch %	6.5	83.9	9.7		100	0	0		0	94.9	5.1		100	0	0		
Total %	2.6	33.8	3.9	40.3	7.8	0	0	7.8	0	48.1	2.6	50.6	1.3	0	0	1.3	

	Road 15 Southbound				Avenue 24 Westbound				Road 15 Northbound				Avenue 24 Eastbound				
Start Time	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Int. Total
Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 04:00 PM																	
04:00 PM	0	3	0	3	1	0	0	1	0	10	0	10	1	0	0	1	15
04:15 PM	0	5	1	6	0	0	0	0	0	6	0	6	0	0	0	0	12
04:30 PM	1	2	1	4	1	0	0	1	0	2	1	3	0	0	0	0	8
04:45 PM	0	2	0	2	1	0	0	1	0	2	0	2	0	0	0	0	5
Total Volume	1	12	2	15	3	0	0	3	0	20	1	21	1	0	0	1	40
% App. Total	6.7	80	13.3		100	0	0		0	95.2	4.8		100	0	0		
PHF	.250	.600	.500	.625	.750	.000	.000	.750	.000	.500	.250	.525	.250	.000	.000	.250	.667

City of Chowchilla
N/S: Road 15
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Weather: Clear

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Peak Hour Analysis From 04:00 PM to 04:45 PM - Peak 1 of 1
Peak Hour for Each Approach Begins at:

	04:00 PM				04:00 PM				04:00 PM				04:00 PM			
+0 mins.	0	3	0	3	1	0	0	1	0	10	0	10	1	0	0	1
+15 mins.	0	5	1	6	0	0	0	0	0	6	0	6	0	0	0	0
+30 mins.	1	2	1	4	1	0	0	1	0	2	1	3	0	0	0	0
+45 mins.	0	2	0	2	1	0	0	1	0	2	0	2	0	0	0	0
Total Volume	1	12	2	15	3	0	0	3	0	20	1	21	1	0	0	1
% App. Total	6.7	80	13.3		100	0	0		0	95.2	4.8		100	0	0	
PHF	.250	.600	.500	.625	.750	.000	.000	.750	.000	.500	.250	.525	.250	.000	.000	.250

File Name : 09_CHA_Rd 15_Ave24 PM
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File Name : 09_CHA_Rd 15_Ave24 PM
Site Code : 00323913
Start Date : 10/4/2023
Page No : 1



Location: System: Master At:		District: I/C:		Designed By: Installed By: Service Info:																									
Timing Change:	By:	Date Start:	Date End:	Designed:	Installed:																								
<div style="text-align: right; margin-bottom: 10px;">FLASH</div> <div style="display: flex; justify-content: space-between;"><div style="width: 30%;"><p>1)</p><p>P 2)</p><p>H 3)</p><p>A 4)</p><p>S 5)</p><p>E 6)</p><p>7)</p><p>8)</p> <p>O A)</p><p>V B)</p><p>E C)</p><p>R D)</p><p>L E)</p><p>A F)</p><p>P</p></div><div style="width: 30%; text-align: center;"><p>[]</p><p>[]</p><p>[]</p><p>[]</p><p>[]</p><p>[]</p><p>[]</p><p>[]</p> <p>[]</p><p>[]</p><p>[]</p><p>[]</p><p>[]</p><p>[]</p></div></div>			Intersection Layout																										
Comments and Notes:				RAM Checksum <table border="1" style="margin: 10px auto; border-collapse: collapse;"><tr><td>Page 2:</td><td>4F10</td><td>Page 8:</td><td>85AF</td></tr><tr><td>Page 3:</td><td>F159</td><td>Page 9:</td><td>3C70</td></tr><tr><td>Page 4:</td><td>D7F1</td><td>Page 10:</td><td>DF84</td></tr><tr><td>Page 5:</td><td>191A</td><td>Page 11:</td><td>93EE</td></tr><tr><td>Page 6:</td><td>191A</td><td>Page 12:</td><td>EF20</td></tr><tr><td>Page 7:</td><td>FA13</td><td>Page 13:</td><td>86F7</td></tr></table>		Page 2:	4F10	Page 8:	85AF	Page 3:	F159	Page 9:	3C70	Page 4:	D7F1	Page 10:	DF84	Page 5:	191A	Page 11:	93EE	Page 6:	191A	Page 12:	EF20	Page 7:	FA13	Page 13:	86F7
Page 2:	4F10	Page 8:	85AF																										
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Page 4:	D7F1	Page 10:	DF84																										
Page 5:	191A	Page 11:	93EE																										
Page 6:	191A	Page 12:	EF20																										
Page 7:	FA13	Page 13:	86F7																										



CONFIGURATION PHASE FLAGS

Phases (2-1-1-1)	
Permitted	1 2 - 4 5 6 - 8
Restricted	- - - - -

Phase Recalls (2-1-1-2)	
Vehicle Min	- 2 - - - 6 - -
vehicle Max	- - - - -
Pedestrian	- - - - -
Bicycle	- - - - -

Phase Locks (2-1-1-3)	
Red	- - - - -
Yellow	- - - - -
Force/Max	- - - - -

Phase Features (2-1-1-4)	
Double Entry	- - - 4 - - - 8
Rest In Walk	- - - - -
Rest In Red	- - - - -
Walk2	- - - - -
Max Green 2	1 2 - 4 5 6 - 8
Max Green 3	- - - - -

Startup (2-1-1-5)	
First Green Phases	- 2 - - - 6 - -
Yellow Start Phases	- - - - -
Vehicle Calls	1 2 - 4 5 6 - 8
Pedestrian Calls	- 2 - 4 - 6 - -
Yellow Start Overlaps	- - - - -
Startup All-Red	6.0

Call To Phase (2-1-2-1)		Omit On Green	
1	- - - - -	1	- - - - -
2	- - - - -	2	- - - - -
3	- - - - -	3	- - - - -
4	- - - - -	4	- - - - -
5	- - - - -	5	- - - - -
6	- - - - -	6	- - - - -
7	- - - - -	7	- - - - -
8	- - - - -	8	- - - - -

Flashing Colors (2-1-2-2)	
Yellow Flash Phases	- - - - -
Yellow Flash Overlap	- - - - -
Flash In Red Phases	- - - - -
Flash In Red Overlap	- - - - -

Special Operation (2-1-2-3)	
Single Exit Phase	- - - - -
Driveway Signal Phases	- - - - -
Driveway Signal Overlaps	- - - - -
Leading Ped Phases	- 2 - 4 - 6 - -

Protected Permissive (2-1-2-4)	
Protected Permissive	- - - - -

Pedestrian (2-1-3)	
P1	- - - - -
P2	- 2 - - - - -
P3	- - - - -
P4	- - - 4 - - - -
P5	- - - - -
P6	- - - - 6 - -
P7	- - - - -
P8	- - - - - 8

Overlap (2-1-4)				
Overlap	Parent	Omit	No Start	Not
A [Arrow A]	- - - - -	- - - - -	- - - - -	- - - - -
B [Arrow B]	- - - - -	- - - - -	- - - - -	- - - - -
C [OL A]	- - - - -	- - - - -	- - - - -	- - - - -
D [OL B]	- - - - -	- - - - -	- - - - -	- - - - -
E [OL C]	- - - - -	- - - - -	- - - - -	- - - - -
F [OL D]	- - - - -	- - - - -	- - - - -	- - - - -

[-] 332 Cabinet Overlap Assignment - For Reference Only

P
H
A
S
E

T
I
M
I
N
G

PHASE (2-2)	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
--- Walk 1 ---	0	7	0	10	0	7	0	0
Flash Don't Walk	0	12	0	21	0	12	0	0
Minimum Green	7	10	0	8	7	10	0	8
Det Limit	0	30	0	20	0	30	0	20
Max Initial	0	0	0	0	0	0	0	0
Max Green 1	15	30	0	20	15	30	0	20
Max Green 2	25	40	0	30	25	40	0	30
Max Green 3	0	0	0	0	0	0	0	0
Extension	2.0	5.2	0.0	4.6	2.0	5.2	0.0	5.4
Maximum Gap	2.0	7.2	0.0	6.4	2.0	7.2	0.0	7.4
Minimum Gap	2.0	2.0	0.0	2.0	2.0	2.0	0.0	2.0
Add Per Vehicle	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reduce Gap By	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1
Reduce Every	0.0	0.5	0.0	0.5	0.0	0.5	0.0	0.4
Yellow	3.7	4.1	3.0	4.1	3.7	4.1	3.0	4.1
All-Red	2.0	2.0	1.0	2.4	2.0	2.0	1.0	2.4
Ped/Bike (2-3)	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
--- Walk 2 ---	0	0	0	0	0	0	0	0
Delay/Early Walk	0	3	0	3	0	3	0	0
Solid Don't Walk	0	0	0	0	0	0	0	0
Bike Green	0	0	0	0	0	0	0	0
Bike All-Red	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

OVERLAP TIMING

Overlap (2-4)	A [Arrow A]	B [Arrow B]	C [OL A]	D [OL B]	E [OL C]	F [OL D]	Red Revert (2-5)		Max/Gap Out (2-7)	
Green	0.0	0.0	0.0	0.0	0.0	0.0	Time	5.0	Max Cnt	0
Yellow	5.0	5.0	5.0	5.0	5.0	5.0	Red To Se (2-6)		Gap Cnt	0
Red	0.0	0.0	0.0	0.0	0.0	0.0	Red To Sec	OFF		



Local Plan 1...9 (7-1) TIMING DATA

COORDINATION

	[Offsets]							Green Factors or Press [F] to Select							
		Cycle	Multi	Lag Gap	A	B	C	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
Plan 1	Green Factor	90	0.0	- - - - -				12			18	12			18
Plan 2	Green Factor	95	0.0	- - - - -				15			25	15			25
Plan 3	Green Factor	100	0.0	- - - - -				18			25	18			25
Plan 4	Green Factor		0.0	- - - - -											
Plan 5	Green Factor		0.0	- - - - -											
Plan 6	Green Factor		0.0	- - - - -											
Plan 7	Green Factor		0.0	- - - - -											
Plan 8	Green Factor		0.0	- - - - -											
Plan 9	Green Factor		0.0	- - - - -											

Local Plan 1...9 (7-1) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 1	- 2 - 4 - 6 - 8	- 2 - - - 6 - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
Plan 2	- 2 - 4 - 6 - 8	- 2 - - - 6 - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
Plan 3	- 2 - 4 - 6 - 8	- 2 - - - 6 - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
Plan 4	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
Plan 5	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
Plan 6	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
Plan 7	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
Plan 8	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
Plan 9	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -

Master Timer Sync (7-A)

Enable in Plans

1-9	- 2 - - - 6 - - -
11-19	- - - - -
21-29	- - - - -

Master Sub Master

Input	0.0
Output	0

(7-E) Free

Lag	Omit
- 2 - 4 - 6 - 8	- - - - -
Veh Min	Veh Max
- 2 - - - 6 - -	- - - - -
Ped	Bike
- - - - -	- - - - -
Cond	Cond Grn
- - - - -	10

MANUAL COMMANDS

Manual Plan (4-1)		Plan: 1-9 15 or 254 = Flash 14 or 255 = Free Offset A, B, or C
Plan	Offset	
0	A	

Special Function Override (4-2)

#	Control	#	Control
1	NORMAL	3	NORMAL
2	NORMAL	4	NORMAL

Detector Reset (4-3)

Local Manual (4-4)	OFF
--------------------	-----



Local Plan 11...19 (7-2) TIMING DATA

COORDINATION

		[Offsets]			Green Factors or Press [F] to Select Force-Off										
		Cycle	Multi	Lag Gap	A	B	C	1	2	3	4	5	6	7	8
Plan 11	Green Factor		0.0	- - - - -											
Plan 12	Green Factor		0.0	- - - - -											
Plan 13	Green Factor		0.0	- - - - -											
Plan 14	Green Factor		0.0	- - - - -											
Plan 15	Green Factor		0.0	- - - - -											
Plan 16	Green Factor		0.0	- - - - -											
Plan 17	Green Factor		0.0	- - - - -											
Plan 18	Green Factor		0.0	- - - - -											
Plan 19	Green Factor		0.0	- - - - -											

Local Plan 11...19 (7-2) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 11	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
Plan 12	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
Plan 13	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
Plan 14	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
Plan 15	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
Plan 16	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
Plan 17	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
Plan 18	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
Plan 19	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -



Local Plan 21...29 (7-3) TIMING DATA

COORDINATION

		[Offsets]			Green Factors or Press [F] to Select Force-Off										
		Cycle	Multi	Lag Gap	A	B	C	1	2	3	4	5	6	7	8
Plan 21	Green Factor		0.0	- - - - -											
Plan 22	Green Factor		0.0	- - - - -											
Plan 23	Green Factor		0.0	- - - - -											
Plan 24	Green Factor		0.0	- - - - -											
Plan 25	Green Factor		0.0	- - - - -											
Plan 26	Green Factor		0.0	- - - - -											
Plan 27	Green Factor		0.0	- - - - -											
Plan 28	Green Factor		0.0	- - - - -											
Plan 29	Green Factor		0.0	- - - - -											

Local Plan 21...29 (7-3) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 21	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
Plan 22	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
Plan 23	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
Plan 24	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
Plan 25	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
Plan 26	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
Plan 27	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
Plan 28	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
Plan 29	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -



DETECTORS

Detector Attributes (5-1)			
Det	Type	Phases	Lock
1	Count+Call+Extend	1 - - - - -	NO
2	Count+Call+Extend	1 - - - - -	NO
3	Count+Call+Extend	- 2 - - - - -	NO
4	Count+Call+Extend	- 2 - - - - -	NO
5	Count+Call+Extend	- 2 - - - - -	NO
6	Count+Call+Extend	- 2 - - - - -	NO
7	Count+Call+Extend	- 2 - - - - -	NO
8	Count+Call+Extend	- 2 - - - - -	NO
9	Count+Call+Extend	- - 3 - - - -	NO
10	Count+Call+Extend	- - 3 - - - -	NO
11	Count+Call+Extend	- - - 4 - - - -	NO
12	Count+Call+Extend	- - - 4 - - - -	NO
13	Count+Call+Extend	- - - 4 - - - -	NO
14	Count+Call+Extend	- - - 4 - - - -	NO
15	Count+Call+Extend	- - - 4 - - - -	NO
16	Count+Call+Extend	- - - 4 - - - -	NO
17	Count+Call+Extend	1 - - - - -	NO
18	Count+Call+Extend	- - 3 - - - -	NO
19	None	- - - - -	NO
20	None	- - - - -	NO
21	Count+Call+Extend	- - - - 5 - - -	NO
22	Count+Call+Extend	- - - - 5 - - -	NO
23	Count+Call+Extend	- - - - 6 - - -	NO
24	Count+Call+Extend	- - - - 6 - - -	NO
25	Count+Call+Extend	- - - - 6 - - -	NO
26	Count+Call+Extend	- - - - 6 - - -	NO
27	Count+Call+Extend	- - - - 6 - - -	NO
28	Count+Call+Extend	- - - - 6 - - -	NO
29	Count+Call+Extend	- - - - 7 - - -	NO
30	Count+Call+Extend	- - - - 7 - - -	NO
31	Count+Call+Extend	- - - - 8 - - -	NO
32	Count+Call+Extend	- - - - 8 - - -	NO
33	Count+Call+Extend	- - - - 8 - - -	NO
34	Count+Call+Extend	- - - - 8 - - -	NO
35	Count+Call+Extend	- - - - 8 - - -	NO
36	Count+Call+Extend	- - - - 8 - - -	NO
37	Count+Call+Extend	- - - - 5 - - -	NO
38	Count+Call+Extend	- - - - 7 - - -	NO
39	None	- - - - -	NO
40	None	- - - - -	NO
41	Pedestrian	- 2 - - - - -	NO
42	Pedestrian	- - - 4 - - - -	NO
43	Pedestrian	- - - - 6 - - -	NO
44	Pedestrian	- - - - 8 - - -	NO

Detector Configuration (5-2)				
Det	Delay	Extend	Recall	Port
1	1	0.0	10	3.2
2	1	0.0	10	7.2
3	0	0.0	10	1.1
4	0	0.0	10	1.5
5	0	0.0	10	4.5
6	0	0.0	10	6.2
7	0	3.0	10	2.1
8	0	3.0	10	7.4
9	0	0.0	10	3.4
10	0	0.0	10	7.6
11	3	0.0	10	1.3
12	0	0.0	10	1.7
13	0	0.0	10	4.7
14	0	0.0	10	6.4
15	3	2.0	10	2.3
16	3	2.0	10	7.8
17	1	0.0	10	3.6
18	0	0.0	10	3.8
19	0	0.0	10	4.1
20	0	0.0	10	4.2
21	1	0.0	10	3.1
22	1	0.0	10	7.1
23	0	0.0	10	1.2
24	0	0.0	10	1.6
25	0	0.0	10	4.6
26	0	0.0	10	6.3
27	0	2.0	10	2.2
28	0	2.0	10	7.3
29	0	0.0	10	3.3
30	0	0.0	10	7.5
31	3	0.0	10	1.4
32	0	0.0	10	1.8
33	0	0.0	10	4.8
34	0	0.0	10	6.5
35	3	2.0	10	2.4
36	3	2.0	10	7.7
37	1	0.0	10	3.5
38	0	0.0	10	3.7
39	0	0.0	10	4.3
40	0	0.0	10	4.4
41	0	0.0	0	5.1
42	0	0.0	0	5.3
43	0	0.0	0	5.2
44	0	0.0	0	5.4

Failure Times (5-3)		Minutes	Failure Override (5-4)	
Maximum On Time		0	Detectors 1-8	- - - - -
Fail Reset Time		0	Detectors 9-16	- - - - -
			Detectors 17-24	- - - - -
			Detectors 25-32	- - - - -
			Detectors 33-40	- - - - -
			Detectors 41-44	- - - - -

System Detector Assignment (5-5)								
Sys Det	1	2	3	4	5	6	7	8
Det Num	0	0	0	0	0	0	0	0
Sys Det	9	10	11	12	13	14	15	16
Det Num	0	0	0	0	0	0	0	0

CIC Operation (5-6-1)	
Enable in Plans	- - - - -

CIC Values (5-6-2)		Volume	Occupancy	Demand
Smoothing		0.66	0.66	0.66
Multiplier		4.0	0.33	
Exponent		0.50	1.0	

Detector-to-Phase Assignment (5-6-3)								
Sys Det	1	2	3	4	5	6	7	8
Phase	0	0	0	0	0	0	0	0
Sys Det	9	10	11	12	13	14	15	16
Phase	0	0	0	0	0	0	0	0

Input File Port-Bit Assignments

332 Cabinet - For Reference Only

I-	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	3.2	1.1	4.5	2.1	3.4	1.3	4.7	2.3	3.6	4.1	6.6	5.1	5.2	6.7
J-	7.2	1.5	6.2	7.4	7.6	1.7	6.4	7.8	3.8	4.2	2.7	5.3	5.4	6.8
	3.1	1.2	4.6	2.2	3.3	1.4	4.8	2.4	3.5	4.3	2.8	5.5	5.6	2.5
	7.1	1.6	6.3	7.3	7.5	1.8	6.5	7.7	3.7	4.4	6.1	5.7	5.8	2.6

[illegible]

Weekday Table Assignments (8-2-7)						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	1	1	1	1	2	2

**HOLIDAY TABLES****Floating Holiday Table (8-2-8)**

#	Mnth	Week	DOW	Table
1	0	0	- - - - -	0
2	0	0	- - - - -	0
3	0	0	- - - - -	0
4	0	0	- - - - -	0
5	0	0	- - - - -	0
6	0	0	- - - - -	0
7	0	0	- - - - -	0
8	0	0	- - - - -	0
9	0	0	- - - - -	0
10	0	0	- - - - -	0
11	0	0	- - - - -	0
12	0	0	- - - - -	0
13	0	0	- - - - -	0
14	0	0	- - - - -	0
15	0	0	- - - - -	0
16	0	0	- - - - -	0

Fixed Holiday Table (8-2-9)

#	Mnth	Day	DOW	Table
1	0	0	- - - - -	0
2	0	0	- - - - -	0
3	0	0	- - - - -	0
4	0	0	- - - - -	0
5	0	0	- - - - -	0
6	0	0	- - - - -	0
7	0	0	- - - - -	0
8	0	0	- - - - -	0
9	0	0	- - - - -	0
10	0	0	- - - - -	0
11	0	0	- - - - -	0
12	0	0	- - - - -	0
13	0	0	- - - - -	0
14	0	0	- - - - -	0
15	0	0	- - - - -	0
16	0	0	- - - - -	0

Solar Clock Data (8-4)

North Latitude	34
West Longitude	118
Local Time Zone	8

Sabbatical Clock (8-5)

Hebrew	Ped Recall
Sabbath	- - - - -
Holiday	- - - - -

Daylight Saving (8-6)

Daylight Saving	YES
------------------------	-----

TOD Functions (8-3)

#	Start	End	DOW	Action	Phases
			1 2 3 4 5 6 7		1 2 3 4 5 6 7 8
1	0530	2230	1 2 3 4 5 6 7	17	1 2 3 4 5 6 7 8
2	0000	0000	- - - - -	0	- - - - -
3	0000	0000	- - - - -	0	- - - - -
4	0000	0000	- - - - -	0	- - - - -
5	0000	0000	- - - - -	0	- - - - -
6	0000	0000	- - - - -	0	- - - - -
7	0000	0000	- - - - -	0	- - - - -
8	0000	0000	- - - - -	0	- - - - -
9	0000	0000	- - - - -	0	- - - - -
10	0000	0000	- - - - -	0	- - - - -
11	0000	0000	- - - - -	0	- - - - -
12	0000	0000	- - - - -	0	- - - - -
13	0000	0000	- - - - -	0	- - - - -
14	0000	0000	- - - - -	0	- - - - -
15	0000	0000	- - - - -	0	- - - - -
16	0000	0000	- - - - -	0	- - - - -

Action Codes:

0. None

1. Permitted

2. Restricted

4. Veh Min Recall

5. Veh Max Recall

6. Ped Recall

7. Bike Recall

8. Red Lock

9. Yellow Lock

10. Force/Max Lock

11. Double Entry

12. Y-Coord C

13. Y-Coord D

14. Free

15. Flashing

16. Walk 2

17. Max Green 2

18. Max Green 3

19. Rest in Walk

20. Rest in Red

21. Free Lag Phases

22. Special Functions

23. Truck Preempt

24. Conditional Service

25. Conditional Service

26. Leading Ped

41. Protected Permissive

42. Protected Permissive

Action Code = Phases added to normal setting

100+Action Code = Phases removed

200+Action Code = Phases replaced



COMMUNICATIONS

C2 (6-1-1)	
Address	0
Protocol	AB3418
Limit Access	None
Baud	1200
Parity	None
Data Bits	8 data bits
Stop Bits	1 stop bit
RTS On Time	20
RTS Off Time	20
Handshaking	Normal

C20 (6-1-2)	
Address	0
Protocol	AB3418
Limit Access	None
Baud	1200
Parity	None
Data Bits	8 data bits
Stop Bits	1 stop bit
RTS On Time	20
RTS Off Time	20
Handshaking	Normal

C21 (6-1-3)	
Address	0
Protocol	AB3418
Limit Access	None
Baud	1200
Parity	None
Data Bits	8 data bits
Stop Bits	1 stop bit
RTS On Time	20
RTS Off Time	20
Handshaking	Normal

SOFT LOGIC

Soft Logic (6-2)							
#	Data	OP	Data	OP	Data	OP	Data
1	12.5	01	00.0	00	00.0	00	00.0
2	00.0	00	00.0	00	00.0	00	00.0
3	00.0	00	00.0	00	00.0	00	00.0
4	00.0	00	00.0	00	00.0	00	00.0
5	00.0	00	00.0	00	00.0	00	00.0
6	00.0	00	00.0	00	00.0	00	00.0
7	00.0	00	00.0	00	00.0	00	00.0
8	00.0	00	00.0	00	00.0	00	00.0
9	00.0	00	00.0	00	00.0	00	00.0
10	00.0	00	00.0	00	00.0	00	00.0
11	00.0	00	00.0	00	00.0	00	00.0
12	00.0	00	00.0	00	00.0	00	00.0
13	00.0	00	00.0	00	00.0	00	00.0
14	00.0	00	00.0	00	00.0	00	00.0
15	00.0	00	00.0	00	00.0	00	00.0
16	00.0	00	00.0	00	00.0	00	00.0

CALLBACK NUMBERS

Callback Numbers (6-3...3)	
Line Out	0
Local Toll	0
Long Distance	0
Delay	10
Area Code	0
Phone Number	0 - 0

Line Out	0
Local Toll	0
Long Distance	0
Delay	10
Area Code	0
Phone Number	0 - 0

Line Out	0
Local Toll	0
Long Distance	0
Delay	10
Area Code	0
Phone Number	0 - 0

NETWORK

Network (6-4)				
Address	1			
Protocol	AB3418			
Port	27000			
IP Mode	Static IP			
IP Address	192	168	13	1
Netmask	255	255	255	0
Broadcast	192	168	13	255
Gateway	192	168	13	254



RAILROAD PREEMPTION

RR 1	(3-1-1)	Timing	Phase Flags (3-1-2)			Pedestrian Flags (3-1-3)			Overlap Flags (3-1-4)		
	Delay	0	Grn Hold	Yel Flash	Red Flash	Walk	Flash DW	Solid DW	Grn Hold	Yel Flash	Red Flash
	Clear 1	10	- 2 - - 5 - - -	- - - - -	- - - - -	- - - - -	- - - - -	- 2 - 4 - 6 - 8	- - - - -	- - - - -	- - - - -
	Clear 2	0	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
	Clear 3	0	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
	Hold	0	- - - - -	- - - - -	1 2 3 4 5 6 7 8	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	A B C D E F
	Exit	5	Exit Parameters (3-1-5)				Configuration (3-1-6)				
	Min Grn	0	Phase Green	Overlap Green	Vehicle Recall	Ped Call	Port	Gate Port	Latching	Power-Up	
	Ped Clr	0	- - - - -	- - - - -	1 2 3 4 5 6 7 8	- 2 - 4 - 6 - 8	2.5	0.0	Yes	Flashing	

RR 2	(3-2-1)	Timing	Phase Flags (3-2-2)			Pedestrian Flags (3-2-3)			Overlap Flags (3-2-4)		
	Delay	0	Grn Hold	Yel Flash	Red Flash	Walk	Flash DW	Solid DW	Grn Hold	Yel Flash	Red Flash
	Clear 1	10	- - - 4 - - 7 -	- - - - -	- - - - -	- - - - -	- - - - -	- 2 - 4 - 6 - 8	- - - - -	- - - - -	- - - - -
	Clear 2	0	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
	Clear 3	0	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
	Hold	0	1 2 3 - - 6 - -	- - - - -	- - - - -	- 2 - - - 6 - -	- - - - -	- - - 4 - - - 8	- - - - -	- - - - -	- - - - -
	Exit	0	Exit Parameters (3-2-5)				Configuration (3-2-6)				
	Min Grn	0	Exit Ph Grn	Exit Ovl Grn	Exit Veh Recall	Exit Ped Call	Port	Gate Port	Latching	Power-Up	
	Ped Clr	0	- - - - -	- - - - -	- - - 4 - - 7 -	- - - - -	2.6	0.0	Yes	Flashing	

EMERGENCY VEHICLE PREEMPTION

EVA (3-A)	Preempt Timers			Phase Green	Overlap Grn
	Delay	Clear	Max		
	0	30	30	- 2 - - 5 - - -	- - - - -
	Port			Latching	
	5.5			No	
	Phase Termination			Advance	
	5.5			Advance	

EVB (3-B)	Preempt Timers			Phase Green	Overlap Grn
	Delay	Clear	Max		
	0	30	30	- - - 4 - - 7 -	- - - - -
	Port			Latching	
	5.6			No	
	Phase Termination			Advance	
	5.6			Advance	

EVC (3-C)	Preempt Timers			Phase Green	Overlap Grn
	Delay	Clear	Max		
	0	30	30	1 - - - - 6 - -	- - - - -
	Port			Latching	
	5.7			No	
	Phase Termination			Advance	
	5.7			Advance	

EVD (3-D)	Preempt Timers			Phase Green	Overlap Grn
	Delay	Clear	Max		
	0	30	30	- - 3 - - - - 8	- - - - -
	Port			Latching	
	5.8			No	
	Phase Termination			Advance	
	5.8			Advance	



INPUTS

		7 Wire I/C(2-1-5-1)			
		Input	Port	Input	Port
Enable	No	R1	3 . 8	Free	3 . 6
Max ON	0	R2	3 . 5	D2	2 . 8
Max OFF	0	R3	3 . 7	D3	6 . 1

Manual Control(2-1-5-2)	
Input	Port
Manual Adv	6 . 6
Adv Enable	6 . 6

Battery Backup (2-1-5-5)	
Port	Operation
2 . 7	Flashing

Y-Coordination (2-1-5-6)	
Port C	Port D
6 . 1	2 . 8

Cabinet Status (2-1-5-3)	
Input	Port
Flash Bus	0 . 0
Door Ajar	0 . 0
Flash Sense	6 . 7
Stop Time	6 . 8

Special Function (2-1-5-4)	
Input	Port
1	0 . 0
2	0 . 0
3	0 . 0
4	0 . 0

OUTPUTS

Loadswitch Assignments (2-1-6)							
A	1	2	22	3	4	24	9
B	5	6	26	7	8	28	10
X	13	14	0	11	12	0	0

Loadswitch Codes:

0 Unused (no output)

1-8 Vehicle 1-8

9-14 Overlap A-F

21-28 Ped 1-8

41-47 Special Functions

41 Protected Permissive Flashing Phase 1

43 Protected Permissive Flashing Phase 3

45 Protected Permissive Flashing Phase 5

47 Protected Permissive Flashing Phase 7

51-57 Special Functions

71-72 Seven Wire I/C

+ middle output of
loadswitches 3 and 6



YELLOW YIELD COORDINATION

Y-Coord Plans (7-C,D)	Long Grn	No Grn	Offset	Perm	Force-Offs								Coord	Lag	Min Recall	Restricted
					1	2	3	4	5	6	7	8				
Plan C	0	0	0	0	0	0	0	0	0	0	0	0	- 2 - - - 6 - -	- 2 - 4 - 6 - 8	- - - - - - - -	- - - - - - - -
Plan D	0	0	0	0	0	0	0	0	0	0	0	0	- 2 - - - 6 - -	- 2 - 4 - 6 - 8	- - - - - - - -	- - - - - - - -

TRANSIT PRIORITY

Local Plans (3-E) 1...9 1...19		Early Green	Green Extend	Inhibit Cycles	Phase 1 Minimum	Phase 2 Minimum	Phase 3 Minimum	Phase 4 Minimum	Phase 5 Minimum	Phase 6 Minimum	Phase 7 Minimum	Phase 8 Minimum
Plan 1	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 2	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 3	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 4	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 5	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 6	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 7	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 8	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 9	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 11	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 12	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 13	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 14	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 15	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 16	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 17	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 18	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 19	Green Factor	0	0	0	0	0	0	0	0	0	0	0

Enable Priority in Plan (3-E-A)					
Enable in Plans		Input	Type	Stop	Go
Plan 1-9	- - - - -	0.0	OPT	0	0
Plan 11-19	- - - - -	0.0	OPT	0	0

Queue Jump (3-E-B)	
Grn Hold	Hold Phase
0	- - - - -
0	- - - - -

Free Plans (3-E-E)	
Max Green	Hold Phase
0	- - - - -

Access Utilities (9-5)	
Password	***
Timeout	30

TRUCK PRIORITY

Truck Priority (3-F)	Passage	CarryOver	Clearance	Next Priority	Phase Green	Det 2 Port	Det 3 Port	Det 4 Port	Sign Output	Slave Input	Slave Output
	0.0	0.0	0	0	- - - - -	0.0	0.0	0.0	0	0.0	0



CONTROLLER ID

Manufacturer ID	Caltrans TSCP Ver 2.21
Model ID	Model 2070
Protocol Revision ID	AB3418

Location: System: Master At:		District: I/C:		Designed By: Intalled By: Service Info:							
Timing Change:		By:		Date Start:		Date End:		Designed:		Installed:	
<div>FLASH</div> <div>1) []</div> <div>P 2) []</div> <div>H 3) []</div> <div>A 4) []</div> <div>S 5) []</div> <div>E 6) []</div> <div>7) []</div> <div>8) []</div> <div>O A) []</div> <div>V B) []</div> <div>E C) []</div> <div>R D) []</div> <div>L E) []</div> <div>A F) []</div> <div>P</div>						Intersection Layout					
Comments and Notes:						<div>RAM Checksum</div> <div><div>Page 2: B4F4</div><div>Page 3: C0DF</div><div>Page 4: 0491</div><div>Page 5: 191A</div><div>Page 6: 191A</div><div>Page 7: AFD5</div><div>Page 8: 85AF</div><div>Page 9: 0340</div><div>Page 10: BAC2</div><div>Page 11: 93EE</div><div>Page 12: EF20</div><div>Page 13: 86F7</div></div>					



CONFIGURATION PHASE FLAGS

Phases (2-1-1-1)	
Permitted	1 2 - 4 5 6 - 8
Restricted	- - - - -

Phase Recalls (2-1-1-2)	
Vehicle Min	- 2 - - - 6 - -
vehicle Max	- - - - -
Pedestrian	- - - - -
Bicycle	- - - - -

Phase Locks (2-1-1-3)	
Red	- 2 - - - 6 - -
Yellow	- - - - -
Force/Max	- - - - -

Phase Features (2-1-1-4)	
Double Entry	- - - 4 - - - 8
Rest In Walk	- - - - -
Rest In Red	- - - - -
Walk2	- - - - -
Max Green 2	1 2 - 4 5 6 - 8
Max Green 3	- - - - -

Startup (2-1-1-5)	
First Green Phases	- 2 - - - 6 - -
Yellow Start Phases	- - - - -
Vehicle Calls	1 2 - 4 5 6 - 8
Pedestrian Calls	- 2 - 4 - 6 - 8
Yellow Start Overlaps	- - - - -
Startup All-Red	6.0

Call To Phase (2-1-2-1)		Omit On Green	
1	- - - - -	1	- - - - -
2	- - - - -	2	- - - - -
3	- - - - -	3	- - - - -
4	- - - - -	4	- - - - -
5	- - - - -	5	- - - - -
6	- - - - -	6	- - - - -
7	- - - - -	7	- - - - -
8	- - - - -	8	- - - - -

Flashing Colors (2-1-2-2)	
Yellow Flash Phases	- - - - -
Yellow Flash Overlap	- - - - -
Flash In Red Phases	- - - - -
Flash In Red Overlap	- - - - -

Special Operation (2-1-2-3)	
Single Exit Phase	- - - - -
Driveway Signal Phases	- - - - -
Driveway Signal Overlaps	- - - - -
Leading Ped Phases	- 2 - 4 - 6 - 8

Protected Permissive (2-1-2-4)	
Protected Permissive	- - - - -

Pedestrian (2-1-3)	
P1	- - - - -
P2	- 2 - - - - -
P3	- - - - -
P4	- - - 4 - - - -
P5	- - - - -
P6	- - - - 6 - -
P7	- - - - -
P8	- - - - - 8

Overlap (2-1-4)				
Overlap	Parent	Omit	No Start	Not
A [Arrow A]	- - - - -	- - - - -	- - - - -	- - - - -
B [Arrow B]	- - - - -	- - - - -	- - - - -	- - - - -
C [OL A]	- - - - -	- - - - -	- - - - -	- - - - -
D [OL B]	- - - - -	- - - - -	- - - - -	- - - - -
E [OL C]	- - - - -	- - - - -	- - - - -	- - - - -
F [OL D]	- - - - -	- - - - -	- - - - -	- - - - -

[-] 332 Cabinet Overlap Assignment - For Reference Only



**P
H
A
S
E

T
I
M
I
N
G**

PHASE (2-2)	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
--- Walk 1 ---	0	4	0	4	0	4	0	4
Flash Don't Walk	0	16	0	24	0	15	0	25
Minimum Green	7	10	0	8	7	10	0	8
Det Limit	0	30	0	20	0	30	0	20
Max Initial	0	0	0	0	0	0	0	0
Max Green 1	15	30	0	20	15	30	0	20
Max Green 2	25	40	0	30	25	40	0	30
Max Green 3	0	0	0	0	0	0	0	0
Extension	2.0	5.2	0.0	5.3	2.0	4.9	0.0	6.3
Maximum Gap	2.0	7.2	0.0	7.3	2.0	6.7	0.0	8.7
Minimum Gap	2.0	2.0	0.0	2.0	2.0	2.0	0.0	2.0
Add Per Vehicle	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Reduce Gap By	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1
Reduce Every	0.0	0.5	0.0	0.4	0.0	0.6	0.0	0.3
Yellow	3.7	4.4	3.0	4.1	3.7	4.4	3.0	4.1
All-Red	2.0	2.0	1.0	2.2	2.0	2.0	1.0	2.2
Ped/Bike (2-3)	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
--- Walk 2 ---	0	0	0	0	0	0	0	0
Delay/Early Walk	0	3	0	3	0	3	0	3
Solid Don't Walk	0	0	0	0	0	0	0	0
Bike Green	0	0	0	0	0	0	0	0
Bike All-Red	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

OVERLAP TIMING

Overlap (2-4)	A [Arrow A]	B [Arrow B]	C [OL A]	D [OL B]	E [OL C]	F [OL D]	Red Revert (2-5)		Max/Gap Out (2-7)	
Green	0.0	0.0	0.0	0.0	0.0	0.0	Time	5.0	Max Cnt	0
Yellow	5.0	5.0	5.0	5.0	5.0	5.0	Red To Se (2-6)		Gap Cnt	0
Red	0.0	0.0	0.0	0.0	0.0	0.0	Red To Sec	OFF		



Local Plan 1...9 (7-1) TIMING DATA

COORDINATION

	[Offsets]							Green Factors or Press [F] to Select							
		Cycle	Multi	Lag Gap	A	B	C	-1-	-2-	-3-	-4-	-5-	-6-	-7-	-8-
Plan 1	Green Factor		0.0	- - - - -											
Plan 2	Green Factor		0.0	- - - - -											
Plan 3	Green Factor		0.0	- - - - -											
Plan 4	Green Factor		0.0	- - - - -											
Plan 5	Green Factor		0.0	- - - - -											
Plan 6	Green Factor		0.0	- - - - -											
Plan 7	Green Factor		0.0	- - - - -											
Plan 8	Green Factor		0.0	- - - - -											
Plan 9	Green Factor		0.0	- - - - -											

Local Plan 1...9 (7-1) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 1	- 2 - 4 - 6 - 8	- 2 - - - 6 - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
Plan 2	- 2 - 4 - 6 - 8	- 2 - - - 6 - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
Plan 3	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
Plan 4	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
Plan 5	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
Plan 6	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
Plan 7	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
Plan 8	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
Plan 9	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -

Master Timer Sync (7-A)

Enable in Plans

1-9	- - - - -
11-19	- - - - -
21-29	- - - - -

Master Sub Master

Input	0.0
Output	0

(7-E) Free

Lag	Omit
- 2 - 4 - 6 - 8	- - - - -
Veh Min	Veh Max
- 2 - - - 6 - -	- - - - -
Ped	Bike
- - - - -	- - - - -
Cond	Cond Grn
- - - - -	10

MANUAL COMMANDS

Manual Plan (4-1)

Plan	Offset
0	A

Plan: 1-9
15 or 254 = Flash
14 or 255 = Free
Offset A, B, or C

Special Function Override (4-2)

#	Control	#	Control
1	NORMAL	3	NORMAL
2	NORMAL	4	NORMAL

Detector Reset (4-3)

Local Manual (4-4)	OFF
--------------------	-----



Local Plan 11...19 (7-2) TIMING DATA

COORDINATION

		[Offsets]			Green Factors or Press [F] to Select Force-Off										
		Cycle	Multi	Lag Gap	A	B	C	1	2	3	4	5	6	7	8
Plan 11	Green Factor		0.0	- - - - -											
Plan 12	Green Factor		0.0	- - - - -											
Plan 13	Green Factor		0.0	- - - - -											
Plan 14	Green Factor		0.0	- - - - -											
Plan 15	Green Factor		0.0	- - - - -											
Plan 16	Green Factor		0.0	- - - - -											
Plan 17	Green Factor		0.0	- - - - -											
Plan 18	Green Factor		0.0	- - - - -											
Plan 19	Green Factor		0.0	- - - - -											

Local Plan 11...19 (7-2) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 11	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
Plan 12	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
Plan 13	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
Plan 14	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
Plan 15	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
Plan 16	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
Plan 17	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
Plan 18	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
Plan 19	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -



Local Plan 21...29 (7-3) TIMING DATA

COORDINATION

		[Offsets]			Green Factors or Press [F] to Select Force-Off										
		Cycle	Multi	Lag Gap	A	B	C	1	2	3	4	5	6	7	8
Plan 21	Green Factor		0.0	- - - - -											
Plan 22	Green Factor		0.0	- - - - -											
Plan 23	Green Factor		0.0	- - - - -											
Plan 24	Green Factor		0.0	- - - - -											
Plan 25	Green Factor		0.0	- - - - -											
Plan 26	Green Factor		0.0	- - - - -											
Plan 27	Green Factor		0.0	- - - - -											
Plan 28	Green Factor		0.0	- - - - -											
Plan 29	Green Factor		0.0	- - - - -											

Local Plan 21...29 (7-3) PHASE FLAGS

	Lag	Sync	Hold	Omit	Veh Min	Veh Max	Ped	Bike
Plan 21	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
Plan 22	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
Plan 23	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
Plan 24	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
Plan 25	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
Plan 26	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
Plan 27	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
Plan 28	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
Plan 29	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -



DETECTORS

Detector Attributes (5-1)			
Det	Type	Phases	Lock
1	Count+Call+Extend	1 - - - - -	NO
2	Count+Call+Extend	1 - - - - -	NO
3	Count+Call+Extend	- 2 - - - - -	NO
4	Count+Call+Extend	- 2 - - - - -	NO
5	Count+Call+Extend	- 2 - - - - -	NO
6	Count+Call+Extend	- 2 - - - - -	NO
7	Count+Call+Extend	- 2 - - - - -	NO
8	Count+Call+Extend	- 2 - - - - -	NO
9	Count+Call+Extend	- - - - - 8	NO
10	Count+Call+Extend	- - - - - 8	NO
11	Count+Call+Extend	- - - 4 - - -	NO
12	Count+Call+Extend	- - - 4 - - -	NO
13	Count+Call+Extend	- - - 4 - - -	NO
14	Count+Call+Extend	- - - 4 - - -	NO
15	Count+Call+Extend	- - - 4 - - -	NO
16	Count+Call+Extend	- - - 4 - - -	NO
17	Count+Call+Extend	1 - - - - -	NO
18	Count+Call+Extend	- - 3 - - - -	NO
19	None	- - - - -	NO
20	None	- - - - -	NO
21	Count+Call+Extend	- - - - 5 - -	NO
22	Count+Call+Extend	- - - - 5 - -	NO
23	Count+Call+Extend	- - - - 6 - -	NO
24	Count+Call+Extend	- - - - 6 - -	NO
25	Count+Call+Extend	- - - - 6 - -	NO
26	Count+Call+Extend	- - - - 6 - -	NO
27	Count+Call+Extend	- - - - 6 - -	NO
28	Count+Call+Extend	- - - - 6 - -	NO
29	Count+Call+Extend	- - - 4 - - -	NO
30	Count+Call+Extend	- - - 4 - - -	NO
31	Count+Call+Extend	- - - - - 8	NO
32	Count+Call+Extend	- - - - - 8	NO
33	Count+Call+Extend	- - - - - 8	NO
34	Count+Call+Extend	- - - - - 8	NO
35	Count+Call+Extend	- - - - - 8	NO
36	Count+Call+Extend	- - - - - 8	NO
37	Count+Call+Extend	- - - - 5 - -	NO
38	Count+Call+Extend	- - - - - 7 -	NO
39	None	- - - - -	NO
40	None	- - - - -	NO
41	Pedestrian	- 2 - - - - -	NO
42	Pedestrian	- - - 4 - - -	NO
43	Pedestrian	- - - - - 6 - -	NO
44	Pedestrian	- - - - - 8	NO

Detector Configuration (5-2)				
Det	Delay	Extend	Recall	Port
1	1	0.0	10	3.2
2	1	0.0	10	7.2
3	0	0.0	10	1.1
4	0	0.0	10	1.5
5	0	0.0	10	4.5
6	0	0.0	10	6.2
7	0	3.0	10	2.1
8	0	3.0	10	7.4
9	3	0.0	10	3.4
10	3	0.0	10	7.6
11	2	0.0	10	1.3
12	0	0.0	10	1.7
13	0	0.0	10	4.7
14	0	0.0	10	6.4
15	5	2.0	10	2.3
16	5	2.0	10	7.8
17	0	0.0	10	3.6
18	0	0.0	10	3.8
19	0	0.0	10	4.1
20	0	0.0	10	4.2
21	1	0.0	10	3.1
22	1	0.0	10	7.1
23	0	0.0	10	1.2
24	0	0.0	10	1.6
25	0	0.0	10	4.6
26	0	0.0	10	6.3
27	0	2.0	10	2.2
28	0	2.0	10	7.3
29	3	0.0	10	3.3
30	3	0.0	10	7.5
31	2	0.0	10	1.4
32	0	0.0	10	1.8
33	0	0.0	10	4.8
34	0	0.0	10	6.5
35	5	2.0	10	2.4
36	5	2.0	10	7.7
37	0	0.0	10	3.5
38	0	0.0	10	3.7
39	0	0.0	10	4.3
40	0	0.0	10	4.4
41	0	0.0	0	5.1
42	0	0.0	0	5.3
43	0	0.0	0	5.2
44	0	0.0	0	5.4

Failure Times (5-3)	Minutes	Failure Override (5-4)	
Maximum On Time	0	Detectors 1-8	- - - - -
Fail Reset Time	0	Detectors 9-16	- - - - -
		Detectors 17-24	- - - - -
		Detectors 25-32	- - - - -
		Detectors 33-40	- - - - -
		Detectors 41-44	- - - - -

System Detector Assignment (5-5)								
Sys Det	1	2	3	4	5	6	7	8
Det Num	0	0	0	0	0	0	0	0
Sys Det	9	10	11	12	13	14	15	16
Det Num	0	0	0	0	0	0	0	0

CIC Operation (5-6-1)	
Enable in Plans	- - - - -

CIC Values (5-6-2)	Volume	Occupancy	Demand
Smoothing	0.66	0.66	0.66
Multiplier	4.0	0.33	
Exponent	0.50	1.0	

Detector-to-Phase Assignment (5-6-3)								
Sys Det	1	2	3	4	5	6	7	8
Phase	0	0	0	0	0	0	0	0
Sys Det	9	10	11	12	13	14	15	16
Phase	0	0	0	0	0	0	0	0

Input File Port-Bit Assignments

332 Cabinet - For Reference Only

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
I-	3.2	1.1	4.5	2.1	3.4	1.3	4.7	2.3	3.6	4.1	6.6	5.1	5.2	6.7
	7.2	1.5	6.2	7.4	7.6	1.7	6.4	7.8	3.8	4.2	2.7	5.3	5.4	6.8
J-	3.1	1.2	4.6	2.2	3.3	1.4	4.8	2.4	3.5	4.3	2.8	5.5	5.6	2.5
	7.1	1.6	6.3	7.3	7.5	1.8	6.5	7.7	3.7	4.4	6.1	5.7	5.8	2.6

TOD SCHEDULE

[illegible]

WEEKDAY ASSIGNMENT

Weekday Table Assignments (8-2-7)						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
1	1	1	1	1	2	2



HOLIDAY TABLES

Floating Holiday Table (8-2-8)				
#	Mnth	Week	DOW	Table
1	0	0	- - - - -	0
2	0	0	- - - - -	0
3	0	0	- - - - -	0
4	0	0	- - - - -	0
5	0	0	- - - - -	0
6	0	0	- - - - -	0
7	0	0	- - - - -	0
8	0	0	- - - - -	0
9	0	0	- - - - -	0
10	0	0	- - - - -	0
11	0	0	- - - - -	0
12	0	0	- - - - -	0
13	0	0	- - - - -	0
14	0	0	- - - - -	0
15	0	0	- - - - -	0
16	0	0	- - - - -	0

Fixed Holiday Table (8-2-9)				
#	Mnth	Day	DOW	Table
1	0	0	- - - - -	0
2	0	0	- - - - -	0
3	0	0	- - - - -	0
4	0	0	- - - - -	0
5	0	0	- - - - -	0
6	0	0	- - - - -	0
7	0	0	- - - - -	0
8	0	0	- - - - -	0
9	0	0	- - - - -	0
10	0	0	- - - - -	0
11	0	0	- - - - -	0
12	0	0	- - - - -	0
13	0	0	- - - - -	0
14	0	0	- - - - -	0
15	0	0	- - - - -	0
16	0	0	- - - - -	0

Solar Clock Data (8-4)	
North Latitude	34
West Longitude	118
Local Time Zone	8

Sabbatical Clock (8-5)	
Hebrew	Ped Recall
Sabbath	- - - - -
Holiday	- - - - -

Daylight Saving (8-6)	
Daylight Saving	YES

TOD Functions (8-3)					
#	Start	End	DOW	Action	Phases
1	0600	2230	1 2 3 4 5 6 7	17	1 2 3 4 5 6 7 8
2	0000	0000	- - - - -	0	- - - - -
3	0000	0000	- - - - -	0	- - - - -
4	0600	2200	- - - - -	24	- - - - 5 - - - -
5	0000	0000	- - - - -	0	- - - - -
6	0000	0000	- - - - -	0	- - - - -
7	0000	0000	- - - - -	0	- - - - -
8	0000	0000	- - - - -	0	- - - - -
9	0000	0000	- - - - -	0	- - - - -
10	0000	0000	- - - - -	0	- - - - -
11	0000	0000	- - - - -	0	- - - - -
12	0000	0000	- - - - -	0	- - - - -
13	0000	0000	- - - - -	0	- - - - -
14	0000	0000	- - - - -	0	- - - - -
15	0000	0000	- - - - -	0	- - - - -
16	0000	0000	- - - - -	0	- - - - -

Action Codes:

- 0. None
- 1. Permitted
- 2. Restricted
- 4. Veh Min Recall
- 5. Veh Max Recall
- 6. Ped Recall
- 7. Bike Recall
- 8. Red Lock
- 9. Yellow Lock
- 10. Force/Max Lock
- 11. Double Entry
- 12. Y-Coord C
- 13. Y-Coord D
- 14. Free
- 15. Flashing
- 16. Walk 2
- 17. Max Green 2

- 18. Max Green 3
- 19. Rest in Walk
- 20. Rest in Red
- 21. Free Lag Phases
- 22. Special Functions
- 23. Truck Preempt
- 24. Conditional Service
- 25. Conditional Service
- 26. Leading Ped

- 41. Protected Permissive
- 42. Protected Permissive
- Action Code = Phases added to normal setting

- 100+Action Code = Phases removed
- 200+Action Code = Phases replaced



COMMUNICATIONS

C2 (6-1-1)	
Address	0
Protocol	AB3418
Limit Access	None
Baud	1200
Parity	None
Data Bits	8 data bits
Stop Bits	1 stop bit
RTS On Time	20
RTS Off Time	20
Handshaking	Normal

C20 (6-1-2)	
Address	0
Protocol	AB3418
Limit Access	None
Baud	1200
Parity	None
Data Bits	8 data bits
Stop Bits	1 stop bit
RTS On Time	20
RTS Off Time	20
Handshaking	Normal

C21 (6-1-3)	
Address	0
Protocol	AB3418
Limit Access	None
Baud	1200
Parity	None
Data Bits	8 data bits
Stop Bits	1 stop bit
RTS On Time	20
RTS Off Time	20
Handshaking	Normal

SOFT LOGIC

Soft Logic (6-2)							
#	Data	OP	Data	OP	Data	OP	Data
1	00.0	00	00.0	00	00.0	00	00.0
2	00.0	00	00.0	00	00.0	00	00.0
3	00.0	00	00.0	00	00.0	00	00.0
4	00.0	00	00.0	00	00.0	00	00.0
5	00.0	00	00.0	00	00.0	00	00.0
6	00.0	00	00.0	00	00.0	00	00.0
7	00.0	00	00.0	00	00.0	00	00.0
8	00.0	00	00.0	00	00.0	00	00.0
9	00.0	00	00.0	00	00.0	00	00.0
10	00.0	00	00.0	00	00.0	00	00.0
11	00.0	00	00.0	00	00.0	00	00.0
12	00.0	00	00.0	00	00.0	00	00.0
13	00.0	00	00.0	00	00.0	00	00.0
14	00.0	00	00.0	00	00.0	00	00.0
15	00.0	00	00.0	00	00.0	00	00.0
16	00.0	00	00.0	00	00.0	00	00.0

CALLBACK NUMBERS

Callback Numbers (6-3...3)	
Line Out	0
Local Toll	0
Long Distance	0
Delay	10
Area Code	0
Phone Number	0 - 0

Line Out	0
Local Toll	0
Long Distance	0
Delay	10
Area Code	0
Phone Number	0 - 0

Line Out	0
Local Toll	0
Long Distance	0
Delay	10
Area Code	0
Phone Number	0 - 0

NETWORK

Network (6-4)				
Address	1			
Protocol	AB3418			
Port	27000			
IP Mode	Static IP			
IP Address	192	168	13	1
Netmask	255	255	255	0
Broadcast	192	168	13	255
Gateway	192	168	13	254



RAILROAD PREEMPTION

RR 1	(3-1-1)	Timing	Phase Flags (3-1-2)			Pedestrian Flags (3-1-3)			Overlap Flags (3-1-4)		
	Delay	0	Grn Hold	Yel Flash	Red Flash	Walk	Flash DW	Solid DW	Grn Hold	Yel Flash	Red Flash
	Clear 1	10	- 2 - - 5 - - -	- - - - -	- - - - -	- - - - -	- - - - -	- 2 - 4 - 6 - 8	- - - - -	- - - - -	- - - - -
	Clear 2	0	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
	Clear 3	0	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
	Hold	0	- - - - -	- - - - -	1 2 3 4 5 6 7 8	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	A B C D E F
	Exit	5	Exit Parameters (3-1-5)				Configuration (3-1-6)				
	Min Grn	0	Phase Green	Overlap Green	Vehicle Recall	Ped Call	Port	Gate Port	Latching	Power-Up	
	Ped Clr	0	- - - - -	- - - - -	1 2 3 4 5 6 7 8	- 2 - 4 - 6 - 8	2.5	0.0	Yes	Flashing	

RR 2	(3-2-1)	Timing	Phase Flags (3-2-2)			Pedestrian Flags (3-2-3)			Overlap Flags (3-2-4)		
	Delay	0	Grn Hold	Yel Flash	Red Flash	Walk	Flash DW	Solid DW	Grn Hold	Yel Flash	Red Flash
	Clear 1	10	- - - 4 - - 7 -	- - - - -	- - - - -	- - - - -	- - - - -	- 2 - 4 - 6 - 8	- - - - -	- - - - -	- - - - -
	Clear 2	0	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
	Clear 3	0	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -
	Hold	0	1 2 3 - - 6 - -	- - - - -	- - - - -	- 2 - - - 6 - -	- - - - -	- - - 4 - - - 8	- - - - -	- - - - -	- - - - -
	Exit	0	Exit Parameters (3-2-5)				Configuration (3-2-6)				
	Min Grn	0	Exit Ph Grn	Exit Ovl Grn	Exit Veh Recall	Exit Ped Call	Port	Gate Port	Latching	Power-Up	
	Ped Clr	0	- - - - -	- - - - -	- - - 4 - - 7 -	- - - - -	2.6	0.0	Yes	Flashing	

EMERGENCY VEHICLE PREEMPTION

EVA (3-A)	Preempt Timers			Phase Green	Overlap Grn
	Delay	Clear	Max		
	0	30	30	- 2 - - 5 - - -	- - - - -
	Port			Latching	
	5.5			No	
	Phase Termination			Advance	
	5.5			Advance	

EVB (3-B)	Preempt Timers			Phase Green	Overlap Grn
	Delay	Clear	Max		
	0	30	30	- - - 4 - - 7 -	- - - - -
	Port			Latching	
	5.6			No	
	Phase Termination			Advance	
	5.6			Advance	

EVC (3-C)	Preempt Timers			Phase Green	Overlap Grn
	Delay	Clear	Max		
	0	30	30	1 - - - - 6 - -	- - - - -
	Port			Latching	
	5.7			No	
	Phase Termination			Advance	
	5.7			Advance	

EVD (3-D)	Preempt Timers			Phase Green	Overlap Grn
	Delay	Clear	Max		
	0	30	30	- - 3 - - - - 8	- - - - -
	Port			Latching	
	5.8			No	
	Phase Termination			Advance	
	5.8			Advance	



INPUTS

		7 Wire I/C(2-1-5-1)			
		Input	Port	Input	Port
Enable	No	R1	3 . 8	Free	3 . 6
Max ON	0	R2	3 . 5	D2	2 . 8
Max OFF	0	R3	3 . 7	D3	6 . 1

Cabinet Status (2-1-5-3)	
Input	Port
Flash Bus	0 . 0
Door Ajar	0 . 0
Flash Sense	6 . 7
Stop Time	6 . 8

Special Function (2-1-5-4)	
Input	Port
1	0 . 0
2	0 . 0
3	0 . 0
4	0 . 0

Manual Control(2-1-5-2)	
Input	Port
Manual Adv	6 . 6
Adv Enable	6 . 6

Battery Backup (2-1-5-5)	
Port	Operation
2 . 7	Flashing

Y-Coordination (2-1-5-6)	
Port C	Port D
6 . 1	2 . 8

OUTPUTS

Loadswitch Assignments (2-1-6)							
A	1	2	22	3	4	24	9
B	5	6	26	7	8	28	10
X	13	14	0	11	12	0	0

Loadswitch Codes:

0 Unused (no output)

1-8 Vehicle 1-8

9-14 Overlap A-F

21-28 Ped 1-8

41-47 Special Functions

41 Protected Permissive Flashing Phase 1

43 Protected Permissive Flashing Phase 3

45 Protected Permissive Flashing Phase 5

47 Protected Permissive Flashing Phase 7

51-57 Special Functions

71-72 Seven Wire I/C

+ middle output of
loadswitches 3 and 6



YELLOW YIELD COORDINATION

Y-Coord Plans (7-C,D)	Long Grn	No Grn	Offset	Perm	Force-Offs								Coord	Lag	Min Recall	Restricted
					1	2	3	4	5	6	7	8				
Plan C	0	0	0	0	0	0	0	0	0	0	0	0	- 2 - - - 6 - -	- 2 - 4 - 6 - 8	- - - - - - - -	- - - - - - - -
Plan D	0	0	0	0	0	0	0	0	0	0	0	0	- 2 - - - 6 - -	- 2 - 4 - 6 - 8	- - - - - - - -	- - - - - - - -

TRANSIT PRIORITY

Local Plans (3-E) 1...9 1...19		Early Green	Green Extend	Inhibit Cycles	Phase 1 Minimum	Phase 2 Minimum	Phase 3 Minimum	Phase 4 Minimum	Phase 5 Minimum	Phase 6 Minimum	Phase 7 Minimum	Phase 8 Minimum
Plan 1	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 2	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 3	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 4	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 5	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 6	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 7	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 8	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 9	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 11	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 12	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 13	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 14	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 15	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 16	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 17	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 18	Green Factor	0	0	0	0	0	0	0	0	0	0	0
Plan 19	Green Factor	0	0	0	0	0	0	0	0	0	0	0

Enable Priority in Plan (3-E-A)					
Enable in Plans		Input	Type	Stop	Go
Plan 1-9	- - - - -	0.0	OPT	0	0
Plan 11-19	- - - - -	0.0	OPT	0	0

Queue Jump (3-E-B)	
Grn Hold	Hold Phase
0	- - - - -
0	- - - - -

Free Plans (3-E-E)	
Max Green	Hold Phase
0	- - - - -

Access Utilities (9-5)	
Password	***
Timeout	30

TRUCK PRIORITY

Truck Priority (3-F)	Passage	CarryOver	Clearance	Next Priority	Phase Green	Det 2 Port	Det 3 Port	Det 4 Port	Sign Output	Slave Input	Slave Output
	0.0	0.0	0	0	- - - - -	0.0	0.0	0.0	0	0.0	0



CONTROLLER ID

Manufacturer ID	Caltrans TSCP Ver 2.21
Model ID	Model 2070
Protocol Revision ID	AB3418

APPENDIX C

VOLUME DEVELOPMENT WORKSHEETS

Table C-1 - Existing Peak Hour Volume Summary

		A.M. Peak Hour				P.M. Peak Hour			
		Unadjusted Existing W/o Project	Existing Without Project	Net Project Trips	Existing Plus Project	Unadjusted Existing W/o Project	Existing Without Project	Net Project Trips	Existing Plus Project
1	Robertson Boulevard/11th Street								
NBL		33	33	3	36	12	12	2	14
NBT		317	317	21	338	420	420	14	434
NBR		36	36	6	42	26	26	4	30
SBL		42	42	0	42	17	17	0	17
SBT		482	482	7	489	421	421	22	443
SBR		49	49	0	49	21	21	0	21
EBL		25	25	0	25	29	29	0	29
EBT		38	38	0	38	15	15	0	15
EBR		26	26	1	27	14	14	3	17
WBL		63	63	2	65	24	24	6	30
WBT		76	76	0	76	14	14	0	14
WBR		32	32	0	32	20	20	0	20
North Leg									
Approach		573	573	7	580	459	459	22	481
Departure		374	374	21	395	469	469	14	483
Total		947	947	28	975	928	928	36	964
South Leg									
Approach		386	386	30	416	458	458	20	478
Departure		571	571	10	581	459	459	31	490
Total		957	957	40	997	917	917	51	968
East Leg									
Approach		171	171	2	173	58	58	6	64
Departure		116	116	6	122	58	58	4	62
Total		287	287	8	295	116	116	10	126
West Leg									
Approach		89	89	1	90	58	58	3	61
Departure		158	158	3	161	47	47	2	49
Total		247	247	4	251	105	105	5	110
Total Approaches									
Approach		1,219	1,219	40	1,259	1,033	1,033	51	1,084
Departure		1,219	1,219	40	1,259	1,033	1,033	51	1,084
Total		2,438	2,438	80	2,518	2,066	2,066	102	2,168

Table C-1 - Existing Peak Hour Volume Summary

		A.M. Peak Hour				P.M. Peak Hour			
		Unadjusted Existing W/o Project	Existing Without Project	Net Project Trips	Existing Plus Project	Unadjusted Existing W/o Project	Existing Without Project	Net Project Trips	Existing Plus Project
2	Robertson Boulevard/15th Street								
NBL		22	22	3	25	50	50	2	52
NBT		268	268	30	298	344	344	20	364
NBR		24	24	3	27	42	42	2	44
SBL		44	44	0	44	52	52	0	52
SBT		354	354	11	365	365	365	31	396
SBR		51	51	0	51	44	44	0	44
EBL		76	76	0	76	73	73	0	73
EBT		51	51	0	51	45	45	0	45
EBR		64	64	1	65	48	48	3	51
WBL		68	68	1	69	24	24	3	27
WBT		95	95	0	95	36	36	0	36
WBR		81	81	0	81	73	73	0	73
North Leg									
Approach		449	449	11	460	461	461	31	492
Departure		425	425	30	455	490	490	20	510
Total		874	874	41	915	951	951	51	1,002
South Leg									
Approach		314	314	36	350	436	436	24	460
Departure		486	486	13	499	437	437	37	474
Total		800	800	49	849	873	873	61	934
East Leg									
Approach		244	244	1	245	133	133	3	136
Departure		119	119	3	122	139	139	2	141
Total		363	363	4	367	272	272	5	277
West Leg									
Approach		191	191	1	192	166	166	3	169
Departure		168	168	3	171	130	130	2	132
Total		359	359	4	363	296	296	5	301
Total Approaches									
Approach		1,198	1,198	49	1,247	1,196	1,196	61	1,257
Departure		1,198	1,198	49	1,247	1,196	1,196	61	1,257
Total		2,396	2,396	98	2,494	2,392	2,392	122	2,514

Table C-1 - Existing Peak Hour Volume Summary

	A.M. Peak Hour				P.M. Peak Hour			
	Unadjusted Existing W/o Project	Existing Without Project	Net Project Trips	Existing Plus Project	Unadjusted Existing W/o Project	Existing Without Project	Net Project Trips	Existing Plus Project
3 Robertson Boulevard/Washington Road								
NBL	16	16	3	19	59	59	2	61
NBT	342	342	35	377	379	379	23	402
NBR	0	0	0	0	0	0	0	0
SBL	0	0	0	0	0	0	0	0
SBT	326	326	13	339	390	390	37	427
SBR	95	95	0	95	123	123	0	123
EBL	124	124	0	124	102	102	0	102
EBT	0	0	0	0	0	0	0	0
EBR	43	43	1	44	32	32	3	35
WBL	0	0	0	0	0	0	0	0
WBT	0	0	0	0	0	0	0	0
WBR	0	0	0	0	0	0	0	0
North Leg								
Approach	421	421	13	434	513	513	37	550
Departure	466	466	35	501	481	481	23	504
Total	887	887	48	935	994	994	60	1,054
South Leg								
Approach	358	358	38	396	438	438	25	463
Departure	369	369	14	383	422	422	40	462
Total	727	727	52	779	860	860	65	925
East Leg								
Approach	0	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
West Leg								
Approach	167	167	1	168	134	134	3	137
Departure	111	111	3	114	182	182	2	184
Total	278	278	4	282	316	316	5	321
Total Approaches								
Approach	946	946	52	998	1,085	1,085	65	1,150
Departure	946	946	52	998	1,085	1,085	65	1,150
Total	1,892	1,892	104	1,996	2,170	2,170	130	2,300

Table C-1 - Existing Peak Hour Volume Summary

	A.M. Peak Hour				P.M. Peak Hour			
	Unadjusted Existing W/o Project	Existing Without Project	Net Project Trips	Existing Plus Project	Unadjusted Existing W/o Project	Existing Without Project	Net Project Trips	Existing Plus Project
4 Robertson Boulevard/Country Wood Shopping Center Driveway - Adams Drive								
NBL	9	9	3	12	15	15	2	17
NBT	303	303	41	344	346	346	27	373
NBR	6	6	0	6	10	10	0	10
SBL	12	12	0	12	28	28	0	28
SBT	301	301	14	315	277	277	43	320
SBR	22	22	0	22	29	29	0	29
EBL	12	12	0	12	22	22	0	22
EBT	0	0	0	0	3	3	0	3
EBR	5	5	1	6	12	12	3	15
WBL	10	10	0	10	2	2	0	2
WBT	4	4	0	4	9	9	0	9
WBR	23	23	0	23	22	22	0	22
North Leg								
Approach	335	335	14	349	334	334	43	377
Departure	338	338	41	379	390	390	27	417
Total	673	673	55	728	724	724	70	794
South Leg								
Approach	318	318	44	362	371	371	29	400
Departure	316	316	15	331	291	291	46	337
Total	634	634	59	693	662	662	75	737
East Leg								
Approach	37	37	0	37	33	33	0	33
Departure	18	18	0	18	41	41	0	41
Total	55	55	0	55	74	74	0	74
West Leg								
Approach	17	17	1	18	37	37	3	40
Departure	35	35	3	38	53	53	2	55
Total	52	52	4	56	90	90	5	95
Total Approaches								
Approach	707	707	59	766	775	775	75	850
Departure	707	707	59	766	775	775	75	850
Total	1,414	1,414	118	1,532	1,550	1,550	150	1,700

Table C-1 - Existing Peak Hour Volume Summary

	A.M. Peak Hour				P.M. Peak Hour			
	Unadjusted Existing W/o Project	Existing Without Project	Net Project Trips	Existing Plus Project	Unadjusted Existing W/o Project	Existing Without Project	Net Project Trips	Existing Plus Project
5 Robertson Boulevard/Myer Drive - Anderson Pump Company Driveway								
NBL	7	7	3	10	13	13	2	15
NBT	261	261	44	305	339	339	29	368
NBR	0	0	0	0	0	0	0	0
SBL	1	1	0	1	0	0	0	0
SBT	287	287	16	303	247	247	47	294
SBR	28	28	0	28	44	44	0	44
EBL	56	56	0	56	25	25	0	25
EBT	0	0	0	0	0	0	0	0
EBR	26	26	1	27	24	24	3	27
WBL	2	2	0	2	2	2	0	2
WBT	0	0	0	0	0	0	0	0
WBR	1	1	0	1	6	6	0	6
North Leg								
Approach	316	316	16	332	291	291	47	338
Departure	318	318	44	362	370	370	29	399
Total	634	634	60	694	661	661	76	737
South Leg								
Approach	268	268	47	315	352	352	31	383
Departure	315	315	17	332	273	273	50	323
Total	583	583	64	647	625	625	81	706
East Leg								
Approach	3	3	0	3	8	8	0	8
Departure	1	1	0	1	0	0	0	0
Total	4	4	0	4	8	8	0	8
West Leg								
Approach	82	82	1	83	49	49	3	52
Departure	35	35	3	38	57	57	2	59
Total	117	117	4	121	106	106	5	111
Total Approaches								
Approach	669	669	64	733	700	700	81	781
Departure	669	669	64	733	700	700	81	781
Total	1,338	1,338	128	1,466	1,400	1,400	162	1,562

Table C-1 - Existing Peak Hour Volume Summary

	A.M. Peak Hour				P.M. Peak Hour			
	Unadjusted Existing W/o Project	Existing Without Project	Net Project Trips	Existing Plus Project	Unadjusted Existing W/o Project	Existing Without Project	Net Project Trips	Existing Plus Project
6 Robertson Boulevard/Palm Parkway								
NBL	0	0	0	0	0	0	0	0
NBT	202	202	38	240	284	284	25	309
NBR	7	7	0	7	15	15	0	15
SBL	43	43	3	46	51	51	9	60
SBT	245	245	14	259	230	230	40	270
SBR	0	0	0	0	0	0	0	0
EBL	0	0	0	0	0	0	0	0
EBT	0	0	0	0	0	0	0	0
EBR	0	0	0	0	0	0	0	0
WBL	17	17	0	17	4	4	0	4
WBT	0	0	0	0	0	0	0	0
WBR	69	69	9	78	36	36	6	42
North Leg								
Approach	288	288	17	305	281	281	49	330
Departure	271	271	47	318	320	320	31	351
Total	559	559	64	623	601	601	80	681
South Leg								
Approach	209	209	38	247	299	299	25	324
Departure	262	262	14	276	234	234	40	274
Total	471	471	52	523	533	533	65	598
East Leg								
Approach	86	86	9	95	40	40	6	46
Departure	50	50	3	53	66	66	9	75
Total	136	136	12	148	106	106	15	121
West Leg								
Approach	0	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0
Total Approaches								
Approach	583	583	64	647	620	620	80	700
Departure	583	583	64	647	620	620	80	700
Total	1,166	1,166	128	1,294	1,240	1,240	160	1,400

Table C-1 - Existing Peak Hour Volume Summary

		A.M. Peak Hour				P.M. Peak Hour			
		Unadjusted Existing W/o Project	Existing Without Project	Net Project Trips	Existing Plus Project	Unadjusted Existing W/o Project	Existing Without Project	Net Project Trips	Existing Plus Project
7	Robertson Boulevard/Avenue 24 1/2								
NBL		2	2	0	2	0	0	0	0
NBT		212	212	38	250	310	310	25	335
NBR		0	0	0	0	0	0	0	0
SBL		0	0	0	0	0	0	0	0
SBT		247	247	14	261	227	227	40	267
SBR		7	7	0	7	9	9	0	9
EBL		10	10	0	10	5	5	0	5
EBT		0	0	0	0	0	0	0	0
EBR		2	2	0	2	3	3	0	3
WBL		0	0	0	0	0	0	0	0
WBT		0	0	0	0	0	0	0	0
WBR		0	0	0	0	0	0	0	0
North Leg									
Approach		254	254	14	268	236	236	40	276
Departure		222	222	38	260	315	315	25	340
Total		476	476	52	528	551	551	65	616
South Leg									
Approach		214	214	38	252	310	310	25	335
Departure		249	249	14	263	230	230	40	270
Total		463	463	52	515	540	540	65	605
East Leg									
Approach		0	0	0	0	0	0	0	0
Departure		0	0	0	0	0	0	0	0
Total		0	0	0	0	0	0	0	0
West Leg									
Approach		12	12	0	12	8	8	0	8
Departure		9	9	0	9	9	9	0	9
Total		21	21	0	21	17	17	0	17
Total Approaches									
Approach		480	480	52	532	554	554	65	619
Departure		480	480	52	532	554	554	65	619
Total		960	960	104	1,064	1,108	1,108	130	1,238

Table C-1 - Existing Peak Hour Volume Summary

		A.M. Peak Hour				P.M. Peak Hour			
		Unadjusted Existing W/o Project	Existing Without Project	Net Project Trips	Existing Plus Project	Unadjusted Existing W/o Project	Existing Without Project	Net Project Trips	Existing Plus Project
8	Robertson Boulevard/Road 15								
NBL		0	0	0	0	0	0	0	0
NBT		187	187	0	187	297	297	0	297
NBR		0	0	2	2	1	1	6	7
SBL		18	18	14	32	17	17	40	57
SBT		231	231	0	231	213	213	0	213
SBR		0	0	0	0	0	0	0	0
EBL		0	0	0	0	0	0	0	0
EBT		0	0	0	0	0	0	0	0
EBR		0	0	0	0	0	0	0	0
WBL		2	2	6	8	0	0	4	4
WBT		0	0	0	0	0	0	0	0
WBR		27	27	38	65	13	13	25	38
North Leg									
Approach		249	249	14	263	230	230	40	270
Departure		214	214	38	252	310	310	25	335
Total		463	463	52	515	540	540	65	605
South Leg									
Approach		187	187	2	189	298	298	6	304
Departure		233	233	6	239	213	213	4	217
Total		420	420	8	428	511	511	10	521
East Leg									
Approach		29	29	44	73	13	13	29	42
Departure		18	18	16	34	18	18	46	64
Total		47	47	60	107	31	31	75	106
West Leg									
Approach		0	0	0	0	0	0	0	0
Departure		0	0	0	0	0	0	0	0
Total		0	0	0	0	0	0	0	0
Total Approaches									
Approach		465	465	60	525	541	541	75	616
Departure		465	465	60	525	541	541	75	616
Total		930	930	120	1,050	1,082	1,082	150	1,232

Table C-1 - Existing Peak Hour Volume Summary

		A.M. Peak Hour				P.M. Peak Hour			
		Unadjusted Existing W/o Project	Existing Without Project	Net Project Trips	Existing Plus Project	Unadjusted Existing W/o Project	Existing Without Project	Net Project Trips	Existing Plus Project
9	Road 15/Avenue 24								
NBL		0	0	0	0	0	0	0	0
NBT		17	17	2	19	20	20	6	26
NBR		6	6	0	6	1	1	0	1
SBL		2	2	0	2	1	1	0	1
SBT		24	24	6	30	13	13	4	17
SBR		0	0	0	0	2	2	0	2
EBL		1	1	0	1	1	1	0	1
EBT		0	0	0	0	0	0	0	0
EBR		1	1	0	1	0	0	0	0
WBL		1	1	0	1	3	3	0	3
WBT		0	0	0	0	0	0	0	0
WBR		2	2	0	2	0	0	0	0
North Leg									
Approach		26	26	6	32	16	16	4	20
Departure		20	20	2	22	21	21	6	27
Total		46	46	8	54	37	37	10	47
South Leg									
Approach		23	23	2	25	21	21	6	27
Departure		26	26	6	32	16	16	4	20
Total		49	49	8	57	37	37	10	47
East Leg									
Approach		3	3	0	3	3	3	0	3
Departure		8	8	0	8	2	2	0	2
Total		11	11	0	11	5	5	0	5
West Leg									
Approach		2	2	0	2	1	1	0	1
Departure		0	0	0	0	2	2	0	2
Total		2	2	0	2	3	3	0	3
Total Approaches									
Approach		54	54	8	62	41	41	10	51
Departure		54	54	8	62	41	41	10	51
Total		108	108	16	124	82	82	20	102

Table C-1 - Existing Peak Hour Volume Summary

		A.M. Peak Hour				P.M. Peak Hour			
		Unadjusted Existing W/o Project	Existing Without Project	Net Project Trips	Existing Plus Project	Unadjusted Existing W/o Project	Existing Without Project	Net Project Trips	Existing Plus Project
10	Project Driveway 1/Road 15								
NBL		0	0	0	0	0	0	0	0
NBT		0	0	0	0	0	0	0	0
NBR		0	0	0	0	0	0	0	0
SBL		0	0	0	0	0	0	0	0
SBT		0	0	0	0	0	0	0	0
SBR		0	0	24	24	0	0	16	16
EBL		0	0	8	8	0	0	25	25
EBT		0	18	7	25	0	18	22	40
EBR		0	0	0	0	0	0	0	0
WBL		0	0	0	0	0	0	0	0
WBT		0	29	21	50	0	13	14	27
WBR		0	0	0	0	0	0	0	0
North Leg									
Approach		0	0	24	24	0	0	16	16
Departure		0	0	8	8	0	0	25	25
Total		0	0	32	32	0	0	41	41
South Leg									
Approach		0	0	0	0	0	0	0	0
Departure		0	0	0	0	0	0	0	0
Total		0	0	0	0	0	0	0	0
East Leg									
Approach		0	29	21	50	0	13	14	27
Departure		0	18	7	25	0	18	22	40
Total		0	47	28	75	0	31	36	67
West Leg									
Approach		0	18	15	33	0	18	47	65
Departure		0	29	45	74	0	13	30	43
Total		0	47	60	107	0	31	77	108
Total Approaches									
Approach		0	47	60	107	0	31	77	108
Departure		0	47	60	107	0	31	77	108
Total		0	94	120	214	0	62	154	216

Table C-1 - Existing Peak Hour Volume Summary

		A.M. Peak Hour				P.M. Peak Hour			
		Unadjusted Existing W/o Project	Existing Without Project	Net Project Trips	Existing Plus Project	Unadjusted Existing W/o Project	Existing Without Project	Net Project Trips	Existing Plus Project
11	Project Driveway 2/Road 15								
NBL		0	0	0	0	0	0	0	0
NBT		0	0	0	0	0	0	0	0
NBR		0	0	0	0	0	0	0	0
SBL		0	0	6	6	0	0	4	4
SBT		0	0	0	0	0	0	0	0
SBR		0	0	21	21	0	0	14	14
EBL		0	0	7	7	0	0	22	22
EBT		0	18	0	18	0	18	0	18
EBR		0	0	0	0	0	0	0	0
WBL		0	0	0	0	0	0	0	0
WBT		0	29	0	29	0	13	0	13
WBR		0	0	2	2	0	0	6	6
North Leg									
Approach		0	0	27	27	0	0	18	18
Departure		0	0	9	9	0	0	28	28
Total		0	0	36	36	0	0	46	46
South Leg									
Approach		0	0	0	0	0	0	0	0
Departure		0	0	0	0	0	0	0	0
Total		0	0	0	0	0	0	0	0
East Leg									
Approach		0	29	2	31	0	13	6	19
Departure		0	18	6	24	0	18	4	22
Total		0	47	8	55	0	31	10	41
West Leg									
Approach		0	18	7	25	0	18	22	40
Departure		0	29	21	50	0	13	14	27
Total		0	47	28	75	0	31	36	67
Total Approaches									
Approach		0	47	36	83	0	31	46	77
Departure		0	47	36	83	0	31	46	77
Total		0	94	72	166	0	62	92	154

Table C-2 - Existing Plus Approved Project (EPAP) Peak Hour Volume Summary

	AM Peak Hour					PM Peak Hour				
	Existing Without Project	Cumulative Project Trips	Existing Plus Approved Project (EPAP)	Net Project Trips	EPAP Plus Project	Existing Without Project	Cumulative Project Trips	Existing Plus Approved Project (EPAP)	Net Project Trips	EPAP Plus Project
1 Robertson Boulevard/11th Street										
NBL	33	7	40	3	43	12	3	15	2	17
NBT	317	126	443	21	464	420	196	616	14	630
NBR	36	7	43	6	49	26	3	29	4	33
SBL	42	25	67	0	67	17	20	37	0	37
SBT	482	151	633	7	640	421	174	595	22	617
SBR	49	25	74	0	74	21	20	41	0	41
EBL	25	11	36	0	36	29	29	58	0	58
EBT	38	0	38	0	38	15	0	15	0	15
EBR	26	2	28	1	29	14	10	24	3	27
WBL	63	2	65	2	67	24	10	34	6	40
WBT	76	0	76	0	76	14	0	14	0	14
WBR	32	11	43	0	43	20	29	49	0	49
North Leg										
Approach	573	201	774	7	781	459	214	673	22	695
Departure	374	148	522	21	543	469	254	723	14	737
Total	947	349	1,296	28	1,324	928	468	1,396	36	1,432
South Leg										
Approach	386	140	526	30	556	458	202	660	20	680
Departure	571	155	726	10	736	459	194	653	31	684
Total	957	295	1,252	40	1,292	917	396	1,313	51	1,364
East Leg										
Approach	171	13	184	2	186	58	39	97	6	103
Departure	116	32	148	6	154	58	23	81	4	85
Total	287	45	332	8	340	116	62	178	10	188
West Leg										
Approach	89	13	102	1	103	58	39	97	3	100
Departure	158	32	190	3	193	47	23	70	2	72
Total	247	45	292	4	296	105	62	167	5	172
Total Approaches										
Approach	1,219	367	1,586	40	1,626	1,033	494	1,527	51	1,578
Departure	1,219	367	1,586	40	1,626	1,033	494	1,527	51	1,578
Total	2,438	734	3,172	80	3,252	2,066	988	3,054	102	3,156

Table C-2 - Existing Plus Approved Project (EPAP) Peak Hour Volume Summary

	AM Peak Hour					PM Peak Hour				
	Existing Without Project	Cumulative Project Trips	Existing Plus Approved Project (EPAP)	Net Project Trips	EPAP Plus Project	Existing Without Project	Cumulative Project Trips	Existing Plus Approved Project (EPAP)	Net Project Trips	EPAP Plus Project
2 Robertson Boulevard/15th Street										
NBL	22	7	29	3	32	50	3	53	2	55
NBT	268	129	397	30	427	344	173	517	20	537
NBR	24	7	31	3	34	42	3	45	2	47
SBL	44	12	56	0	56	52	10	62	0	62
SBT	354	130	484	11	495	365	174	539	31	570
SBR	51	12	63	0	63	44	10	54	0	54
EBL	76	5	81	0	81	73	14	87	0	87
EBT	51	0	51	0	51	45	0	45	0	45
EBR	64	2	66	1	67	48	10	58	3	61
WBL	68	2	70	1	71	24	10	34	3	37
WBT	95	0	95	0	95	36	0	36	0	36
WBR	81	5	86	0	86	73	14	87	0	87
North Leg										
Approach	449	154	603	11	614	461	194	655	31	686
Departure	425	139	564	30	594	490	201	691	20	711
Total	874	293	1,167	41	1,208	951	395	1,346	51	1,397
South Leg										
Approach	314	143	457	36	493	436	179	615	24	639
Departure	486	134	620	13	633	437	194	631	37	668
Total	800	277	1,077	49	1,126	873	373	1,246	61	1,307
East Leg										
Approach	244	7	251	1	252	133	24	157	3	160
Departure	119	19	138	3	141	139	13	152	2	154
Total	363	26	389	4	393	272	37	309	5	314
West Leg										
Approach	191	7	198	1	199	166	24	190	3	193
Departure	168	19	187	3	190	130	13	143	2	145
Total	359	26	385	4	389	296	37	333	5	338
Total Approaches										
Approach	1,198	311	1,509	49	1,558	1,196	421	1,617	61	1,678
Departure	1,198	311	1,509	49	1,558	1,196	421	1,617	61	1,678
Total	2,396	622	3,018	98	3,116	2,392	842	3,234	122	3,356

Table C-2 - Existing Plus Approved Project (EPAP) Peak Hour Volume Summary

	AM Peak Hour					PM Peak Hour				
	Existing Without Project	Cumulative Project Trips	Existing Plus Approved Project (EPAP)	Net Project Trips	EPAP Plus Project	Existing Without Project	Cumulative Project Trips	Existing Plus Approved Project (EPAP)	Net Project Trips	EPAP Plus Project
3 Robertson Boulevard/Washington Road										
NBL	16	0	16	3	19	59	0	59	2	61
NBT	342	32	374	35	409	379	86	465	23	488
NBR	0	0	0	0	0	0	0	0	0	0
SBL	0	0	0	0	0	0	0	0	0	0
SBT	326	75	401	13	414	390	59	449	37	486
SBR	95	59	154	0	154	123	135	258	0	258
EBL	124	112	236	0	236	102	94	196	0	196
EBT	0	0	0	0	0	0	0	0	0	0
EBR	43	0	43	1	44	32	0	32	3	35
WBL	0	0	0	0	0	0	0	0	0	0
WBT	0	0	0	0	0	0	0	0	0	0
WBR	0	0	0	0	0	0	0	0	0	0
North Leg										
Approach	421	134	555	13	568	513	194	707	37	744
Departure	466	144	610	35	645	481	180	661	23	684
Total	887	278	1,165	48	1,213	994	374	1,368	60	1,428
South Leg										
Approach	358	32	390	38	428	438	86	524	25	549
Departure	369	75	444	14	458	422	59	481	40	521
Total	727	107	834	52	886	860	145	1,005	65	1,070
East Leg										
Approach	0	0	0	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
West Leg										
Approach	167	112	279	1	280	134	94	228	3	231
Departure	111	59	170	3	173	182	135	317	2	319
Total	278	171	449	4	453	316	229	545	5	550
Total Approaches										
Approach	946	278	1,224	52	1,276	1,085	374	1,459	65	1,524
Departure	946	278	1,224	52	1,276	1,085	374	1,459	65	1,524
Total	1,892	556	2,448	104	2,552	2,170	748	2,918	130	3,048

Table C-2 - Existing Plus Approved Project (EPAP) Peak Hour Volume Summary

	AM Peak Hour					PM Peak Hour				
	Existing Without Project	Cumulative Project Trips	Existing Plus Approved Project (EPAP)	Net Project Trips	EPAP Plus Project	Existing Without Project	Cumulative Project Trips	Existing Plus Approved Project (EPAP)	Net Project Trips	EPAP Plus Project
4 Robertson Boulevard/Country Wood Shopping Center Driveway - Adams Drive										
NBL	9	0	9	3	12	15	0	15	2	17
NBT	303	21	324	41	365	346	57	403	27	430
NBR	6	0	6	0	6	10	0	10	0	10
SBL	12	0	12	0	12	28	0	28	0	28
SBT	301	50	351	14	365	277	40	317	43	360
SBR	22	12	34	0	34	29	10	39	0	39
EBL	12	5	17	0	17	22	14	36	0	36
EBT	0	0	0	0	0	3	0	3	0	3
EBR	5	0	5	1	6	12	0	12	3	15
WBL	10	0	10	0	10	2	0	2	0	2
WBT	4	0	4	0	4	9	0	9	0	9
WBR	23	0	23	0	23	22	0	22	0	22
North Leg										
Approach	335	62	397	14	411	334	50	384	43	427
Departure	338	26	364	41	405	390	71	461	27	488
Total	673	88	761	55	816	724	121	845	70	915
South Leg										
Approach	318	21	339	44	383	371	57	428	29	457
Departure	316	50	366	15	381	291	40	331	46	377
Total	634	71	705	59	764	662	97	759	75	834
East Leg										
Approach	37	0	37	0	37	33	0	33	0	33
Departure	18	0	18	0	18	41	0	41	0	41
Total	55	0	55	0	55	74	0	74	0	74
West Leg										
Approach	17	5	22	1	23	37	14	51	3	54
Departure	35	12	47	3	50	53	10	63	2	65
Total	52	17	69	4	73	90	24	114	5	119
Total Approaches										
Approach	707	88	795	59	854	775	121	896	75	971
Departure	707	88	795	59	854	775	121	896	75	971
Total	1,414	176	1,590	118	1,708	1,550	242	1,792	150	1,942

Table C-2 - Existing Plus Approved Project (EPAP) Peak Hour Volume Summary

	AM Peak Hour					PM Peak Hour				
	Existing Without Project	Cumulative Project Trips	Existing Plus Approved Project (EPAP)	Net Project Trips	EPAP Plus Project	Existing Without Project	Cumulative Project Trips	Existing Plus Approved Project (EPAP)	Net Project Trips	EPAP Plus Project
5 Robertson Boulevard/Myer Drive - Anderson Pump Company Driveway										
NBL	7	4	11	3	14	13	13	26	2	28
NBT	261	21	282	44	326	339	57	396	29	425
NBR	0	0	0	0	0	0	0	0	0	0
SBL	1	0	1	0	1	0	0	0	0	0
SBT	287	50	337	16	353	247	40	287	47	334
SBR	28	0	28	0	28	44	0	44	0	44
EBL	56	0	56	0	56	25	0	25	0	25
EBT	0	0	0	0	0	0	0	0	0	0
EBR	26	11	37	1	38	24	7	31	3	34
WBL	2	0	2	0	2	2	0	2	0	2
WBT	0	0	0	0	0	0	0	0	0	0
WBR	1	0	1	0	1	6	0	6	0	6
North Leg										
Approach	316	50	366	16	382	291	40	331	47	378
Departure	318	21	339	44	383	370	57	427	29	456
Total	634	71	705	60	765	661	97	758	76	834
South Leg										
Approach	268	25	293	47	340	352	70	422	31	453
Departure	315	61	376	17	393	273	47	320	50	370
Total	583	86	669	64	733	625	117	742	81	823
East Leg										
Approach	3	0	3	0	3	8	0	8	0	8
Departure	1	0	1	0	1	0	0	0	0	0
Total	4	0	4	0	4	8	0	8	0	8
West Leg										
Approach	82	11	93	1	94	49	7	56	3	59
Departure	35	4	39	3	42	57	13	70	2	72
Total	117	15	132	4	136	106	20	126	5	131
Total Approaches										
Approach	669	86	755	64	819	700	117	817	81	898
Departure	669	86	755	64	819	700	117	817	81	898
Total	1,338	172	1,510	128	1,638	1,400	234	1,634	162	1,796

Table C-2 - Existing Plus Approved Project (EPAP) Peak Hour Volume Summary

	AM Peak Hour					PM Peak Hour				
	Existing Without Project	Cumulative Project Trips	Existing Plus Approved Project (EPAP)	Net Project Trips	EPAP Plus Project	Existing Without Project	Cumulative Project Trips	Existing Plus Approved Project (EPAP)	Net Project Trips	EPAP Plus Project
6 Robertson Boulevard/Palm Parkway										
NBL	0	0	0	0	0	0	0	0	0	0
NBT	202	25	227	38	265	284	70	354	25	379
NBR	7	0	7	0	7	15	0	15	0	15
SBL	43	0	43	3	46	51	0	51	9	60
SBT	245	61	306	14	320	230	47	277	40	317
SBR	0	0	0	0	0	0	0	0	0	0
EBL	0	0	0	0	0	0	0	0	0	0
EBT	0	0	0	0	0	0	0	0	0	0
EBR	0	0	0	0	0	0	0	0	0	0
WBL	17	0	17	0	17	4	0	4	0	4
WBT	0	0	0	0	0	0	0	0	0	0
WBR	69	0	69	9	78	36	0	36	6	42
North Leg										
Approach	288	61	349	17	366	281	47	328	49	377
Departure	271	25	296	47	343	320	70	390	31	421
Total	559	86	645	64	709	601	117	718	80	798
South Leg										
Approach	209	25	234	38	272	299	70	369	25	394
Departure	262	61	323	14	337	234	47	281	40	321
Total	471	86	557	52	609	533	117	650	65	715
East Leg										
Approach	86	0	86	9	95	40	0	40	6	46
Departure	50	0	50	3	53	66	0	66	9	75
Total	136	0	136	12	148	106	0	106	15	121
West Leg										
Approach	0	0	0	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Total Approaches										
Approach	583	86	669	64	733	620	117	737	80	817
Departure	583	86	669	64	733	620	117	737	80	817
Total	1,166	172	1,338	128	1,466	1,240	234	1,474	160	1,634

Table C-2 - Existing Plus Approved Project (EPAP) Peak Hour Volume Summary

	AM Peak Hour					PM Peak Hour				
	Existing Without Project	Cumulative Project Trips	Existing Plus Approved Project (EPAP)	Net Project Trips	EPAP Plus Project	Existing Without Project	Cumulative Project Trips	Existing Plus Approved Project (EPAP)	Net Project Trips	EPAP Plus Project
7 Robertson Boulevard/Avenue 24 1/2										
NBL	2	0	2	0	2	0	0	0	0	0
NBT	212	18	230	38	268	310	51	361	25	386
NBR	0	0	0	0	0	0	0	0	0	0
SBL	0	0	0	0	0	0	0	0	0	0
SBT	247	43	290	14	304	227	34	261	40	301
SBR	7	17	24	0	24	9	13	22	0	22
EBL	10	7	17	0	17	5	19	24	0	24
EBT	0	0	0	0	0	0	0	0	0	0
EBR	2	0	2	0	2	3	0	3	0	3
WBL	0	0	0	0	0	0	0	0	0	0
WBT	0	0	0	0	0	0	0	0	0	0
WBR	0	0	0	0	0	0	0	0	0	0
North Leg										
Approach	254	60	314	14	328	236	47	283	40	323
Departure	222	25	247	38	285	315	70	385	25	410
Total	476	85	561	52	613	551	117	668	65	733
South Leg										
Approach	214	18	232	38	270	310	51	361	25	386
Departure	249	43	292	14	306	230	34	264	40	304
Total	463	61	524	52	576	540	85	625	65	690
East Leg										
Approach	0	0	0	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
West Leg										
Approach	12	7	19	0	19	8	19	27	0	27
Departure	9	17	26	0	26	9	13	22	0	22
Total	21	24	45	0	45	17	32	49	0	49
Total Approaches										
Approach	480	85	565	52	617	554	117	671	65	736
Departure	480	85	565	52	617	554	117	671	65	736
Total	960	170	1,130	104	1,234	1,108	234	1,342	130	1,472

Table C-2 - Existing Plus Approved Project (EPAP) Peak Hour Volume Summary

	AM Peak Hour					PM Peak Hour				
	Existing Without Project	Cumulative Project Trips	Existing Plus Approved Project (EPAP)	Net Project Trips	EPAP Plus Project	Existing Without Project	Cumulative Project Trips	Existing Plus Approved Project (EPAP)	Net Project Trips	EPAP Plus Project
8 Robertson Boulevard/Road 15										
NBL	0	0	0	0	0	0	0	0	0	0
NBT	187	18	205	0	205	297	51	348	0	348
NBR	0	0	0	2	2	1	0	1	6	7
SBL	18	0	18	14	32	17	0	17	40	57
SBT	231	43	274	0	274	213	34	247	0	247
SBR	0	0	0	0	0	0	0	0	0	0
EBL	0	0	0	0	0	0	0	0	0	0
EBT	0	0	0	0	0	0	0	0	0	0
EBR	0	0	0	0	0	0	0	0	0	0
WBL	2	0	2	6	8	0	0	0	4	4
WBT	0	0	0	0	0	0	0	0	0	0
WBR	27	0	27	38	65	13	0	13	25	38
North Leg										
Approach	249	43	292	14	306	230	34	264	40	304
Departure	214	18	232	38	270	310	51	361	25	386
Total	463	61	524	52	576	540	85	625	65	690
South Leg										
Approach	187	18	205	2	207	298	51	349	6	355
Departure	233	43	276	6	282	213	34	247	4	251
Total	420	61	481	8	489	511	85	596	10	606
East Leg										
Approach	29	0	29	44	73	13	0	13	29	42
Departure	18	0	18	16	34	18	0	18	46	64
Total	47	0	47	60	107	31	0	31	75	106
West Leg										
Approach	0	0	0	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
Total Approaches										
Approach	465	61	526	60	586	541	85	626	75	701
Departure	465	61	526	60	586	541	85	626	75	701
Total	930	122	1,052	120	1,172	1,082	170	1,252	150	1,402

Table C-2 - Existing Plus Approved Project (EPAP) Peak Hour Volume Summary

	AM Peak Hour					PM Peak Hour				
	Existing Without Project	Cumulative Project Trips	Existing Plus Approved Project (EPAP)	Net Project Trips	EPAP Plus Project	Existing Without Project	Cumulative Project Trips	Existing Plus Approved Project (EPAP)	Net Project Trips	EPAP Plus Project
9 Road 15/Avenue 24										
NBL	0	0	0	0	0	0	0	0	0	0
NBT	17	0	17	2	19	20	0	20	6	26
NBR	6	0	6	0	6	1	0	1	0	1
SBL	2	0	2	0	2	1	0	1	0	1
SBT	24	0	24	6	30	13	0	13	4	17
SBR	0	0	0	0	0	2	0	2	0	2
EBL	1	0	1	0	1	1	0	1	0	1
EBT	0	0	0	0	0	0	0	0	0	0
EBR	1	0	1	0	1	0	0	0	0	0
WBL	1	0	1	0	1	3	0	3	0	3
WBT	0	0	0	0	0	0	0	0	0	0
WBR	2	0	2	0	2	0	0	0	0	0
North Leg										
Approach	26	0	26	6	32	16	0	16	4	20
Departure	20	0	20	2	22	21	0	21	6	27
Total	46	0	46	8	54	37	0	37	10	47
South Leg										
Approach	23	0	23	2	25	21	0	21	6	27
Departure	26	0	26	6	32	16	0	16	4	20
Total	49	0	49	8	57	37	0	37	10	47
East Leg										
Approach	3	0	3	0	3	3	0	3	0	3
Departure	8	0	8	0	8	2	0	2	0	2
Total	11	0	11	0	11	5	0	5	0	5
West Leg										
Approach	2	0	2	0	2	1	0	1	0	1
Departure	0	0	0	0	0	2	0	2	0	2
Total	2	0	2	0	2	3	0	3	0	3
Total Approaches										
Approach	54	0	54	8	62	41	0	41	10	51
Departure	54	0	54	8	62	41	0	41	10	51
Total	108	0	108	16	124	82	0	82	20	102

Table C-2 - Existing Plus Approved Project (EPAP) Peak Hour Volume Summary

	AM Peak Hour					PM Peak Hour				
	Existing Without Project	Cumulative Project Trips	Existing Plus Approved Project (EPAP)	Net Project Trips	EPAP Plus Project	Existing Without Project	Cumulative Project Trips	Existing Plus Approved Project (EPAP)	Net Project Trips	EPAP Plus Project
10 Project Driveway 1/Road 15										
NBL	0	0	0	0	0	0	0	0	0	0
NBT	0	0	0	0	0	0	0	0	0	0
NBR	0	0	0	0	0	0	0	0	0	0
SBL	0	0	0	0	0	0	0	0	0	0
SBT	0	0	0	0	0	0	0	0	0	0
SBR	0	0	0	24	24	0	0	0	16	16
EBL	0	0	0	8	8	0	0	0	25	25
EBT	18	0	18	7	25	18	0	18	22	40
EBR	0	0	0	0	0	0	0	0	0	0
WBL	0	0	0	0	0	0	0	0	0	0
WBT	29	0	29	21	50	13	0	13	14	27
WBR	0	0	0	0	0	0	0	0	0	0
North Leg										
Approach	0	0	0	24	24	0	0	0	16	16
Departure	0	0	0	8	8	0	0	0	25	25
Total	0	0	0	32	32	0	0	0	41	41
South Leg										
Approach	0	0	0	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
East Leg										
Approach	29	0	29	21	50	13	0	13	14	27
Departure	18	0	18	7	25	18	0	18	22	40
Total	47	0	47	28	75	31	0	31	36	67
West Leg										
Approach	18	0	18	15	33	18	0	18	47	65
Departure	29	0	29	45	74	13	0	13	30	43
Total	47	0	47	60	107	31	0	31	77	108
Total Approaches										
Approach	47	0	47	60	107	31	0	31	77	108
Departure	47	0	47	60	107	31	0	31	77	108
Total	94	0	94	120	214	62	0	62	154	216

Table C-2 - Existing Plus Approved Project (EPAP) Peak Hour Volume Summary

	AM Peak Hour					PM Peak Hour				
	Existing Without Project	Cumulative Project Trips	Existing Plus Approved Project (EPAP)	Net Project Trips	EPAP Plus Project	Existing Without Project	Cumulative Project Trips	Existing Plus Approved Project (EPAP)	Net Project Trips	EPAP Plus Project
11 Project Driveway 2/Road 15										
NBL	0	0	0	0	0	0	0	0	0	0
NBT	0	0	0	0	0	0	0	0	0	0
NBR	0	0	0	0	0	0	0	0	0	0
SBL	0	0	0	6	6	0	0	0	4	4
SBT	0	0	0	0	0	0	0	0	0	0
SBR	0	0	0	21	21	0	0	0	14	14
EBL	0	0	0	7	7	0	0	0	22	22
EBT	18	0	18	0	18	18	0	18	0	18
EBR	0	0	0	0	0	0	0	0	0	0
WBL	0	0	0	0	0	0	0	0	0	0
WBT	29	0	29	0	29	13	0	13	0	13
WBR	0	0	0	2	2	0	0	0	6	6
North Leg										
Approach	0	0	0	27	27	0	0	0	18	18
Departure	0	0	0	9	9	0	0	0	28	28
Total	0	0	0	36	36	0	0	0	46	46
South Leg										
Approach	0	0	0	0	0	0	0	0	0	0
Departure	0	0	0	0	0	0	0	0	0	0
Total	0	0	0	0	0	0	0	0	0	0
East Leg										
Approach	29	0	29	2	31	13	0	13	6	19
Departure	18	0	18	6	24	18	0	18	4	22
Total	47	0	47	8	55	31	0	31	10	41
West Leg										
Approach	18	0	18	7	25	18	0	18	22	40
Departure	29	0	29	21	50	13	0	13	14	27
Total	47	0	47	28	75	31	0	31	36	67
Total Approaches										
Approach	47	0	47	36	83	31	0	31	46	77
Departure	47	0	47	36	83	31	0	31	46	77
Total	94	0	94	72	166	62	0	62	92	154

Table C-3- Build-Out Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Build-Out Without Project	Net Project Trips	Build-Out Plus Project	Build-Out Without Project	Net Project Trips	Build-Out Plus Project
1 Robertson Boulevard/11th Street						
NBL	42	3	45	16	2	18
NBT	465	21	486	647	14	661
NBR	45	6	51	30	4	34
SBL	70	0	70	39	0	39
SBT	665	7	672	625	22	647
SBR	78	0	78	43	0	43
EBL	38	0	38	61	0	61
EBT	40	0	40	16	0	16
EBR	29	1	30	25	3	28
WBL	68	2	70	36	6	42
WBT	78	0	78	14	0	14
WBR	45	0	45	51	0	51
North Leg						
Approach	813	7	820	707	22	729
Departure	548	21	569	759	14	773
Total	1,361	28	1,389	1,466	36	1,502
South Leg						
Approach	552	30	582	693	20	713
Departure	762	10	772	686	31	717
Total	1,314	40	1,354	1,379	51	1,430
East Leg						
Approach	191	2	193	101	6	107
Departure	155	6	161	85	4	89
Total	346	8	354	186	10	196
West Leg						
Approach	107	1	108	102	3	105
Departure	198	3	201	73	2	75
Total	305	4	309	175	5	180
Total Approaches						
Approach	1,663	40	1,703	1,603	51	1,654
Departure	1,663	40	1,703	1,603	51	1,654
Total	3,326	80	3,406	3,206	102	3,308

Table C-3- Build-Out Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Build-Out Without Project	Net Project Trips	Build-Out Plus Project	Build-Out Without Project	Net Project Trips	Build-Out Plus Project
2 Robertson Boulevard/15th Street						
NBL	30	3	33	56	2	58
NBT	417	30	447	543	20	563
NBR	33	3	36	45	2	47
SBL	59	0	59	65	0	65
SBT	508	11	519	566	31	597
SBR	66	0	66	57	0	57
EBL	85	0	85	91	0	91
EBT	51	0	51	45	0	45
EBR	69	1	70	61	3	64
WBL	70	1	71	36	3	39
WBT	96	0	96	38	0	38
WBR	90	0	90	91	0	91
North Leg						
Approach	633	11	644	688	31	719
Departure	592	30	622	725	20	745
Total	1,225	41	1,266	1,413	51	1,464
South Leg						
Approach	480	36	516	644	24	668
Departure	647	13	660	663	37	700
Total	1,127	49	1,176	1,307	61	1,368
East Leg						
Approach	256	1	257	165	3	168
Departure	143	3	146	155	2	157
Total	399	4	403	320	5	325
West Leg						
Approach	205	1	206	197	3	200
Departure	192	3	195	151	2	153
Total	397	4	401	348	5	353
Total Approaches						
Approach	1,574	49	1,623	1,694	61	1,755
Departure	1,574	49	1,623	1,694	61	1,755
Total	3,148	98	3,246	3,388	122	3,510

Table C-3- Build-Out Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Build-Out Without Project	Net Project Trips	Build-Out Plus Project	Build-Out Without Project	Net Project Trips	Build-Out Plus Project
3 Robertson Boulevard/Washington Road						
NBL	16	3	19	62	2	64
NBT	393	35	428	488	23	511
NBR	0	0	0	0	0	0
SBL	0	0	0	0	0	0
SBT	421	13	434	471	37	508
SBR	162	0	162	271	0	271
EBL	248	0	248	206	0	206
EBT	0	0	0	0	0	0
EBR	45	1	46	34	3	37
WBL	0	0	0	0	0	0
WBT	0	0	0	0	0	0
WBR	0	0	0	0	0	0
North Leg						
Approach	583	13	596	742	37	779
Departure	641	35	676	694	23	717
Total	1,224	48	1,272	1,436	60	1,496
South Leg						
Approach	409	38	447	550	25	575
Departure	466	14	480	505	40	545
Total	875	52	927	1,055	65	1,120
East Leg						
Approach	0	0	0	0	0	0
Departure	0	0	0	0	0	0
Total	0	0	0	0	0	0
West Leg						
Approach	293	1	294	240	3	243
Departure	178	3	181	333	2	335
Total	471	4	475	573	5	578
Total Approaches						
Approach	1,285	52	1,337	1,532	65	1,597
Departure	1,285	52	1,337	1,532	65	1,597
Total	2,570	104	2,674	3,064	130	3,194

Table C-3- Build-Out Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Build-Out Without Project	Net Project Trips	Build-Out Plus Project	Build-Out Without Project	Net Project Trips	Build-Out Plus Project
4 Robertson Boulevard/Country Wood Shopping Center Driveway - Adams Drive						
NBL	9	3	12	16	2	18
NBT	340	41	381	423	27	450
NBR	6	0	6	10	0	10
SBL	13	0	13	29	0	29
SBT	369	14	383	333	43	376
SBR	36	0	36	41	0	41
EBL	18	0	18	38	0	38
EBT	0	0	0	3	0	3
EBR	5	1	6	12	3	15
WBL	10	0	10	2	0	2
WBT	4	0	4	9	0	9
WBR	25	0	25	22	0	22
North Leg						
Approach	418	14	432	403	43	446
Departure	383	41	424	483	27	510
Total	801	55	856	886	70	956
South Leg						
Approach	355	44	399	449	29	478
Departure	384	15	399	347	46	393
Total	739	59	798	796	75	871
East Leg						
Approach	39	0	39	33	0	33
Departure	19	0	19	42	0	42
Total	58	0	58	75	0	75
West Leg						
Approach	23	1	24	53	3	56
Departure	49	3	52	66	2	68
Total	72	4	76	119	5	124
Total Approaches						
Approach	835	59	894	938	75	1,013
Departure	835	59	894	938	75	1,013
Total	1,670	118	1,788	1,876	150	2,026

Table C-3- Build-Out Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Build-Out Without Project	Net Project Trips	Build-Out Plus Project	Build-Out Without Project	Net Project Trips	Build-Out Plus Project
5 Robertson Boulevard/Myer Drive - Anderson Pump Company Driveway						
NBL	12	3	15	27	2	29
NBT	297	44	341	416	29	445
NBR	0	0	0	0	0	0
SBL	3	0	3	0	0	0
SBT	353	16	369	301	47	348
SBR	28	0	28	46	0	46
EBL	57	0	57	26	0	26
EBT	0	0	0	0	0	0
EBR	39	1	40	33	3	36
WBL	2	0	2	2	0	2
WBT	0	0	0	0	0	0
WBR	1	0	1	7	0	7
North Leg						
Approach	384	16	400	347	47	394
Departure	355	44	399	449	29	478
Total	739	60	799	796	76	872
South Leg						
Approach	309	47	356	443	31	474
Departure	394	17	411	336	50	386
Total	703	64	767	779	81	860
East Leg						
Approach	3	0	3	9	0	9
Departure	3	0	3	0	0	0
Total	6	0	6	9	0	9
West Leg						
Approach	96	1	97	59	3	62
Departure	40	3	43	73	2	75
Total	136	4	140	132	5	137
Total Approaches						
Approach	792	64	856	858	81	939
Departure	792	64	856	858	81	939
Total	1,584	128	1,712	1,716	162	1,878

Table C-3- Build-Out Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Build-Out Without Project	Net Project Trips	Build-Out Plus Project	Build-Out Without Project	Net Project Trips	Build-Out Plus Project
6 Robertson Boulevard/Palm Parkway						
NBL	0	0	0	0	0	0
NBT	238	38	276	372	25	397
NBR	7	0	7	16	0	16
SBL	43	3	46	52	9	61
SBT	321	14	335	291	40	331
SBR	0	0	0	0	0	0
EBL	0	0	0	0	0	0
EBT	0	0	0	0	0	0
EBR	0	0	0	0	0	0
WBL	17	0	17	4	0	4
WBT	0	0	0	0	0	0
WBR	69	9	78	36	6	42
North Leg						
Approach	364	17	381	343	49	392
Departure	307	47	354	408	31	439
Total	671	64	735	751	80	831
South Leg						
Approach	245	38	283	388	25	413
Departure	338	14	352	295	40	335
Total	583	52	635	683	65	748
East Leg						
Approach	86	9	95	40	6	46
Departure	50	3	53	68	9	77
Total	136	12	148	108	15	123
West Leg						
Approach	0	0	0	0	0	0
Departure	0	0	0	0	0	0
Total	0	0	0	0	0	0
Total Approaches						
Approach	695	64	759	771	80	851
Departure	695	64	759	771	80	851
Total	1,390	128	1,518	1,542	160	1,702

Table C-3- Build-Out Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Build-Out Without Project	Net Project Trips	Build-Out Plus Project	Build-Out Without Project	Net Project Trips	Build-Out Plus Project
7 Robertson Boulevard/Avenue 24 1/2						
NBL	2	0	2	1	0	1
NBT	232	38	270	379	25	404
NBR	0	0	0	0	0	0
SBL	0	0	0	0	0	0
SBT	305	14	319	274	40	314
SBR	25	0	25	23	0	23
EBL	18	0	18	25	0	25
EBT	0	0	0	0	0	0
EBR	2	0	2	3	0	3
WBL	0	0	0	0	0	0
WBT	0	0	0	0	0	0
WBR	0	0	0	0	0	0
North Leg						
Approach	330	14	344	297	40	337
Departure	250	38	288	404	25	429
Total	580	52	632	701	65	766
South Leg						
Approach	234	38	272	380	25	405
Departure	307	14	321	277	40	317
Total	541	52	593	657	65	722
East Leg						
Approach	0	0	0	0	0	0
Departure	0	0	0	0	0	0
Total	0	0	0	0	0	0
West Leg						
Approach	20	0	20	28	0	28
Departure	27	0	27	24	0	24
Total	47	0	47	52	0	52
Total Approaches						
Approach	584	52	636	705	65	770
Departure	584	52	636	705	65	770
Total	1,168	104	1,272	1,410	130	1,540

Table C-3- Build-Out Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Build-Out Without Project	Net Project Trips	Build-Out Plus Project	Build-Out Without Project	Net Project Trips	Build-Out Plus Project
8 Robertson Boulevard/Road 15						
NBL	0	0	0	0	0	0
NBT	207	0	207	367	0	367
NBR	1	2	3	1	6	7
SBL	18	14	32	18	40	58
SBT	289	0	289	259	0	259
SBR	0	0	0	0	0	0
EBL	0	0	0	0	0	0
EBT	0	0	0	0	0	0
EBR	0	0	0	0	0	0
WBL	2	6	8	0	4	4
WBT	0	0	0	0	0	0
WBR	27	38	65	13	25	38
North Leg						
Approach	307	14	321	277	40	317
Departure	234	38	272	380	25	405
Total	541	52	593	657	65	722
South Leg						
Approach	208	2	210	368	6	374
Departure	291	6	297	259	4	263
Total	499	8	507	627	10	637
East Leg						
Approach	29	44	73	13	29	42
Departure	19	16	35	19	46	65
Total	48	60	108	32	75	107
West Leg						
Approach	0	0	0	0	0	0
Departure	0	0	0	0	0	0
Total	0	0	0	0	0	0
Total Approaches						
Approach	544	60	604	658	75	733
Departure	544	60	604	658	75	733
Total	1,088	120	1,208	1,316	150	1,466

Table C-3- Build-Out Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Build-Out Without Project	Net Project Trips	Build-Out Plus Project	Build-Out Without Project	Net Project Trips	Build-Out Plus Project
9 Road 15/Avenue 24						
NBL	0	0	0	0	0	0
NBT	18	2	20	21	6	27
NBR	6	0	6	1	0	1
SBL	2	0	2	1	0	1
SBT	25	6	31	14	4	18
SBR	0	0	0	2	0	2
EBL	1	0	1	1	0	1
EBT	0	0	0	0	0	0
EBR	1	0	1	0	0	0
WBL	1	0	1	3	0	3
WBT	0	0	0	0	0	0
WBR	2	0	2	0	0	0
North Leg						
Approach	27	6	33	17	4	21
Departure	21	2	23	22	6	28
Total	48	8	56	39	10	49
South Leg						
Approach	24	2	26	22	6	28
Departure	27	6	33	17	4	21
Total	51	8	59	39	10	49
East Leg						
Approach	3	0	3	3	0	3
Departure	8	0	8	2	0	2
Total	11	0	11	5	0	5
West Leg						
Approach	2	0	2	1	0	1
Departure	0	0	0	2	0	2
Total	2	0	2	3	0	3
Total Approaches						
Approach	56	8	64	43	10	53
Departure	56	8	64	43	10	53
Total	112	16	128	86	20	106

Table C-3- Build-Out Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Build-Out Without Project	Net Project Trips	Build-Out Plus Project	Build-Out Without Project	Net Project Trips	Build-Out Plus Project
10 Project Driveway 1/Road 15						
NBL	0	0	0	0	0	0
NBT	0	0	0	0	0	0
NBR	0	0	0	0	0	0
SBL	0	0	0	0	0	0
SBT	0	0	0	0	0	0
SBR	0	24	24	0	16	16
EBL	0	8	8	0	25	25
EBT	19	7	26	19	22	41
EBR	0	0	0	0	0	0
WBL	0	0	0	0	0	0
WBT	30	21	51	13	14	27
WBR	0	0	0	0	0	0
North Leg						
Approach	0	24	24	0	16	16
Departure	0	8	8	0	25	25
Total	0	32	32	0	41	41
South Leg						
Approach	0	0	0	0	0	0
Departure	0	0	0	0	0	0
Total	0	0	0	0	0	0
East Leg						
Approach	30	21	51	13	14	27
Departure	19	7	26	19	22	41
Total	49	28	77	32	36	68
West Leg						
Approach	19	15	34	19	47	66
Departure	30	45	75	13	30	43
Total	49	60	109	32	77	109
Total Approaches						
Approach	49	60	109	32	77	109
Departure	49	60	109	32	77	109
Total	98	120	218	64	154	218

Table C-3- Build-Out Peak Hour Volume Summary

	AM Peak Hour			PM Peak Hour		
	Build-Out Without Project	Net Project Trips	Build-Out Plus Project	Build-Out Without Project	Net Project Trips	Build-Out Plus Project
11 Project Driveway 2/Road 15						
NBL	0	0	0	0	0	0
NBT	0	0	0	0	0	0
NBR	0	0	0	0	0	0
SBL	0	6	6	0	4	4
SBT	0	0	0	0	0	0
SBR	0	21	21	0	14	14
EBL	0	7	7	0	22	22
EBT	18	0	18	18	0	18
EBR	0	0	0	0	0	0
WBL	0	0	0	0	0	0
WBT	29	0	29	13	0	13
WBR	0	2	2	0	6	6
North Leg						
Approach	0	27	27	0	18	18
Departure	0	9	9	0	28	28
Total	0	36	36	0	46	46
South Leg						
Approach	0	0	0	0	0	0
Departure	0	0	0	0	0	0
Total	0	0	0	0	0	0
East Leg						
Approach	29	2	31	13	6	19
Departure	18	6	24	18	4	22
Total	47	8	55	31	10	41
West Leg						
Approach	18	7	25	18	22	40
Departure	29	21	50	13	14	27
Total	47	28	75	31	36	67
Total Approaches						
Approach	47	36	83	31	46	77
Departure	47	36	83	31	46	77
Total	94	72	166	62	92	154

APPENDIX D

LEVEL OF SERVICE WORKSHEETS

HCM 7th Signalized Intersection Summary

1: Robertson Blvd & 11th St

Chowchilla Residential Development Project

Existing NP - AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	38	26	63	76	32	33	317	36	42	482	49
Future Volume (veh/h)	25	38	26	63	76	32	33	317	36	42	482	49
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1826	1826	1826	1870	1870	1870
Adj Flow Rate, veh/h	34	52	36	86	104	44	45	434	49	58	660	67
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
Percent Heavy Veh, %	2	2	2	2	2	2	5	5	5	2	2	2
Cap, veh/h	150	190	104	196	175	63	113	1223	545	138	1297	578
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.06	0.35	0.35	0.08	0.36	0.36
Sat Flow, veh/h	284	923	505	478	854	309	1739	3469	1547	1781	3554	1585
Grp Volume(v), veh/h	122	0	0	234	0	0	45	434	49	58	660	67
Grp Sat Flow(s),veh/h/ln	1713	0	0	1641	0	0	1739	1735	1547	1781	1777	1585
Q Serve(g_s), s	0.0	0.0	0.0	3.5	0.0	0.0	1.2	4.6	1.1	1.6	7.3	1.4
Cycle Q Clear(g_c), s	2.9	0.0	0.0	6.4	0.0	0.0	1.2	4.6	1.1	1.6	7.3	1.4
Prop In Lane	0.28		0.30	0.37		0.19	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	444	0	0	435	0	0	113	1223	545	138	1297	578
V/C Ratio(X)	0.27	0.00	0.00	0.54	0.00	0.00	0.40	0.35	0.09	0.42	0.51	0.12
Avail Cap(c_a), veh/h	746	0	0	738	0	0	520	2191	977	532	2245	1001
HCM Platoon Ratio	1.00	1.00	1.00	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	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.0	0.0	0.0	18.3	0.0	0.0	22.5	12.0	10.9	22.1	12.4	10.6
Incr Delay (d2), s/veh	0.6	0.0	0.0	2.7	0.0	0.0	0.8	0.4	0.2	0.8	0.7	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	0.0	2.6	0.0	0.0	0.5	1.5	0.3	0.6	2.6	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	17.6	0.0	0.0	21.0	0.0	0.0	23.4	12.4	11.0	22.8	13.2	10.8
LnGrp LOS	B			C			C	B	B	C	B	B
Approach Vol, veh/h	122			234			528			785		
Approach Delay, s/veh	17.6			21.0			13.2			13.7		
Approach LOS	B			C			B			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.6	23.8		16.8	9.0	24.4		16.8				
Change Period (Y+Rc), s	5.7	6.1		6.5	5.7	6.1		6.5				
Max Green Setting (Gmax), s	15.0	31.7		20.0	15.0	31.7		20.0				
Max Q Clear Time (g_c+I1), s	3.6	6.6		4.9	3.2	9.3		8.4				
Green Ext Time (p_c), s	0.0	5.8		0.9	0.0	9.0		1.9				
Intersection Summary												
HCM 7th Control Delay, s/veh				14.8								
HCM 7th LOS				B								

HCM 7th Signalized Intersection Summary

2: Robertson Blvd & 15th St

Chowchilla Residential Development Project
Existing NP - AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	76	51	64	68	95	81	22	268	24	44	354	51
Future Volume (veh/h)	76	51	64	68	95	81	22	268	24	44	354	51
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1870	1870	1870	1796	1796	1796	1870	1870	1870
Adj Flow Rate, veh/h	106	71	89	94	132	112	31	372	33	61	492	71
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Percent Heavy Veh, %	3	3	3	2	2	2	7	7	7	2	2	2
Cap, veh/h	326	208	260	395	259	220	84	840	74	144	924	133
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.05	0.26	0.26	0.08	0.30	0.30
Sat Flow, veh/h	1127	748	938	1226	935	793	1711	3172	280	1781	3118	448
Grp Volume(v), veh/h	106	0	160	94	0	244	31	199	206	61	279	284
Grp Sat Flow(s), veh/h/ln	1127	0	1687	1226	0	1728	1711	1706	1746	1781	1777	1790
Q Serve(g_s), s	4.3	0.0	3.7	3.2	0.0	5.8	0.9	4.7	4.8	1.6	6.4	6.5
Cycle Q Clear(g_c), s	10.1	0.0	3.7	6.9	0.0	5.8	0.9	4.7	4.8	1.6	6.4	6.5
Prop In Lane	1.00		0.56	1.00		0.46	1.00		0.16	1.00		0.25
Lane Grp Cap(c), veh/h	326	0	468	395	0	479	84	452	462	144	527	530
V/C Ratio(X)	0.32	0.00	0.34	0.24	0.00	0.51	0.37	0.44	0.44	0.42	0.53	0.53
Avail Cap(c_a), veh/h	475	0	691	557	0	708	526	1104	1130	547	1150	1158
HCM Platoon Ratio	1.00	1.00	1.00	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	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.1	0.0	14.1	16.8	0.0	14.8	22.5	14.9	15.0	21.4	14.3	14.4
Incr Delay (d2), s/veh	1.4	0.0	1.1	1.3	0.0	3.6	1.0	1.6	1.6	0.7	1.7	1.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	1.4	1.0	0.0	2.4	0.3	1.7	1.7	0.6	2.3	2.3
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	20.5	0.0	15.1	18.2	0.0	18.4	23.5	16.5	16.5	22.1	16.0	16.1
LnGrp LOS	C		B	B		B	C	B	B	C	B	B
Approach Vol, veh/h	266			338			436			624		
Approach Delay, s/veh	17.3			18.3			17.0			16.6		
Approach LOS	B			B			B			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.6	19.3		19.9	8.1	20.9		19.9				
Change Period (Y+Rc), s	5.7	6.4		6.3	5.7	6.4		6.3				
Max Green Setting (Gmax), s	15.0	31.6		20.0	15.0	31.6		20.0				
Max Q Clear Time (g_c+I), s	13.6	6.8		12.1	2.9	8.5		8.9				
Green Ext Time (p_c), s	0.0	4.6		1.5	0.0	6.0		3.1				
Intersection Summary												
HCM 7th Control Delay, s/veh	17.2											
HCM 7th LOS	B											

HCM 7th TWSC
3: Robertson Blvd & Washington Rd

Chowchilla Residential Development Project
Existing NP - AM Peak Hour

Intersection												
Int Delay, s/veh	5.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Vol, veh/h	124	0	43	0	0	0	16	342	0	0	326	95
Future Vol, veh/h	124	0	43	0	0	0	16	342	0	0	326	95
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	60	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	76	76	76	76	76	76	76	76	76	76	76	76
Heavy Vehicles, %	2	2	2	0	0	0	3	3	3	5	5	5
Mvmt Flow	163	0	57	0	0	0	21	450	0	0	429	125

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	759	984	277	707	1046	225	554	0	0	450	0	0
Stage 1	491	491	-	492	492	-	-	-	-	-	-	-
Stage 2	267	492	-	214	554	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.5	6.5	6.9	4.16	-	-	4.2	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.5	4	3.3	2.23	-	-	2.25	-	-
Pot Cap-1 Maneuver	296	247	720	326	230	784	1005	-	-	1086	-	-
Stage 1	527	546	-	532	551	-	-	-	-	-	-	-
Stage 2	715	546	-	774	517	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	290	242	720	294	225	784	1005	-	-	1086	-	-
Mov Cap-2 Maneuver	290	242	-	294	225	-	-	-	-	-	-	-
Stage 1	527	546	-	521	539	-	-	-	-	-	-	-
Stage 2	700	534	-	713	517	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v32.58		0	0.39	0
HCM LOS	D	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1005	-	-	342	-	-	-
HCM Lane V/C Ratio	0.021	-	-	0.642	-	-	-
HCM Control Delay (s/veh)	8.7	-	-	32.6	0	0	-
HCM Lane LOS	A	-	-	D	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	4.2	-	0	-

Intersection												
Int Delay, s/veh	1.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	↕
Traffic Vol, veh/h	12	0	5	10	4	23	9	303	6	12	301	22
Future Vol, veh/h	12	0	5	10	4	23	9	303	6	12	301	22
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	130	-	-	385	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	77	77	77	77	77	77	77	77	77	77	77	77
Heavy Vehicles, %	0	0	0	0	0	0	3	3	3	5	5	5
Mvmt Flow	16	0	6	13	5	30	12	394	8	16	391	29

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	842	847	195	647	871	397	419	0	0	401	0	0
Stage 1	422	422	-	421	421	-	-	-	-	-	-	-
Stage 2	419	425	-	227	451	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.9	7.3	6.5	6.2	4.145	-	-	4.175	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2285	-	-	2.2475	-	-
Pot Cap-1 Maneuver	273	301	819	373	291	657	1132	-	-	1137	-	-
Stage 1	585	592	-	614	592	-	-	-	-	-	-	-
Stage 2	615	590	-	761	575	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	250	294	819	361	284	657	1132	-	-	1137	-	-
Mov Cap-2 Maneuver	250	294	-	361	284	-	-	-	-	-	-	-
Stage 1	577	584	-	608	586	-	-	-	-	-	-	-
Stage 2	576	584	-	745	567	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	17.31	13.3	0.23	0.29
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1132	-	-	314	482	1137	-
HCM Lane V/C Ratio	0.01	-	-	0.07	0.1	0.014	-
HCM Control Delay (s/veh)	8.2	-	-	17.3	13.3	8.2	-
HCM Lane LOS	A	-	-	C	B	A	-
HCM 95th %tile Q(veh)	0	-	-	0.2	0.3	0	-

Intersection												
Int Delay, s/veh	2.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	56	0	26	2	0	1	7	261	0	1	287	28
Future Vol, veh/h	56	0	26	2	0	1	7	261	0	1	287	28
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	95	-	-	50	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	75	75	75	75	75	75	75	75	75
Heavy Vehicles, %	0	0	0	0	0	0	3	3	3	5	5	5
Mvmt Flow	75	0	35	3	0	1	9	348	0	1	383	37
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	752	752	191	561	789	348	420	0	0	348	0	0
Stage 1	385	385	-	367	367	-	-	-	-	-	-	-
Stage 2	367	367	-	194	423	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.9	7.3	6.5	6.2	4.145	-	-	4.175	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2285	-	-	2.2475	-	-
Pot Cap-1 Maneuver	316	342	824	428	325	700	1131	-	-	1190	-	-
Stage 1	615	614	-	657	626	-	-	-	-	-	-	-
Stage 2	657	626	-	795	591	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	312	338	824	406	322	700	1131	-	-	1190	-	-
Mov Cap-2 Maneuver	312	338	-	406	322	-	-	-	-	-	-	-
Stage 1	614	613	-	652	621	-	-	-	-	-	-	-
Stage 2	650	621	-	761	591	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s/v	17.85		12.69		0.21		0.03					
HCM LOS	C		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1131	-	-	389	472	1190	-	-				
HCM Lane V/C Ratio	0.008	-	-	0.281	0.008	0.001	-	-				
HCM Control Delay (s/veh)	8.2	-	-	17.9	12.7	8	-	-				
HCM Lane LOS	A	-	-	C	B	A	-	-				
HCM 95th %tile Q(veh)	0	-	-	1.1	0	0	-	-				

Intersection						
Int Delay, s/veh	2.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	17	69	202	7	43	245
Future Vol, veh/h	17	69	202	7	43	245
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	0	0	3	3	7	7
Mvmt Flow	20	80	235	8	50	285

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	624	239	0	0	243
Stage 1	239	-	-	-	-
Stage 2	385	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.17
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.263
Pot Cap-1 Maneuver	453	805	-	-	1295
Stage 1	805	-	-	-	-
Stage 2	692	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	435	805	-	-	1295
Mov Cap-2 Maneuver	435	-	-	-	-
Stage 1	805	-	-	-	-
Stage 2	665	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v11.11		0	1.18
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	689	1295
HCM Lane V/C Ratio	-	-	0.145	0.039
HCM Control Delay (s/veh)	-	-	11.1	7.9
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.5	0.1

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	2	2	212	247	7
Future Vol, veh/h	10	2	2	212	247	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	3	3	7	7
Mvmt Flow	12	2	2	249	291	8

Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	549	295	299	0	-	0
Stage 1	295	-	-	-	-	-
Stage 2	254	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.13	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.227	-	-	-
Pot Cap-1 Maneuver	500	749	1257	-	-	-
Stage 1	760	-	-	-	-	-
Stage 2	793	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	499	749	1257	-	-	-
Mov Cap-2 Maneuver	499	-	-	-	-	-
Stage 1	759	-	-	-	-	-
Stage 2	793	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	12	0.07	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	17	-	529	-	-
HCM Lane V/C Ratio	0.002	-	0.027	-	-
HCM Control Delay (s/veh)	7.9	0	12	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection						
Int Delay, s/veh	0.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	27	187	0	18	231
Future Vol, veh/h	2	27	187	0	18	231
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	0	3	3	7	7
Mvmt Flow	2	31	215	0	21	266
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	522	215	0	0	215	0
Stage 1	215	-	-	-	-	-
Stage 2	307	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.17	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.263	-
Pot Cap-1 Maneuver	519	830	-	-	1326	-
Stage 1	826	-	-	-	-	-
Stage 2	751	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	509	830	-	-	1326	-
Mov Cap-2 Maneuver	509	-	-	-	-	-
Stage 1	826	-	-	-	-	-
Stage 2	737	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s/v	9.72	0		0.56		
HCM LOS	A					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	-	795	130	-	
HCM Lane V/C Ratio	-	-	0.042	0.016	-	
HCM Control Delay (s/veh)	-	-	9.7	7.8	0	
HCM Lane LOS	-	-	A	A	A	
HCM 95th %tile Q(veh)	-	-	0.1	0	-	

Intersection												
Int Delay, s/veh	1.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	1	1	0	2	0	17	6	2	24	0
Future Vol, veh/h	1	0	1	1	0	2	0	17	6	2	24	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	68	68	68	68	68	68	68	68	68	68	68	68
Heavy Vehicles, %	0	0	0	0	0	0	17	17	17	4	4	4
Mvmt Flow	1	0	1	1	0	3	0	25	9	3	35	0
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	66	75	35	71	71	29	35	0	0	34	0	0
Stage 1	41	41	-	29	29	-	-	-	-	-	-	-
Stage 2	25	34	-	41	41	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.27	-	-	4.14	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.353	-	-	2.236	-	-
Pot Cap-1 Maneuver	932	819	1043	926	824	1051	1484	-	-	1565	-	-
Stage 1	979	865	-	993	875	-	-	-	-	-	-	-
Stage 2	998	871	-	979	865	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	928	818	1043	923	822	1051	1484	-	-	1565	-	-
Mov Cap-2 Maneuver	928	818	-	923	822	-	-	-	-	-	-	-
Stage 1	977	863	-	993	875	-	-	-	-	-	-	-
Stage 2	995	871	-	975	863	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s/v	8.68		8.6			0			0.56			
HCM LOS	A		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1484	-	-	982	1005	138	-	-				
HCM Lane V/C Ratio	-	-	-	0.003	0.004	0.002	-	-				
HCM Control Delay (s/veh)	0	-	-	8.7	8.6	7.3	0	-				
HCM Lane LOS	A	-	-	A	A	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-				

HCM 7th Signalized Intersection Summary

1: Robertson Blvd & 11th St

Chowchilla Residential Development Project

Existing NP - PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	15	14	24	14	20	12	420	26	17	421	21
Future Volume (veh/h)	29	15	14	24	14	20	12	420	26	17	421	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1841	1841	1841	1885	1885	1885
Adj Flow Rate, veh/h	30	16	15	25	15	21	12	438	27	18	439	22
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	4	4	4	1	1	1
Cap, veh/h	229	110	63	205	102	88	39	1086	484	57	1148	512
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.02	0.31	0.31	0.03	0.32	0.32
Sat Flow, veh/h	527	707	402	423	657	567	1753	3497	1560	1795	3582	1598
Grp Volume(v), veh/h	61	0	0	61	0	0	12	438	27	18	439	22
Grp Sat Flow(s),veh/h/ln	1636	0	0	1647	0	0	1753	1749	1560	1795	1791	1598
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.2	3.6	0.4	0.4	3.5	0.3
Cycle Q Clear(g_c), s	1.1	0.0	0.0	1.1	0.0	0.0	0.2	3.6	0.4	0.4	3.5	0.3
Prop In Lane	0.49		0.25	0.41		0.34	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	402	0	0	396	0	0	39	1086	484	57	1148	512
V/C Ratio(X)	0.15	0.00	0.00	0.15	0.00	0.00	0.31	0.40	0.06	0.31	0.38	0.04
Avail Cap(c_a), veh/h	1013	0	0	1013	0	0	721	3041	1356	739	3115	1389
HCM Platoon Ratio	1.00	1.00	1.00	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	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.4	0.0	0.0	13.5	0.0	0.0	17.6	9.9	8.8	17.3	9.6	8.5
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.5	0.0	0.0	1.7	0.6	0.1	1.1	0.5	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	0.4	0.0	0.0	0.1	1.0	0.1	0.1	1.1	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	13.8	0.0	0.0	13.9	0.0	0.0	19.2	10.5	8.9	18.4	10.1	8.6
LnGrp LOS	B			B			B	B	A	B	B	A
Approach Vol, veh/h	61			61			477			479		
Approach Delay, s/veh	13.8			13.9			10.6			10.3		
Approach LOS	B			B			B			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.9	17.4		12.2	6.5	17.8		12.2				
Change Period (Y+Rc), s	5.7	6.1		6.5	5.7	6.1		6.5				
Max Green Setting (Gmax), s	15.0	31.7		20.0	15.0	31.7		20.0				
Max Q Clear Time (g_c+I1), s	2.4	5.6		3.1	2.2	5.5		3.1				
Green Ext Time (p_c), s	0.0	5.7		0.3	0.0	6.0		0.4				
Intersection Summary												
HCM 7th Control Delay, s/veh	10.9											
HCM 7th LOS	B											

HCM 7th Signalized Intersection Summary 2: Robertson Blvd & 15th St

Chowchilla Residential Development Project
Existing NP - PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	73	45	48	24	36	73	50	344	42	52	365	44
Future Volume (veh/h)	73	45	48	24	36	73	50	344	42	52	365	44
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1885	1885	1885	1900	1900	1900	1856	1856	1856	1885	1885	1885
Adj Flow Rate, veh/h	78	48	52	26	39	78	54	370	45	56	392	47
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	0	0	0	3	3	3	1	1	1
Cap, veh/h	352	160	174	369	110	219	139	844	102	145	866	103
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.08	0.27	0.27	0.08	0.27	0.27
Sat Flow, veh/h	1285	827	896	1315	565	1131	1767	3167	383	1795	3223	384
Grp Volume(v), veh/h	78	0	100	26	0	117	54	205	210	56	217	222
Grp Sat Flow(s),veh/h/ln	1285	0	1724	1315	0	1696	1767	1763	1787	1795	1791	1816
Q Serve(g_s), s	2.2	0.0	2.0	0.7	0.0	2.4	1.2	3.9	3.9	1.2	4.0	4.1
Cycle Q Clear(g_c), s	4.6	0.0	2.0	2.7	0.0	2.4	1.2	3.9	3.9	1.2	4.0	4.1
Prop In Lane	1.00		0.52	1.00		0.67	1.00		0.21	1.00		0.21
Lane Grp Cap(c), veh/h	352	0	334	369	0	329	139	470	476	145	481	488
V/C Ratio(X)	0.22	0.00	0.30	0.07	0.00	0.36	0.39	0.44	0.44	0.39	0.45	0.46
Avail Cap(c_a), veh/h	743	0	859	770	0	846	661	1388	1407	671	1411	1430
HCM Platoon Ratio	1.00	1.00	1.00	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	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.0	0.0	13.8	15.0	0.0	14.0	17.6	12.2	12.2	17.5	12.2	12.2
Incr Delay (d2), s/veh	0.8	0.0	1.2	0.3	0.0	2.8	0.7	1.5	1.5	0.6	1.3	1.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.8	0.2	0.0	1.0	0.4	1.3	1.4	0.4	1.4	1.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	16.8	0.0	15.1	15.3	0.0	16.8	18.2	13.7	13.7	18.1	13.6	13.6
LnGrp LOS	B		B	B		B	B	B	B	B	B	B
Approach Vol, veh/h	178			143			469			495		
Approach Delay, s/veh	15.8			16.5			14.2			14.1		
Approach LOS	B			B			B			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.9	17.1		14.1	8.9	17.2		14.1				
Change Period (Y+Rc), s	5.7	6.4		6.3	5.7	6.4		6.3				
Max Green Setting (Gmax), s	15.0	31.6		20.0	15.0	31.6		20.0				
Max Q Clear Time (g_c+I), s	13.2	5.9		6.6	3.2	6.1		4.7				
Green Ext Time (p_c), s	0.0	4.8		1.2	0.0	4.7		1.4				

Intersection Summary

HCM 7th Control Delay, s/veh	14.7
HCM 7th LOS	B

HCM 7th TWSC
3: Robertson Blvd & Washington Rd

Chowchilla Residential Development Project
Existing NP - PM Peak Hour

Intersection												
Int Delay, s/veh	4.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Vol, veh/h	102	0	32	0	0	0	59	379	0	0	390	123
Future Vol, veh/h	102	0	32	0	0	0	59	379	0	0	390	123
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	60	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	1	1	1	0	0	0	1	1	1	2	2	2
Mvmt Flow	115	0	36	0	0	0	66	426	0	0	438	138

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	853	1066	288	778	1135	213	576	0	0	426	0	0
Stage 1	507	507	-	558	558	-	-	-	-	-	-	-
Stage 2	346	558	-	219	576	-	-	-	-	-	-	-
Critical Hdwy	7.52	6.52	6.92	7.5	6.5	6.9	4.12	-	-	4.14	-	-
Critical Hdwy Stg 1	6.52	5.52	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.52	5.52	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.51	4.01	3.31	3.5	4	3.3	2.21	-	-	2.22	-	-
Pot Cap-1 Maneuver	254	223	711	290	204	798	1000	-	-	1130	-	-
Stage 1	519	540	-	486	515	-	-	-	-	-	-	-
Stage 2	646	512	-	769	505	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	237	208	711	257	191	798	1000	-	-	1130	-	-
Mov Cap-2 Maneuver	237	208	-	257	191	-	-	-	-	-	-	-
Stage 1	519	540	-	454	481	-	-	-	-	-	-	-
Stage 2	603	478	-	730	505	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v31.41		0	1.19	0
HCM LOS	D	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1000	-	-	282	-	1130	-
HCM Lane V/C Ratio	0.066	-	-	0.533	-	-	-
HCM Control Delay (s/veh)	8.9	-	-	31.4	0	0	-
HCM Lane LOS	A	-	-	D	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	2.9	-	0	-

Intersection												
Int Delay, s/veh	1.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	↕
Traffic Vol, veh/h	22	3	12	2	9	22	15	346	10	28	277	29
Future Vol, veh/h	22	3	12	2	9	22	15	346	10	28	277	29
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	130	-	-	385	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	1	1	1	2	2	2
Mvmt Flow	24	3	13	2	10	24	16	376	11	30	301	32

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	776	782	151	627	808	382	333	0	0	387	0	0
Stage 1	362	362	-	414	414	-	-	-	-	-	-	-
Stage 2	414	420	-	213	393	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.9	7.3	6.5	6.2	4.115	-	-	4.13	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2095	-	-	2.219	-	-
Pot Cap-1 Maneuver	304	328	875	385	317	670	1232	-	-	1170	-	-
Stage 1	635	629	-	619	596	-	-	-	-	-	-	-
Stage 2	620	593	-	775	609	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	273	316	875	361	305	670	1232	-	-	1170	-	-
Mov Cap-2 Maneuver	273	316	-	361	305	-	-	-	-	-	-	-
Stage 1	618	612	-	611	589	-	-	-	-	-	-	-
Stage 2	580	585	-	740	593	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v16.38		13	0.32	0.68
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1232	-	-	356 486	1170	-	-
HCM Lane V/C Ratio	0.013	-	-	0.113 0.074	0.026	-	-
HCM Control Delay (s/veh)	8	-	-	16.4 13	8.2	-	-
HCM Lane LOS	A	-	-	C B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.4 0.2	0.1	-	-

Intersection

Int Delay, s/veh 1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	↕
Traffic Vol, veh/h	25	0	24	2	0	6	13	339	0	0	247	44
Future Vol, veh/h	25	0	24	2	0	6	13	339	0	0	247	44
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	95	-	-	50	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	5	5	5	2	2	2
Mvmt Flow	27	0	26	2	0	6	14	365	0	0	266	47

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	658	658	133	525	705	365	313	0	0	365	0	0
Stage 1	266	266	-	392	392	-	-	-	-	-	-	-
Stage 2	392	392	-	133	313	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.9	7.3	6.5	6.2	4.175	-	-	4.13	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2475	-	-	2.219	-	-
Pot Cap-1 Maneuver	367	387	898	453	363	685	1227	-	-	1192	-	-
Stage 1	722	693	-	636	610	-	-	-	-	-	-	-
Stage 2	636	610	-	863	661	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	359	382	898	435	359	685	1227	-	-	1192	-	-
Mov Cap-2 Maneuver	359	382	-	435	359	-	-	-	-	-	-	-
Stage 1	722	693	-	629	603	-	-	-	-	-	-	-
Stage 2	623	603	-	838	661	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v12.89		11.1	0.29	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1227	-	-	509 599	1192	-	-
HCM Lane V/C Ratio	0.011	-	-	0.104 0.014	-	-	-
HCM Control Delay (s/veh)	8	-	-	12.9 11.1	0	-	-
HCM Lane LOS	A	-	-	B B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3 0	0	-	-

Intersection						
Int Delay, s/veh	1.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	36	284	15	51	230
Future Vol, veh/h	4	36	284	15	51	230
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	5	5	4	4
Mvmt Flow	4	39	309	16	55	250

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	678	317	0	0	325
Stage 1	317	-	-	-	-
Stage 2	361	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.14
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.236
Pot Cap-1 Maneuver	421	728	-	-	1224
Stage 1	743	-	-	-	-
Stage 2	710	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	402	728	-	-	1224
Mov Cap-2 Maneuver	402	-	-	-	-
Stage 1	743	-	-	-	-
Stage 2	678	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v10.71		0	1.47
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	674	1224
HCM Lane V/C Ratio	-	-	0.065	0.045
HCM Control Delay (s/veh)	-	-	10.7	8.1
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.2	0.1

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	3	0	310	227	9
Future Vol, veh/h	5	3	0	310	227	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	5	5	4	4
Mvmt Flow	6	3	0	344	252	10

Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	602	257	262	0	-	0
Stage 1	257	-	-	-	-	-
Stage 2	344	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.15	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.245	-	-	-
Pot Cap-1 Maneuver	466	786	1285	-	-	-
Stage 1	790	-	-	-	-	-
Stage 2	722	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	466	786	1285	-	-	-
Mov Cap-2 Maneuver	466	-	-	-	-	-
Stage 1	790	-	-	-	-	-
Stage 2	722	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v11.65		0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1285	-	550	-	-
HCM Lane V/C Ratio	-	-	0.016	-	-
HCM Control Delay (s/veh)	0	-	11.7	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0	-	-

Intersection						
Int Delay, s/veh	0.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	13	297	1	17	213
Future Vol, veh/h	0	13	297	1	17	213
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	5	5	4	4
Mvmt Flow	0	14	316	1	18	227

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	579	316	0
Stage 1	316	-	-
Stage 2	263	-	-
Critical Hdwy	6.4	6.2	-
Critical Hdwy Stg 1	5.4	-	-
Critical Hdwy Stg 2	5.4	-	-
Follow-up Hdwy	3.5	3.3	-
Pot Cap-1 Maneuver	480	729	-
Stage 1	743	-	-
Stage 2	786	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	472	729	-
Mov Cap-2 Maneuver	472	-	-
Stage 1	743	-	-
Stage 2	773	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v10.04		0	0.59
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	729	133
HCM Lane V/C Ratio	-	-	0.019	0.015
HCM Control Delay (s/veh)	-	-	10	8
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.1	0

Intersection												
Int Delay, s/veh	1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	1	0	0	3	0	0	0	20	1	1	13	2
Future Vol, veh/h	1	0	0	3	0	0	0	20	1	1	13	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	64	64	64	64	64	64	64	64	64	64	64	64
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	6	6	6
Mvmt Flow	2	0	0	5	0	0	0	31	2	2	20	3
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	56	58	22	55	59	32	23	0	0	33	0	0
Stage 1	25	25	-	32	32	-	-	-	-	-	-	-
Stage 2	31	33	-	23	27	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.16	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.254	-	-
Pot Cap-1 Maneuver	946	837	1061	947	836	1048	1605	-	-	1554	-	-
Stage 1	998	878	-	989	872	-	-	-	-	-	-	-
Stage 2	990	872	-	1000	877	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	945	836	1061	946	835	1048	1605	-	-	1554	-	-
Mov Cap-2 Maneuver	945	836	-	946	835	-	-	-	-	-	-	-
Stage 1	997	877	-	989	872	-	-	-	-	-	-	-
Stage 2	990	872	-	999	876	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s/v	8.82		8.82			0			0.46			
HCM LOS	A		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1605	-	-	945	946	110	-	-				
HCM Lane V/C Ratio	-	-	-	0.002	0.005	0.001	-	-				
HCM Control Delay (s/veh)	0	-	-	8.8	8.8	7.3	0	-				
HCM Lane LOS	A	-	-	A	A	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-				

HCM 7th Signalized Intersection Summary

1: Robertson Blvd & 11th St

Chowchilla Residential Development Project

Ex Plus Project - AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	38	27	65	76	32	36	338	42	42	489	49
Future Volume (veh/h)	25	38	27	65	76	32	36	338	42	42	489	49
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1826	1826	1826	1870	1870	1870
Adj Flow Rate, veh/h	34	52	37	89	104	44	49	463	58	58	670	67
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
Percent Heavy Veh, %	2	2	2	2	2	2	5	5	5	2	2	2
Cap, veh/h	148	189	107	199	174	63	119	1240	553	137	1299	580
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.07	0.36	0.36	0.08	0.37	0.37
Sat Flow, veh/h	282	916	516	493	841	304	1739	3469	1547	1781	3554	1585
Grp Volume(v), veh/h	123	0	0	237	0	0	49	463	58	58	670	67
Grp Sat Flow(s),veh/h/ln	1714	0	0	1638	0	0	1739	1735	1547	1781	1777	1585
Q Serve(g_s), s	0.0	0.0	0.0	3.6	0.0	0.0	1.4	5.0	1.3	1.6	7.5	1.4
Cycle Q Clear(g_c), s	3.0	0.0	0.0	6.6	0.0	0.0	1.4	5.0	1.3	1.6	7.5	1.4
Prop In Lane	0.28		0.30	0.38		0.19	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	444	0	0	436	0	0	119	1240	553	137	1299	580
V/C Ratio(X)	0.28	0.00	0.00	0.54	0.00	0.00	0.41	0.37	0.10	0.42	0.52	0.12
Avail Cap(c_a), veh/h	735	0	0	726	0	0	512	2158	962	524	2210	986
HCM Platoon Ratio	1.00	1.00	1.00	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	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.2	0.0	0.0	18.6	0.0	0.0	22.7	12.1	10.9	22.4	12.6	10.7
Incr Delay (d2), s/veh	0.6	0.0	0.0	2.8	0.0	0.0	0.8	0.4	0.2	0.8	0.8	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	0.0	2.7	0.0	0.0	0.5	1.6	0.4	0.6	2.7	0.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	17.8	0.0	0.0	21.3	0.0	0.0	23.6	12.6	11.1	23.2	13.4	10.9
LnGrp LOS	B			C			C	B	B	C	B	B
Approach Vol, veh/h	123			237			570			795		
Approach Delay, s/veh	17.8			21.3			13.4			13.9		
Approach LOS	B			C			B			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.6	24.3		17.0	9.2	24.7		17.0				
Change Period (Y+Rc), s	5.7	6.1		6.5	5.7	6.1		6.5				
Max Green Setting (Gmax), s	15.0	31.7		20.0	15.0	31.7		20.0				
Max Q Clear Time (g_c+l1), s	3.6	7.0		5.0	3.4	9.5		8.6				
Green Ext Time (p_c), s	0.0	6.2		0.9	0.0	9.1		2.0				
Intersection Summary												
HCM 7th Control Delay, s/veh				15.0								
HCM 7th LOS				B								

HCM 7th Signalized Intersection Summary

2: Robertson Blvd & 15th St

Chowchilla Residential Development Project

Ex Plus Project - AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	76	51	65	69	95	81	25	298	27	44	365	51
Future Volume (veh/h)	76	51	65	69	95	81	25	298	27	44	365	51
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1870	1870	1870	1796	1796	1796	1870	1870	1870
Adj Flow Rate, veh/h	106	71	90	96	132	112	35	414	38	61	507	71
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Percent Heavy Veh, %	3	3	3	2	2	2	7	7	7	2	2	2
Cap, veh/h	322	205	260	390	258	219	92	865	79	143	939	131
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.05	0.27	0.27	0.08	0.30	0.30
Sat Flow, veh/h	1127	743	942	1225	935	793	1711	3162	289	1781	3132	437
Grp Volume(v), veh/h	106	0	161	96	0	244	35	223	229	61	287	291
Grp Sat Flow(s), veh/h/ln	1127	0	1686	1225	0	1728	1711	1706	1744	1781	1777	1792
Q Serve(g_s), s	4.4	0.0	3.8	3.4	0.0	5.9	1.0	5.4	5.5	1.6	6.7	6.8
Cycle Q Clear(g_c), s	10.3	0.0	3.8	7.2	0.0	5.9	1.0	5.4	5.5	1.6	6.7	6.8
Prop In Lane	1.00		0.56	1.00		0.46	1.00		0.17	1.00		0.24
Lane Grp Cap(c), veh/h	322	0	466	390	0	477	92	467	477	143	533	537
V/C Ratio(X)	0.33	0.00	0.35	0.25	0.00	0.51	0.38	0.48	0.48	0.43	0.54	0.54
Avail Cap(c_a), veh/h	464	0	678	544	0	695	516	1084	1108	537	1129	1139
HCM Platoon Ratio	1.00	1.00	1.00	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	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.5	0.0	14.4	17.3	0.0	15.2	22.7	15.1	15.1	21.8	14.5	14.6
Incr Delay (d2), s/veh	1.5	0.0	1.1	1.4	0.0	3.6	1.0	1.8	1.8	0.8	1.7	1.7
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	1.4	1.0	0.0	2.5	0.4	1.9	2.0	0.6	2.4	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	21.0	0.0	15.5	18.7	0.0	18.8	23.7	16.9	16.9	22.5	16.3	16.3
LnGrp LOS	C		B	B		B	C	B	B	C	B	B
Approach Vol, veh/h	267			340			487			639		
Approach Delay, s/veh	17.7			18.8			17.4			16.9		
Approach LOS	B			B			B			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	7.0	20.0		20.0	8.4	21.3		20.0				
Change Period (Y+Rc), s	5.7	6.4		6.3	5.7	6.4		6.3				
Max Green Setting (Gmax), s	15.0	31.6		20.0	15.0	31.6		20.0				
Max Q Clear Time (g_c+I), s	13.6	7.5		12.3	3.0	8.8		9.2				
Green Ext Time (p_c), s	0.0	5.1		1.5	0.0	6.2		3.0				

Intersection Summary

HCM 7th Control Delay, s/veh	17.5
HCM 7th LOS	B

HCM 7th TWSC
3: Robertson Blvd & Washington Rd

Chowchilla Residential Development Project
Ex Plus Project - AM Peak Hour

Intersection												
Int Delay, s/veh	6.6											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Vol, veh/h	124	0	44	0	0	0	19	377	0	0	339	95
Future Vol, veh/h	124	0	44	0	0	0	19	377	0	0	339	95
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	60	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	76	76	76	76	76	76	76	76	76	76	76	76
Heavy Vehicles, %	2	2	2	0	0	0	3	3	3	5	5	5
Mvmt Flow	163	0	58	0	0	0	25	496	0	0	446	125

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	807	1055	286	769	1117	248	571	0	0	496	0	0
Stage 1	509	509	-	546	546	-	-	-	-	-	-	-
Stage 2	298	546	-	223	571	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.5	6.5	6.9	4.16	-	-	4.2	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.5	4	3.3	2.23	-	-	2.25	-	-
Pot Cap-1 Maneuver	273	224	711	294	209	758	991	-	-	1043	-	-
Stage 1	515	537	-	495	521	-	-	-	-	-	-	-
Stage 2	686	516	-	765	508	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	266	219	711	263	204	758	991	-	-	1043	-	-
Mov Cap-2 Maneuver	266	219	-	263	204	-	-	-	-	-	-	-
Stage 1	515	537	-	482	508	-	-	-	-	-	-	-
Stage 2	669	503	-	703	508	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v38.46		0	0.42	0
HCM LOS	E	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	991	-	-	318	-	-	-
HCM Lane V/C Ratio	0.025	-	-	0.695	-	-	-
HCM Control Delay (s/veh)	8.7	-	-	38.5	0	0	-
HCM Lane LOS	A	-	-	E	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	4.9	-	0	-

Intersection												
Int Delay, s/veh	1.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	↕
Traffic Vol, veh/h	12	0	6	10	4	23	12	344	6	12	315	22
Future Vol, veh/h	12	0	6	10	4	23	12	344	6	12	315	22
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	130	-	-	385	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	77	77	77	77	77	77	77	77	77	77	77	77
Heavy Vehicles, %	0	0	0	0	0	0	3	3	3	5	5	5
Mvmt Flow	16	0	8	13	5	30	16	447	8	16	409	29

Major/Minor	Minor2		Minor1		Major1			Major2				
Conflicting Flow All	921	926	205	718	951	451	438	0	0	455	0	0
Stage 1	440	440	-	482	482	-	-	-	-	-	-	-
Stage 2	481	486	-	236	469	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.9	7.3	6.5	6.2	4.145	-	-	4.175	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2285	-	-	2.2475	-	-
Pot Cap-1 Maneuver	241	271	808	333	262	613	1114	-	-	1086	-	-
Stage 1	571	581	-	569	557	-	-	-	-	-	-	-
Stage 2	570	554	-	752	564	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	218	263	808	321	255	613	1114	-	-	1086	-	-
Mov Cap-2 Maneuver	218	263	-	321	255	-	-	-	-	-	-	-
Stage 1	563	572	-	561	549	-	-	-	-	-	-	-
Stage 2	530	547	-	734	556	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	18.59	14.22	0.27	0.29
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1114	-	-	288	438	1086	-	-
HCM Lane V/C Ratio	0.014	-	-	0.081	0.11	0.014	-	-
HCM Control Delay (s/veh)	8.3	-	-	18.6	14.2	8.4	-	-
HCM Lane LOS	A	-	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.4	0	-	-

Intersection

Int Delay, s/veh 2.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	↕
Traffic Vol, veh/h	56	0	27	2	0	1	10	305	0	1	303	28
Future Vol, veh/h	56	0	27	2	0	1	10	305	0	1	303	28
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	95	-	-	50	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	75	75	75	75	75	75	75	75	75
Heavy Vehicles, %	0	0	0	0	0	0	3	3	3	5	5	5
Mvmt Flow	75	0	36	3	0	1	13	407	0	1	404	37

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	840	840	202	638	877	407	441	0	0	407	0	0
Stage 1	407	407	-	433	433	-	-	-	-	-	-	-
Stage 2	433	433	-	205	444	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.9	7.3	6.5	6.2	4.145	-	-	4.175	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2285	-	-	2.2475	-	-
Pot Cap-1 Maneuver	274	304	811	379	289	649	1111	-	-	1132	-	-
Stage 1	598	601	-	605	585	-	-	-	-	-	-	-
Stage 2	605	585	-	784	579	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	270	300	811	357	285	649	1111	-	-	1132	-	-
Mov Cap-2 Maneuver	270	300	-	357	285	-	-	-	-	-	-	-
Stage 1	597	600	-	598	578	-	-	-	-	-	-	-
Stage 2	596	578	-	748	578	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	20.3	13.65	0.26	0.02
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1111	-	-	345	420	1132	-
HCM Lane V/C Ratio	0.012	-	-	0.321	0.01	0.001	-
HCM Control Delay (s/veh)	8.3	-	-	20.3	13.7	8.2	-
HCM Lane LOS	A	-	-	C	B	A	-
HCM 95th %tile Q(veh)	0	-	-	1.4	0	0	-

Intersection						
Int Delay, s/veh	2.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	17	78	240	7	46	259
Future Vol, veh/h	17	78	240	7	46	259
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	0	0	3	3	7	7
Mvmt Flow	20	91	279	8	53	301

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	691	283	0
Stage 1	283	-	-
Stage 2	408	-	-
Critical Hdwy	6.4	6.2	-
Critical Hdwy Stg 1	5.4	-	-
Critical Hdwy Stg 2	5.4	-	-
Follow-up Hdwy	3.5	3.3	-
Pot Cap-1 Maneuver	413	761	-
Stage 1	769	-	-
Stage 2	676	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	396	761	-
Mov Cap-2 Maneuver	396	-	-
Stage 1	769	-	-
Stage 2	647	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	11.63	0	1.21
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	653	1247
HCM Lane V/C Ratio	-	-	0.169	0.043
HCM Control Delay (s/veh)	-	-	11.6	8
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.6	0.1

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	10	2	2	250	261	7
Future Vol, veh/h	10	2	2	250	261	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	3	3	7	7
Mvmt Flow	12	2	2	294	307	8
Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	610	311	315	0	-	0
Stage 1	311	-	-	-	-	-
Stage 2	299	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.13	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.227	-	-	-
Pot Cap-1 Maneuver	461	734	1239	-	-	-
Stage 1	747	-	-	-	-	-
Stage 2	757	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	460	734	1239	-	-	-
Mov Cap-2 Maneuver	460	-	-	-	-	-
Stage 1	746	-	-	-	-	-
Stage 2	757	-	-	-	-	-
Approach	EB	NB		SB		
HCM Control Delay, s/v	12.56	0.06		0		
HCM LOS	B					
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR	
Capacity (veh/h)	14	-	490	-	-	
HCM Lane V/C Ratio	0.002	-	0.029	-	-	
HCM Control Delay (s/veh)	7.9	0	12.6	-	-	
HCM Lane LOS	A	A	B	-	-	
HCM 95th %tile Q(veh)	0	-	0.1	-	-	

Intersection						
Int Delay, s/veh	1.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	65	187	2	32	231
Future Vol, veh/h	8	65	187	2	32	231
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	0	3	3	7	7
Mvmt Flow	9	75	215	2	37	266
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	555	216	0	0	217	0
Stage 1	216	-	-	-	-	-
Stage 2	339	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.17	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.263	-
Pot Cap-1 Maneuver	496	829	-	-	1323	-
Stage 1	825	-	-	-	-	-
Stage 2	726	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	482	829	-	-	1323	-
Mov Cap-2 Maneuver	482	-	-	-	-	-
Stage 1	825	-	-	-	-	-
Stage 2	706	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s/v10.26		0		0.95		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	-	768	1323	-	
HCM Lane V/C Ratio	-	-	0.109	0.028	-	
HCM Control Delay (s/veh)	-	-	10.3	7.8	-	
HCM Lane LOS	-	-	B	A	-	
HCM 95th %tile Q(veh)	-	-	0.4	0.1	-	

Intersection												
Int Delay, s/veh	0.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	0	1	1	0	2	0	19	6	2	30	0
Future Vol, veh/h	1	0	1	1	0	2	0	19	6	2	30	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	68	68	68	68	68	68	68	68	68	68	68	68
Heavy Vehicles, %	0	0	0	0	0	0	17	17	17	4	4	4
Mvmt Flow	1	0	1	1	0	3	0	28	9	3	44	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	78	87	44	82	82	32	44	0	0	37	0	0
Stage 1	50	50	-	32	32	-	-	-	-	-	-	-
Stage 2	28	37	-	50	50	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.27	-	-	4.14	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.353	-	-	2.236	-	-
Pot Cap-1 Maneuver	916	807	1032	910	812	1047	1473	-	-	1561	-	-
Stage 1	968	857	-	989	872	-	-	-	-	-	-	-
Stage 2	994	868	-	968	857	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	912	806	1032	907	810	1047	1473	-	-	1561	-	-
Mov Cap-2 Maneuver	912	806	-	907	810	-	-	-	-	-	-	-
Stage 1	966	856	-	989	872	-	-	-	-	-	-	-
Stage 2	992	868	-	965	856	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s/v	8.73		8.63		0		0.46	
HCM LOS	A		A					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1473	-	-	968	996	113	-
HCM Lane V/C Ratio	-	-	-	0.003	0.004	0.002	-
HCM Control Delay (s/veh)	0	-	-	8.7	8.6	7.3	0
HCM Lane LOS	A	-	-	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-

Intersection						
Int Delay, s/veh	2.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	25	50	0	0	24
Future Vol, veh/h	8	25	50	0	0	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	0	0
Mvmt Flow	9	27	54	0	0	26
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	54	0	-	0	99	54
Stage 1	-	-	-	-	54	-
Stage 2	-	-	-	-	45	-
Critical Hdwy	4.12	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.218	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1551	-	-	-	905	1018
Stage 1	-	-	-	-	973	-
Stage 2	-	-	-	-	983	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1551	-	-	-	900	1018
Mov Cap-2 Maneuver	-	-	-	-	900	-
Stage 1	-	-	-	-	968	-
Stage 2	-	-	-	-	983	-
Approach	EB	WB		SB		
HCM Control Delay, s/v	1.78	0		8.63		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	436	-	-	-	-	1018
HCM Lane V/C Ratio	0.006	-	-	-	-	0.026
HCM Control Delay (s/veh)	7.3	0	-	-	-	8.6
HCM Lane LOS	A	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-	0.1

Intersection						
Int Delay, s/veh	3.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	7	18	29	2	6	21
Future Vol, veh/h	7	18	29	2	6	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	0	0
Mvmt Flow	8	20	32	2	7	23
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	34	0	-	0	67	33
Stage 1	-	-	-	-	33	-
Stage 2	-	-	-	-	35	-
Critical Hdwy	4.12	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.218	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1578	-	-	-	943	1047
Stage 1	-	-	-	-	995	-
Stage 2	-	-	-	-	993	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1578	-	-	-	938	1047
Mov Cap-2 Maneuver	-	-	-	-	938	-
Stage 1	-	-	-	-	990	-
Stage 2	-	-	-	-	993	-
Approach	EB	WB		SB		
HCM Control Delay, s/v	2.04	0		8.63		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	504	-	-	-	1021	
HCM Lane V/C Ratio	0.005	-	-	-	0.029	
HCM Control Delay (s/veh)	7.3	0	-	-	8.6	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0.1	

HCM 7th Signalized Intersection Summary

Chowchilla Residential Development Project

1: Robertson Blvd & 11th St

Ex Plus Project - PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	15	17	30	14	20	14	434	30	17	443	21
Future Volume (veh/h)	29	15	17	30	14	20	14	434	30	17	443	21
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1841	1841	1841	1885	1885	1885
Adj Flow Rate, veh/h	30	16	18	31	15	21	15	452	31	18	461	22
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	4	4	4	1	1	1
Cap, veh/h	220	109	73	219	101	81	47	1112	496	57	1156	516
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.03	0.32	0.32	0.03	0.32	0.32
Sat Flow, veh/h	494	684	461	489	631	511	1753	3497	1560	1795	3582	1598
Grp Volume(v), veh/h	64	0	0	67	0	0	15	452	31	18	461	22
Grp Sat Flow(s),veh/h/ln	1638	0	0	1632	0	0	1753	1749	1560	1795	1791	1598
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.3	3.8	0.5	0.4	3.7	0.4
Cycle Q Clear(g_c), s	1.1	0.0	0.0	1.2	0.0	0.0	0.3	3.8	0.5	0.4	3.7	0.4
Prop In Lane	0.47		0.28	0.46		0.31	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	403	0	0	401	0	0	47	1112	496	57	1156	516
V/C Ratio(X)	0.16	0.00	0.00	0.17	0.00	0.00	0.32	0.41	0.06	0.31	0.40	0.04
Avail Cap(c_a), veh/h	990	0	0	987	0	0	705	2974	1326	722	3045	1358
HCM Platoon Ratio	1.00	1.00	1.00	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	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.7	0.0	0.0	13.7	0.0	0.0	17.8	10.0	8.8	17.6	9.8	8.7
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.5	0.0	0.0	1.4	0.6	0.1	1.1	0.5	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	0.5	0.0	0.0	0.1	1.1	0.1	0.1	1.2	0.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	14.0	0.0	0.0	14.2	0.0	0.0	19.2	10.5	9.0	18.8	10.3	8.7
LnGrp LOS	B			B			B	B	A	B	B	A
Approach Vol, veh/h	64			67			498			501		
Approach Delay, s/veh	14.0			14.2			10.7			10.6		
Approach LOS	B			B			B			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	6.9	18.0		12.4	6.7	18.1		12.4				
Change Period (Y+Rc), s	5.7	6.1		6.5	5.7	6.1		6.5				
Max Green Setting (Gmax), s	15.0	31.7		20.0	15.0	31.7		20.0				
Max Q Clear Time (g_c+I1), s	2.4	5.8		3.1	2.3	5.7		3.2				
Green Ext Time (p_c), s	0.0	5.9		0.4	0.0	6.3		0.5				
Intersection Summary												
HCM 7th Control Delay, s/veh	11.0											
HCM 7th LOS	B											

HCM 7th Signalized Intersection Summary

2: Robertson Blvd & 15th St

Chowchilla Residential Development Project

Ex Plus Project - PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	73	45	51	27	36	73	52	364	44	52	396	44
Future Volume (veh/h)	73	45	51	27	36	73	52	364	44	52	396	44
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1885	1885	1885	1900	1900	1900	1856	1856	1856	1885	1885	1885
Adj Flow Rate, veh/h	78	48	55	29	39	78	56	391	47	56	426	47
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	0	0	0	3	3	3	1	1	1
Cap, veh/h	343	153	175	358	108	216	142	890	106	144	914	100
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.08	0.28	0.28	0.08	0.28	0.28
Sat Flow, veh/h	1285	801	918	1312	565	1131	1767	3171	379	1795	3255	357
Grp Volume(v), veh/h	78	0	103	29	0	117	56	216	222	56	233	240
Grp Sat Flow(s), veh/h/ln	1285	0	1720	1312	0	1696	1767	1763	1787	1795	1791	1821
Q Serve(g_s), s	2.3	0.0	2.1	0.8	0.0	2.5	1.2	4.1	4.2	1.2	4.4	4.5
Cycle Q Clear(g_c), s	4.8	0.0	2.1	2.9	0.0	2.5	1.2	4.1	4.2	1.2	4.4	4.5
Prop In Lane	1.00		0.53	1.00		0.67	1.00		0.21	1.00		0.20
Lane Grp Cap(c), veh/h	343	0	328	358	0	324	142	495	502	144	503	511
V/C Ratio(X)	0.23	0.00	0.31	0.08	0.00	0.36	0.39	0.44	0.44	0.39	0.46	0.47
Avail Cap(c_a), veh/h	724	0	837	746	0	826	645	1356	1375	656	1378	1401
HCM Platoon Ratio	1.00	1.00	1.00	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	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.5	0.0	14.3	15.6	0.0	14.4	17.9	12.1	12.1	17.9	12.2	12.2
Incr Delay (d2), s/veh	0.8	0.0	1.3	0.4	0.0	2.9	0.7	1.4	1.4	0.6	1.4	1.4
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.8	0.2	0.0	1.1	0.4	1.4	1.4	0.4	1.5	1.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	17.3	0.0	15.6	16.0	0.0	17.4	18.6	13.5	13.6	18.6	13.6	13.6
LnGrp LOS	B		B	B		B	B	B	B	B	B	B
Approach Vol, veh/h	181			146			494			529		
Approach Delay, s/veh	16.4			17.1			14.1			14.1		
Approach LOS	B			B			B			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.0	17.9		14.1	9.0	17.9		14.1				
Change Period (Y+Rc), s	5.7	6.4		6.3	5.7	6.4		6.3				
Max Green Setting (Gmax), s	15.6	31.6		20.0	15.0	31.6		20.0				
Max Q Clear Time (g_c+I), s	13.2	6.2		6.8	3.2	6.5		4.9				
Green Ext Time (p_c), s	0.0	5.1		1.3	0.0	5.1		1.4				

Intersection Summary

HCM 7th Control Delay, s/veh	14.7
HCM 7th LOS	B

HCM 7th TWSC
3: Robertson Blvd & Washington Rd

Chowchilla Residential Development Project
Ex Plus Project - PM Peak Hour

Intersection												
Int Delay, s/veh	4.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Vol, veh/h	102	0	35	0	0	0	61	402	0	0	427	123
Future Vol, veh/h	102	0	35	0	0	0	61	402	0	0	427	123
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	60	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	1	1	1	0	0	0	1	1	1	2	2	2
Mvmt Flow	115	0	39	0	0	0	69	452	0	0	480	138

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	912	1138	309	829	1207	226	618	0	0	452	0	0
Stage 1	549	549	-	589	589	-	-	-	-	-	-	-
Stage 2	363	589	-	240	618	-	-	-	-	-	-	-
Critical Hdwy	7.52	6.52	6.92	7.5	6.5	6.9	4.12	-	-	4.14	-	-
Critical Hdwy Stg 1	6.52	5.52	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.52	5.52	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.51	4.01	3.31	3.5	4	3.3	2.21	-	-	2.22	-	-
Pot Cap-1 Maneuver	230	202	690	267	185	783	965	-	-	1105	-	-
Stage 1	490	517	-	467	499	-	-	-	-	-	-	-
Stage 2	631	496	-	748	484	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	214	187	690	233	172	783	965	-	-	1105	-	-
Mov Cap-2 Maneuver	214	187	-	233	172	-	-	-	-	-	-	-
Stage 1	490	517	-	433	463	-	-	-	-	-	-	-
Stage 2	586	461	-	705	484	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v37.14		0	1.19	0
HCM LOS	E	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	965	-	-	260	-	1105	-
HCM Lane V/C Ratio	0.071	-	-	0.592	-	-	-
HCM Control Delay (s/veh)	9	-	-	37.1	0	0	-
HCM Lane LOS	A	-	-	E	A	A	-
HCM 95th %tile Q(veh)	0.2	-	-	3.5	-	0	-

Intersection												
Int Delay, s/veh	1.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	↕
Traffic Vol, veh/h	22	3	15	2	9	22	17	373	10	28	320	29
Future Vol, veh/h	22	3	15	2	9	22	17	373	10	28	320	29
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	130	-	-	385	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	1	1	1	2	2	2
Mvmt Flow	24	3	16	2	10	24	18	405	11	30	348	32

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	856	862	174	684	888	411	379	0	0	416	0	0
Stage 1	409	409	-	448	448	-	-	-	-	-	-	-
Stage 2	447	453	-	236	440	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.9	7.3	6.5	6.2	4.115	-	-	4.13	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2095	-	-	2.219	-	-
Pot Cap-1 Maneuver	267	295	846	352	285	645	1184	-	-	1141	-	-
Stage 1	596	600	-	594	576	-	-	-	-	-	-	-
Stage 2	594	573	-	751	581	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	238	283	846	327	273	645	1184	-	-	1141	-	-
Mov Cap-2 Maneuver	238	283	-	327	273	-	-	-	-	-	-	-
Stage 1	580	584	-	585	567	-	-	-	-	-	-	-
Stage 2	554	564	-	713	565	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	17.51	13.67	0.34	0.61
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1184	-	-	331 451	1141	-	-
HCM Lane V/C Ratio	0.016	-	-	0.131 0.08	0.027	-	-
HCM Control Delay (s/veh)	8.1	-	-	17.5 13.7	8.2	-	-
HCM Lane LOS	A	-	-	C B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.4 0.3	0.1	-	-

Intersection												
Int Delay, s/veh	1.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	0	27	2	0	6	15	368	0	0	294	44
Future Vol, veh/h	25	0	27	2	0	6	15	368	0	0	294	44
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	95	-	-	50	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	5	5	5	2	2	2
Mvmt Flow	27	0	29	2	0	6	16	396	0	0	316	47
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	744	744	158	586	791	396	363	0	0	396	0	0
Stage 1	316	316	-	428	428	-	-	-	-	-	-	-
Stage 2	428	428	-	158	363	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.9	7.3	6.5	6.2	4.175	-	-	4.13	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2475	-	-	2.219	-	-
Pot Cap-1 Maneuver	320	345	866	411	324	658	1175	-	-	1161	-	-
Stage 1	675	658	-	609	588	-	-	-	-	-	-	-
Stage 2	609	588	-	834	628	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	312	340	866	392	320	658	1175	-	-	1161	-	-
Mov Cap-2 Maneuver	312	340	-	392	320	-	-	-	-	-	-	-
Stage 1	675	658	-	601	580	-	-	-	-	-	-	-
Stage 2	595	580	-	806	628	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s/v13.75			11.5		0.32		0					
HCM LOS	B		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1175	-	-	467	563	1161	-	-				
HCM Lane V/C Ratio	0.014	-	-	0.12	0.015	-	-	-				
HCM Control Delay (s/veh)	8.1	-	-	13.7	11.5	0	-	-				
HCM Lane LOS	A	-	-	B	B	A	-	-				
HCM 95th %tile Q(veh)	0	-	-	0.4	0	0	-	-				

Intersection						
Int Delay, s/veh	1.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	42	309	15	60	270
Future Vol, veh/h	4	42	309	15	60	270
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	5	5	4	4
Mvmt Flow	4	46	336	16	65	293

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	768	344	0	0	352
Stage 1	344	-	-	-	-
Stage 2	424	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.14
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.236
Pot Cap-1 Maneuver	373	703	-	-	1196
Stage 1	722	-	-	-	-
Stage 2	665	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	352	703	-	-	1196
Mov Cap-2 Maneuver	352	-	-	-	-
Stage 1	722	-	-	-	-
Stage 2	628	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	11.03	0	1.49
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	647	1196
HCM Lane V/C Ratio	-	-	0.077	0.055
HCM Control Delay (s/veh)	-	-	11	8.2
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.3	0.2

Intersection						
Int Delay, s/veh	0.2					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	5	3	0	335	267	9
Future Vol, veh/h	5	3	0	335	267	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	5	5	4	4
Mvmt Flow	6	3	0	372	297	10

Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	674	302	307	0	-	0
Stage 1	302	-	-	-	-	-
Stage 2	372	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.15	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.245	-	-	-
Pot Cap-1 Maneuver	423	743	1237	-	-	-
Stage 1	755	-	-	-	-	-
Stage 2	701	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	423	743	1237	-	-	-
Mov Cap-2 Maneuver	423	-	-	-	-	-
Stage 1	755	-	-	-	-	-
Stage 2	701	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v12.26		0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1237	-	505	-	-
HCM Lane V/C Ratio	-	-	0.018	-	-
HCM Control Delay (s/veh)	0	-	12.3	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection						
Int Delay, s/veh	1.5					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	38	297	7	57	213
Future Vol, veh/h	4	38	297	7	57	213
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	5	5	4	4
Mvmt Flow	4	40	316	7	61	227
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	668	320	0	0	323	0
Stage 1	320	-	-	-	-	-
Stage 2	348	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.14	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.236	-
Pot Cap-1 Maneuver	427	726	-	-	1225	-
Stage 1	741	-	-	-	-	-
Stage 2	719	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	406	726	-	-	1225	-
Mov Cap-2 Maneuver	406	-	-	-	-	-
Stage 1	741	-	-	-	-	-
Stage 2	684	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s/v10.71		0		1.71		
HCM LOS	B					
Minor Lane/Major Mvmt		NBT	NBRWBLn1	SBL	SBT	
Capacity (veh/h)		-	-	675	1225	-
HCM Lane V/C Ratio		-	-	0.066	0.049	-
HCM Control Delay (s/veh)		-	-	10.7	8.1	-
HCM Lane LOS		-	-	B	A	-
HCM 95th %tile Q(veh)		-	-	0.2	0.2	-

Intersection												
Int Delay, s/veh	0.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	0	0	3	0	0	0	26	1	1	17	2
Future Vol, veh/h	1	0	0	3	0	0	0	26	1	1	17	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	64	64	64	64	64	64	64	64	64	64	64	64
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	6	6	6
Mvmt Flow	2	0	0	5	0	0	0	41	2	2	27	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	72	73	28	71	74	41	30	0	0	42	0	0
Stage 1	31	31	-	41	41	-	-	-	-	-	-	-
Stage 2	41	42	-	30	33	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.16	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.254	-	-
Pot Cap-1 Maneuver	924	821	1053	925	820	1035	1596	-	-	1541	-	-
Stage 1	990	873	-	978	864	-	-	-	-	-	-	-
Stage 2	979	864	-	992	872	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	923	820	1053	924	819	1035	1596	-	-	1541	-	-
Mov Cap-2 Maneuver	923	820	-	924	819	-	-	-	-	-	-	-
Stage 1	989	872	-	978	864	-	-	-	-	-	-	-
Stage 2	979	864	-	991	871	-	-	-	-	-	-	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	8.91			8.91			0			0.37		
HCM LOS	A			A								

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1596	-	-	923 924	88	-	-
HCM Lane V/C Ratio	-	-	-	0.002 0.005	0.001	-	-
HCM Control Delay (s/veh)	0	-	-	8.9 8.9	7.3	0	-
HCM Lane LOS	A	-	-	A A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0 0	0	-	-

Intersection						
Int Delay, s/veh	2.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	25	40	27	0	0	16
Future Vol, veh/h	25	40	27	0	0	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	0	0
Mvmt Flow	27	43	29	0	0	17
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	29	0	-	0	127	29
Stage 1	-	-	-	-	29	-
Stage 2	-	-	-	-	98	-
Critical Hdwy	4.12	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.218	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1584	-	-	-	872	1051
Stage 1	-	-	-	-	998	-
Stage 2	-	-	-	-	931	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1584	-	-	-	857	1051
Mov Cap-2 Maneuver	-	-	-	-	857	-
Stage 1	-	-	-	-	981	-
Stage 2	-	-	-	-	931	-
Approach	EB	WB		SB		
HCM Control Delay, s/v	2.81	0		8.48		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	692	-	-	-	1051	
HCM Lane V/C Ratio	0.017	-	-	-	0.017	
HCM Control Delay (s/veh)	7.3	0	-	-	8.5	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1	

Intersection						
Int Delay, s/veh	4.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	22	18	13	6	4	14
Future Vol, veh/h	22	18	13	6	4	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	0	0
Mvmt Flow	24	20	14	7	4	15
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	21	0	-	0	85	17
Stage 1	-	-	-	-	17	-
Stage 2	-	-	-	-	67	-
Critical Hdwy	4.12	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.218	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1595	-	-	-	922	1067
Stage 1	-	-	-	-	1011	-
Stage 2	-	-	-	-	960	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1595	-	-	-	908	1067
Mov Cap-2 Maneuver	-	-	-	-	908	-
Stage 1	-	-	-	-	995	-
Stage 2	-	-	-	-	960	-
Approach	EB	WB		SB		
HCM Control Delay, s/v	4.01	0		8.57		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	990	-	-	-	1027	
HCM Lane V/C Ratio	0.015	-	-	-	0.019	
HCM Control Delay (s/veh)	7.3	0	-	-	8.6	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0.1	

HCM 7th Signalized Intersection Summary

1: Robertson Blvd & 11th St

Chowchilla Residential Development Project

EPAP NP - AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	38	28	65	76	43	40	443	43	67	633	74
Future Volume (veh/h)	36	38	28	65	76	43	40	443	43	67	633	74
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1826	1826	1826	1870	1870	1870
Adj Flow Rate, veh/h	49	52	38	89	104	59	55	607	59	92	867	101
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
Percent Heavy Veh, %	2	2	2	2	2	2	5	5	5	2	2	2
Cap, veh/h	169	166	94	181	163	80	123	1340	598	166	1452	648
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.07	0.39	0.39	0.09	0.41	0.41
Sat Flow, veh/h	412	804	458	472	789	386	1739	3469	1547	1781	3554	1585
Grp Volume(v), veh/h	139	0	0	252	0	0	55	607	59	92	867	101
Grp Sat Flow(s),veh/h/ln	1674	0	0	1647	0	0	1739	1735	1547	1781	1777	1585
Q Serve(g_s), s	0.0	0.0	0.0	4.2	0.0	0.0	1.8	7.6	1.4	2.9	11.1	2.3
Cycle Q Clear(g_c), s	3.9	0.0	0.0	8.1	0.0	0.0	1.8	7.6	1.4	2.9	11.1	2.3
Prop In Lane	0.35		0.27	0.35		0.23	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	429	0	0	423	0	0	123	1340	598	166	1452	648
V/C Ratio(X)	0.32	0.00	0.00	0.60	0.00	0.00	0.45	0.45	0.10	0.55	0.60	0.16
Avail Cap(c_a), veh/h	637	0	0	638	0	0	448	1889	842	459	1935	863
HCM Platoon Ratio	1.00	1.00	1.00	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	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.9	0.0	0.0	21.4	0.0	0.0	26.0	13.3	11.4	25.2	13.5	10.9
Incr Delay (d2), s/veh	0.8	0.0	0.0	3.5	0.0	0.0	0.9	0.6	0.2	1.1	0.9	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	0.0	3.4	0.0	0.0	0.7	2.5	0.4	1.2	4.0	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	20.7	0.0	0.0	24.9	0.0	0.0	26.9	13.9	11.6	26.3	14.4	11.1
LnGrp LOS	C			C			C	B	B	C	B	B
Approach Vol, veh/h	139			252			721			1060		
Approach Delay, s/veh	20.7			24.9			14.7			15.1		
Approach LOS	C			C			B			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.1	28.6		18.5	9.8	29.9		18.5				
Change Period (Y+Rc), s	5.7	6.1		6.5	5.7	6.1		6.5				
Max Green Setting (Gmax), s	15.0	31.7		20.0	15.0	31.7		20.0				
Max Q Clear Time (g_c+I1), s	4.9	9.6		5.9	3.8	13.1		10.1				
Green Ext Time (p_c), s	0.1	7.8		1.0	0.0	10.7		1.9				
Intersection Summary												
HCM 7th Control Delay, s/veh				16.5								
HCM 7th LOS				B								

HCM 7th Signalized Intersection Summary

2: Robertson Blvd & 15th St

Chowchilla Residential Development Project
EPAP NP - AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	81	51	66	70	95	86	29	397	31	56	484	63
Future Volume (veh/h)	81	51	66	70	95	86	29	397	31	56	484	63
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1870	1870	1870	1796	1796	1796	1870	1870	1870
Adj Flow Rate, veh/h	112	71	92	97	132	119	40	551	43	78	672	88
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Percent Heavy Veh, %	3	3	3	2	2	2	7	7	7	2	2	2
Cap, veh/h	294	201	260	365	248	224	98	1019	79	155	1097	143
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.06	0.32	0.32	0.09	0.35	0.35
Sat Flow, veh/h	1120	734	951	1223	906	817	1711	3208	250	1781	3160	413
Grp Volume(v), veh/h	112	0	163	97	0	251	40	293	301	78	378	382
Grp Sat Flow(s),veh/h/ln	1120	0	1684	1223	0	1723	1711	1706	1751	1781	1777	1796
Q Serve(g_s), s	5.4	0.0	4.5	4.0	0.0	7.1	1.3	8.1	8.1	2.4	10.1	10.1
Cycle Q Clear(g_c), s	12.5	0.0	4.5	8.4	0.0	7.1	1.3	8.1	8.1	2.4	10.1	10.1
Prop In Lane	1.00		0.56	1.00		0.47	1.00		0.14	1.00		0.23
Lane Grp Cap(c), veh/h	294	0	461	365	0	471	98	542	556	155	617	623
V/C Ratio(X)	0.38	0.00	0.35	0.27	0.00	0.53	0.41	0.54	0.54	0.50	0.61	0.61
Avail Cap(c_a), veh/h	379	0	589	458	0	603	449	943	968	467	982	992
HCM Platoon Ratio	1.00	1.00	1.00	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	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.0	0.0	16.7	20.1	0.0	17.7	26.0	16.1	16.1	24.9	15.5	15.5
Incr Delay (d2), s/veh	2.0	0.0	1.1	1.7	0.0	4.0	1.0	2.0	1.9	0.9	2.0	2.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	1.7	1.2	0.0	3.1	0.5	3.0	3.0	1.0	3.7	3.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	25.0	0.0	17.8	21.7	0.0	21.6	27.0	18.0	18.0	25.9	17.5	17.5
LnGrp LOS	C		B	C		C	C	B	B	C	B	B
Approach Vol, veh/h	275			348			634			838		
Approach Delay, s/veh	20.8			21.7			18.6			18.3		
Approach LOS	C			C			B			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.7	24.6		21.9	9.0	26.3		21.9				
Change Period (Y+Rc), s	5.7	6.4		6.3	5.7	6.4		6.3				
Max Green Setting (Gmax), s	15.0	31.6		20.0	15.0	31.6		20.0				
Max Q Clear Time (g_c+I), s	14.4	10.1		14.5	3.3	12.1		10.4				
Green Ext Time (p_c), s	0.1	6.6		1.2	0.0	7.8		2.9				
Intersection Summary												
HCM 7th Control Delay, s/veh	19.3											
HCM 7th LOS	B											

HCM 7th TWSC
3: Robertson Blvd & Washington Rd

Chowchilla Residential Development Project
EPAP NP - AM Peak Hour

Intersection												
Int Delay, s/veh	63.7											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	236	0	43	0	0	0	16	374	0	0	401	154
Future Vol, veh/h	236	0	43	0	0	0	16	374	0	0	401	154
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	60	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	76	76	76	76	76	76	76	76	76	76	76	76
Heavy Vehicles, %	2	2	2	0	0	0	3	3	3	5	5	5
Mvmt Flow	311	0	57	0	0	0	21	492	0	0	528	203
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	917	1163	365	798	1264	246	730	0	0	492	0	0
Stage 1	629	629	-	534	534	-	-	-	-	-	-	-
Stage 2	288	534	-	264	730	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.5	6.5	6.9	4.16	-	-	4.2	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.5	4	3.3	2.23	-	-	2.25	-	-
Pot Cap-1 Maneuver	~ 227	193	632	280	171	760	863	-	-	1047	-	-
Stage 1	437	474	-	503	528	-	-	-	-	-	-	-
Stage 2	695	523	-	724	431	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	~ 221	189	632	249	167	760	863	-	-	1047	-	-
Mov Cap-2 Maneuver	~ 221	189	-	249	167	-	-	-	-	-	-	-
Stage 1	437	474	-	490	515	-	-	-	-	-	-	-
Stage 2	678	510	-	659	431	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s/veh	279.09		0		0.38		0					
HCM LOS	F		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	863	-	-	246	-	1047	-	-				
HCM Lane V/C Ratio	0.024	-	-	1.492	-	-	-	-				
HCM Control Delay (s/veh)	9.3	-	-	279.1	0	0	-	-				
HCM Lane LOS	A	-	-	F	A	A	-	-				
HCM 95th %tile Q(veh)	0.1	-	-	21.5	-	0	-	-				
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

Intersection												
Int Delay, s/veh	1.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	↕
Traffic Vol, veh/h	17	0	5	10	4	23	9	324	6	12	351	34
Future Vol, veh/h	17	0	5	10	4	23	9	324	6	12	351	34
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	130	-	-	385	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	77	77	77	77	77	77	77	77	77	77	77	77
Heavy Vehicles, %	0	0	0	0	0	0	3	3	3	5	5	5
Mvmt Flow	22	0	6	13	5	30	12	421	8	16	456	44

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	934	939	228	707	979	425	500	0	0	429	0	0
Stage 1	487	487	-	448	448	-	-	-	-	-	-	-
Stage 2	447	452	-	259	531	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.9	7.3	6.5	6.2	4.145	-	-	4.175	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2285	-	-	2.2475	-	-
Pot Cap-1 Maneuver	236	266	781	339	252	634	1056	-	-	1111	-	-
Stage 1	536	554	-	594	576	-	-	-	-	-	-	-
Stage 2	595	574	-	729	529	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	214	259	781	328	246	634	1056	-	-	1111	-	-
Mov Cap-2 Maneuver	214	259	-	328	246	-	-	-	-	-	-	-
Stage 1	528	546	-	587	570	-	-	-	-	-	-	-
Stage 2	555	568	-	713	522	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v20.77		14.06	0.22	0.25
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1056	-	-	257 445	1111	-	-
HCM Lane V/C Ratio	0.011	-	-	0.111 0.108	0.014	-	-
HCM Control Delay (s/veh)	8.4	-	-	20.8 14.1	8.3	-	-
HCM Lane LOS	A	-	-	C B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.4 0.4	0	-	-

Intersection

Int Delay, s/veh 2.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	↕
Traffic Vol, veh/h	56	0	37	2	0	1	11	282	0	1	337	28
Future Vol, veh/h	56	0	37	2	0	1	11	282	0	1	337	28
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	95	-	-	50	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	75	75	75	75	75	75	75	75	75
Heavy Vehicles, %	0	0	0	0	0	0	3	3	3	5	5	5
Mvmt Flow	75	0	49	3	0	1	15	376	0	1	449	37

Major/Minor	Minor2		Minor1		Major1		Major2		Major2		Major2	
Conflicting Flow All	857	857	225	633	895	376	487	0	0	376	0	0
Stage 1	452	452	-	405	405	-	-	-	-	-	-	-
Stage 2	405	405	-	227	489	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.9	7.3	6.5	6.2	4.145	-	-	4.175	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2285	-	-	2.2475	-	-
Pot Cap-1 Maneuver	267	297	785	382	282	675	1068	-	-	1162	-	-
Stage 1	562	574	-	626	602	-	-	-	-	-	-	-
Stage 2	626	602	-	760	552	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	262	292	785	352	278	675	1068	-	-	1162	-	-
Mov Cap-2 Maneuver	262	292	-	352	278	-	-	-	-	-	-	-
Stage 1	561	573	-	618	594	-	-	-	-	-	-	-
Stage 2	616	594	-	712	552	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v20.39		13.67	0.32	0.02
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1068	-	-	357	419	1162	-
HCM Lane V/C Ratio	0.014	-	-	0.348	0.01	0.001	-
HCM Control Delay (s/veh)	8.4	-	-	20.4	13.7	8.1	-
HCM Lane LOS	A	-	-	C	B	A	-
HCM 95th %tile Q(veh)	0	-	-	1.5	0	0	-

Intersection						
Int Delay, s/veh	2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	17	69	227	7	43	306
Future Vol, veh/h	17	69	227	7	43	306
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	0	0	3	3	7	7
Mvmt Flow	20	80	264	8	50	356

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	724	268	0	0	272
Stage 1	268	-	-	-	-
Stage 2	456	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.17
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.263
Pot Cap-1 Maneuver	396	775	-	-	1263
Stage 1	782	-	-	-	-
Stage 2	643	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	380	775	-	-	1263
Mov Cap-2 Maneuver	380	-	-	-	-
Stage 1	782	-	-	-	-
Stage 2	617	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	11.63	0	0.98
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	643	1263
HCM Lane V/C Ratio	-	-	0.155	0.04
HCM Control Delay (s/veh)	-	-	11.6	8
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.5	0.1

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	17	2	2	230	290	24
Future Vol, veh/h	17	2	2	230	290	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	3	3	7	7
Mvmt Flow	20	2	2	271	341	28

Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	631	355	369	0	-	0
Stage 1	355	-	-	-	-	-
Stage 2	275	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.13	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.227	-	-	-
Pot Cap-1 Maneuver	448	693	1184	-	-	-
Stage 1	714	-	-	-	-	-
Stage 2	776	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	447	693	1184	-	-	-
Mov Cap-2 Maneuver	447	-	-	-	-	-
Stage 1	712	-	-	-	-	-
Stage 2	776	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v13.14		0.07	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	16	-	465	-	-
HCM Lane V/C Ratio	0.002	-	0.048	-	-
HCM Control Delay (s/veh)	8	0	13.1	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection						
Int Delay, s/veh	0.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	27	205	0	18	274
Future Vol, veh/h	2	27	205	0	18	274
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	0	3	3	7	7
Mvmt Flow	2	31	236	0	21	315

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	592	236	0	0	236
Stage 1	236	-	-	-	-
Stage 2	356	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.17
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.263
Pot Cap-1 Maneuver	472	808	-	-	1303
Stage 1	808	-	-	-	-
Stage 2	713	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	463	808	-	-	1303
Mov Cap-2 Maneuver	463	-	-	-	-
Stage 1	808	-	-	-	-
Stage 2	699	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	9.89	0	0.48
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	769	111
HCM Lane V/C Ratio	-	-	0.043	0.016
HCM Control Delay (s/veh)	-	-	9.9	7.8
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0

Intersection												
Int Delay, s/veh	1.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	0	1	1	0	2	0	17	6	2	24	0
Future Vol, veh/h	1	0	1	1	0	2	0	17	6	2	24	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	68	68	68	68	68	68	68	68	68	68	68	68
Heavy Vehicles, %	0	0	0	0	0	0	17	17	17	4	4	4
Mvmt Flow	1	0	1	1	0	3	0	25	9	3	35	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	66	75	35	71	71	29	35	0	0	34	0	0
Stage 1	41	41	-	29	29	-	-	-	-	-	-	-
Stage 2	25	34	-	41	41	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.27	-	-	4.14	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.353	-	-	2.236	-	-
Pot Cap-1 Maneuver	932	819	1043	926	824	1051	1484	-	-	1565	-	-
Stage 1	979	865	-	993	875	-	-	-	-	-	-	-
Stage 2	998	871	-	979	865	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	928	818	1043	923	822	1051	1484	-	-	1565	-	-
Mov Cap-2 Maneuver	928	818	-	923	822	-	-	-	-	-	-	-
Stage 1	977	863	-	993	875	-	-	-	-	-	-	-
Stage 2	995	871	-	975	863	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s/v	8.68		8.6		0		0.56	
HCM LOS	A		A					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1484	-	-	982	1005	138	-	-
HCM Lane V/C Ratio	-	-	-	0.003	0.004	0.002	-	-
HCM Control Delay (s/veh)	0	-	-	8.7	8.6	7.3	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

HCM 7th Signalized Intersection Summary

1: Robertson Blvd & 11th St

Chowchilla Residential Development Project

EPAP NP - PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	58	15	24	34	14	49	15	616	29	37	595	41
Future Volume (veh/h)	58	15	24	34	14	49	15	616	29	37	595	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1841	1841	1841	1885	1885	1885
Adj Flow Rate, veh/h	60	16	25	35	15	51	16	642	30	39	620	43
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	4	4	4	1	1	1
Cap, veh/h	251	73	64	167	72	134	49	1293	577	108	1438	641
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.03	0.37	0.37	0.06	0.40	0.40
Sat Flow, veh/h	752	445	394	363	438	817	1753	3497	1560	1795	3582	1598
Grp Volume(v), veh/h	101	0	0	101	0	0	16	642	30	39	620	43
Grp Sat Flow(s),veh/h/ln	1591	0	0	1619	0	0	1753	1749	1560	1795	1791	1598
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.4	6.4	0.6	0.9	5.6	0.7
Cycle Q Clear(g_c), s	2.2	0.0	0.0	2.3	0.0	0.0	0.4	6.4	0.6	0.9	5.6	0.7
Prop In Lane	0.59		0.25	0.35		0.50	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	388	0	0	373	0	0	49	1293	577	108	1438	641
V/C Ratio(X)	0.26	0.00	0.00	0.27	0.00	0.00	0.32	0.50	0.05	0.36	0.43	0.07
Avail Cap(c_a), veh/h	804	0	0	811	0	0	585	2465	1099	599	2524	1126
HCM Platoon Ratio	1.00	1.00	1.00	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	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.7	0.0	0.0	16.7	0.0	0.0	21.4	10.9	9.1	20.3	9.7	8.3
Incr Delay (d2), s/veh	0.6	0.0	0.0	1.0	0.0	0.0	1.4	0.7	0.1	0.8	0.5	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.0	0.9	0.0	0.0	0.2	1.9	0.2	0.4	1.8	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	17.3	0.0	0.0	17.7	0.0	0.0	22.8	11.6	9.2	21.1	10.2	8.4
LnGrp LOS	B			B			C	B	A	C	B	A
Approach Vol, veh/h	101			101			688			702		
Approach Delay, s/veh	17.3			17.7			11.8			10.7		
Approach LOS	B			B			B			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.4	22.7		13.9	7.0	24.2		13.9				
Change Period (Y+Rc), s	5.7	6.1		6.5	5.7	6.1		6.5				
Max Green Setting (Gmax), s	15.0	31.7		20.0	15.0	31.7		20.0				
Max Q Clear Time (g_c+l1), s	2.9	8.4		4.2	2.4	7.6		4.3				
Green Ext Time (p_c), s	0.0	8.2		0.7	0.0	8.6		0.8				
Intersection Summary												
HCM 7th Control Delay, s/veh				12.0								
HCM 7th LOS				B								

HCM 7th Signalized Intersection Summary

2: Robertson Blvd & 15th St

Chowchilla Residential Development Project
EPAP NP - PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	87	45	58	34	36	87	53	517	45	62	539	54
Future Volume (veh/h)	87	45	58	34	36	87	53	517	45	62	539	54
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1885	1885	1885	1900	1900	1900	1856	1856	1856	1885	1885	1885
Adj Flow Rate, veh/h	94	48	62	37	39	94	57	556	48	67	580	58
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	0	0	0	3	3	3	1	1	1
Cap, veh/h	324	153	198	346	101	244	137	1067	92	155	1097	109
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.08	0.32	0.32	0.09	0.33	0.33
Sat Flow, veh/h	1267	747	965	1304	494	1191	1767	3284	283	1795	3289	328
Grp Volume(v), veh/h	94	0	110	37	0	133	57	298	306	67	315	323
Grp Sat Flow(s),veh/h/ln	1267	0	1712	1304	0	1686	1767	1763	1805	1795	1791	1826
Q Serve(g_s), s	3.3	0.0	2.6	1.2	0.0	3.3	1.5	6.6	6.6	1.7	6.8	6.9
Cycle Q Clear(g_c), s	6.6	0.0	2.6	3.8	0.0	3.3	1.5	6.6	6.6	1.7	6.8	6.9
Prop In Lane	1.00		0.56	1.00		0.71	1.00		0.16	1.00		0.18
Lane Grp Cap(c), veh/h	324	0	351	346	0	346	137	573	586	155	597	609
V/C Ratio(X)	0.29	0.00	0.31	0.11	0.00	0.38	0.42	0.52	0.52	0.43	0.53	0.53
Avail Cap(c_a), veh/h	592	0	714	623	0	703	553	1162	1189	562	1180	1203
HCM Platoon Ratio	1.00	1.00	1.00	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	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.3	0.0	16.2	17.8	0.0	16.4	21.1	13.1	13.2	20.8	12.9	12.9
Incr Delay (d2), s/veh	1.2	0.0	1.3	0.6	0.0	3.0	0.7	1.7	1.7	0.7	1.5	1.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	1.0	0.4	0.0	1.4	0.6	2.3	2.4	0.6	2.4	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	20.5	0.0	17.4	18.4	0.0	19.4	21.8	14.9	14.9	21.5	14.4	14.4
LnGrp LOS	C		B	B		B	C	B	B	C	B	B
Approach Vol, veh/h	204			170			661			705		
Approach Delay, s/veh	18.9			19.2			15.5			15.1		
Approach LOS	B			B			B			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.8	22.0		16.1	9.4	22.4		16.1				
Change Period (Y+Rc), s	5.7	6.4		6.3	5.7	6.4		6.3				
Max Green Setting (Gmax), s	15.0	31.6		20.0	15.0	31.6		20.0				
Max Q Clear Time (g_c+I1), s	13.7	8.6		8.6	3.5	8.9		5.8				
Green Ext Time (p_c), s	0.0	7.0		1.3	0.0	6.8		1.6				

Intersection Summary

HCM 7th Control Delay, s/veh	16.1
HCM 7th LOS	B

HCM 7th TWSC
3: Robertson Blvd & Washington Rd

Chowchilla Residential Development Project
EPAP NP - PM Peak Hour

Intersection												
Int Delay, s/veh	37.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	196	0	32	0	0	0	59	465	0	0	449	258
Future Vol, veh/h	196	0	32	0	0	0	59	465	0	0	449	258
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	60	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	1	1	1	0	0	0	1	1	1	2	2	2
Mvmt Flow	220	0	36	0	0	0	66	522	0	0	504	290
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1043	1304	397	907	1449	261	794	0	0	522	0	0
Stage 1	649	649	-	655	655	-	-	-	-	-	-	-
Stage 2	394	655	-	252	794	-	-	-	-	-	-	-
Critical Hdwy	7.52	6.52	6.92	7.5	6.5	6.9	4.12	-	-	4.14	-	-
Critical Hdwy Stg 1	6.52	5.52	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.52	5.52	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.51	4.01	3.31	3.5	4	3.3	2.21	-	-	2.22	-	-
Pot Cap-1 Maneuver	~ 185	160	605	234	132	744	829	-	-	1040	-	-
Stage 1	427	466	-	426	466	-	-	-	-	-	-	-
Stage 2	605	463	-	736	403	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 170	148	605	202	122	744	829	-	-	1040	-	-
Mov Cap-2 Maneuver	~ 170	148	-	202	122	-	-	-	-	-	-	-
Stage 1	427	466	-	392	428	-	-	-	-	-	-	-
Stage 2	557	426	-	692	403	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s/veh	237.68		0		1.09		0					
HCM LOS	F		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	829	-	-	189	-	1040	-	-				
HCM Lane V/C Ratio	0.08	-	-	1.354	-	-	-	-				
HCM Control Delay (s/veh)	9.7	-	-	237.7	0	0	-	-				
HCM Lane LOS	A	-	-	F	A	A	-	-				
HCM 95th %tile Q(veh)	0.3	-	-	14.8	-	0	-	-				
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s			+: Computation Not Defined				*: All major volume in platoon			

Intersection												
Int Delay, s/veh	2.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	↕
Traffic Vol, veh/h	36	3	12	2	9	22	15	403	10	28	317	39
Future Vol, veh/h	36	3	12	2	9	22	15	403	10	28	317	39
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	130	-	-	385	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	1	1	1	2	2	2
Mvmt Flow	39	3	13	2	10	24	16	438	11	30	345	42

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	881	887	172	711	924	443	387	0	0	449	0	0
Stage 1	405	405	-	476	476	-	-	-	-	-	-	-
Stage 2	476	482	-	235	448	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.9	7.3	6.5	6.2	4.115	-	-	4.13	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2095	-	-	2.219	-	-
Pot Cap-1 Maneuver	257	285	848	337	272	619	1176	-	-	1110	-	-
Stage 1	599	602	-	573	560	-	-	-	-	-	-	-
Stage 2	574	557	-	753	576	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	228	274	848	315	260	619	1176	-	-	1110	-	-
Mov Cap-2 Maneuver	228	274	-	315	260	-	-	-	-	-	-	-
Stage 1	582	585	-	566	552	-	-	-	-	-	-	-
Stage 2	534	549	-	717	561	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s/v	21.1		14.1		0.28		0.61	
HCM LOS	C		B					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1176	-	-	279	431	1110	-	-
HCM Lane V/C Ratio	0.014	-	-	0.199	0.083	0.027	-	-
HCM Control Delay (s/veh)	8.1	-	-	21.1	14.1	8.3	-	-
HCM Lane LOS	A	-	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.7	0.3	0.1	-	-

Intersection												
Int Delay, s/veh	1.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	25	0	31	2	0	6	26	396	0	0	287	44
Future Vol, veh/h	25	0	31	2	0	6	26	396	0	0	287	44
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	95	-	-	50	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	5	5	5	2	2	2
Mvmt Flow	27	0	33	2	0	6	28	426	0	0	309	47
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	790	790	154	636	838	426	356	0	0	426	0	0
Stage 1	309	309	-	482	482	-	-	-	-	-	-	-
Stage 2	482	482	-	154	356	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.9	7.3	6.5	6.2	4.175	-	-	4.13	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2475	-	-	2.219	-	-
Pot Cap-1 Maneuver	297	325	870	380	305	633	1182	-	-	1132	-	-
Stage 1	682	663	-	569	557	-	-	-	-	-	-	-
Stage 2	569	557	-	838	633	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	287	317	870	357	298	633	1182	-	-	1132	-	-
Mov Cap-2 Maneuver	287	317	-	357	298	-	-	-	-	-	-	-
Stage 1	682	663	-	556	544	-	-	-	-	-	-	-
Stage 2	550	544	-	806	633	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s/v14.09			11.9		0.5		0					
HCM LOS	B		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1182	-	-	456	530	1132	-	-				
HCM Lane V/C Ratio	0.024	-	-	0.132	0.016	-	-	-				
HCM Control Delay (s/veh)	8.1	-	-	14.1	11.9	0	-	-				
HCM Lane LOS	A	-	-	B	B	A	-	-				
HCM 95th %tile Q(veh)	0.1	-	-	0.5	0	0	-	-				

Intersection						
Int Delay, s/veh	1.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	36	354	15	51	277
Future Vol, veh/h	4	36	354	15	51	277
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	5	5	4	4
Mvmt Flow	4	39	385	16	55	301
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	805	393	0	0	401	0
Stage 1	393	-	-	-	-	-
Stage 2	412	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.14	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.236	-
Pot Cap-1 Maneuver	355	660	-	-	1147	-
Stage 1	686	-	-	-	-	-
Stage 2	673	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	337	660	-	-	1147	-
Mov Cap-2 Maneuver	337	-	-	-	-	-
Stage 1	686	-	-	-	-	-
Stage 2	640	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s/v	11.44	0		1.29		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT	
Capacity (veh/h)	-	-	603	1147	-	
HCM Lane V/C Ratio	-	-	0.072	0.048	-	
HCM Control Delay (s/veh)	-	-	11.4	8.3	-	
HCM Lane LOS	-	-	B	A	-	
HCM 95th %tile Q(veh)	-	-	0.2	0.2	-	

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	24	3	0	361	261	22
Future Vol, veh/h	24	3	0	361	261	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	5	5	4	4
Mvmt Flow	27	3	0	401	290	24

Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	703	302	314	0	-	0
Stage 1	302	-	-	-	-	-
Stage 2	401	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.15	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.245	-	-	-
Pot Cap-1 Maneuver	407	742	1229	-	-	-
Stage 1	754	-	-	-	-	-
Stage 2	681	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	407	742	1229	-	-	-
Mov Cap-2 Maneuver	407	-	-	-	-	-
Stage 1	754	-	-	-	-	-
Stage 2	681	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v14.04		0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1229	-	428	-	-
HCM Lane V/C Ratio	-	-	0.07	-	-
HCM Control Delay (s/veh)	0	-	14	-	-
HCM Lane LOS	A	-	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection						
Int Delay, s/veh	0.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	13	348	1	17	247
Future Vol, veh/h	0	13	348	1	17	247
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	5	5	4	4
Mvmt Flow	0	14	370	1	18	263
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	670	371	0	0	371	0
Stage 1	371	-	-	-	-	-
Stage 2	299	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.14	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.236	-
Pot Cap-1 Maneuver	426	680	-	-	1176	-
Stage 1	702	-	-	-	-	-
Stage 2	757	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	418	680	-	-	1176	-
Mov Cap-2 Maneuver	418	-	-	-	-	-
Stage 1	702	-	-	-	-	-
Stage 2	743	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s/v	10.41	0		0.52		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT	
Capacity (veh/h)	-	-	680	116	-	
HCM Lane V/C Ratio	-	-	0.02	0.015	-	
HCM Control Delay (s/veh)	-	-	10.4	8.1	0	
HCM Lane LOS	-	-	B	A	A	
HCM 95th %tile Q(veh)	-	-	0.1	0	-	

Intersection												
Int Delay, s/veh	1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	0	0	3	0	0	0	20	1	1	13	2
Future Vol, veh/h	1	0	0	3	0	0	0	20	1	1	13	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	64	64	64	64	64	64	64	64	64	64	64	64
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	6	6	6
Mvmt Flow	2	0	0	5	0	0	0	31	2	2	20	3

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	56	58	22	55	59	32	23	0	0	33	0	0
Stage 1	25	25	-	32	32	-	-	-	-	-	-	-
Stage 2	31	33	-	23	27	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.16	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.254	-	-
Pot Cap-1 Maneuver	946	837	1061	947	836	1048	1605	-	-	1554	-	-
Stage 1	998	878	-	989	872	-	-	-	-	-	-	-
Stage 2	990	872	-	1000	877	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	945	836	1061	946	835	1048	1605	-	-	1554	-	-
Mov Cap-2 Maneuver	945	836	-	946	835	-	-	-	-	-	-	-
Stage 1	997	877	-	989	872	-	-	-	-	-	-	-
Stage 2	990	872	-	999	876	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	8.82	8.82	0	0.46
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1605	-	-	945 946	110	-	-
HCM Lane V/C Ratio	-	-	-	0.002 0.005	0.001	-	-
HCM Control Delay (s/veh)	0	-	-	8.8 8.8	7.3	0	-
HCM Lane LOS	A	-	-	A A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0 0	0	-	-

HCM 7th Signalized Intersection Summary

1: Robertson Blvd & 11th St

Chowchilla Residential Development Project

EPAP Plus Project - AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	38	29	67	76	43	43	464	49	67	640	74
Future Volume (veh/h)	36	38	29	67	76	43	43	464	49	67	640	74
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1826	1826	1826	1870	1870	1870
Adj Flow Rate, veh/h	49	52	40	92	104	59	59	636	67	92	877	101
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
Percent Heavy Veh, %	2	2	2	2	2	2	5	5	5	2	2	2
Cap, veh/h	166	164	98	184	161	79	128	1352	603	165	1452	648
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.07	0.39	0.39	0.09	0.41	0.41
Sat Flow, veh/h	405	792	474	487	778	381	1739	3469	1547	1781	3554	1585
Grp Volume(v), veh/h	141	0	0	255	0	0	59	636	67	92	877	101
Grp Sat Flow(s),veh/h/ln	1671	0	0	1645	0	0	1739	1735	1547	1781	1777	1585
Q Serve(g_s), s	0.0	0.0	0.0	4.3	0.0	0.0	1.9	8.1	1.6	2.9	11.4	2.4
Cycle Q Clear(g_c), s	4.0	0.0	0.0	8.3	0.0	0.0	1.9	8.1	1.6	2.9	11.4	2.4
Prop In Lane	0.35		0.28	0.36		0.23	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	429	0	0	424	0	0	128	1352	603	165	1452	648
V/C Ratio(X)	0.33	0.00	0.00	0.60	0.00	0.00	0.46	0.47	0.11	0.56	0.60	0.16
Avail Cap(c_a), veh/h	629	0	0	630	0	0	443	1866	832	453	1911	852
HCM Platoon Ratio	1.00	1.00	1.00	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	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.1	0.0	0.0	21.7	0.0	0.0	26.2	13.4	11.5	25.6	13.7	11.0
Incr Delay (d2), s/veh	0.8	0.0	0.0	3.5	0.0	0.0	1.0	0.6	0.2	1.1	1.0	0.3
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	0.0	3.5	0.0	0.0	0.8	2.7	0.5	1.2	4.2	0.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	20.9	0.0	0.0	25.2	0.0	0.0	27.1	14.0	11.7	26.7	14.6	11.3
LnGrp LOS	C			C			C	B	B	C	B	B
Approach Vol, veh/h	141			255			762			1070		
Approach Delay, s/veh	20.9			25.2			14.8			15.4		
Approach LOS	C			C			B			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	11.1	29.1		18.7	10.0	30.2		18.7				
Change Period (Y+Rc), s	5.7	6.1		6.5	5.7	6.1		6.5				
Max Green Setting (Gmax), s	15.0	31.7		20.0	15.0	31.7		20.0				
Max Q Clear Time (g_c+I1), s	4.9	10.1		6.0	3.9	13.4		10.3				
Green Ext Time (p_c), s	0.1	8.2		1.0	0.0	10.7		1.9				
Intersection Summary												
HCM 7th Control Delay, s/veh				16.7								
HCM 7th LOS				B								

HCM 7th Signalized Intersection Summary

2: Robertson Blvd & 15th St

Chowchilla Residential Development Project
EPAP Plus Project - AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	81	51	67	71	95	86	32	427	34	56	495	63
Future Volume (veh/h)	81	51	67	71	95	86	32	427	34	56	495	63
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1870	1870	1870	1796	1796	1796	1870	1870	1870
Adj Flow Rate, veh/h	112	71	93	99	132	119	44	593	47	78	688	88
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Percent Heavy Veh, %	3	3	3	2	2	2	7	7	7	2	2	2
Cap, veh/h	290	199	260	361	247	223	105	1040	82	154	1109	142
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.06	0.32	0.32	0.09	0.35	0.35
Sat Flow, veh/h	1120	729	955	1222	906	817	1711	3204	254	1781	3169	405
Grp Volume(v), veh/h	112	0	164	99	0	251	44	315	325	78	385	391
Grp Sat Flow(s), veh/h/ln	1120	0	1684	1222	0	1723	1711	1706	1751	1781	1777	1797
Q Serve(g_s), s	5.5	0.0	4.6	4.1	0.0	7.2	1.4	8.9	8.9	2.4	10.5	10.5
Cycle Q Clear(g_c), s	12.7	0.0	4.6	8.7	0.0	7.2	1.4	8.9	8.9	2.4	10.5	10.5
Prop In Lane	1.00		0.57	1.00		0.47	1.00		0.14	1.00		0.23
Lane Grp Cap(c), veh/h	290	0	459	361	0	470	105	554	569	154	621	629
V/C Ratio(X)	0.39	0.00	0.36	0.27	0.00	0.53	0.42	0.57	0.57	0.51	0.62	0.62
Avail Cap(c_a), veh/h	370	0	579	448	0	593	441	928	952	460	966	977
HCM Platoon Ratio	1.00	1.00	1.00	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	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.4	0.0	17.0	20.5	0.0	18.0	26.3	16.3	16.3	25.4	15.7	15.7
Incr Delay (d2), s/veh	2.1	0.0	1.2	1.7	0.0	4.0	1.0	2.2	2.1	1.0	2.1	2.0
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	1.8	1.3	0.0	3.1	0.6	3.3	3.3	1.0	3.9	3.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	25.5	0.0	18.2	22.3	0.0	22.0	27.3	18.4	18.4	26.3	17.8	17.7
LnGrp LOS	C		B	C		C	C	B	B	C	B	B
Approach Vol, veh/h	276			350			684			854		
Approach Delay, s/veh	21.2			22.1			19.0			18.5		
Approach LOS	C			C			B			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.7	25.3		22.1	9.3	26.7		22.1				
Change Period (Y+Rc), s	5.7	6.4		6.3	5.7	6.4		6.3				
Max Green Setting (Gmax), s	15.0	31.6		20.0	15.0	31.6		20.0				
Max Q Clear Time (g_c+I), s	14.4	10.9		14.7	3.4	12.5		10.7				
Green Ext Time (p_c), s	0.1	7.1		1.1	0.0	7.8		2.8				
Intersection Summary												
HCM 7th Control Delay, s/veh	19.6											
HCM 7th LOS	B											

HCM 7th TWSC
3: Robertson Blvd & Washington Rd

Chowchilla Residential Development Project
EPAP Plus Project - AM Peak Hour

Intersection												
Int Delay, s/veh	74.1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	236	0	44	0	0	0	19	409	0	0	414	154
Future Vol, veh/h	236	0	44	0	0	0	19	409	0	0	414	154
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	60	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	76	76	76	76	76	76	76	76	76	76	76	76
Heavy Vehicles, %	2	2	2	0	0	0	3	3	3	5	5	5
Mvmt Flow	311	0	58	0	0	0	25	538	0	0	545	203
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	965	1234	374	861	1336	269	747	0	0	538	0	0
Stage 1	646	646	-	588	588	-	-	-	-	-	-	-
Stage 2	319	588	-	272	747	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.5	6.5	6.9	4.16	-	-	4.2	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.5	4	3.3	2.23	-	-	2.25	-	-
Pot Cap-1 Maneuver	~ 209	175	624	253	155	735	850	-	-	1006	-	-
Stage 1	427	465	-	467	499	-	-	-	-	-	-	-
Stage 2	667	494	-	716	423	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	~ 203	170	624	223	150	735	850	-	-	1006	-	-
Mov Cap-2 Maneuver	~ 203	170	-	223	150	-	-	-	-	-	-	-
Stage 1	427	465	-	453	484	-	-	-	-	-	-	-
Stage 2	647	480	-	650	423	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s/v\$ 337			0		0.42		0					
HCM LOS	F		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	850	-	-	227	-	1006	-	-				
HCM Lane V/C Ratio	0.029	-	-	1.621	-	-	-	-				
HCM Control Delay (s/veh)	9.4	-	-	\$ 337	0	0	-	-				
HCM Lane LOS	A	-	-	F	A	A	-	-				
HCM 95th %tile Q(veh)	0.1	-	-	23.5	-	0	-	-				
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

Intersection												
Int Delay, s/veh	1.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	↕
Traffic Vol, veh/h	17	0	6	10	4	23	12	365	6	12	365	34
Future Vol, veh/h	17	0	6	10	4	23	12	365	6	12	365	34
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	130	-	-	385	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	77	77	77	77	77	77	77	77	77	77	77	77
Heavy Vehicles, %	0	0	0	0	0	0	3	3	3	5	5	5
Mvmt Flow	22	0	8	13	5	30	16	474	8	16	474	44

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1013	1018	237	777	1058	478	518	0	0	482	0	0
Stage 1	505	505	-	509	509	-	-	-	-	-	-	-
Stage 2	508	513	-	268	549	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.9	7.3	6.5	6.2	4.145	-	-	4.175	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2285	-	-	2.2475	-	-
Pot Cap-1 Maneuver	207	239	771	303	226	592	1040	-	-	1061	-	-
Stage 1	523	544	-	550	541	-	-	-	-	-	-	-
Stage 2	551	539	-	720	519	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	187	232	771	291	220	592	1040	-	-	1061	-	-
Mov Cap-2 Maneuver	187	232	-	291	220	-	-	-	-	-	-	-
Stage 1	515	536	-	542	533	-	-	-	-	-	-	-
Stage 2	511	531	-	702	512	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	22.74	15.09	0.27	0.25
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1040	-	-	233	405	1061	-	-
HCM Lane V/C Ratio	0.015	-	-	0.128	0.119	0.015	-	-
HCM Control Delay (s/veh)	8.5	-	-	22.7	15.1	8.4	-	-
HCM Lane LOS	A	-	-	C	C	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.4	0.4	0	-	-

Intersection

Int Delay, s/veh 2.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	↕
Traffic Vol, veh/h	56	0	38	2	0	1	14	326	0	1	353	28
Future Vol, veh/h	56	0	38	2	0	1	14	326	0	1	353	28
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	95	-	-	50	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	75	75	75	75	75	75	75	75	75	75	75	75
Heavy Vehicles, %	0	0	0	0	0	0	3	3	3	5	5	5
Mvmt Flow	75	0	51	3	0	1	19	435	0	1	471	37

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	945	945	235	710	983	435	508	0	0	435	0	0
Stage 1	473	473	-	472	472	-	-	-	-	-	-	-
Stage 2	472	472	-	238	511	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.9	7.3	6.5	6.2	4.145	-	-	4.175	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2285	-	-	2.2475	-	-
Pot Cap-1 Maneuver	231	264	773	338	251	626	1049	-	-	1105	-	-
Stage 1	546	562	-	576	562	-	-	-	-	-	-	-
Stage 2	576	562	-	750	541	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	226	259	773	309	246	626	1049	-	-	1105	-	-
Mov Cap-2 Maneuver	226	259	-	309	246	-	-	-	-	-	-	-
Stage 1	545	561	-	566	552	-	-	-	-	-	-	-
Stage 2	565	552	-	700	540	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v23.59		14.78	0.35	0.02
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1049	-	-	317 372	1105	-	-
HCM Lane V/C Ratio	0.018	-	-	0.395 0.011	0.001	-	-
HCM Control Delay (s/veh)	8.5	-	-	23.6 14.8	8.3	-	-
HCM Lane LOS	A	-	-	C B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	1.8 0	0	-	-

Intersection						
Int Delay, s/veh	2.1					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	17	78	265	7	46	320
Future Vol, veh/h	17	78	265	7	46	320
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	0	0	3	3	7	7
Mvmt Flow	20	91	308	8	53	372
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	791	312	0	0	316	0
Stage 1	312	-	-	-	-	-
Stage 2	479	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.17	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.263	-
Pot Cap-1 Maneuver	361	733	-	-	1216	-
Stage 1	747	-	-	-	-	-
Stage 2	627	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	345	733	-	-	1216	-
Mov Cap-2 Maneuver	345	-	-	-	-	-
Stage 1	747	-	-	-	-	-
Stage 2	600	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s/v	12.2	0		1.02		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	-	610	1216	-	
HCM Lane V/C Ratio	-	-	0.181	0.044	-	
HCM Control Delay (s/veh)	-	-	12.2	8.1	-	
HCM Lane LOS	-	-	B	A	-	
HCM 95th %tile Q(veh)	-	-	0.7	0.1	-	

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	17	2	2	268	304	24
Future Vol, veh/h	17	2	2	268	304	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	0	0	3	3	7	7
Mvmt Flow	20	2	2	315	358	28

Major/Minor	Minor2	Major1	Major2
Conflicting Flow All	692	372	386
Stage 1	372	-	-
Stage 2	320	-	-
Critical Hdwy	6.4	6.2	4.13
Critical Hdwy Stg 1	5.4	-	-
Critical Hdwy Stg 2	5.4	-	-
Follow-up Hdwy	3.5	3.3	2.227
Pot Cap-1 Maneuver	413	679	1167
Stage 1	702	-	-
Stage 2	741	-	-
Platoon blocked, %			
Mov Cap-1 Maneuver	412	679	1167
Mov Cap-2 Maneuver	412	-	-
Stage 1	700	-	-
Stage 2	741	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v13.83		0.06	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	13	-	430	-	-
HCM Lane V/C Ratio	0.002	-	0.052	-	-
HCM Control Delay (s/veh)	8.1	0	13.8	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection						
Int Delay, s/veh	1.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	65	205	2	32	274
Future Vol, veh/h	8	65	205	2	32	274
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	0	0	3	3	7	7
Mvmt Flow	9	75	236	2	37	315
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	625	237	0	0	238	0
Stage 1	237	-	-	-	-	-
Stage 2	389	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.17	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.263	-
Pot Cap-1 Maneuver	452	807	-	-	1300	-
Stage 1	807	-	-	-	-	-
Stage 2	690	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	439	807	-	-	1300	-
Mov Cap-2 Maneuver	439	-	-	-	-	-
Stage 1	807	-	-	-	-	-
Stage 2	670	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s/v10.49		0		0.82		
HCM LOS	B					
Minor Lane/Major Mvmt		NBT	NBRWBLn1	SBL	SBT	
Capacity (veh/h)		-	-	739	1300	-
HCM Lane V/C Ratio		-	-	0.114	0.028	-
HCM Control Delay (s/veh)		-	-	10.5	7.8	-
HCM Lane LOS		-	-	B	A	-
HCM 95th %tile Q(veh)		-	-	0.4	0.1	-

Intersection												
Int Delay, s/veh	0.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	0	1	1	0	2	0	19	6	2	30	0
Future Vol, veh/h	1	0	1	1	0	2	0	19	6	2	30	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	68	68	68	68	68	68	68	68	68	68	68	68
Heavy Vehicles, %	0	0	0	0	0	0	17	17	17	4	4	4
Mvmt Flow	1	0	1	1	0	3	0	28	9	3	44	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	78	87	44	82	82	32	44	0	0	37	0	0
Stage 1	50	50	-	32	32	-	-	-	-	-	-	-
Stage 2	28	37	-	50	50	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.27	-	-	4.14	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.353	-	-	2.236	-	-
Pot Cap-1 Maneuver	916	807	1032	910	812	1047	1473	-	-	1561	-	-
Stage 1	968	857	-	989	872	-	-	-	-	-	-	-
Stage 2	994	868	-	968	857	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	912	806	1032	907	810	1047	1473	-	-	1561	-	-
Mov Cap-2 Maneuver	912	806	-	907	810	-	-	-	-	-	-	-
Stage 1	966	856	-	989	872	-	-	-	-	-	-	-
Stage 2	992	868	-	965	856	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	8.73	8.63	0	0.46
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1473	-	-	968	996	113	-
HCM Lane V/C Ratio	-	-	-	0.003	0.004	0.002	-
HCM Control Delay (s/veh)	0	-	-	8.7	8.6	7.3	0
HCM Lane LOS	A	-	-	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-

Intersection						
Int Delay, s/veh	2.5					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	25	50	0	0	24
Future Vol, veh/h	8	25	50	0	0	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	0	0
Mvmt Flow	9	27	54	0	0	26
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	54	0	-	0	99	54
Stage 1	-	-	-	-	54	-
Stage 2	-	-	-	-	45	-
Critical Hdwy	4.12	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.218	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1551	-	-	-	905	1018
Stage 1	-	-	-	-	973	-
Stage 2	-	-	-	-	983	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1551	-	-	-	900	1018
Mov Cap-2 Maneuver	-	-	-	-	900	-
Stage 1	-	-	-	-	968	-
Stage 2	-	-	-	-	983	-
Approach	EB	WB		SB		
HCM Control Delay, s/v	1.78	0		8.63		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	436	-	-	-	-	1018
HCM Lane V/C Ratio	0.006	-	-	-	-	0.026
HCM Control Delay (s/veh)	7.3	0	-	-	-	8.6
HCM Lane LOS	A	A	-	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	-	0.1

Intersection						
Int Delay, s/veh	3.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	7	18	29	2	6	21
Future Vol, veh/h	7	18	29	2	6	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	0	0
Mvmt Flow	8	20	32	2	7	23
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	34	0	-	0	67	33
Stage 1	-	-	-	-	33	-
Stage 2	-	-	-	-	35	-
Critical Hdwy	4.12	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.218	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1578	-	-	-	943	1047
Stage 1	-	-	-	-	995	-
Stage 2	-	-	-	-	993	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1578	-	-	-	938	1047
Mov Cap-2 Maneuver	-	-	-	-	938	-
Stage 1	-	-	-	-	990	-
Stage 2	-	-	-	-	993	-
Approach	EB	WB		SB		
HCM Control Delay, s/v	2.04	0		8.63		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	504	-	-	-	1021	
HCM Lane V/C Ratio	0.005	-	-	-	0.029	
HCM Control Delay (s/veh)	7.3	0	-	-	8.6	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0.1	

HCM 7th Signalized Intersection Summary

1: Robertson Blvd & 11th St

Chowchilla Residential Development Project

EPAP Plus Project - PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	58	15	27	40	14	49	17	630	33	37	617	41
Future Volume (veh/h)	58	15	27	40	14	49	17	630	33	37	617	41
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1841	1841	1841	1885	1885	1885
Adj Flow Rate, veh/h	60	16	28	42	15	51	18	656	34	39	643	43
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	4	4	4	1	1	1
Cap, veh/h	244	73	71	180	69	125	55	1308	583	107	1442	643
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.03	0.37	0.37	0.06	0.40	0.40
Sat Flow, veh/h	726	444	431	427	423	760	1753	3497	1560	1795	3582	1598
Grp Volume(v), veh/h	104	0	0	108	0	0	18	656	34	39	643	43
Grp Sat Flow(s),veh/h/ln	1601	0	0	1610	0	0	1753	1749	1560	1795	1791	1598
Q Serve(g_s), s	0.0	0.0	0.0	0.2	0.0	0.0	0.5	6.6	0.6	0.9	5.9	0.8
Cycle Q Clear(g_c), s	2.3	0.0	0.0	2.5	0.0	0.0	0.5	6.6	0.6	0.9	5.9	0.8
Prop In Lane	0.58		0.27	0.39		0.47	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	387	0	0	374	0	0	55	1308	583	107	1442	643
V/C Ratio(X)	0.27	0.00	0.00	0.29	0.00	0.00	0.33	0.50	0.06	0.36	0.45	0.07
Avail Cap(c_a), veh/h	797	0	0	800	0	0	578	2437	1087	592	2496	1113
HCM Platoon Ratio	1.00	1.00	1.00	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	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.9	0.0	0.0	16.9	0.0	0.0	21.6	11.0	9.1	20.5	9.9	8.3
Incr Delay (d2), s/veh	0.7	0.0	0.0	1.1	0.0	0.0	1.3	0.7	0.1	0.8	0.5	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.0	1.0	0.0	0.0	0.2	2.0	0.2	0.4	1.9	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	17.5	0.0	0.0	18.1	0.0	0.0	22.8	11.7	9.2	21.3	10.4	8.4
LnGrp LOS	B			B			C	B	A	C	B	A
Approach Vol, veh/h	104			108			708			725		
Approach Delay, s/veh	17.5			18.1			11.8			10.9		
Approach LOS	B			B			B			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.4	23.1		14.0	7.1	24.4		14.0				
Change Period (Y+Rc), s	5.7	6.1		6.5	5.7	6.1		6.5				
Max Green Setting (Gmax), s	15.0	31.7		20.0	15.0	31.7		20.0				
Max Q Clear Time (g_c+I1), s	2.9	8.6		4.3	2.5	7.9		4.5				
Green Ext Time (p_c), s	0.0	8.4		0.7	0.0	8.9		0.9				
Intersection Summary												
HCM 7th Control Delay, s/veh	12.2											
HCM 7th LOS	B											

HCM 7th Signalized Intersection Summary

2: Robertson Blvd & 15th St

Chowchilla Residential Development Project
EPAP Plus Project - PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	87	45	61	37	36	87	55	537	47	62	570	54
Future Volume (veh/h)	87	45	61	37	36	87	55	537	47	62	570	54
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1885	1885	1885	1900	1900	1900	1856	1856	1856	1885	1885	1885
Adj Flow Rate, veh/h	94	48	66	40	39	94	59	577	51	67	613	58
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	0	0	0	3	3	3	1	1	1
Cap, veh/h	321	147	202	340	101	244	140	1089	96	154	1121	106
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.08	0.33	0.33	0.09	0.34	0.34
Sat Flow, veh/h	1267	719	988	1299	494	1191	1767	3277	289	1795	3307	312
Grp Volume(v), veh/h	94	0	114	40	0	133	59	310	318	67	331	340
Grp Sat Flow(s),veh/h/ln	1267	0	1707	1299	0	1686	1767	1763	1803	1795	1791	1829
Q Serve(g_s), s	3.4	0.0	2.8	1.3	0.0	3.3	1.6	6.9	7.0	1.7	7.3	7.3
Cycle Q Clear(g_c), s	6.7	0.0	2.8	4.1	0.0	3.3	1.6	6.9	7.0	1.7	7.3	7.3
Prop In Lane	1.00		0.58	1.00		0.71	1.00		0.16	1.00		0.17
Lane Grp Cap(c), veh/h	321	0	350	340	0	345	140	586	599	154	607	620
V/C Ratio(X)	0.29	0.00	0.33	0.12	0.00	0.39	0.42	0.53	0.53	0.44	0.55	0.55
Avail Cap(c_a), veh/h	581	0	700	606	0	691	544	1142	1169	552	1160	1185
HCM Platoon Ratio	1.00	1.00	1.00	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	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.6	0.0	16.5	18.3	0.0	16.7	21.4	13.2	13.2	21.2	13.1	13.1
Incr Delay (d2), s/veh	1.2	0.0	1.3	0.7	0.0	3.0	0.8	1.7	1.7	0.7	1.6	1.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	1.1	0.4	0.0	1.4	0.6	2.4	2.5	0.7	2.6	2.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	20.9	0.0	17.9	18.9	0.0	19.8	22.2	14.9	14.9	21.9	14.6	14.6
LnGrp LOS	C		B	B		B	C	B	B	C	B	B
Approach Vol, veh/h	208			173			687			738		
Approach Delay, s/veh	19.2			19.6			15.5			15.3		
Approach LOS	B			B			B			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.9	22.6		16.3	9.6	22.9		16.3				
Change Period (Y+Rc), s	5.7	6.4		6.3	5.7	6.4		6.3				
Max Green Setting (Gmax), s	15.0	31.6		20.0	15.0	31.6		20.0				
Max Q Clear Time (g_c+I), s	13.7	9.0		8.7	3.6	9.3		6.1				
Green Ext Time (p_c), s	0.0	7.2		1.3	0.0	7.2		1.7				
Intersection Summary												
HCM 7th Control Delay, s/veh	16.3											
HCM 7th LOS	B											

HCM 7th TWSC
3: Robertson Blvd & Washington Rd

Chowchilla Residential Development Project
EPAP Plus Project - PM Peak Hour

Intersection												
Int Delay, s/veh	46.5											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	196	0	35	0	0	0	61	488	0	0	486	258
Future Vol, veh/h	196	0	35	0	0	0	61	488	0	0	486	258
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	60	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	1	1	1	0	0	0	1	1	1	2	2	2
Mvmt Flow	220	0	39	0	0	0	69	548	0	0	546	290
Major/Minor	Minor2		Minor1			Major1			Major2			
Conflicting Flow All	1102	1376	418	958	1521	274	836	0	0	548	0	0
Stage 1	691	691	-	685	685	-	-	-	-	-	-	-
Stage 2	411	685	-	273	836	-	-	-	-	-	-	-
Critical Hdwy	7.52	6.52	6.92	7.5	6.5	6.9	4.12	-	-	4.14	-	-
Critical Hdwy Stg 1	6.52	5.52	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.52	5.52	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.51	4.01	3.31	3.5	4	3.3	2.21	-	-	2.22	-	-
Pot Cap-1 Maneuver	~ 167	145	587	215	120	729	800	-	-	1017	-	-
Stage 1	403	446	-	409	451	-	-	-	-	-	-	-
Stage 2	591	449	-	715	385	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	~ 153	133	587	183	109	729	800	-	-	1017	-	-
Mov Cap-2 Maneuver	~ 153	133	-	183	109	-	-	-	-	-	-	-
Stage 1	403	446	-	374	413	-	-	-	-	-	-	-
Stage 2	541	410	-	667	385	-	-	-	-	-	-	-
Approach	EB		WB			NB			SB			
HCM Control Delay, s/veh	304.43		0			1.1			0			
HCM LOS	F		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	800	-	-	172	-	1017	-	-				
HCM Lane V/C Ratio	0.086	-	-	1.506	-	-	-	-				
HCM Control Delay (s/veh)	9.9	-	-	\$ 304.4	0	0	-	-				
HCM Lane LOS	A	-	-	F	A	A	-	-				
HCM 95th %tile Q(veh)	0.3	-	-	16.7	-	0	-	-				
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s			+: Computation Not Defined				*: All major volume in platoon			

Intersection												
Int Delay, s/veh	2.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	↕
Traffic Vol, veh/h	36	3	15	2	9	22	17	430	10	28	360	39
Future Vol, veh/h	36	3	15	2	9	22	17	430	10	28	360	39
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	130	-	-	385	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	1	1	1	2	2	2
Mvmt Flow	39	3	16	2	10	24	18	467	11	30	391	42

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	961	967	196	768	1004	473	434	0	0	478	0	0
Stage 1	452	452	-	510	510	-	-	-	-	-	-	-
Stage 2	509	515	-	258	495	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.9	7.3	6.5	6.2	4.115	-	-	4.13	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2095	-	-	2.219	-	-
Pot Cap-1 Maneuver	225	256	819	308	244	595	1130	-	-	1082	-	-
Stage 1	562	574	-	550	541	-	-	-	-	-	-	-
Stage 2	550	538	-	730	550	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	198	245	819	285	233	595	1130	-	-	1082	-	-
Mov Cap-2 Maneuver	198	245	-	285	233	-	-	-	-	-	-	-
Stage 1	546	558	-	541	532	-	-	-	-	-	-	-
Stage 2	510	529	-	691	534	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v23.31		14.9	0.31	0.55
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1130	-	-	255	399	1082	-
HCM Lane V/C Ratio	0.016	-	-	0.23	0.09	0.028	-
HCM Control Delay (s/veh)	8.2	-	-	23.3	14.9	8.4	-
HCM Lane LOS	A	-	-	C	B	A	-
HCM 95th %tile Q(veh)	0	-	-	0.9	0.3	0.1	-

Intersection												
Int Delay, s/veh	1.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	↕
Traffic Vol, veh/h	25	0	34	2	0	6	28	425	0	0	334	44
Future Vol, veh/h	25	0	34	2	0	6	28	425	0	0	334	44
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	95	-	-	50	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	5	5	5	2	2	2
Mvmt Flow	27	0	37	2	0	6	30	457	0	0	359	47

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	876	876	180	697	924	457	406	0	0	457	0	0
Stage 1	359	359	-	517	517	-	-	-	-	-	-	-
Stage 2	517	517	-	180	406	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.9	7.3	6.5	6.2	4.175	-	-	4.13	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2475	-	-	2.219	-	-
Pot Cap-1 Maneuver	258	289	839	345	272	608	1132	-	-	1102	-	-
Stage 1	637	631	-	545	537	-	-	-	-	-	-	-
Stage 2	545	537	-	811	601	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	249	282	839	321	264	608	1132	-	-	1102	-	-
Mov Cap-2 Maneuver	249	282	-	321	264	-	-	-	-	-	-	-
Stage 1	637	631	-	530	523	-	-	-	-	-	-	-
Stage 2	525	523	-	775	601	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v15.13		12.37	0.51	0
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1132	-	-	419	497	1102	-	-
HCM Lane V/C Ratio	0.027	-	-	0.152	0.017	-	-	-
HCM Control Delay (s/veh)	8.3	-	-	15.1	12.4	0	-	-
HCM Lane LOS	A	-	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.5	0.1	0	-	-

Intersection						
Int Delay, s/veh	1.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	42	379	15	60	317
Future Vol, veh/h	4	42	379	15	60	317
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	5	5	4	4
Mvmt Flow	4	46	412	16	65	345

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	895	420	0
Stage 1	420	-	-
Stage 2	475	-	-
Critical Hdwy	6.4	6.2	-
Critical Hdwy Stg 1	5.4	-	-
Critical Hdwy Stg 2	5.4	-	-
Follow-up Hdwy	3.5	3.3	-
Pot Cap-1 Maneuver	314	638	-
Stage 1	667	-	-
Stage 2	630	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	295	638	-
Mov Cap-2 Maneuver	295	-	-
Stage 1	667	-	-
Stage 2	593	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	11.8	0	1.34
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	579	1121
HCM Lane V/C Ratio	-	-	0.086	0.058
HCM Control Delay (s/veh)	-	-	11.8	8.4
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.3	0.2

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	24	3	0	386	301	22
Future Vol, veh/h	24	3	0	386	301	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	90	90	90	90	90	90
Heavy Vehicles, %	0	0	5	5	4	4
Mvmt Flow	27	3	0	429	334	24

Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	776	347	359	0	-	0
Stage 1	347	-	-	-	-	-
Stage 2	429	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.15	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.245	-	-	-
Pot Cap-1 Maneuver	369	701	1183	-	-	-
Stage 1	720	-	-	-	-	-
Stage 2	661	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	369	701	1183	-	-	-
Mov Cap-2 Maneuver	369	-	-	-	-	-
Stage 1	720	-	-	-	-	-
Stage 2	661	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v15.01		0	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1183	-	389	-	-
HCM Lane V/C Ratio	-	-	0.077	-	-
HCM Control Delay (s/veh)	0	-	15	-	-
HCM Lane LOS	A	-	C	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection						
Int Delay, s/veh	1.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	38	348	7	57	247
Future Vol, veh/h	4	38	348	7	57	247
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	5	5	4	4
Mvmt Flow	4	40	370	7	61	263
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	758	374	0	0	378	0
Stage 1	374	-	-	-	-	-
Stage 2	384	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.14	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.236	-
Pot Cap-1 Maneuver	378	677	-	-	1170	-
Stage 1	700	-	-	-	-	-
Stage 2	693	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	358	677	-	-	1170	-
Mov Cap-2 Maneuver	358	-	-	-	-	-
Stage 1	700	-	-	-	-	-
Stage 2	657	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s/v	11.21	0		1.55		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT	
Capacity (veh/h)	-	-	624	1170	-	
HCM Lane V/C Ratio	-	-	0.072	0.052	-	
HCM Control Delay (s/veh)	-	-	11.2	8.2	-	
HCM Lane LOS	-	-	B	A	-	
HCM 95th %tile Q(veh)	-	-	0.2	0.2	-	

Intersection												
Int Delay, s/veh	0.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	0	0	3	0	0	0	26	1	1	17	2
Future Vol, veh/h	1	0	0	3	0	0	0	26	1	1	17	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	64	64	64	64	64	64	64	64	64	64	64	64
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	6	6	6
Mvmt Flow	2	0	0	5	0	0	0	41	2	2	27	3

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	72	73	28	71	74	41	30	0	0	42	0	0
Stage 1	31	31	-	41	41	-	-	-	-	-	-	-
Stage 2	41	42	-	30	33	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.16	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.254	-	-
Pot Cap-1 Maneuver	924	821	1053	925	820	1035	1596	-	-	1541	-	-
Stage 1	990	873	-	978	864	-	-	-	-	-	-	-
Stage 2	979	864	-	992	872	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	923	820	1053	924	819	1035	1596	-	-	1541	-	-
Mov Cap-2 Maneuver	923	820	-	924	819	-	-	-	-	-	-	-
Stage 1	989	872	-	978	864	-	-	-	-	-	-	-
Stage 2	979	864	-	991	871	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	8.91	8.91	0	0.37
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1596	-	-	923 924	88	-	-
HCM Lane V/C Ratio	-	-	-	0.002 0.005	0.001	-	-
HCM Control Delay (s/veh)	0	-	-	8.9 8.9	7.3	0	-
HCM Lane LOS	A	-	-	A A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0 0	0	-	-

Intersection						
Int Delay, s/veh	2.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	25	40	27	0	0	16
Future Vol, veh/h	25	40	27	0	0	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	0	0
Mvmt Flow	27	43	29	0	0	17
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	29	0	-	0	127	29
Stage 1	-	-	-	-	29	-
Stage 2	-	-	-	-	98	-
Critical Hdwy	4.12	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.218	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1584	-	-	-	872	1051
Stage 1	-	-	-	-	998	-
Stage 2	-	-	-	-	931	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1584	-	-	-	857	1051
Mov Cap-2 Maneuver	-	-	-	-	857	-
Stage 1	-	-	-	-	981	-
Stage 2	-	-	-	-	931	-
Approach	EB	WB		SB		
HCM Control Delay, s/v	2.81	0		8.48		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	692	-	-	-	1051	
HCM Lane V/C Ratio	0.017	-	-	-	0.017	
HCM Control Delay (s/veh)	7.3	0	-	-	8.5	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0.1	-	-	-	0.1	

Intersection						
Int Delay, s/veh	4.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	22	18	13	6	4	14
Future Vol, veh/h	22	18	13	6	4	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	0	0
Mvmt Flow	24	20	14	7	4	15

Major/Minor	Major1	Major2	Minor2
Conflicting Flow All	21	0	85
Stage 1	-	-	17
Stage 2	-	-	67
Critical Hdwy	4.12	-	6.4
Critical Hdwy Stg 1	-	-	5.4
Critical Hdwy Stg 2	-	-	5.4
Follow-up Hdwy	2.218	-	3.5
Pot Cap-1 Maneuver	1595	-	922
Stage 1	-	-	1011
Stage 2	-	-	960
Platoon blocked, %	-	-	-
Mov Cap-1 Maneuver	1595	-	908
Mov Cap-2 Maneuver	-	-	908
Stage 1	-	-	995
Stage 2	-	-	960

Approach	EB	WB	SB
HCM Control Delay, s/v	4.01	0	8.57
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	990	-	-	-	1027
HCM Lane V/C Ratio	0.015	-	-	-	0.019
HCM Control Delay (s/veh)	7.3	0	-	-	8.6
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

HCM 7th Signalized Intersection Summary

1: Robertson Blvd & 11th St

Chowchilla Residential Development Project

Build-Out NP - AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	40	29	68	78	45	42	465	45	70	665	78
Future Volume (veh/h)	38	40	29	68	78	45	42	465	45	70	665	78
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1826	1826	1826	1870	1870	1870
Adj Flow Rate, veh/h	41	43	32	74	85	49	46	505	49	76	723	85
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	5	5	5	2	2	2
Cap, veh/h	169	156	87	181	149	72	114	1264	564	161	1383	617
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.07	0.36	0.36	0.09	0.39	0.39
Sat Flow, veh/h	392	839	469	457	801	388	1739	3469	1547	1781	3554	1585
Grp Volume(v), veh/h	116	0	0	208	0	0	46	505	49	76	723	85
Grp Sat Flow(s),veh/h/ln	1701	0	0	1645	0	0	1739	1735	1547	1781	1777	1585
Q Serve(g_s), s	0.0	0.0	0.0	2.9	0.0	0.0	1.3	5.5	1.1	2.1	7.9	1.8
Cycle Q Clear(g_c), s	2.9	0.0	0.0	5.8	0.0	0.0	1.3	5.5	1.1	2.1	7.9	1.8
Prop In Lane	0.35		0.28	0.36		0.24	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	412	0	0	402	0	0	114	1264	564	161	1383	617
V/C Ratio(X)	0.28	0.00	0.00	0.52	0.00	0.00	0.40	0.40	0.09	0.47	0.52	0.14
Avail Cap(c_a), veh/h	728	0	0	727	0	0	512	2159	963	525	2212	986
HCM Platoon Ratio	1.00	1.00	1.00	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	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.1	0.0	0.0	19.2	0.0	0.0	22.8	12.0	10.6	22.0	11.9	10.0
Incr Delay (d2), s/veh	0.7	0.0	0.0	2.7	0.0	0.0	0.8	0.5	0.2	0.8	0.7	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	0.0	2.4	0.0	0.0	0.5	1.7	0.3	0.8	2.8	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	18.7	0.0	0.0	21.8	0.0	0.0	23.7	12.5	10.8	22.8	12.7	10.3
LnGrp LOS	B			C			C	B	B	C	B	B
Approach Vol, veh/h	116			208			600			884		
Approach Delay, s/veh	18.7			21.8			13.2			13.3		
Approach LOS	B			C			B			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.3	24.7		16.0	9.0	25.9		16.0				
Change Period (Y+Rc), s	5.7	6.1		6.5	5.7	6.1		6.5				
Max Green Setting (Gmax), s	15.0	31.7		20.0	15.0	31.7		20.0				
Max Q Clear Time (g_c+l1), s	4.1	7.5		4.9	3.3	9.9		7.8				
Green Ext Time (p_c), s	0.1	6.7		0.8	0.0	9.9		1.7				
Intersection Summary												
HCM 7th Control Delay, s/veh				14.6								
HCM 7th LOS				B								

HCM 7th Signalized Intersection Summary

2: Robertson Blvd & 15th St

Chowchilla Residential Development Project
Build-Out NP - AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	51	69	70	96	90	30	417	33	59	508	66
Future Volume (veh/h)	85	51	69	70	96	90	30	417	33	59	508	66
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1870	1870	1870	1796	1796	1796	1870	1870	1870
Adj Flow Rate, veh/h	92	55	75	76	104	98	33	453	36	64	552	72
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	2	2	2	7	7	7	2	2	2
Cap, veh/h	316	173	236	376	215	203	89	935	74	149	1023	133
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.05	0.29	0.29	0.08	0.32	0.32
Sat Flow, veh/h	1171	711	970	1260	886	835	1711	3203	254	1781	3162	411
Grp Volume(v), veh/h	92	0	130	76	0	202	33	241	248	64	310	314
Grp Sat Flow(s),veh/h/ln	1171	0	1681	1260	0	1720	1711	1706	1751	1781	1777	1796
Q Serve(g_s), s	3.5	0.0	3.1	2.5	0.0	4.9	0.9	5.6	5.6	1.6	6.9	6.9
Cycle Q Clear(g_c), s	8.4	0.0	3.1	5.6	0.0	4.9	0.9	5.6	5.6	1.6	6.9	6.9
Prop In Lane	1.00		0.58	1.00		0.49	1.00		0.14	1.00		0.23
Lane Grp Cap(c), veh/h	316	0	409	376	0	418	89	498	511	149	575	581
V/C Ratio(X)	0.29	0.00	0.32	0.20	0.00	0.48	0.37	0.48	0.49	0.43	0.54	0.54
Avail Cap(c_a), veh/h	517	0	697	592	0	713	532	1118	1147	554	1164	1177
HCM Platoon Ratio	1.00	1.00	1.00	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	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.3	0.0	15.0	17.3	0.0	15.7	22.1	14.1	14.1	21.0	13.4	13.4
Incr Delay (d2), s/veh	1.3	0.0	1.1	1.1	0.0	3.7	1.0	1.7	1.7	0.7	1.6	1.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	1.1	0.8	0.0	2.1	0.3	2.0	2.0	0.6	2.4	2.4
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	20.5	0.0	16.1	18.4	0.0	19.3	23.1	15.8	15.8	21.7	15.0	15.0
LnGrp LOS	C		B	B		B	C	B	B	C	B	B
Approach Vol, veh/h	222			278			522			688		
Approach Delay, s/veh	17.9			19.1			16.2			15.6		
Approach LOS	B			B			B			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	20.5			18.0	8.2	22.0		18.0				
Change Period (Y+Rc), s	5.7	6.4		6.3	5.7	6.4		6.3				
Max Green Setting (Gmax), s	15.0	31.6		20.0	15.0	31.6		20.0				
Max Q Clear Time (g_c+I), s	13.6	7.6		10.4	2.9	8.9		7.6				
Green Ext Time (p_c), s	0.0	5.6		1.4	0.0	6.7		2.7				
Intersection Summary												
HCM 7th Control Delay, s/veh	16.7											
HCM 7th LOS	B											

HCM 7th TWSC
3: Robertson Blvd & Washington Rd

Chowchilla Residential Development Project
Build-Out NP - AM Peak Hour

Intersection												
Int Delay, s/veh	24.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Vol, veh/h	248	0	45	0	0	0	16	393	0	0	421	162
Future Vol, veh/h	248	0	45	0	0	0	16	393	0	0	421	162
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	60	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	0	0	0	3	3	3	5	5	5
Mvmt Flow	270	0	49	0	0	0	17	427	0	0	458	176

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	794	1008	317	691	1096	214	634	0	0	427	0	0
Stage 1	546	546	-	462	462	-	-	-	-	-	-	-
Stage 2	248	462	-	229	634	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.5	6.5	6.9	4.16	-	-	4.2	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.5	4	3.3	2.23	-	-	2.25	-	-
Pot Cap-1 Maneuver	279	239	679	335	215	798	938	-	-	1108	-	-
Stage 1	490	516	-	554	568	-	-	-	-	-	-	-
Stage 2	734	563	-	759	476	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	274	235	679	305	211	798	938	-	-	1108	-	-
Mov Cap-2 Maneuver	274	235	-	305	211	-	-	-	-	-	-	-
Stage 1	490	516	-	544	558	-	-	-	-	-	-	-
Stage 2	720	553	-	704	476	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/veh	0	0	0.35	0
HCM LOS	F	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	938	-	-	301	1108	-	-
HCM Lane V/C Ratio	0.019	-	-	1.057	-	-	-
HCM Control Delay (s/veh)	8.9	-	-	106.3	0	0	-
HCM Lane LOS	A	-	-	F	A	A	-
HCM 95th %tile Q(veh)	0.1	-	-	12.1	-	0	-

Intersection												
Int Delay, s/veh	1.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	↕
Traffic Vol, veh/h	18	0	5	10	4	25	9	340	6	13	369	36
Future Vol, veh/h	18	0	5	10	4	25	9	340	6	13	369	36
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	130	-	-	385	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	3	3	3	5	5	5
Mvmt Flow	20	0	5	11	4	27	10	370	7	14	401	39

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	821	825	201	621	861	373	440	0	0	376	0	0
Stage 1	429	429	-	392	392	-	-	-	-	-	-	-
Stage 2	391	396	-	229	468	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.9	7.3	6.5	6.2	4.145	-	-	4.175	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2285	-	-	2.2475	-	-
Pot Cap-1 Maneuver	283	310	813	389	295	678	1112	-	-	1162	-	-
Stage 1	580	587	-	636	610	-	-	-	-	-	-	-
Stage 2	637	608	-	759	564	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	262	303	813	378	289	678	1112	-	-	1162	-	-
Mov Cap-2 Maneuver	262	303	-	378	289	-	-	-	-	-	-	-
Stage 1	572	580	-	631	604	-	-	-	-	-	-	-
Stage 2	602	602	-	745	557	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	17.76	12.77	0.21	0.25
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1112	-	-	307	505	1162	-	-
HCM Lane V/C Ratio	0.009	-	-	0.081	0.084	0.012	-	-
HCM Control Delay (s/veh)	8.3	-	-	17.8	12.8	8.1	-	-
HCM Lane LOS	A	-	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.3	0	-	-

Intersection												
Int Delay, s/veh	2.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	57	0	39	2	0	1	12	297	0	3	353	28
Future Vol, veh/h	57	0	39	2	0	1	12	297	0	3	353	28
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	95	-	-	50	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	3	3	3	5	5	5
Mvmt Flow	62	0	42	2	0	1	13	323	0	3	384	30
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	739	739	192	547	770	323	414	0	0	323	0	0
Stage 1	390	390	-	349	349	-	-	-	-	-	-	-
Stage 2	349	349	-	198	421	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.9	7.3	6.5	6.2	4.145	-	-	4.175	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2285	-	-	2.2475	-	-
Pot Cap-1 Maneuver	322	347	824	437	334	723	1137	-	-	1216	-	-
Stage 1	611	611	-	672	637	-	-	-	-	-	-	-
Stage 2	672	637	-	790	592	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	317	343	824	409	329	723	1137	-	-	1216	-	-
Mov Cap-2 Maneuver	317	343	-	409	329	-	-	-	-	-	-	-
Stage 1	609	609	-	664	630	-	-	-	-	-	-	-
Stage 2	663	630	-	748	591	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s/v16.28			12.58		0.32		0.06					
HCM LOS	C		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1137	-	-	423	478	1216	-	-				
HCM Lane V/C Ratio	0.011	-	-	0.247	0.007	0.003	-	-				
HCM Control Delay (s/veh)	8.2	-	-	16.3	12.6	8	-	-				
HCM Lane LOS	A	-	-	C	B	A	-	-				
HCM 95th %tile Q(veh)	0	-	-	1	0	0	-	-				

Intersection						
Int Delay, s/veh	1.9					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	17	69	238	7	43	321
Future Vol, veh/h	17	69	238	7	43	321
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	3	3	7	7
Mvmt Flow	18	75	259	8	47	349

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	705	262	0
Stage 1	262	-	-
Stage 2	442	-	-
Critical Hdwy	6.4	6.2	-
Critical Hdwy Stg 1	5.4	-	-
Critical Hdwy Stg 2	5.4	-	-
Follow-up Hdwy	3.5	3.3	-
Pot Cap-1 Maneuver	406	781	-
Stage 1	786	-	-
Stage 2	652	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	391	781	-
Mov Cap-2 Maneuver	391	-	-
Stage 1	786	-	-
Stage 2	628	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	11.44	0	0.94
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	652	1269
HCM Lane V/C Ratio	-	-	0.143	0.037
HCM Control Delay (s/veh)	-	-	11.4	7.9
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.5	0.1

Intersection						
Int Delay, s/veh	0.5					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	18	2	2	232	305	25
Future Vol, veh/h	18	2	2	232	305	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	3	3	7	7
Mvmt Flow	20	2	2	252	332	27

Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	602	345	359	0	-	0
Stage 1	345	-	-	-	-	-
Stage 2	257	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.13	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.227	-	-	-
Pot Cap-1 Maneuver	466	702	1194	-	-	-
Stage 1	722	-	-	-	-	-
Stage 2	791	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	465	702	1194	-	-	-
Mov Cap-2 Maneuver	465	-	-	-	-	-
Stage 1	720	-	-	-	-	-
Stage 2	791	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v12.83		0.07	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	15	-	481	-	-
HCM Lane V/C Ratio	0.002	-	0.045	-	-
HCM Control Delay (s/veh)	8	0	12.8	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection						
Int Delay, s/veh	0.8					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	2	27	207	1	18	289
Future Vol, veh/h	2	27	207	1	18	289
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	3	3	7	7
Mvmt Flow	2	29	225	1	20	314

Major/Minor	Minor1	Major1	Major2
Conflicting Flow All	579	226	0
Stage 1	226	-	-
Stage 2	353	-	-
Critical Hdwy	6.4	6.2	-
Critical Hdwy Stg 1	5.4	-	-
Critical Hdwy Stg 2	5.4	-	-
Follow-up Hdwy	3.5	3.3	-
Pot Cap-1 Maneuver	481	819	-
Stage 1	817	-	-
Stage 2	715	-	-
Platoon blocked, %		-	-
Mov Cap-1 Maneuver	472	819	-
Mov Cap-2 Maneuver	472	-	-
Stage 1	817	-	-
Stage 2	702	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	9.81	0	0.46
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	779	106
HCM Lane V/C Ratio	-	-	0.04	0.015
HCM Control Delay (s/veh)	-	-	9.8	7.8
HCM Lane LOS	-	-	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0

Intersection												
Int Delay, s/veh	1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	0	1	1	0	2	0	18	6	2	25	0
Future Vol, veh/h	1	0	1	1	0	2	0	18	6	2	25	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	17	17	17	4	4	4
Mvmt Flow	1	0	1	1	0	2	0	20	7	2	27	0

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	51	58	27	54	54	23	27	0	0	26	0	0
Stage 1	32	32	-	23	23	-	-	-	-	-	-	-
Stage 2	20	26	-	32	32	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.27	-	-	4.14	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.353	-	-	2.236	-	-
Pot Cap-1 Maneuver	953	837	1054	949	841	1060	1495	-	-	1575	-	-
Stage 1	990	873	-	1001	880	-	-	-	-	-	-	-
Stage 2	1005	877	-	990	873	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	950	836	1054	946	840	1060	1495	-	-	1575	-	-
Mov Cap-2 Maneuver	950	836	-	946	840	-	-	-	-	-	-	-
Stage 1	989	872	-	1001	880	-	-	-	-	-	-	-
Stage 2	1002	877	-	988	872	-	-	-	-	-	-	-

Approach	EB		WB		NB		SB	
HCM Control Delay, s/v	8.61		8.54		0		0.54	
HCM LOS	A		A					

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1495	-	-	999	1019	133	-	-
HCM Lane V/C Ratio	-	-	-	0.002	0.003	0.001	-	-
HCM Control Delay (s/veh)	0	-	-	8.6	8.5	7.3	0	-
HCM Lane LOS	A	-	-	A	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-

HCM 7th Signalized Intersection Summary

Chowchilla Residential Development Project

1: Robertson Blvd & 11th St

Build-Out NP - PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	16	25	36	14	51	16	647	30	39	625	43
Future Volume (veh/h)	61	16	25	36	14	51	16	647	30	39	625	43
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1841	1841	1841	1885	1885	1885
Adj Flow Rate, veh/h	64	17	26	38	15	53	17	674	31	41	651	45
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	4	4	4	1	1	1
Cap, veh/h	249	72	63	169	69	131	52	1324	591	111	1472	656
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.03	0.38	0.38	0.06	0.41	0.41
Sat Flow, veh/h	766	443	388	384	423	808	1753	3497	1560	1795	3582	1598
Grp Volume(v), veh/h	107	0	0	106	0	0	17	674	31	41	651	45
Grp Sat Flow(s),veh/h/ln	1597	0	0	1615	0	0	1753	1749	1560	1795	1791	1598
Q Serve(g_s), s	0.0	0.0	0.0	0.1	0.0	0.0	0.4	6.8	0.6	1.0	6.0	0.8
Cycle Q Clear(g_c), s	2.4	0.0	0.0	2.5	0.0	0.0	0.4	6.8	0.6	1.0	6.0	0.8
Prop In Lane	0.60		0.24	0.36		0.50	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	384	0	0	368	0	0	52	1324	591	111	1472	656
V/C Ratio(X)	0.28	0.00	0.00	0.29	0.00	0.00	0.33	0.51	0.05	0.37	0.44	0.07
Avail Cap(c_a), veh/h	786	0	0	790	0	0	571	2406	1073	584	2464	1099
HCM Platoon Ratio	1.00	1.00	1.00	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	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.2	0.0	0.0	17.2	0.0	0.0	21.9	11.0	9.1	20.7	9.8	8.2
Incr Delay (d2), s/veh	0.7	0.0	0.0	1.1	0.0	0.0	1.3	0.7	0.1	0.8	0.5	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	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	1.0	0.0	0.0	0.2	2.1	0.2	0.4	2.0	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	17.9	0.0	0.0	18.3	0.0	0.0	23.2	11.7	9.2	21.5	10.3	8.3
LnGrp LOS	B			B			C	B	A	C	B	A
Approach Vol, veh/h	107			106			722			737		
Approach Delay, s/veh	17.9			18.3			11.9			10.8		
Approach LOS	B			B			B			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.6	23.5		14.0	7.1	25.0		14.0				
Change Period (Y+Rc), s	5.7	6.1		6.5	5.7	6.1		6.5				
Max Green Setting (Gmax), s	15.0	31.7		20.0	15.0	31.7		20.0				
Max Q Clear Time (g_c+I1), s	3.0	8.8		4.4	2.4	8.0		4.5				
Green Ext Time (p_c), s	0.0	8.6		0.7	0.0	9.0		0.9				
Intersection Summary												
HCM 7th Control Delay, s/veh	12.2											
HCM 7th LOS	B											

HCM 7th Signalized Intersection Summary

2: Robertson Blvd & 15th St

Chowchilla Residential Development Project
Build-Out NP - PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	91	45	61	36	38	91	56	543	45	65	566	57
Future Volume (veh/h)	91	45	61	36	38	91	56	543	45	65	566	57
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1885	1885	1885	1900	1900	1900	1856	1856	1856	1885	1885	1885
Adj Flow Rate, veh/h	98	48	66	39	41	98	60	584	48	70	609	61
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	0	0	0	3	3	3	1	1	1
Cap, veh/h	321	151	208	345	104	250	140	1092	90	157	1115	111
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.08	0.33	0.33	0.09	0.34	0.34
Sat Flow, veh/h	1260	719	988	1299	497	1189	1767	3299	271	1795	3288	329
Grp Volume(v), veh/h	98	0	114	39	0	139	60	312	320	70	331	339
Grp Sat Flow(s), veh/h/ln	1260	0	1707	1299	0	1686	1767	1763	1807	1795	1791	1826
Q Serve(g_s), s	3.6	0.0	2.8	1.3	0.0	3.5	1.6	7.1	7.1	1.8	7.4	7.5
Cycle Q Clear(g_c), s	7.1	0.0	2.8	4.1	0.0	3.5	1.6	7.1	7.1	1.8	7.4	7.5
Prop In Lane	1.00		0.58	1.00		0.71	1.00		0.15	1.00		0.18
Lane Grp Cap(c), veh/h	321	0	359	345	0	354	140	584	598	157	607	619
V/C Ratio(X)	0.31	0.00	0.32	0.11	0.00	0.39	0.43	0.53	0.54	0.45	0.55	0.55
Avail Cap(c_a), veh/h	565	0	689	596	0	681	535	1125	1153	544	1143	1165
HCM Platoon Ratio	1.00	1.00	1.00	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	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.9	0.0	16.6	18.3	0.0	16.8	21.7	13.5	13.5	21.5	13.3	13.3
Incr Delay (d2), s/veh	1.3	0.0	1.3	0.6	0.0	3.0	0.8	1.8	1.8	0.7	1.6	1.5
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	1.1	0.4	0.0	1.5	0.6	2.5	2.6	0.7	2.6	2.7
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	21.2	0.0	17.8	18.9	0.0	19.9	22.5	15.3	15.2	22.2	14.8	14.8
LnGrp LOS	C		B	B		B	C	B	B	C	B	B
Approach Vol, veh/h	212			178			692			740		
Approach Delay, s/veh	19.4			19.7			15.9			15.5		
Approach LOS	B			B			B			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.0	22.8		16.7	9.6	23.2		16.7				
Change Period (Y+Rc), s	5.7	6.4		6.3	5.7	6.4		6.3				
Max Green Setting (Gmax), s	15.0	31.6		20.0	15.0	31.6		20.0				
Max Q Clear Time (g_c+I), s	13.8	9.1		9.1	3.6	9.5		6.1				
Green Ext Time (p_c), s	0.0	7.3		1.3	0.0	7.2		1.7				

Intersection Summary

HCM 7th Control Delay, s/veh	16.5
HCM 7th LOS	B

HCM 7th TWSC
3: Robertson Blvd & Washington Rd

Chowchilla Residential Development Project
Build-Out NP - PM Peak Hour

Intersection													
Int Delay, s/veh	41.8												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR	
Lane Configurations													
Traffic Vol, veh/h	206	0	34	0	0	0	62	488	0	0	471	271	
Future Vol, veh/h	206	0	34	0	0	0	62	488	0	0	471	271	
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0	
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free	
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None	
Storage Length	0	-	-	-	-	-	60	-	-	50	-	-	
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-	
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-	
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92	
Heavy Vehicles, %	1	1	1	0	0	0	1	1	1	2	2	2	
Mvmt Flow	224	0	37	0	0	0	67	530	0	0	512	295	
Major/Minor	Minor2		Minor1			Major1			Major2				
Conflicting Flow All	1059	1324	403	921	1472	265	807	0	0	530	0	0	
Stage 1	659	659	-	665	665	-	-	-	-	-	-	-	
Stage 2	400	665	-	256	807	-	-	-	-	-	-	-	
Critical Hdwy	7.52	6.52	6.92	7.5	6.5	6.9	4.12	-	-	4.14	-	-	
Critical Hdwy Stg 1	6.52	5.52	-	6.5	5.5	-	-	-	-	-	-	-	
Critical Hdwy Stg 2	6.52	5.52	-	6.5	5.5	-	-	-	-	-	-	-	
Follow-up Hdwy	3.51	4.01	3.31	3.5	4	3.3	2.21	-	-	2.22	-	-	
Pot Cap-1 Maneuver	~ 180	156	600	228	128	739	821	-	-	1033	-	-	
Stage 1	421	461	-	420	461	-	-	-	-	-	-	-	
Stage 2	600	458	-	732	397	-	-	-	-	-	-	-	
Platoon blocked, %								-	-		-	-	
Mov Cap-1 Maneuver	~ 165	143	600	197	118	739	821	-	-	1033	-	-	
Mov Cap-2 Maneuver	~ 165	143	-	197	118	-	-	-	-	-	-	-	
Stage 1	421	461	-	386	423	-	-	-	-	-	-	-	
Stage 2	551	421	-	687	397	-	-	-	-	-	-	-	
Approach	EB		WB			NB			SB				
HCM Control Delay, s/v264.3				0			1.1			0			
HCM LOS	F			A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR						
Capacity (veh/h)	821	-	-	184	-	1033	-	-					
HCM Lane V/C Ratio	0.082	-	-	1.417	-	-	-	-					
HCM Control Delay (s/veh)	9.8	-	-	264.3	0	0	-	-					
HCM Lane LOS	A	-	-	F	A	A	-	-					
HCM 95th %tile Q(veh)	0.3	-	-	15.8	-	0	-	-					
Notes													
~: Volume exceeds capacity		\$: Delay exceeds 300s			+: Computation Not Defined				*: All major volume in platoon				

Intersection												
Int Delay, s/veh	2.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	38	3	12	2	9	22	16	423	10	29	333	41
Future Vol, veh/h	38	3	12	2	9	22	16	423	10	29	333	41
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	130	-	-	385	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	1	1	1	2	2	2
Mvmt Flow	41	3	13	2	10	24	17	460	11	32	362	45
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	924	930	181	746	970	465	407	0	0	471	0	0
Stage 1	425	425	-	500	500	-	-	-	-	-	-	-
Stage 2	499	505	-	246	470	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.9	7.3	6.5	6.2	4.115	-	-	4.13	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2095	-	-	2.219	-	-
Pot Cap-1 Maneuver	239	269	837	319	255	601	1157	-	-	1089	-	-
Stage 1	583	590	-	557	546	-	-	-	-	-	-	-
Stage 2	557	543	-	742	564	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	211	257	837	297	244	601	1157	-	-	1089	-	-
Mov Cap-2 Maneuver	211	257	-	297	244	-	-	-	-	-	-	-
Stage 1	566	573	-	548	538	-	-	-	-	-	-	-
Stage 2	517	535	-	705	547	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s/v22.97			14.58		0.29		0.6					
HCM LOS	C		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1157	-	-	257	412	1089	-	-				
HCM Lane V/C Ratio	0.015	-	-	0.224	0.087	0.029	-	-				
HCM Control Delay (s/veh)	8.2	-	-	23	14.6	8.4	-	-				
HCM Lane LOS	A	-	-	C	B	A	-	-				
HCM 95th %tile Q(veh)	0	-	-	0.8	0.3	0.1	-	-				

Intersection

Int Delay, s/veh 1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	↕
Traffic Vol, veh/h	26	0	33	2	0	7	27	416	0	0	301	46
Future Vol, veh/h	26	0	33	2	0	7	27	416	0	0	301	46
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	95	-	-	50	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	5	5	5	2	2	2
Mvmt Flow	28	0	35	2	0	8	29	447	0	0	324	49

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	829	829	162	667	878	447	373	0	0	447	0	0
Stage 1	324	324	-	505	505	-	-	-	-	-	-	-
Stage 2	505	505	-	162	373	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.9	7.3	6.5	6.2	4.175	-	-	4.13	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2475	-	-	2.219	-	-
Pot Cap-1 Maneuver	279	308	861	361	289	615	1165	-	-	1111	-	-
Stage 1	668	654	-	553	543	-	-	-	-	-	-	-
Stage 2	553	543	-	830	622	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	269	301	861	338	281	615	1165	-	-	1111	-	-
Mov Cap-2 Maneuver	269	301	-	338	281	-	-	-	-	-	-	-
Stage 1	668	654	-	539	530	-	-	-	-	-	-	-
Stage 2	533	530	-	796	622	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	14.64	12.05	0.5	0
HCM LOS	B	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1165	-	-	437	520	1111	-	-
HCM Lane V/C Ratio	0.025	-	-	0.145	0.019	-	-	-
HCM Control Delay (s/veh)	8.2	-	-	14.6	12	0	-	-
HCM Lane LOS	A	-	-	B	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.5	0.1	0	-	-

Intersection						
Int Delay, s/veh	1.2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	36	372	16	52	291
Future Vol, veh/h	4	36	372	16	52	291
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	5	5	4	4
Mvmt Flow	4	39	404	17	57	316
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	842	413	0	0	422	0
Stage 1	413	-	-	-	-	-
Stage 2	429	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.14	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.236	-
Pot Cap-1 Maneuver	337	643	-	-	1127	-
Stage 1	672	-	-	-	-	-
Stage 2	661	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	320	643	-	-	1127	-
Mov Cap-2 Maneuver	320	-	-	-	-	-
Stage 1	672	-	-	-	-	-
Stage 2	628	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s/v	11.66	0		1.27		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT	
Capacity (veh/h)	-	-	584	1127	-	
HCM Lane V/C Ratio	-	-	0.074	0.05	-	
HCM Control Delay (s/veh)	-	-	11.7	8.4	-	
HCM Lane LOS	-	-	B	A	-	
HCM 95th %tile Q(veh)	-	-	0.2	0.2	-	

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	25	3	1	379	274	23
Future Vol, veh/h	25	3	1	379	274	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	5	5	4	4
Mvmt Flow	27	3	1	412	298	25

Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	724	310	323	0	-	0
Stage 1	310	-	-	-	-	-
Stage 2	414	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.15	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.245	-	-	-
Pot Cap-1 Maneuver	395	734	1220	-	-	-
Stage 1	748	-	-	-	-	-
Stage 2	671	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	395	734	1220	-	-	-
Mov Cap-2 Maneuver	395	-	-	-	-	-
Stage 1	747	-	-	-	-	-
Stage 2	671	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v14.35		0.02	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	5	-	415	-	-
HCM Lane V/C Ratio	0.001	-	0.073	-	-
HCM Control Delay (s/veh)	8	0	14.4	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection						
Int Delay, s/veh	0.4					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	13	367	1	18	259
Future Vol, veh/h	0	13	367	1	18	259
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	5	5	4	4
Mvmt Flow	0	14	390	1	19	276
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	705	391	0	0	391	0
Stage 1	391	-	-	-	-	-
Stage 2	314	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.14	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.236	-
Pot Cap-1 Maneuver	406	662	-	-	1156	-
Stage 1	688	-	-	-	-	-
Stage 2	745	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	398	662	-	-	1156	-
Mov Cap-2 Maneuver	398	-	-	-	-	-
Stage 1	688	-	-	-	-	-
Stage 2	731	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s/v10.55		0		0.53		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	-	662	117	-	
HCM Lane V/C Ratio	-	-	0.021	0.017	-	
HCM Control Delay (s/veh)	-	-	10.6	8.2	0	
HCM Lane LOS	-	-	B	A	A	
HCM 95th %tile Q(veh)	-	-	0.1	0.1	-	

Intersection												
Int Delay, s/veh	1											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	0	0	3	0	0	0	21	1	1	14	2
Future Vol, veh/h	1	0	0	3	0	0	0	21	1	1	14	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	6	6	6
Mvmt Flow	1	0	0	3	0	0	0	23	1	1	15	2

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	41	42	16	41	43	23	17	0	0	24	0	0
Stage 1	18	18	-	23	23	-	-	-	-	-	-	-
Stage 2	23	24	-	17	20	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.16	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.254	-	-
Pot Cap-1 Maneuver	967	853	1069	968	853	1059	1613	-	-	1565	-	-
Stage 1	1006	884	-	1000	880	-	-	-	-	-	-	-
Stage 2	1001	879	-	1007	883	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	967	853	1069	967	852	1059	1613	-	-	1565	-	-
Mov Cap-2 Maneuver	967	853	-	967	852	-	-	-	-	-	-	-
Stage 1	1005	883	-	1000	880	-	-	-	-	-	-	-
Stage 2	1001	879	-	1006	882	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	8.73	8.73	0	0.43
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1613	-	-	967	967	103	-
HCM Lane V/C Ratio	-	-	-	0.001	0.003	0.001	-
HCM Control Delay (s/veh)	0	-	-	8.7	8.7	7.3	0
HCM Lane LOS	A	-	-	A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-

HCM 7th Signalized Intersection Summary

1: Robertson Blvd & 11th St

Chowchilla Residential Development Project

Build-Out Plus Project - AM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	40	30	70	78	45	45	486	51	70	672	78
Future Volume (veh/h)	38	40	30	70	78	45	45	486	51	70	672	78
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1826	1826	1826	1870	1870	1870
Adj Flow Rate, veh/h	41	43	33	76	85	49	49	528	55	76	730	85
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	5	5	5	2	2	2
Cap, veh/h	167	155	90	183	148	72	119	1276	569	161	1384	617
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.07	0.37	0.37	0.09	0.39	0.39
Sat Flow, veh/h	389	833	480	467	792	383	1739	3469	1547	1781	3554	1585
Grp Volume(v), veh/h	117	0	0	210	0	0	49	528	55	76	730	85
Grp Sat Flow(s),veh/h/ln	1701	0	0	1643	0	0	1739	1735	1547	1781	1777	1585
Q Serve(g_s), s	0.0	0.0	0.0	3.0	0.0	0.0	1.4	5.8	1.2	2.1	8.1	1.8
Cycle Q Clear(g_c), s	2.9	0.0	0.0	5.9	0.0	0.0	1.4	5.8	1.2	2.1	8.1	1.8
Prop In Lane	0.35		0.28	0.36		0.23	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	412	0	0	402	0	0	119	1276	569	161	1384	617
V/C Ratio(X)	0.28	0.00	0.00	0.52	0.00	0.00	0.41	0.41	0.10	0.47	0.53	0.14
Avail Cap(c_a), veh/h	721	0	0	719	0	0	507	2136	953	519	2188	976
HCM Platoon Ratio	1.00	1.00	1.00	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	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.2	0.0	0.0	19.4	0.0	0.0	23.0	12.1	10.7	22.3	12.1	10.1
Incr Delay (d2), s/veh	0.7	0.0	0.0	2.7	0.0	0.0	0.8	0.5	0.2	0.8	0.7	0.2
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	0.0	2.4	0.0	0.0	0.5	1.9	0.4	0.8	2.8	0.6
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	18.9	0.0	0.0	22.1	0.0	0.0	23.8	12.6	10.8	23.1	12.8	10.4
LnGrp LOS	B			C			C	B	B	C	B	B
Approach Vol, veh/h	117				210			632			891	
Approach Delay, s/veh	18.9				22.1			13.4			13.5	
Approach LOS	B				C			B			B	
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.3	25.0		16.1	9.2	26.1		16.1				
Change Period (Y+Rc), s	5.7	6.1		6.5	5.7	6.1		6.5				
Max Green Setting (Gmax), s	15.0	31.7		20.0	15.0	31.7		20.0				
Max Q Clear Time (g_c+l1), s	4.1	7.8		4.9	3.4	10.1		7.9				
Green Ext Time (p_c), s	0.1	7.0		0.8	0.0	9.9		1.8				
Intersection Summary												
HCM 7th Control Delay, s/veh	14.7											
HCM 7th LOS	B											

HCM 7th Signalized Intersection Summary

2: Robertson Blvd & 15th St

Chowchilla Residential Development Project

Build-Out Plus Project - AM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	51	70	71	96	90	33	447	36	59	519	66
Future Volume (veh/h)	85	51	70	71	96	90	33	447	36	59	519	66
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1856	1856	1856	1870	1870	1870	1796	1796	1796	1870	1870	1870
Adj Flow Rate, veh/h	92	55	76	77	104	98	36	486	39	64	564	72
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	2	2	2	7	7	7	2	2	2
Cap, veh/h	313	171	236	372	215	202	95	955	76	148	1034	132
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.06	0.30	0.30	0.08	0.33	0.33
Sat Flow, veh/h	1171	705	975	1259	886	835	1711	3201	256	1781	3171	404
Grp Volume(v), veh/h	92	0	131	77	0	202	36	258	267	64	315	321
Grp Sat Flow(s),veh/h/ln	1171	0	1680	1259	0	1720	1711	1706	1750	1781	1777	1798
Q Serve(g_s), s	3.6	0.0	3.1	2.6	0.0	4.9	1.0	6.1	6.2	1.7	7.1	7.2
Cycle Q Clear(g_c), s	8.5	0.0	3.1	5.8	0.0	4.9	1.0	6.1	6.2	1.7	7.1	7.2
Prop In Lane	1.00		0.58	1.00		0.49	1.00		0.15	1.00		0.22
Lane Grp Cap(c), veh/h	313	0	407	372	0	417	95	509	522	148	580	586
V/C Ratio(X)	0.29	0.00	0.32	0.21	0.00	0.48	0.38	0.51	0.51	0.43	0.54	0.55
Avail Cap(c_a), veh/h	508	0	687	581	0	703	525	1102	1131	546	1148	1161
HCM Platoon Ratio	1.00	1.00	1.00	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	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.6	0.0	15.2	17.6	0.0	15.9	22.3	14.2	14.2	21.3	13.5	13.5
Incr Delay (d2), s/veh	1.3	0.0	1.1	1.2	0.0	3.7	0.9	1.8	1.8	0.7	1.6	1.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	1.2	0.8	0.0	2.1	0.4	2.1	2.2	0.6	2.5	2.5
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	20.8	0.0	16.4	18.8	0.0	19.6	23.2	16.0	16.0	22.1	15.1	15.1
LnGrp LOS	C		B	B		B	C	B	B	C	B	B
Approach Vol, veh/h	223			279			561			700		
Approach Delay, s/veh	18.2			19.4			16.5			15.8		
Approach LOS	B			B			B			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	9.8	21.0		18.2	8.4	22.4		18.2				
Change Period (Y+Rc), s	5.7	6.4		6.3	5.7	6.4		6.3				
Max Green Setting (Gmax), s	15.0	31.6		20.0	15.0	31.6		20.0				
Max Q Clear Time (g_c+I), s	13.7	8.2		10.5	3.0	9.2		7.8				
Green Ext Time (p_c), s	0.0	6.0		1.4	0.0	6.8		2.6				
Intersection Summary												
HCM 7th Control Delay, s/veh	16.9											
HCM 7th LOS	B											

HCM 7th TWSC
3: Robertson Blvd & Washington Rd

Chowchilla Residential Development Project
Build-Out Plus Project - AM Peak Hour

Intersection												
Int Delay, s/veh	29.4											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	248	0	46	0	0	0	19	428	0	0	434	162
Future Vol, veh/h	248	0	46	0	0	0	19	428	0	0	434	162
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	60	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	0	0	0	3	3	3	5	5	5
Mvmt Flow	270	0	50	0	0	0	21	465	0	0	472	176
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	834	1066	324	742	1154	233	648	0	0	465	0	0
Stage 1	560	560	-	507	507	-	-	-	-	-	-	-
Stage 2	274	507	-	236	648	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.5	6.5	6.9	4.16	-	-	4.2	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.5	4	3.3	2.23	-	-	2.25	-	-
Pot Cap-1 Maneuver	~ 261	221	672	308	199	776	927	-	-	1072	-	-
Stage 1	480	509	-	522	543	-	-	-	-	-	-	-
Stage 2	709	538	-	752	469	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	~ 255	216	672	278	194	776	927	-	-	1072	-	-
Mov Cap-2 Maneuver	~ 255	216	-	278	194	-	-	-	-	-	-	-
Stage 1	480	509	-	510	531	-	-	-	-	-	-	-
Stage 2	693	526	-	696	469	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s/veh	33.03		0		0.38		0					
HCM LOS	F		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	927	-	-	283	-	1072	-	-				
HCM Lane V/C Ratio	0.022	-	-	1.131	-	-	-	-				
HCM Control Delay (s/veh)	9	-	-	133	0	0	-	-				
HCM Lane LOS	A	-	-	F	A	A	-	-				
HCM 95th %tile Q(veh)	0.1	-	-	13.5	-	0	-	-				
Notes												
~: Volume exceeds capacity		\$: Delay exceeds 300s		+: Computation Not Defined				*: All major volume in platoon				

Intersection												
Int Delay, s/veh	1.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	↕
Traffic Vol, veh/h	18	0	6	10	4	25	12	381	6	13	383	36
Future Vol, veh/h	18	0	6	10	4	25	12	381	6	13	383	36
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	130	-	-	385	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	3	3	3	5	5	5
Mvmt Flow	20	0	7	11	4	27	13	414	7	14	416	39

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	887	891	208	680	927	417	455	0	0	421	0	0
Stage 1	445	445	-	443	443	-	-	-	-	-	-	-
Stage 2	442	447	-	236	484	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.9	7.3	6.5	6.2	4.145	-	-	4.175	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2285	-	-	2.2475	-	-
Pot Cap-1 Maneuver	254	284	804	354	270	640	1097	-	-	1118	-	-
Stage 1	568	578	-	597	579	-	-	-	-	-	-	-
Stage 2	598	577	-	751	556	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	234	277	804	343	264	640	1097	-	-	1118	-	-
Mov Cap-2 Maneuver	234	277	-	343	264	-	-	-	-	-	-	-
Stage 1	561	571	-	590	572	-	-	-	-	-	-	-
Stage 2	562	570	-	736	549	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	18.96	13.47	0.25	0.25
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1097	-	-	284	467	1118	-	-
HCM Lane V/C Ratio	0.012	-	-	0.092	0.091	0.013	-	-
HCM Control Delay (s/veh)	8.3	-	-	19	13.5	8.3	-	-
HCM Lane LOS	A	-	-	C	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.3	0.3	0	-	-

Intersection												
Int Delay, s/veh	2.2											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	57	0	40	2	0	1	15	341	0	3	369	28
Future Vol, veh/h	57	0	40	2	0	1	15	341	0	3	369	28
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	95	-	-	50	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	3	3	3	5	5	5
Mvmt Flow	62	0	43	2	0	1	16	371	0	3	401	30
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	811	811	201	610	841	371	432	0	0	371	0	0
Stage 1	408	408	-	403	403	-	-	-	-	-	-	-
Stage 2	403	403	-	207	438	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.9	7.3	6.5	6.2	4.145	-	-	4.175	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2285	-	-	2.2475	-	-
Pot Cap-1 Maneuver	287	316	813	396	303	680	1120	-	-	1167	-	-
Stage 1	597	600	-	628	603	-	-	-	-	-	-	-
Stage 2	628	603	-	781	582	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	282	310	813	368	298	680	1120	-	-	1167	-	-
Mov Cap-2 Maneuver	282	310	-	368	298	-	-	-	-	-	-	-
Stage 1	595	599	-	619	594	-	-	-	-	-	-	-
Stage 2	618	594	-	738	580	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s/v	17.81		13.35		0.35		0.06					
HCM LOS	C		B									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1120	-	-	386	434	1167	-	-				
HCM Lane V/C Ratio	0.015	-	-	0.273	0.008	0.003	-	-				
HCM Control Delay (s/veh)	8.3	-	-	17.8	13.4	8.1	-	-				
HCM Lane LOS	A	-	-	C	B	A	-	-				
HCM 95th %tile Q(veh)	0	-	-	1.1	0	0	-	-				

Intersection						
Int Delay, s/veh	2					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	17	78	276	7	46	335
Future Vol, veh/h	17	78	276	7	46	335
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	3	3	7	7
Mvmt Flow	18	85	300	8	50	364

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	768	304	0	0	308
Stage 1	304	-	-	-	-
Stage 2	464	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.17
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.263
Pot Cap-1 Maneuver	373	741	-	-	1225
Stage 1	753	-	-	-	-
Stage 2	637	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	358	741	-	-	1225
Mov Cap-2 Maneuver	358	-	-	-	-
Stage 1	753	-	-	-	-
Stage 2	611	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	11.94	0	0.97
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	621	1225
HCM Lane V/C Ratio	-	-	0.166	0.041
HCM Control Delay (s/veh)	-	-	11.9	8.1
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.6	0.1

Intersection						
Int Delay, s/veh	0.4					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	18	2	2	270	319	25
Future Vol, veh/h	18	2	2	270	319	25
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	3	3	7	7
Mvmt Flow	20	2	2	293	347	27

Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	658	360	374	0	-	0
Stage 1	360	-	-	-	-	-
Stage 2	298	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.13	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.227	-	-	-
Pot Cap-1 Maneuver	432	689	1179	-	-	-
Stage 1	710	-	-	-	-	-
Stage 2	758	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	431	689	1179	-	-	-
Mov Cap-2 Maneuver	431	-	-	-	-	-
Stage 1	709	-	-	-	-	-
Stage 2	758	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	13.45	0.06	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	13	-	448	-	-
HCM Lane V/C Ratio	0.002	-	0.049	-	-
HCM Control Delay (s/veh)	8.1	0	13.4	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection						
Int Delay, s/veh	1.7					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	8	65	207	3	32	289
Future Vol, veh/h	8	65	207	3	32	289
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	3	3	7	7
Mvmt Flow	9	71	225	3	35	314
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	610	227	0	0	228	0
Stage 1	227	-	-	-	-	-
Stage 2	384	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.17	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.263	-
Pot Cap-1 Maneuver	461	818	-	-	1311	-
Stage 1	816	-	-	-	-	-
Stage 2	693	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	449	818	-	-	1311	-
Mov Cap-2 Maneuver	449	-	-	-	-	-
Stage 1	816	-	-	-	-	-
Stage 2	675	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s/v10.37		0		0.78		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1		SBL	SBT	
Capacity (veh/h)	-	-	750	1311	-	
HCM Lane V/C Ratio	-	-	0.106	0.027	-	
HCM Control Delay (s/veh)	-	-	10.4	7.8	-	
HCM Lane LOS	-	-	B	A	-	
HCM 95th %tile Q(veh)	-	-	0.4	0.1	-	

Intersection												
Int Delay, s/veh	0.9											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	0	1	1	0	2	0	20	6	2	31	0
Future Vol, veh/h	1	0	1	1	0	2	0	20	6	2	31	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	17	17	17	4	4	4
Mvmt Flow	1	0	1	1	0	2	0	22	7	2	34	0
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	60	66	34	63	63	25	34	0	0	28	0	0
Stage 1	38	38	-	25	25	-	-	-	-	-	-	-
Stage 2	22	28	-	38	38	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.27	-	-	4.14	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.353	-	-	2.236	-	-
Pot Cap-1 Maneuver	941	828	1045	936	832	1057	1486	-	-	1572	-	-
Stage 1	982	867	-	998	878	-	-	-	-	-	-	-
Stage 2	1002	876	-	982	867	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	938	827	1045	934	830	1057	1486	-	-	1572	-	-
Mov Cap-2 Maneuver	938	827	-	934	830	-	-	-	-	-	-	-
Stage 1	981	866	-	998	878	-	-	-	-	-	-	-
Stage 2	1000	876	-	980	866	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s/v	8.65		8.57		0		0.44					
HCM LOS	A		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1486	-	-	989	1013	109	-	-				
HCM Lane V/C Ratio	-	-	-	0.002	0.003	0.001	-	-				
HCM Control Delay (s/veh)	0	-	-	8.6	8.6	7.3	0	-				
HCM Lane LOS	A	-	-	A	A	A	A	-				
HCM 95th %tile Q(veh)	0	-	-	0	0	0	-	-				

Intersection						
Int Delay, s/veh	2.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	8	26	51	0	0	24
Future Vol, veh/h	8	26	51	0	0	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	0	0
Mvmt Flow	9	28	55	0	0	26
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	55	0	-	0	101	55
Stage 1	-	-	-	-	55	-
Stage 2	-	-	-	-	46	-
Critical Hdwy	4.12	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.218	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1549	-	-	-	902	1017
Stage 1	-	-	-	-	972	-
Stage 2	-	-	-	-	982	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1549	-	-	-	897	1017
Mov Cap-2 Maneuver	-	-	-	-	897	-
Stage 1	-	-	-	-	967	-
Stage 2	-	-	-	-	982	-
Approach	EB	WB		SB		
HCM Control Delay, s/v	1.73	0		8.63		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	424	-	-	-	1017	
HCM Lane V/C Ratio	0.006	-	-	-	0.026	
HCM Control Delay (s/veh)	7.3	0	-	-	8.6	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0.1	

Intersection						
Int Delay, s/veh	3.4					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	7	18	29	2	6	21
Future Vol, veh/h	7	18	29	2	6	21
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	0	0
Mvmt Flow	8	20	32	2	7	23

Major/Minor	Major1	Major2	Minor2		
Conflicting Flow All	34	0	0	67	33
Stage 1	-	-	-	33	-
Stage 2	-	-	-	35	-
Critical Hdwy	4.12	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	5.4	-
Follow-up Hdwy	2.218	-	-	3.5	3.3
Pot Cap-1 Maneuver	1578	-	-	943	1047
Stage 1	-	-	-	995	-
Stage 2	-	-	-	993	-
Platoon blocked, %	-	-	-	-	-
Mov Cap-1 Maneuver	1578	-	-	938	1047
Mov Cap-2 Maneuver	-	-	-	938	-
Stage 1	-	-	-	990	-
Stage 2	-	-	-	993	-

Approach	EB	WB	SB
HCM Control Delay, s/v	2.04	0	8.63
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1
Capacity (veh/h)	504	-	-	-	1021
HCM Lane V/C Ratio	0.005	-	-	-	0.029
HCM Control Delay (s/veh)	7.3	0	-	-	8.6
HCM Lane LOS	A	A	-	-	A
HCM 95th %tile Q(veh)	0	-	-	-	0.1

HCM 7th Signalized Intersection Summary

1: Robertson Blvd & 11th St

Chowchilla Residential Development Project

Build-Out Plus Project - PM Peak Hour

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	16	28	42	14	51	18	661	34	39	647	43
Future Volume (veh/h)	61	16	28	42	14	51	18	661	34	39	647	43
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1841	1841	1841	1885	1885	1885
Adj Flow Rate, veh/h	64	17	29	44	15	53	19	689	35	41	674	45
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	4	4	4	1	1	1
Cap, veh/h	242	72	69	179	67	124	57	1340	598	111	1477	659
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.03	0.38	0.38	0.06	0.41	0.41
Sat Flow, veh/h	740	442	423	441	410	765	1753	3497	1560	1795	3582	1598
Grp Volume(v), veh/h	110	0	0	112	0	0	19	689	35	41	674	45
Grp Sat Flow(s),veh/h/ln	1605	0	0	1616	0	0	1753	1749	1560	1795	1791	1598
Q Serve(g_s), s	0.0	0.0	0.0	0.2	0.0	0.0	0.5	7.0	0.7	1.0	6.3	0.8
Cycle Q Clear(g_c), s	2.5	0.0	0.0	2.7	0.0	0.0	0.5	7.0	0.7	1.0	6.3	0.8
Prop In Lane	0.58		0.26	0.39		0.47	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	382	0	0	370	0	0	57	1340	598	111	1477	659
V/C Ratio(X)	0.29	0.00	0.00	0.30	0.00	0.00	0.33	0.51	0.06	0.37	0.46	0.07
Avail Cap(c_a), veh/h	779	0	0	782	0	0	565	2380	1062	578	2438	1087
HCM Platoon Ratio	1.00	1.00	1.00	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	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.4	0.0	0.0	17.5	0.0	0.0	22.0	11.0	9.1	21.0	9.9	8.3
Incr Delay (d2), s/veh	0.7	0.0	0.0	1.2	0.0	0.0	1.2	0.7	0.1	0.8	0.5	0.1
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	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	1.1	0.0	0.0	0.2	2.1	0.2	0.4	2.1	0.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	18.1	0.0	0.0	18.7	0.0	0.0	23.3	11.8	9.2	21.7	10.4	8.4
LnGrp LOS	B			B			C	B	A	C	B	A
Approach Vol, veh/h	110			112			743			760		
Approach Delay, s/veh	18.1			18.7			11.9			10.9		
Approach LOS	B			B			B			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	8.6	23.9		14.0	7.2	25.3		14.0				
Change Period (Y+Rc), s	5.7	6.1		6.5	5.7	6.1		6.5				
Max Green Setting (Gmax), s	15.0	31.7		20.0	15.0	31.7		20.0				
Max Q Clear Time (g_c+I1), s	3.0	9.0		4.5	2.5	8.3		4.7				
Green Ext Time (p_c), s	0.0	8.8		0.8	0.0	9.2		0.9				
Intersection Summary												
HCM 7th Control Delay, s/veh	12.3											
HCM 7th LOS	B											

HCM 7th Signalized Intersection Summary

2: Robertson Blvd & 15th St

Chowchilla Residential Development Project

Build-Out Plus Project - PM Peak Hour



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	91	45	64	39	38	91	58	563	47	65	597	57
Future Volume (veh/h)	91	45	64	39	38	91	58	563	47	65	597	57
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Lane Width Adj.	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Ped-Bike Adj(A_pbT)	1.00		1.00	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	1.00	1.00	1.00
Work Zone On Approach	No			No			No			No		
Adj Sat Flow, veh/h/ln	1885	1885	1885	1900	1900	1900	1856	1856	1856	1885	1885	1885
Adj Flow Rate, veh/h	98	48	69	42	41	98	62	605	51	70	642	61
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	0	0	0	3	3	3	1	1	1
Cap, veh/h	317	146	211	338	104	249	142	1117	94	156	1142	108
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.08	0.34	0.34	0.09	0.35	0.35
Sat Flow, veh/h	1260	699	1005	1295	497	1189	1767	3291	277	1795	3306	314
Grp Volume(v), veh/h	98	0	117	42	0	139	62	324	332	70	347	356
Grp Sat Flow(s), veh/h/ln	1260	0	1704	1295	0	1686	1767	1763	1806	1795	1791	1829
Q Serve(g_s), s	3.7	0.0	2.9	1.4	0.0	3.6	1.7	7.5	7.5	1.9	8.0	8.0
Cycle Q Clear(g_c), s	7.3	0.0	2.9	4.4	0.0	3.6	1.7	7.5	7.5	1.9	8.0	8.0
Prop In Lane	1.00		0.59	1.00		0.71	1.00		0.15	1.00		0.17
Lane Grp Cap(c), veh/h	317	0	357	338	0	353	142	598	613	156	619	632
V/C Ratio(X)	0.31	0.00	0.33	0.12	0.00	0.39	0.44	0.54	0.54	0.45	0.56	0.56
Avail Cap(c_a), veh/h	552	0	675	580	0	668	525	1103	1130	534	1121	1145
HCM Platoon Ratio	1.00	1.00	1.00	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	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.3	0.0	16.9	18.8	0.0	17.2	22.1	13.5	13.5	21.9	13.4	13.4
Incr Delay (d2), s/veh	1.4	0.0	1.3	0.7	0.0	3.1	0.8	1.8	1.8	0.8	1.6	1.6
Initial Q Delay(d3), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	1.2	0.5	0.0	1.5	0.6	2.7	2.7	0.7	2.8	2.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d), s/veh	21.7	0.0	18.3	19.5	0.0	20.2	22.9	15.3	15.3	22.7	15.0	15.0
LnGrp LOS	C		B	B		C	C	B	B	C	B	B
Approach Vol, veh/h	215			181			718			773		
Approach Delay, s/veh	19.8			20.1			15.9			15.7		
Approach LOS	B			C			B			B		
Timer - Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	10.1	23.5		16.9	9.8	23.8		16.9				
Change Period (Y+Rc), s	5.7	6.4		6.3	5.7	6.4		6.3				
Max Green Setting (Gmax), s	15.0	31.6		20.0	15.0	31.6		20.0				
Max Q Clear Time (g_c+I), s	13.9	9.5		9.3	3.7	10.0		6.4				
Green Ext Time (p_c), s	0.0	7.5		1.4	0.0	7.5		1.7				
Intersection Summary												
HCM 7th Control Delay, s/veh	16.7											
HCM 7th LOS	B											

HCM 7th TWSC
3: Robertson Blvd & Washington Rd

Chowchilla Residential Development Project
Build-Out Plus Project - PM Peak Hour

Intersection												
Int Delay, s/veh	51											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	
Traffic Vol, veh/h	206	0	37	0	0	0	64	511	0	0	508	271
Future Vol, veh/h	206	0	37	0	0	0	64	511	0	0	508	271
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	-	-	-	-	60	-	-	50	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	1	1	1	0	0	0	1	1	1	2	2	2
Mvmt Flow	224	0	40	0	0	0	70	555	0	0	552	295
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1116	1394	423	971	1541	278	847	0	0	555	0	0
Stage 1	699	699	-	695	695	-	-	-	-	-	-	-
Stage 2	417	695	-	276	847	-	-	-	-	-	-	-
Critical Hdwy	7.52	6.52	6.92	7.5	6.5	6.9	4.12	-	-	4.14	-	-
Critical Hdwy Stg 1	6.52	5.52	-	6.5	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.52	5.52	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.51	4.01	3.31	3.5	4	3.3	2.21	-	-	2.22	-	-
Pot Cap-1 Maneuver	~ 163	142	582	210	116	726	793	-	-	1011	-	-
Stage 1	399	442	-	404	447	-	-	-	-	-	-	-
Stage 2	587	444	-	712	381	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 149	129	582	179	106	726	793	-	-	1011	-	-
Mov Cap-2 Maneuver	~ 149	129	-	179	106	-	-	-	-	-	-	-
Stage 1	399	442	-	368	408	-	-	-	-	-	-	-
Stage 2	535	405	-	663	381	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, \$/332.67			0		1.11		0					
HCM LOS	F		A									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR					
Capacity (veh/h)	793	-	-	168	-	1011	-	-	-	-	-	-
HCM Lane V/C Ratio	0.088	-	-	1.571	-	-	-	-	-	-	-	-
HCM Control Delay (s/veh)	10	-	-	\$ 332.7	0	0	-	-	-	-	-	-
HCM Lane LOS	A	-	-	F	A	A	-	-	-	-	-	-
HCM 95th %tile Q(veh)	0.3	-	-	17.6	-	0	-	-	-	-	-	-
Notes												
~: Volume exceeds capacity \$: Delay exceeds 300s +: Computation Not Defined *: All major volume in platoon												

Intersection												
Int Delay, s/veh	2.3											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	38	3	15	2	9	22	18	450	10	29	376	41
Future Vol, veh/h	38	3	15	2	9	22	18	450	10	29	376	41
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	130	-	-	385	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	1	1	1	2	2	2
Mvmt Flow	41	3	16	2	10	24	20	489	11	32	409	45
Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	1005	1011	204	803	1050	495	453	0	0	500	0	0
Stage 1	472	472	-	534	534	-	-	-	-	-	-	-
Stage 2	533	539	-	269	516	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.9	7.3	6.5	6.2	4.115	-	-	4.13	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2095	-	-	2.219	-	-
Pot Cap-1 Maneuver	210	241	809	291	229	579	1112	-	-	1062	-	-
Stage 1	547	562	-	534	528	-	-	-	-	-	-	-
Stage 2	534	525	-	719	537	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	184	230	809	268	218	579	1112	-	-	1062	-	-
Mov Cap-2 Maneuver	184	230	-	268	218	-	-	-	-	-	-	-
Stage 1	531	546	-	524	519	-	-	-	-	-	-	-
Stage 2	494	516	-	680	521	-	-	-	-	-	-	-
Approach	EB		WB		NB		SB					
HCM Control Delay, s/v	25.6		15.44		0.31		0.55					
HCM LOS	D		C									
Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR				
Capacity (veh/h)	1112	-	-	235	381	1062	-	-				
HCM Lane V/C Ratio	0.018	-	-	0.259	0.094	0.03	-	-				
HCM Control Delay (s/veh)	8.3	-	-	25.6	15.4	8.5	-	-				
HCM Lane LOS	A	-	-	D	C	A	-	-				
HCM 95th %tile Q(veh)	0.1	-	-	1	0.3	0.1	-	-				

Intersection

Int Delay, s/veh 1.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕		↕	↕		↕	↕	↕
Traffic Vol, veh/h	26	0	36	2	0	7	29	445	0	0	348	46
Future Vol, veh/h	26	0	36	2	0	7	29	445	0	0	348	46
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	95	-	-	50	-	50
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	5	5	5	2	2	2
Mvmt Flow	28	0	39	2	0	8	31	478	0	0	374	49

Major/Minor	Minor2		Minor1		Major1		Major2					
Conflicting Flow All	915	915	187	728	965	478	424	0	0	478	0	0
Stage 1	374	374	-	541	541	-	-	-	-	-	-	-
Stage 2	541	541	-	187	424	-	-	-	-	-	-	-
Critical Hdwy	7.3	6.5	6.9	7.3	6.5	6.2	4.175	-	-	4.13	-	-
Critical Hdwy Stg 1	6.5	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.5	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2475	-	-	2.219	-	-
Pot Cap-1 Maneuver	243	275	829	328	257	591	1115	-	-	1082	-	-
Stage 1	624	621	-	529	524	-	-	-	-	-	-	-
Stage 2	529	524	-	802	591	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	233	267	829	304	250	591	1115	-	-	1082	-	-
Mov Cap-2 Maneuver	233	267	-	304	250	-	-	-	-	-	-	-
Stage 1	624	621	-	514	509	-	-	-	-	-	-	-
Stage 2	508	509	-	765	591	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v15.79		12.52	0.51	0
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1115	-	-	400	489	1082	-
HCM Lane V/C Ratio	0.028	-	-	0.167	0.02	-	-
HCM Control Delay (s/veh)	8.3	-	-	15.8	12.5	0	-
HCM Lane LOS	A	-	-	C	B	A	-
HCM 95th %tile Q(veh)	0.1	-	-	0.6	0.1	0	-

Intersection						
Int Delay, s/veh	1.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	42	397	16	61	331
Future Vol, veh/h	4	42	397	16	61	331
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	5	5	4	4
Mvmt Flow	4	46	432	17	66	360

Major/Minor	Minor1	Major1	Major2		
Conflicting Flow All	933	440	0	0	449
Stage 1	440	-	-	-	-
Stage 2	492	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.14
Critical Hdwy Stg 1	5.4	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.236
Pot Cap-1 Maneuver	298	621	-	-	1101
Stage 1	653	-	-	-	-
Stage 2	618	-	-	-	-
Platoon blocked, %			-	-	-
Mov Cap-1 Maneuver	280	621	-	-	1101
Mov Cap-2 Maneuver	280	-	-	-	-
Stage 1	653	-	-	-	-
Stage 2	581	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v12.03		0	1.32
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT
Capacity (veh/h)	-	-	562	1101
HCM Lane V/C Ratio	-	-	0.089	0.06
HCM Control Delay (s/veh)	-	-	12	8.5
HCM Lane LOS	-	-	B	A
HCM 95th %tile Q(veh)	-	-	0.3	0.2

Intersection						
Int Delay, s/veh	0.6					
Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	25	3	1	404	314	23
Future Vol, veh/h	25	3	1	404	314	23
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	0	0	5	5	4	4
Mvmt Flow	27	3	1	439	341	25

Major/Minor	Minor2	Major1		Major2		
Conflicting Flow All	795	354	366	0	-	0
Stage 1	354	-	-	-	-	-
Stage 2	441	-	-	-	-	-
Critical Hdwy	6.4	6.2	4.15	-	-	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	2.245	-	-	-
Pot Cap-1 Maneuver	359	695	1176	-	-	-
Stage 1	715	-	-	-	-	-
Stage 2	653	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	359	695	1176	-	-	-
Mov Cap-2 Maneuver	359	-	-	-	-	-
Stage 1	714	-	-	-	-	-
Stage 2	653	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v15.34		0.02	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	4	-	378	-	-
HCM Lane V/C Ratio	0.001	-	0.08	-	-
HCM Control Delay (s/veh)	8.1	0	15.3	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

Intersection						
Int Delay, s/veh	1.3					
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	4	38	367	7	58	259
Future Vol, veh/h	4	38	367	7	58	259
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	5	5	4	4
Mvmt Flow	4	40	390	7	62	276
Major/Minor	Minor1	Major1		Major2		
Conflicting Flow All	793	394	0	0	398	0
Stage 1	394	-	-	-	-	-
Stage 2	399	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.14	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.236	-
Pot Cap-1 Maneuver	360	659	-	-	1150	-
Stage 1	686	-	-	-	-	-
Stage 2	682	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	341	659	-	-	1150	-
Mov Cap-2 Maneuver	341	-	-	-	-	-
Stage 1	686	-	-	-	-	-
Stage 2	646	-	-	-	-	-
Approach	WB	NB		SB		
HCM Control Delay, s/v	11.42	0		1.52		
HCM LOS	B					
Minor Lane/Major Mvmt	NBT	NBRWBLn1	SBL	SBT		
Capacity (veh/h)	-	-	605	1150	-	
HCM Lane V/C Ratio	-	-	0.074	0.054	-	
HCM Control Delay (s/veh)	-	-	11.4	8.3	-	
HCM Lane LOS	-	-	B	A	-	
HCM 95th %tile Q(veh)	-	-	0.2	0.2	-	

Intersection												
Int Delay, s/veh	0.8											
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	1	0	0	3	0	0	0	27	1	1	18	2
Future Vol, veh/h	1	0	0	3	0	0	0	27	1	1	18	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	6	6	6
Mvmt Flow	1	0	0	3	0	0	0	29	1	1	20	2

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	52	53	21	52	54	30	22	0	0	30	0	0
Stage 1	23	23	-	30	30	-	-	-	-	-	-	-
Stage 2	29	30	-	22	24	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.16	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.254	-	-
Pot Cap-1 Maneuver	952	842	1063	953	841	1050	1607	-	-	1557	-	-
Stage 1	1001	880	-	992	874	-	-	-	-	-	-	-
Stage 2	993	874	-	1002	879	-	-	-	-	-	-	-
Platoon blocked, %								-	-	-	-	-
Mov Cap-1 Maneuver	951	841	1063	952	841	1050	1607	-	-	1557	-	-
Mov Cap-2 Maneuver	951	841	-	952	841	-	-	-	-	-	-	-
Stage 1	1000	880	-	992	874	-	-	-	-	-	-	-
Stage 2	993	874	-	1001	879	-	-	-	-	-	-	-

Approach	EB			WB			NB			SB		
HCM Control Delay, s/v	8.79			8.8			0			0.35		
HCM LOS	A			A								

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1607	-	-	951 952	84	-	-
HCM Lane V/C Ratio	-	-	-	0.001 0.003	0.001	-	-
HCM Control Delay (s/veh)	0	-	-	8.8 8.8	7.3	0	-
HCM Lane LOS	A	-	-	A A	A	A	-
HCM 95th %tile Q(veh)	0	-	-	0 0	0	-	-

Intersection						
Int Delay, s/veh	2.9					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	25	41	27	0	0	16
Future Vol, veh/h	25	41	27	0	0	16
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	0	0
Mvmt Flow	27	45	29	0	0	17
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	29	0	-	0	128	29
Stage 1	-	-	-	-	29	-
Stage 2	-	-	-	-	99	-
Critical Hdwy	4.12	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.218	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1584	-	-	-	871	1051
Stage 1	-	-	-	-	998	-
Stage 2	-	-	-	-	930	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1584	-	-	-	856	1051
Mov Cap-2 Maneuver	-	-	-	-	856	-
Stage 1	-	-	-	-	981	-
Stage 2	-	-	-	-	930	-
Approach	EB	WB		SB		
HCM Control Delay, s/v	2.77	0		8.48		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	682	-	-	-	-	1051
HCM Lane V/C Ratio	0.017	-	-	-	-	0.017
HCM Control Delay (s/veh)	7.3	0	-	-	-	8.5
HCM Lane LOS	A	A	-	-	-	A
HCM 95th %tile Q(veh)	0.1	-	-	-	-	0.1

Intersection						
Int Delay, s/veh	4.1					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	22	18	13	6	4	14
Future Vol, veh/h	22	18	13	6	4	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	0	0
Mvmt Flow	24	20	14	7	4	15
Major/Minor	Major1	Major2		Minor2		
Conflicting Flow All	21	0	-	0	85	17
Stage 1	-	-	-	-	17	-
Stage 2	-	-	-	-	67	-
Critical Hdwy	4.12	-	-	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	2.218	-	-	-	3.5	3.3
Pot Cap-1 Maneuver	1595	-	-	-	922	1067
Stage 1	-	-	-	-	1011	-
Stage 2	-	-	-	-	960	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1595	-	-	-	908	1067
Mov Cap-2 Maneuver	-	-	-	-	908	-
Stage 1	-	-	-	-	995	-
Stage 2	-	-	-	-	960	-
Approach	EB	WB		SB		
HCM Control Delay, s/v	4.01	0		8.57		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	990	-	-	-	1027	
HCM Lane V/C Ratio	0.015	-	-	-	0.019	
HCM Control Delay (s/veh)	7.3	0	-	-	8.6	
HCM Lane LOS	A	A	-	-	A	
HCM 95th %tile Q(veh)	0	-	-	-	0.1	

APPENDIX E

QUEUING ANALYSIS WORKSHEETS

Queues

Chowchilla Residential Development Project

1: Robertson Blvd & 11th St

Existing NP - AM Peak Hour



Lane Group	EBT	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	122	234	45	434	49	58	660	67
v/c Ratio	0.26	0.53	0.18	0.36	0.08	0.22	0.53	0.10
Control Delay (s/veh)	17.6	23.8	29.3	16.3	0.2	29.1	17.8	1.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	17.6	23.8	29.3	16.3	0.2	29.1	17.8	1.3
Queue Length 50th (ft)	28	70	15	64	0	20	105	0
Queue Length 95th (ft)	59	119	39	87	0	46	130	0
Internal Link Dist (ft)	370	621		612			535	
Turn Bay Length (ft)			100		100	80		130
Base Capacity (vph)	630	605	512	2166	1012	527	2230	1041
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.39	0.09	0.20	0.05	0.11	0.30	0.06
Intersection Summary								

Queues

Chowchilla Residential Development Project

2: Robertson Blvd & 15th St

Existing NP - AM Peak Hour

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	106	160	94	245	31	405	61	563
v/c Ratio	0.32	0.29	0.26	0.45	0.12	0.40	0.21	0.45
Control Delay (s/veh)	20.0	12.0	18.8	16.7	26.2	16.9	25.8	14.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	20.0	12.0	18.8	16.7	26.2	16.9	25.8	14.9
Queue Length 50th (ft)	27	22	24	52	9	55	18	50
Queue Length 95th (ft)	56	50	50	91	28	80	44	103
Internal Link Dist (ft)		465		377		483		627
Turn Bay Length (ft)	50		55		50		95	
Base Capacity (vph)	483	769	527	774	545	2275	572	2372
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.21	0.18	0.32	0.06	0.18	0.11	0.24
Intersection Summary								

Queuing and Blocking Report

Intersection: 3: Robertson Blvd & Washington Rd

Movement	EB	NB
Directions Served	LTR	L
Maximum Queue (ft)	133	12
Average Queue (ft)	44	1
95th Queue (ft)	85	7
Link Distance (ft)	680	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		60
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 4: Robertson Blvd & Country Wood Shopping Ctr/Adams Dr

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	23	55	31	28
Average Queue (ft)	9	24	5	3
95th Queue (ft)	27	48	22	15
Link Distance (ft)	326	341		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			130	385
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: Robertson Blvd & Myer Dr/Anderson Pump Dwy

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	46	30	29	25
Average Queue (ft)	25	2	3	1
95th Queue (ft)	43	15	17	9
Link Distance (ft)	233	497		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			95	50
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queuing and Blocking Report

Intersection: 6: Robertson Blvd & Palm Pkwy

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	54	51
Average Queue (ft)	32	8
95th Queue (ft)	41	32
Link Distance (ft)	277	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		100
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 0

Queues

Chowchilla Residential Development Project

1: Robertson Blvd & 11th St

Existing NP - PM Peak Hour

	→	←	↖	↑	↗	↘	↓	↙
Lane Group	EBT	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	61	61	13	438	27	18	439	22
v/c Ratio	0.13	0.13	0.03	0.17	0.02	0.04	0.16	0.01
Control Delay (s/veh)	10.9	10.2	15.6	6.9	0.0	15.5	6.8	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	10.9	10.2	15.6	6.9	0.0	15.5	6.8	0.0
Queue Length 50th (ft)	2	2	1	0	0	1	0	0
Queue Length 95th (ft)	37	35	16	88	0	20	88	0
Internal Link Dist (ft)	370	621		612			535	
Turn Bay Length (ft)			100		100	80		130
Base Capacity (vph)	1064	994	830	3138	1415	854	3231	1457
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.06	0.02	0.14	0.02	0.02	0.14	0.02
Intersection Summary								

Queues

Chowchilla Residential Development Project

2: Robertson Blvd & 15th St

Existing NP - PM Peak Hour

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	78	100	26	117	54	415	56	439
v/c Ratio	0.24	0.21	0.07	0.24	0.17	0.27	0.18	0.25
Control Delay (s/veh)	18.7	11.0	17.0	9.3	21.8	13.5	21.7	11.8
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.7	11.0	17.0	9.3	21.8	13.5	21.7	11.8
Queue Length 50th (ft)	19	11	6	9	14	48	14	30
Queue Length 95th (ft)	53	45	23	44	44	92	46	97
Internal Link Dist (ft)		465		377		483		627
Turn Bay Length (ft)	50		55		50		95	
Base Capacity (vph)	616	860	632	862	631	2619	644	2671
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.12	0.04	0.14	0.09	0.16	0.09	0.16
Intersection Summary								

Queuing and Blocking Report

Intersection: 3: Robertson Blvd & Washington Rd

Movement	EB	NB	SB
Directions Served	LTR	L	TR
Maximum Queue (ft)	109	36	12
Average Queue (ft)	48	10	0
95th Queue (ft)	88	26	4
Link Distance (ft)	680		492
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		60	
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: Robertson Blvd & Country Wood Shopping Ctr/Adams Dr

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	47	53	31	29
Average Queue (ft)	18	20	2	11
95th Queue (ft)	41	46	14	33
Link Distance (ft)	326	341		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			130	385
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: Robertson Blvd & Myer Dr/Anderson Pump Dwy

Movement	EB	WB
Directions Served	LTR	LTR
Maximum Queue (ft)	45	30
Average Queue (ft)	20	8
95th Queue (ft)	38	31
Link Distance (ft)	233	497
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Queuing and Blocking Report

Intersection: 6: Robertson Blvd & Palm Pkwy

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	52	55
Average Queue (ft)	27	7
95th Queue (ft)	44	30
Link Distance (ft)	277	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		100
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 0

Queues

Chowchilla Residential Development Project

1: Robertson Blvd & 11th St

Ex Plus Project - AM Peak Hour



Lane Group	EBT	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	123	237	49	463	58	58	670	67
v/c Ratio	0.26	0.54	0.19	0.39	0.09	0.22	0.54	0.10
Control Delay (s/veh)	17.7	24.3	29.7	16.5	0.7	29.5	17.9	1.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	17.7	24.3	29.7	16.5	0.7	29.5	17.9	1.3
Queue Length 50th (ft)	29	72	17	70	0	20	107	0
Queue Length 95th (ft)	60	121	41	93	0	46	133	0
Internal Link Dist (ft)	370	621		612			535	
Turn Bay Length (ft)			100		100	80		130
Base Capacity (vph)	627	598	508	2151	1006	524	2214	1034
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.20	0.40	0.10	0.22	0.06	0.11	0.30	0.06
Intersection Summary								

Queues

Chowchilla Residential Development Project

2: Robertson Blvd & 15th St

Ex Plus Project - AM Peak Hour

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	106	161	96	245	35	452	61	578
v/c Ratio	0.32	0.29	0.26	0.45	0.13	0.44	0.21	0.46
Control Delay (s/veh)	20.3	12.2	19.2	17.0	26.4	17.2	26.1	15.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	20.3	12.2	19.2	17.0	26.4	17.2	26.1	15.0
Queue Length 50th (ft)	28	23	25	53	10	63	18	51
Queue Length 95th (ft)	57	50	52	92	30	88	44	107
Internal Link Dist (ft)		465		377		483		627
Turn Bay Length (ft)	50		55		50		95	
Base Capacity (vph)	479	763	522	769	541	2256	568	2358
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.21	0.18	0.32	0.06	0.20	0.11	0.25
Intersection Summary								

Queuing and Blocking Report

Intersection: 3: Robertson Blvd & Washington Rd

Movement	EB	NB	SB
Directions Served	LTR	L	TR
Maximum Queue (ft)	82	38	19
Average Queue (ft)	48	8	0
95th Queue (ft)	76	22	0
Link Distance (ft)	680		492
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		60	
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: Robertson Blvd & Country Wood Shopping Ctr/Adams Dr

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	44	56	30	28
Average Queue (ft)	18	18	11	7
95th Queue (ft)	38	48	34	26
Link Distance (ft)	326	341		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			130	385
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: Robertson Blvd & Myer Dr/Anderson Pump Dwy

Movement	EB	WB	NB
Directions Served	LTR	LTR	L
Maximum Queue (ft)	46	30	27
Average Queue (ft)	22	10	2
95th Queue (ft)	40	33	13
Link Distance (ft)	233	497	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			95
Storage Blk Time (%)			
Queuing Penalty (veh)			

Queuing and Blocking Report

Intersection: 6: Robertson Blvd & Palm Pkwy

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	31	45
Average Queue (ft)	23	10
95th Queue (ft)	43	31
Link Distance (ft)	277	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		100
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 8: Robertson Blvd & Rd 15

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	53	31
Average Queue (ft)	20	12
95th Queue (ft)	47	35
Link Distance (ft)	329	52
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 10: Rd 15 & Project Dwy 1

Movement	SB
Directions Served	LR
Maximum Queue (ft)	32
Average Queue (ft)	10
95th Queue (ft)	33
Link Distance (ft)	416
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Queuing and Blocking Report

Intersection: 11: Rd 15/Road 15 & Project Dwy 2

Movement	SB
Directions Served	LR
Maximum Queue (ft)	30
Average Queue (ft)	15
95th Queue (ft)	39
Link Distance (ft)	507
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 0

Queues

Chowchilla Residential Development Project

1: Robertson Blvd & 11th St

EPAP NP - AM Peak Hour

								
Lane Group	EBT	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	139	252	55	607	59	92	867	101
v/c Ratio	0.35	0.60	0.25	0.50	0.09	0.36	0.59	0.14
Control Delay (s/veh)	22.3	28.8	33.4	19.2	0.6	33.7	18.2	3.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	22.3	28.8	33.4	19.2	0.6	33.7	18.2	3.1
Queue Length 50th (ft)	40	86	22	104	0	37	158	0
Queue Length 95th (ft)	75	138	47	127	0	68	177	11
Internal Link Dist (ft)	370	621		612			535	
Turn Bay Length (ft)			100		100	80		130
Base Capacity (vph)	502	527	436	1845	880	449	1899	904
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.48	0.13	0.33	0.07	0.20	0.46	0.11
Intersection Summary								

Queues

Chowchilla Residential Development Project

2: Robertson Blvd & 15th St

EPAP NP - AM Peak Hour

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	113	163	97	251	40	594	78	760
v/c Ratio	0.37	0.30	0.28	0.47	0.16	0.52	0.28	0.55
Control Delay (s/veh)	24.2	13.7	22.0	19.3	29.7	18.1	29.3	15.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	24.2	13.7	22.0	19.3	29.7	18.1	29.3	15.7
Queue Length 50th (ft)	33	25	27	59	13	91	26	76
Queue Length 95th (ft)	69	57	59	107	36	120	56	145
Internal Link Dist (ft)		465		377		483		627
Turn Bay Length (ft)	50		55		50		95	
Base Capacity (vph)	419	704	477	708	495	2069	520	2160
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.27	0.23	0.20	0.35	0.08	0.29	0.15	0.35
Intersection Summary								

Queuing and Blocking Report

Intersection: 3: Robertson Blvd & Washington Rd

Movement	EB	NB	NB
Directions Served	LTR	L	T
Maximum Queue (ft)	412	15	10
Average Queue (ft)	122	3	0
95th Queue (ft)	283	11	3
Link Distance (ft)	680		308
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		60	
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: Robertson Blvd & Country Wood Shopping Ctr/Adams Dr

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	23	70	28	28
Average Queue (ft)	10	24	4	3
95th Queue (ft)	28	54	20	17
Link Distance (ft)	326	341		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			130	385
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: Robertson Blvd & Myer Dr/Anderson Pump Dwy

Movement	EB	WB	NB
Directions Served	LTR	LTR	L
Maximum Queue (ft)	46	30	30
Average Queue (ft)	21	4	4
95th Queue (ft)	39	22	20
Link Distance (ft)	233	497	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			95
Storage Blk Time (%)			
Queuing Penalty (veh)			

Queuing and Blocking Report

Intersection: 6: Robertson Blvd & Palm Pkwy

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	55	28
Average Queue (ft)	30	4
95th Queue (ft)	51	19
Link Distance (ft)	277	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		100
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 0

Queues

Chowchilla Residential Development Project

1: Robertson Blvd & 11th St

EPAP NP - PM Peak Hour



Lane Group	EBT	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	101	101	16	642	30	39	620	43
v/c Ratio	0.26	0.23	0.04	0.29	0.02	0.11	0.25	0.03
Control Delay (s/veh)	17.1	12.4	23.4	10.4	0.0	22.8	7.9	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	17.1	12.4	23.4	10.4	0.0	22.8	7.9	0.0
Queue Length 50th (ft)	15	9	3	48	0	8	45	0
Queue Length 95th (ft)	66	52	22	144	0	39	134	0
Internal Link Dist (ft)	370	621		612			535	
Turn Bay Length (ft)			100		100	80		130
Base Capacity (vph)	764	832	705	2664	1219	725	2749	1257
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.12	0.02	0.24	0.02	0.05	0.23	0.03
Intersection Summary								

Queues

Chowchilla Residential Development Project

2: Robertson Blvd & 15th St

EPAP NP - PM Peak Hour

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	94	110	37	133	57	604	67	638
v/c Ratio	0.30	0.23	0.11	0.27	0.20	0.36	0.23	0.37
Control Delay (s/veh)	22.1	11.7	19.7	9.9	25.7	14.4	25.6	14.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	22.1	11.7	19.7	9.9	25.7	14.4	25.6	14.2
Queue Length 50th (ft)	25	12	9	10	16	81	19	86
Queue Length 95th (ft)	70	52	34	52	53	147	59	153
Internal Link Dist (ft)		465		377		483		627
Turn Bay Length (ft)	50		55		50		95	
Base Capacity (vph)	547	781	564	790	569	2375	581	2418
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.14	0.07	0.17	0.10	0.25	0.12	0.26
Intersection Summary								

Queuing and Blocking Report

Intersection: 3: Robertson Blvd & Washington Rd

Movement	EB	NB	NB	SB
Directions Served	LTR	L	T	TR
Maximum Queue (ft)	371	65	74	41
Average Queue (ft)	129	13	1	3
95th Queue (ft)	262	38	4	16
Link Distance (ft)	680		308	492
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		60		
Storage Blk Time (%)		1	0	
Queuing Penalty (veh)		2	0	

Intersection: 4: Robertson Blvd & Country Wood Shopping Ctr/Adams Dr

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	66	51	30	28
Average Queue (ft)	27	21	6	7
95th Queue (ft)	53	45	25	27
Link Distance (ft)	326	341		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			130	385
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: Robertson Blvd & Myer Dr/Anderson Pump Dwy

Movement	EB	WB	NB
Directions Served	LTR	LTR	L
Maximum Queue (ft)	42	30	49
Average Queue (ft)	21	6	5
95th Queue (ft)	33	26	25
Link Distance (ft)	233	497	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			95
Storage Blk Time (%)			
Queuing Penalty (veh)			

Queuing and Blocking Report

Intersection: 6: Robertson Blvd & Palm Pkwy

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	52	68
Average Queue (ft)	24	18
95th Queue (ft)	46	47
Link Distance (ft)	277	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		100
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 2

Queues

Chowchilla Residential Development Project

1: Robertson Blvd & 11th St

EPAP Plus Project - AM Peak Hour



Lane Group	EBT	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	141	255	59	636	67	92	877	101
v/c Ratio	0.35	0.61	0.26	0.52	0.10	0.37	0.60	0.14
Control Delay (s/veh)	22.4	29.3	33.9	19.4	1.2	34.2	18.3	3.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	22.4	29.3	33.9	19.4	1.2	34.2	18.3	3.1
Queue Length 50th (ft)	41	90	24	112	0	38	163	0
Queue Length 95th (ft)	76	140	50	134	0	68	180	11
Internal Link Dist (ft)	370	621		612			535	
Turn Bay Length (ft)			100		100	80		130
Base Capacity (vph)	498	521	431	1824	871	444	1877	895
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.49	0.14	0.35	0.08	0.21	0.47	0.11

Intersection Summary

Queues

Chowchilla Residential Development Project

2: Robertson Blvd & 15th St

EPAP Plus Project - AM Peak Hour

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	113	164	99	251	44	640	78	776
v/c Ratio	0.41	0.32	0.30	0.50	0.19	0.57	0.30	0.56
Control Delay (s/veh)	26.6	14.5	23.7	21.1	30.8	19.6	31.0	17.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	26.6	14.5	23.7	21.1	30.8	19.6	31.0	17.3
Queue Length 50th (ft)	36	27	30	64	15	100	28	124
Queue Length 95th (ft)	71	58	61	109	39	129	57	149
Internal Link Dist (ft)		465		377		483		627
Turn Bay Length (ft)	50		55		50		95	
Base Capacity (vph)	375	658	440	658	458	1914	480	1999
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.25	0.23	0.38	0.10	0.33	0.16	0.39
Intersection Summary								

Queuing and Blocking Report

Intersection: 3: Robertson Blvd & Washington Rd

Movement	EB	NB
Directions Served	LTR	L
Maximum Queue (ft)	330	48
Average Queue (ft)	135	4
95th Queue (ft)	284	19
Link Distance (ft)	680	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		60
Storage Blk Time (%)		0
Queuing Penalty (veh)		0

Intersection: 4: Robertson Blvd & Country Wood Shopping Ctr/Adams Dr

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	44	75	30	28
Average Queue (ft)	16	26	2	2
95th Queue (ft)	35	58	14	14
Link Distance (ft)	326	341		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			130	385
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: Robertson Blvd & Myer Dr/Anderson Pump Dwy

Movement	EB	WB	NB
Directions Served	LTR	LTR	L
Maximum Queue (ft)	85	30	46
Average Queue (ft)	29	5	5
95th Queue (ft)	60	24	24
Link Distance (ft)	233	497	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			95
Storage Blk Time (%)			
Queuing Penalty (veh)			

Queuing and Blocking Report

Intersection: 6: Robertson Blvd & Palm Pkwy

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	55	55
Average Queue (ft)	33	11
95th Queue (ft)	46	36
Link Distance (ft)	277	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		100
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 8: Robertson Blvd & Rd 15

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	31	31
Average Queue (ft)	28	7
95th Queue (ft)	43	27
Link Distance (ft)	329	52
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 10: Rd 15 & Project Dwy 1

Movement	SB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	21
95th Queue (ft)	43
Link Distance (ft)	395
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Queuing and Blocking Report

Intersection: 11: Rd 15 & Project Dwy 2

Movement	SB
Directions Served	LR
Maximum Queue (ft)	30
Average Queue (ft)	16
95th Queue (ft)	40
Link Distance (ft)	507
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 0

Queues

Chowchilla Residential Development Project

1: Robertson Blvd & 11th St

EPAP Plus Project - PM Peak Hour



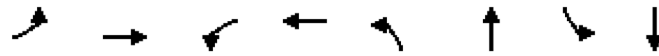
Lane Group	EBT	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	104	108	18	656	34	39	643	43
v/c Ratio	0.27	0.25	0.05	0.29	0.03	0.11	0.26	0.03
Control Delay (s/veh)	17.1	13.1	23.7	10.4	0.0	23.0	7.9	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	17.1	13.1	23.7	10.4	0.0	23.0	7.9	0.0
Queue Length 50th (ft)	15	10	4	49	0	8	47	0
Queue Length 95th (ft)	67	57	24	148	0	40	140	0
Internal Link Dist (ft)	370	621		612			535	
Turn Bay Length (ft)			100		100	80		130
Base Capacity (vph)	771	826	711	2654	1215	732	2743	1254
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.13	0.03	0.25	0.03	0.05	0.23	0.03
Intersection Summary								

Queues

Chowchilla Residential Development Project

2: Robertson Blvd & 15th St

EPAP Plus Project - PM Peak Hour



Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	94	114	40	133	59	628	67	671
v/c Ratio	0.30	0.24	0.12	0.27	0.21	0.37	0.23	0.39
Control Delay (s/veh)	22.4	11.7	20.1	10.0	26.1	14.4	26.0	14.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	22.4	11.7	20.1	10.0	26.1	14.4	26.0	14.4
Queue Length 50th (ft)	26	12	10	10	17	85	20	91
Queue Length 95th (ft)	72	53	37	52	55	154	60	163
Internal Link Dist (ft)		465		377		483		627
Turn Bay Length (ft)	50		55		50		95	
Base Capacity (vph)	542	774	557	782	563	2351	575	2395
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.15	0.07	0.17	0.10	0.27	0.12	0.28
Intersection Summary								

Queuing and Blocking Report

Intersection: 3: Robertson Blvd & Washington Rd

Movement	EB	NB	NB	SB	SB
Directions Served	LTR	L	T	T	TR
Maximum Queue (ft)	524	58	8	24	48
Average Queue (ft)	182	12	0	1	3
95th Queue (ft)	371	36	3	8	18
Link Distance (ft)	680		306	492	492
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		60			
Storage Blk Time (%)		0			
Queuing Penalty (veh)		1			

Intersection: 4: Robertson Blvd & Country Wood Shopping Ctr/Adams Dr

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	88	52	30	53
Average Queue (ft)	23	22	5	5
95th Queue (ft)	48	49	22	23
Link Distance (ft)	326	341		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			130	385
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: Robertson Blvd & Myer Dr/Anderson Pump Dwy

Movement	EB	WB	NB
Directions Served	LTR	LTR	L
Maximum Queue (ft)	64	30	30
Average Queue (ft)	27	7	1
95th Queue (ft)	50	28	9
Link Distance (ft)	233	497	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			95
Storage Blk Time (%)			
Queuing Penalty (veh)			

Queuing and Blocking Report

Intersection: 6: Robertson Blvd & Palm Pkwy

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	51	52
Average Queue (ft)	22	15
95th Queue (ft)	46	39
Link Distance (ft)	277	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		100
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 8: Robertson Blvd & Rd 15

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	53	31
Average Queue (ft)	24	13
95th Queue (ft)	48	36
Link Distance (ft)	329	52
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 10: Rd 15 & Project Dwy 1

Movement	SB
Directions Served	LR
Maximum Queue (ft)	32
Average Queue (ft)	13
95th Queue (ft)	38
Link Distance (ft)	416
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Queuing and Blocking Report

Intersection: 11: Rd 15/Road 15 & Project Dwy 2

Movement	SB
Directions Served	LR
Maximum Queue (ft)	30
Average Queue (ft)	15
95th Queue (ft)	39
Link Distance (ft)	507
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 1

Queues

Chowchilla Residential Development Project

1: Robertson Blvd & 11th St

Build-Out NP - AM Peak Hour



Lane Group	EBT	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	116	208	46	505	49	76	723	85
v/c Ratio	0.27	0.49	0.18	0.40	0.07	0.28	0.55	0.12
Control Delay (s/veh)	18.8	23.6	30.0	16.5	0.2	29.7	17.4	2.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.8	23.6	30.0	16.5	0.2	29.7	17.4	2.2
Queue Length 50th (ft)	29	62	16	75	0	27	115	0
Queue Length 95th (ft)	77	141	50	134	0	72	188	15
Internal Link Dist (ft)	370	621		612			535	
Turn Bay Length (ft)			100		100	80		130
Base Capacity (vph)	596	592	498	2105	987	512	2166	1015
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.35	0.09	0.24	0.05	0.15	0.33	0.08

Intersection Summary

Queues

Chowchilla Residential Development Project

2: Robertson Blvd & 15th St

Build-Out NP - AM Peak Hour

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	92	130	76	202	33	489	64	624
v/c Ratio	0.28	0.25	0.22	0.39	0.12	0.45	0.22	0.47
Control Delay (s/veh)	20.6	10.7	19.4	16.1	26.4	16.7	26.1	14.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	20.6	10.7	19.4	16.1	26.4	16.7	26.1	14.4
Queue Length 50th (ft)	24	14	19	39	10	66	19	53
Queue Length 95th (ft)	67	55	56	103	37	125	58	152
Internal Link Dist (ft)		465		377		483		627
Turn Bay Length (ft)	50		55		50		95	
Base Capacity (vph)	497	762	536	767	540	2256	567	2354
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.17	0.14	0.26	0.06	0.22	0.11	0.27
Intersection Summary								

Queuing and Blocking Report

Intersection: 3: Robertson Blvd & Washington Rd

Movement	EB	NB	SB
Directions Served	LTR	L	TR
Maximum Queue (ft)	317	38	12
Average Queue (ft)	150	5	0
95th Queue (ft)	263	21	4
Link Distance (ft)	680		492
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		60	
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: Robertson Blvd & Country Wood Shopping Ctr/Adams Dr

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	23	70	26	29
Average Queue (ft)	11	25	1	7
95th Queue (ft)	29	50	9	26
Link Distance (ft)	326	341		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			130	385
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: Robertson Blvd & Myer Dr/Anderson Pump Dwy

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	86	30	29	24
Average Queue (ft)	30	2	4	1
95th Queue (ft)	56	15	20	8
Link Distance (ft)	233	497		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			95	50
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queuing and Blocking Report

Intersection: 6: Robertson Blvd & Palm Pkwy

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	52	52
Average Queue (ft)	31	9
95th Queue (ft)	44	33
Link Distance (ft)	277	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		100
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 0

Queues

Chowchilla Residential Development Project

1: Robertson Blvd & 11th St

Build-Out NP - PM Peak Hour



Lane Group	EBT	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	107	106	17	674	31	41	651	45
v/c Ratio	0.28	0.24	0.05	0.30	0.03	0.12	0.26	0.03
Control Delay (s/veh)	17.7	12.7	24.3	10.6	0.0	23.4	8.0	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	17.7	12.7	24.3	10.6	0.0	23.4	8.0	0.0
Queue Length 50th (ft)	16	9	3	52	0	8	49	0
Queue Length 95th (ft)	71	55	23	155	0	42	143	0
Internal Link Dist (ft)	370	621		612			535	
Turn Bay Length (ft)			100		100	80		130
Base Capacity (vph)	754	821	699	2634	1206	719	2728	1248
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.14	0.13	0.02	0.26	0.03	0.06	0.24	0.04
Intersection Summary								

Queues

Chowchilla Residential Development Project

2: Robertson Blvd & 15th St

Build-Out NP - PM Peak Hour

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	98	114	39	139	60	632	70	670
v/c Ratio	0.31	0.24	0.12	0.28	0.21	0.38	0.24	0.39
Control Delay (s/veh)	22.7	11.7	20.2	10.1	26.5	14.6	26.4	14.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	22.7	11.7	20.2	10.1	26.5	14.6	26.4	14.5
Queue Length 50th (ft)	27	12	10	11	18	86	21	92
Queue Length 95th (ft)	75	54	36	54	56	157	63	165
Internal Link Dist (ft)		465		377		483		627
Turn Bay Length (ft)	50		55		50		95	
Base Capacity (vph)	535	770	553	780	560	2338	571	2378
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.18	0.15	0.07	0.18	0.11	0.27	0.12	0.28
Intersection Summary								

Queuing and Blocking Report

Intersection: 3: Robertson Blvd & Washington Rd

Movement	EB	NB	NB	SB
Directions Served	LTR	L	T	TR
Maximum Queue (ft)	320	40	10	39
Average Queue (ft)	181	14	1	1
95th Queue (ft)	302	34	5	13
Link Distance (ft)	680		308	492
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)		60		
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 4: Robertson Blvd & Country Wood Shopping Ctr/Adams Dr

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	68	55	29	31
Average Queue (ft)	27	20	4	10
95th Queue (ft)	52	48	20	32
Link Distance (ft)	326	341		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			130	385
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: Robertson Blvd & Myer Dr/Anderson Pump Dwy

Movement	EB	WB	NB
Directions Served	LTR	LTR	L
Maximum Queue (ft)	106	30	48
Average Queue (ft)	26	2	7
95th Queue (ft)	56	15	28
Link Distance (ft)	233	497	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			95
Storage Blk Time (%)			
Queuing Penalty (veh)			

Queuing and Blocking Report

Intersection: 6: Robertson Blvd & Palm Pkwy

Movement	WB	NB	SB
Directions Served	LR	TR	L
Maximum Queue (ft)	56	28	31
Average Queue (ft)	23	0	14
95th Queue (ft)	49	0	36
Link Distance (ft)	277	1201	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			100
Storage Blk Time (%)			
Queuing Penalty (veh)			

Zone Summary

Zone wide Queuing Penalty: 0

Queues

Chowchilla Residential Development Project

1: Robertson Blvd & 11th St

Build-Out Plus Project - AM Peak Hour



Lane Group	EBT	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	117	210	49	528	55	76	730	85
v/c Ratio	0.27	0.50	0.20	0.42	0.08	0.28	0.55	0.12
Control Delay (s/veh)	18.8	23.9	30.2	16.7	0.3	30.0	17.5	2.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.8	23.9	30.2	16.7	0.3	30.0	17.5	2.2
Queue Length 50th (ft)	29	63	17	79	0	27	116	0
Queue Length 95th (ft)	78	144	53	141	2	72	191	16
Internal Link Dist (ft)	370	621		612			535	
Turn Bay Length (ft)			100		100	80		130
Base Capacity (vph)	597	589	497	2103	986	512	2164	1014
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.20	0.36	0.10	0.25	0.06	0.15	0.34	0.08
Intersection Summary								

Queues

Chowchilla Residential Development Project

2: Robertson Blvd & 15th St

Build-Out Plus Project - AM Peak Hour

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	92	131	77	202	36	525	64	636
v/c Ratio	0.28	0.25	0.22	0.39	0.14	0.48	0.22	0.48
Control Delay (s/veh)	20.9	10.7	19.7	16.3	26.7	17.0	26.4	14.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	20.9	10.7	19.7	16.3	26.7	17.0	26.4	14.5
Queue Length 50th (ft)	24	14	20	40	11	72	19	55
Queue Length 95th (ft)	68	56	58	105	39	135	58	156
Internal Link Dist (ft)		465		377		483		627
Turn Bay Length (ft)	50		55		50		95	
Base Capacity (vph)	493	757	531	761	536	2238	562	2335
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.17	0.15	0.27	0.07	0.23	0.11	0.27
Intersection Summary								

Queuing and Blocking Report

Intersection: 3: Robertson Blvd & Washington Rd

Movement	EB	NB	SB
Directions Served	LTR	L	TR
Maximum Queue (ft)	348	16	12
Average Queue (ft)	163	4	0
95th Queue (ft)	313	14	4
Link Distance (ft)	680		492
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)		60	
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 4: Robertson Blvd & Country Wood Shopping Ctr/Adams Dr

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	46	55	28	46
Average Queue (ft)	15	22	3	3
95th Queue (ft)	37	49	18	17
Link Distance (ft)	326	341		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			130	385
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: Robertson Blvd & Myer Dr/Anderson Pump Dwy

Movement	EB	WB	NB	NB
Directions Served	LTR	LTR	L	TR
Maximum Queue (ft)	64	30	30	25
Average Queue (ft)	26	4	9	1
95th Queue (ft)	47	19	30	8
Link Distance (ft)	233	497		161
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			95	
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queuing and Blocking Report

Intersection: 6: Robertson Blvd & Palm Pkwy

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	53	63
Average Queue (ft)	34	7
95th Queue (ft)	54	32
Link Distance (ft)	277	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		100
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 8: Robertson Blvd & Rd 15

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	54	30
Average Queue (ft)	30	4
95th Queue (ft)	51	21
Link Distance (ft)	329	52
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 10: Rd 15 & Project Dwy 1

Movement	SB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	15
95th Queue (ft)	39
Link Distance (ft)	395
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Queuing and Blocking Report

Intersection: 11: Rd 15 & Project Dwy 2

Movement	SB
Directions Served	LR
Maximum Queue (ft)	30
Average Queue (ft)	14
95th Queue (ft)	38
Link Distance (ft)	507
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 0

Queues

Chowchilla Residential Development Project

1: Robertson Blvd & 11th St

Build-Out Plus Project - PM Peak Hour



Lane Group	EBT	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	110	112	19	689	35	41	674	45
v/c Ratio	0.31	0.29	0.06	0.38	0.04	0.13	0.33	0.04
Control Delay (s/veh)	18.6	14.1	24.7	12.2	0.0	24.1	9.5	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.6	14.1	24.7	12.2	0.0	24.1	9.5	0.0
Queue Length 50th (ft)	17	11	4	53	0	8	51	0
Queue Length 95th (ft)	72	60	25	160	0	42	149	0
Internal Link Dist (ft)	370	621		612			535	
Turn Bay Length (ft)			100		100	80		130
Base Capacity (vph)	660	712	610	2564	1178	627	2661	1220
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.16	0.03	0.27	0.03	0.07	0.25	0.04
Intersection Summary								

Queues

Chowchilla Residential Development Project

2: Robertson Blvd & 15th St

Build-Out Plus Project - PM Peak Hour

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	98	117	42	139	62	656	70	703
v/c Ratio	0.32	0.25	0.13	0.28	0.22	0.38	0.24	0.40
Control Delay (s/veh)	23.2	11.8	20.7	10.2	27.0	14.6	26.9	14.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	23.2	11.8	20.7	10.2	27.0	14.6	26.9	14.6
Queue Length 50th (ft)	28	13	11	11	19	91	22	98
Queue Length 95th (ft)	76	55	38	55	59	165	63	176
Internal Link Dist (ft)		465		377		483		627
Turn Bay Length (ft)	50		55		50		95	
Base Capacity (vph)	528	761	545	771	552	2305	563	2348
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.15	0.08	0.18	0.11	0.28	0.12	0.30
Intersection Summary								

Queuing and Blocking Report

Intersection: 3: Robertson Blvd & Washington Rd

Movement	EB	NB	NB	SB	SB
Directions Served	LTR	L	T	T	TR
Maximum Queue (ft)	478	36	30	41	30
Average Queue (ft)	235	13	0	1	1
95th Queue (ft)	433	31	0	14	10
Link Distance (ft)	680		306	492	492
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)		60			
Storage Blk Time (%)				0	
Queuing Penalty (veh)				0	

Intersection: 4: Robertson Blvd & Country Wood Shopping Ctr/Adams Dr

Movement	EB	WB	NB	SB	SB
Directions Served	LTR	LTR	L	L	R
Maximum Queue (ft)	47	55	30	76	21
Average Queue (ft)	23	25	6	14	1
95th Queue (ft)	38	54	25	44	7
Link Distance (ft)	326	341			
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)			130	385	50
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 5: Robertson Blvd & Myer Dr/Anderson Pump Dwy

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	R
Maximum Queue (ft)	47	30	30	22
Average Queue (ft)	21	7	8	1
95th Queue (ft)	42	28	28	7
Link Distance (ft)	233	497		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			95	50
Storage Blk Time (%)				
Queuing Penalty (veh)				

Queuing and Blocking Report

Intersection: 6: Robertson Blvd & Palm Pkwy

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	55	55
Average Queue (ft)	23	12
95th Queue (ft)	48	37
Link Distance (ft)	277	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		100
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 8: Robertson Blvd & Rd 15

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	53	31
Average Queue (ft)	25	12
95th Queue (ft)	48	35
Link Distance (ft)	329	52
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 10: Rd 15 & Project Dwy 1

Movement	SB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	12
95th Queue (ft)	36
Link Distance (ft)	416
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Queuing and Blocking Report

Intersection: 11: Rd 15/Road 15 & Project Dwy 2

Movement	EB	SB
Directions Served	LT	LR
Maximum Queue (ft)	31	30
Average Queue (ft)	2	6
95th Queue (ft)	15	27
Link Distance (ft)	599	507
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 0

Queues

Chowchilla Residential Development Project

1: Robertson Blvd & 11th St

Ex Plus Project - AM Peak Hour MIT

								
Lane Group	EBT	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	123	237	49	463	58	58	670	67
v/c Ratio	0.26	0.54	0.19	0.39	0.09	0.22	0.54	0.10
Control Delay (s/veh)	17.7	24.3	29.7	16.5	0.7	29.5	17.9	1.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	17.7	24.3	29.7	16.5	0.7	29.5	17.9	1.3
Queue Length 50th (ft)	29	72	17	70	0	20	107	0
Queue Length 95th (ft)	60	121	41	93	0	46	133	0
Internal Link Dist (ft)	370	621		612			535	
Turn Bay Length (ft)			100		100	80		130
Base Capacity (vph)	627	598	508	2151	1006	524	2214	1034
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.20	0.40	0.10	0.22	0.06	0.11	0.30	0.06
Intersection Summary								

Queues

Chowchilla Residential Development Project

2: Robertson Blvd & 15th St

Ex Plus Project - AM Peak Hour MIT

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	106	161	96	245	35	452	61	578
v/c Ratio	0.32	0.29	0.26	0.45	0.13	0.44	0.21	0.46
Control Delay (s/veh)	20.3	12.2	19.2	17.0	26.4	17.2	26.1	15.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	20.3	12.2	19.2	17.0	26.4	17.2	26.1	15.0
Queue Length 50th (ft)	28	23	25	53	10	63	18	51
Queue Length 95th (ft)	57	50	52	92	30	88	44	107
Internal Link Dist (ft)		465		377		483		627
Turn Bay Length (ft)	50		55		50		95	
Base Capacity (vph)	479	763	522	769	541	2256	568	2358
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.22	0.21	0.18	0.32	0.06	0.20	0.11	0.25
Intersection Summary								

Queues

3: Robertson Blvd & Washington Rd

Chowchilla Residential Development Project

Ex Plus Project - AM Peak Hour MIT

	→	↶	↑	↓
Lane Group	EBT	NBL	NBT	SBT
Lane Group Flow (vph)	221	25	496	571
v/c Ratio	0.42	0.08	0.29	0.38
Control Delay (s/veh)	8.0	15.8	5.8	7.8
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	8.0	15.8	5.8	7.8
Queue Length 50th (ft)	8	3	21	22
Queue Length 95th (ft)	45	20	40	72
Internal Link Dist (ft)	676		315	483
Turn Bay Length (ft)		60		
Base Capacity (vph)	1045	302	2416	2167
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.21	0.08	0.21	0.26
Intersection Summary				

Queuing and Blocking Report

Intersection: 4: Robertson Blvd & Country Wood Shopping Ctr/Adams Dr

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	23	49	29	26
Average Queue (ft)	10	17	3	1
95th Queue (ft)	29	44	16	9
Link Distance (ft)	326	341		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			130	385
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: Robertson Blvd & Myer Dr/Anderson Pump Dwy

Movement	EB	WB	NB
Directions Served	LTR	LTR	L
Maximum Queue (ft)	44	30	28
Average Queue (ft)	21	2	1
95th Queue (ft)	40	14	9
Link Distance (ft)	233	497	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			95
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: Robertson Blvd & Palm Pkwy

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	54	46
Average Queue (ft)	34	7
95th Queue (ft)	48	29
Link Distance (ft)	277	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		100
Storage Blk Time (%)		
Queuing Penalty (veh)		

Queuing and Blocking Report

Intersection: 8: Robertson Blvd & Rd 15

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	68	31
Average Queue (ft)	28	6
95th Queue (ft)	51	25
Link Distance (ft)	329	52
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 10: Rd 15 & Project Dwy 1

Movement	SB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	13
95th Queue (ft)	37
Link Distance (ft)	395
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 11: Rd 15 & Project Dwy 2

Movement	EB	SB
Directions Served	LT	LR
Maximum Queue (ft)	31	30
Average Queue (ft)	1	16
95th Queue (ft)	11	40
Link Distance (ft)	599	507
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 0

Queues

Chowchilla Residential Development Project

1: Robertson Blvd & 11th St

Ex Plus Project - PM Peak Hour MIT

								
Lane Group	EBT	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	64	67	15	452	31	18	461	22
v/c Ratio	0.14	0.14	0.03	0.17	0.02	0.04	0.17	0.01
Control Delay (s/veh)	10.7	10.3	15.8	6.9	0.0	15.8	6.9	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	10.7	10.3	15.8	6.9	0.0	15.8	6.9	0.0
Queue Length 50th (ft)	2	2	1	0	0	1	0	0
Queue Length 95th (ft)	38	39	18	93	0	21	94	0
Internal Link Dist (ft)	370	621		612			535	
Turn Bay Length (ft)			100		100	80		130
Base Capacity (vph)	1016	1008	833	3122	1409	857	3214	1450
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.06	0.07	0.02	0.14	0.02	0.02	0.14	0.02
Intersection Summary								

Queues

Chowchilla Residential Development Project

2: Robertson Blvd & 15th St

Ex Plus Project - PM Peak Hour MIT

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	78	103	29	117	56	438	56	473
v/c Ratio	0.24	0.22	0.08	0.24	0.18	0.28	0.18	0.30
Control Delay (s/veh)	19.0	11.0	17.4	9.5	22.2	13.6	22.1	13.7
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	19.0	11.0	17.4	9.5	22.2	13.6	22.1	13.7
Queue Length 50th (ft)	19	11	7	9	15	52	15	57
Queue Length 95th (ft)	54	46	26	45	46	97	46	105
Internal Link Dist (ft)		465		377		483		627
Turn Bay Length (ft)	50		55		50		95	
Base Capacity (vph)	611	853	624	855	626	2596	638	2649
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.12	0.05	0.14	0.09	0.17	0.09	0.18
Intersection Summary								

Queues

	→	↶	↑	↓
Lane Group	EBT	NBL	NBT	SBT
Lane Group Flow (vph)	154	69	452	618
v/c Ratio	0.36	0.22	0.18	0.34
Control Delay (s/veh)	7.2	17.7	3.6	8.9
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	7.2	17.7	3.6	8.9
Queue Length 50th (ft)	2	13	16	49
Queue Length 95th (ft)	37	44	35	91
Internal Link Dist (ft)	676		315	483
Turn Bay Length (ft)		60		
Base Capacity (vph)	958	327	2499	2087
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.16	0.21	0.18	0.30
Intersection Summary				

Queuing and Blocking Report

Intersection: 4: Robertson Blvd & Country Wood Shopping Ctr/Adams Dr

Movement	EB	WB	NB	SB	SB
Directions Served	LTR	LTR	L	L	R
Maximum Queue (ft)	45	54	31	31	21
Average Queue (ft)	16	27	6	10	1
95th Queue (ft)	37	51	25	32	7
Link Distance (ft)	326	341			
Upstream Blk Time (%)					
Queuing Penalty (veh)					
Storage Bay Dist (ft)			130	385	50
Storage Blk Time (%)					
Queuing Penalty (veh)					

Intersection: 5: Robertson Blvd & Myer Dr/Anderson Pump Dwy

Movement	EB	WB	NB
Directions Served	LTR	LTR	L
Maximum Queue (ft)	46	52	30
Average Queue (ft)	22	8	3
95th Queue (ft)	41	33	17
Link Distance (ft)	233	497	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			95
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: Robertson Blvd & Palm Pkwy

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	52	53
Average Queue (ft)	25	13
95th Queue (ft)	46	40
Link Distance (ft)	277	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		100
Storage Blk Time (%)		
Queuing Penalty (veh)		

Queuing and Blocking Report

Intersection: 8: Robertson Blvd & Rd 15

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	53	52
Average Queue (ft)	26	14
95th Queue (ft)	47	39
Link Distance (ft)	329	52
Upstream Blk Time (%)		0
Queuing Penalty (veh)		0
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 10: Rd 15 & Project Dwy 1

Movement	EB	SB
Directions Served	LT	LR
Maximum Queue (ft)	31	32
Average Queue (ft)	1	13
95th Queue (ft)	11	37
Link Distance (ft)	329	416
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 11: Rd 15/Road 15 & Project Dwy 2

Movement	EB	SB
Directions Served	LT	LR
Maximum Queue (ft)	31	30
Average Queue (ft)	1	16
95th Queue (ft)	10	40
Link Distance (ft)	599	507
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Zone Summary

Zone wide Queuing Penalty: 0

Queues

Chowchilla Residential Development Project

1: Robertson Blvd & 11th St

EPAP Plus Project - AM Peak Hour MIT

								
Lane Group	EBT	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	141	255	59	636	67	92	877	101
v/c Ratio	0.35	0.61	0.26	0.52	0.10	0.37	0.60	0.14
Control Delay (s/veh)	22.4	29.3	33.9	19.4	1.2	34.2	18.3	3.1
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	22.4	29.3	33.9	19.4	1.2	34.2	18.3	3.1
Queue Length 50th (ft)	41	90	24	112	0	38	163	0
Queue Length 95th (ft)	76	140	50	134	0	68	180	11
Internal Link Dist (ft)	370	621		612			535	
Turn Bay Length (ft)			100		100	80		130
Base Capacity (vph)	498	521	431	1824	871	444	1877	895
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.28	0.49	0.14	0.35	0.08	0.21	0.47	0.11
Intersection Summary								

Queues

Chowchilla Residential Development Project

2: Robertson Blvd & 15th St

EPAP Plus Project - AM Peak Hour MIT

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	113	164	99	251	44	640	78	776
v/c Ratio	0.41	0.32	0.30	0.50	0.19	0.57	0.30	0.56
Control Delay (s/veh)	26.6	14.5	23.7	21.1	30.8	19.6	31.0	17.3
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	26.6	14.5	23.7	21.1	30.8	19.6	31.0	17.3
Queue Length 50th (ft)	36	27	30	64	15	100	28	124
Queue Length 95th (ft)	71	58	61	109	39	129	57	149
Internal Link Dist (ft)		465		377		483		627
Turn Bay Length (ft)	50		55		50		95	
Base Capacity (vph)	375	658	440	658	458	1914	480	1999
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.30	0.25	0.23	0.38	0.10	0.33	0.16	0.39
Intersection Summary								

Queues



Lane Group	EBT	NBL	NBT	SBT
Lane Group Flow (vph)	369	25	538	748
v/c Ratio	0.57	0.10	0.35	0.54
Control Delay (s/veh)	11.8	21.7	8.0	10.8
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	11.8	21.7	8.0	10.8
Queue Length 50th (ft)	33	4	32	44
Queue Length 95th (ft)	96	23	60	114
Internal Link Dist (ft)	676		315	483
Turn Bay Length (ft)		60		
Base Capacity (vph)	955	249	2161	1942
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.39	0.10	0.25	0.39
Intersection Summary				

Queuing and Blocking Report

Intersection: 4: Robertson Blvd & Country Wood Shopping Ctr/Adams Dr

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	45	31	30	29
Average Queue (ft)	13	18	2	2
95th Queue (ft)	33	43	14	14
Link Distance (ft)	326	341		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			130	385
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: Robertson Blvd & Myer Dr/Anderson Pump Dwy

Movement	EB	WB	NB
Directions Served	LTR	LTR	L
Maximum Queue (ft)	46	30	30
Average Queue (ft)	23	4	5
95th Queue (ft)	41	22	23
Link Distance (ft)	233	497	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			95
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: Robertson Blvd & Palm Pkwy

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	74	30
Average Queue (ft)	37	9
95th Queue (ft)	58	30
Link Distance (ft)	277	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		100
Storage Blk Time (%)		
Queuing Penalty (veh)		

Queuing and Blocking Report

Intersection: 8: Robertson Blvd & Rd 15

Movement	WB	NB	SB
Directions Served	LR	TR	L
Maximum Queue (ft)	52	46	29
Average Queue (ft)	29	2	6
95th Queue (ft)	44	16	24
Link Distance (ft)	329	1723	52
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 10: Rd 15 & Project Dwy 1

Movement	SB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	16
95th Queue (ft)	41
Link Distance (ft)	395
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 11: Rd 15 & Project Dwy 2

Movement	SB
Directions Served	LR
Maximum Queue (ft)	30
Average Queue (ft)	18
95th Queue (ft)	41
Link Distance (ft)	507
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 0

Queues

Chowchilla Residential Development Project

1: Robertson Blvd & 11th St

EPAP Plus Project - PM Peak Hour MIT



Lane Group	EBT	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	104	108	18	656	34	39	643	43
v/c Ratio	0.27	0.25	0.05	0.29	0.03	0.11	0.26	0.03
Control Delay (s/veh)	17.1	13.1	23.7	10.4	0.0	23.0	7.9	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	17.1	13.1	23.7	10.4	0.0	23.0	7.9	0.0
Queue Length 50th (ft)	15	10	4	49	0	8	47	0
Queue Length 95th (ft)	67	57	24	148	0	40	140	0
Internal Link Dist (ft)	370	621		612			535	
Turn Bay Length (ft)			100		100	80		130
Base Capacity (vph)	771	826	711	2654	1215	732	2743	1254
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.13	0.13	0.03	0.25	0.03	0.05	0.23	0.03
Intersection Summary								

Queues

Chowchilla Residential Development Project

2: Robertson Blvd & 15th St

EPAP Plus Project - PM Peak Hour MIT

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	94	114	40	133	59	628	67	671
v/c Ratio	0.30	0.24	0.12	0.27	0.21	0.37	0.23	0.39
Control Delay (s/veh)	22.4	11.7	20.1	10.0	26.1	14.4	26.0	14.4
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	22.4	11.7	20.1	10.0	26.1	14.4	26.0	14.4
Queue Length 50th (ft)	26	12	10	10	17	85	20	91
Queue Length 95th (ft)	72	53	37	52	55	154	60	163
Internal Link Dist (ft)		465		377		483		627
Turn Bay Length (ft)	50		55		50		95	
Base Capacity (vph)	542	774	557	782	563	2351	575	2395
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.15	0.07	0.17	0.10	0.27	0.12	0.28
Intersection Summary								

Queues



Lane Group	EBT	NBL	NBT	SBT
Lane Group Flow (vph)	259	69	548	836
v/c Ratio	0.53	0.28	0.26	0.53
Control Delay (s/veh)	12.7	23.6	5.1	10.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	12.7	23.6	5.1	10.1
Queue Length 50th (ft)	27	17	27	72
Queue Length 95th (ft)	78	51	58	135
Internal Link Dist (ft)	676		315	483
Turn Bay Length (ft)		60		
Base Capacity (vph)	859	240	2210	1741
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.30	0.29	0.25	0.48
Intersection Summary				

Queuing and Blocking Report

Intersection: 4: Robertson Blvd & Country Wood Shopping Ctr/Adams Dr

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	47	31	29	30
Average Queue (ft)	22	24	4	6
95th Queue (ft)	43	45	19	25
Link Distance (ft)	326	341		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			130	385
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: Robertson Blvd & Myer Dr/Anderson Pump Dwy

Movement	EB	WB	NB
Directions Served	LTR	LTR	L
Maximum Queue (ft)	66	30	30
Average Queue (ft)	22	8	9
95th Queue (ft)	43	30	30
Link Distance (ft)	233	497	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			95
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: Robertson Blvd & Palm Pkwy

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	78	52
Average Queue (ft)	28	13
95th Queue (ft)	56	40
Link Distance (ft)	277	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		100
Storage Blk Time (%)		
Queuing Penalty (veh)		

Queuing and Blocking Report

Intersection: 8: Robertson Blvd & Rd 15

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	31	52
Average Queue (ft)	22	12
95th Queue (ft)	44	38
Link Distance (ft)	329	52
Upstream Blk Time (%)		0
Queuing Penalty (veh)		0
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 10: Rd 15 & Project Dwy 1

Movement	SB
Directions Served	LR
Maximum Queue (ft)	51
Average Queue (ft)	14
95th Queue (ft)	41
Link Distance (ft)	416
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 11: Rd 15/Road 15 & Project Dwy 2

Movement	SB
Directions Served	LR
Maximum Queue (ft)	30
Average Queue (ft)	18
95th Queue (ft)	41
Link Distance (ft)	507
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 0

Queues

Chowchilla Residential Development Project

1: Robertson Blvd & 11th St

Build-Out Plus Project - AM Peak Hour MIT



Lane Group	EBT	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	117	210	49	528	55	76	730	85
v/c Ratio	0.27	0.50	0.20	0.42	0.08	0.28	0.55	0.12
Control Delay (s/veh)	18.8	23.9	30.2	16.7	0.3	30.0	17.5	2.2
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.8	23.9	30.2	16.7	0.3	30.0	17.5	2.2
Queue Length 50th (ft)	29	63	17	79	0	27	116	0
Queue Length 95th (ft)	78	144	53	141	2	72	191	16
Internal Link Dist (ft)	370	621		612			535	
Turn Bay Length (ft)			100		100	80		130
Base Capacity (vph)	597	589	497	2103	986	512	2164	1014
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.20	0.36	0.10	0.25	0.06	0.15	0.34	0.08
Intersection Summary								

Queues

Chowchilla Residential Development Project

2: Robertson Blvd & 15th St

Build-Out Plus Project - AM Peak Hour MIT

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	92	131	77	202	36	525	64	636
v/c Ratio	0.28	0.25	0.22	0.39	0.14	0.48	0.22	0.48
Control Delay (s/veh)	20.9	10.7	19.7	16.3	26.7	17.0	26.4	14.5
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	20.9	10.7	19.7	16.3	26.7	17.0	26.4	14.5
Queue Length 50th (ft)	24	14	20	40	11	72	19	55
Queue Length 95th (ft)	68	56	58	105	39	135	58	156
Internal Link Dist (ft)		465		377		483		627
Turn Bay Length (ft)	50		55		50		95	
Base Capacity (vph)	493	757	531	761	536	2238	562	2335
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.17	0.15	0.27	0.07	0.23	0.11	0.27
Intersection Summary								

Queues

3: Robertson Blvd & Washington Rd

Chowchilla Residential Development Project

Build-Out Plus Project - AM Peak Hour MIT

	→	↶	↑	↓
Lane Group	EBT	NBL	NBT	SBT
Lane Group Flow (vph)	320	21	465	648
v/c Ratio	0.52	0.07	0.30	0.47
Control Delay (s/veh)	10.3	19.5	7.2	9.5
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	10.3	19.5	7.2	9.5
Queue Length 50th (ft)	20	3	24	32
Queue Length 95th (ft)	106	24	61	120
Internal Link Dist (ft)	676		315	483
Turn Bay Length (ft)		60		
Base Capacity (vph)	1051	272	2314	2079
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.30	0.08	0.20	0.31
Intersection Summary				

Queuing and Blocking Report

Intersection: 4: Robertson Blvd & Country Wood Shopping Ctr/Adams Dr

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	23	55	30	28
Average Queue (ft)	11	21	8	3
95th Queue (ft)	28	49	29	17
Link Distance (ft)	326	341		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			130	385
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: Robertson Blvd & Myer Dr/Anderson Pump Dwy

Movement	EB	WB	NB
Directions Served	LTR	LTR	L
Maximum Queue (ft)	86	30	30
Average Queue (ft)	30	3	8
95th Queue (ft)	56	18	28
Link Distance (ft)	233	497	
Upstream Blk Time (%)			
Queuing Penalty (veh)			
Storage Bay Dist (ft)			95
Storage Blk Time (%)			
Queuing Penalty (veh)			

Intersection: 6: Robertson Blvd & Palm Pkwy

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	95	64
Average Queue (ft)	35	12
95th Queue (ft)	61	38
Link Distance (ft)	277	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		100
Storage Blk Time (%)		
Queuing Penalty (veh)		

Queuing and Blocking Report

Intersection: 8: Robertson Blvd & Rd 15

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	74	30
Average Queue (ft)	29	4
95th Queue (ft)	52	21
Link Distance (ft)	329	52
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 10: Rd 15 & Project Dwy 1

Movement	SB
Directions Served	LR
Maximum Queue (ft)	31
Average Queue (ft)	16
95th Queue (ft)	41
Link Distance (ft)	395
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 11: Rd 15 & Project Dwy 2

Movement	SB
Directions Served	LR
Maximum Queue (ft)	54
Average Queue (ft)	19
95th Queue (ft)	44
Link Distance (ft)	507
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 0

Queues

Chowchilla Residential Development Project

1: Robertson Blvd & 11th St

Build-Out Plus Project - PM Peak Hour MIT



Lane Group	EBT	WBT	NBL	NBT	NBR	SBL	SBT	SBR
Lane Group Flow (vph)	110	112	19	689	35	41	674	45
v/c Ratio	0.31	0.29	0.06	0.38	0.04	0.13	0.33	0.04
Control Delay (s/veh)	18.6	14.1	24.7	12.2	0.0	24.1	9.5	0.0
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	18.6	14.1	24.7	12.2	0.0	24.1	9.5	0.0
Queue Length 50th (ft)	17	11	4	53	0	8	51	0
Queue Length 95th (ft)	72	60	25	160	0	42	149	0
Internal Link Dist (ft)	370	621		612			535	
Turn Bay Length (ft)			100		100	80		130
Base Capacity (vph)	660	712	610	2564	1178	627	2661	1220
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.17	0.16	0.03	0.27	0.03	0.07	0.25	0.04
Intersection Summary								

Queues

Chowchilla Residential Development Project

2: Robertson Blvd & 15th St

Build-Out Plus Project - PM Peak Hour MIT

								
Lane Group	EBL	EBT	WBL	WBT	NBL	NBT	SBL	SBT
Lane Group Flow (vph)	98	117	42	139	62	656	70	703
v/c Ratio	0.32	0.25	0.13	0.28	0.22	0.38	0.24	0.40
Control Delay (s/veh)	23.2	11.8	20.7	10.2	27.0	14.6	26.9	14.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay (s/veh)	23.2	11.8	20.7	10.2	27.0	14.6	26.9	14.6
Queue Length 50th (ft)	28	13	11	11	19	91	22	98
Queue Length 95th (ft)	76	55	38	55	59	165	63	176
Internal Link Dist (ft)		465		377		483		627
Turn Bay Length (ft)	50		55		50		95	
Base Capacity (vph)	528	761	545	771	552	2305	563	2348
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.19	0.15	0.08	0.18	0.11	0.28	0.12	0.30
Intersection Summary								

Queues

3: Robertson Blvd & Washington Rd

Chowchilla Residential Development Project

Build-Out Plus Project - PM Peak Hour MIT

	→	↶	↑	↓
Lane Group	EBT	NBL	NBT	SBT
Lane Group Flow (vph)	264	70	555	847
v/c Ratio	0.54	0.30	0.27	0.53
Control Delay (s/veh)	12.9	24.3	5.1	10.1
Queue Delay	0.0	0.0	0.0	0.0
Total Delay (s/veh)	12.9	24.3	5.1	10.1
Queue Length 50th (ft)	28	17	28	73
Queue Length 95th (ft)	83	53	61	140
Internal Link Dist (ft)	676		315	483
Turn Bay Length (ft)		60		
Base Capacity (vph)	857	231	2205	1755
Starvation Cap Reductn	0	0	0	0
Spillback Cap Reductn	0	0	0	0
Storage Cap Reductn	0	0	0	0
Reduced v/c Ratio	0.31	0.30	0.25	0.48
Intersection Summary				

Queuing and Blocking Report

Intersection: 4: Robertson Blvd & Country Wood Shopping Ctr/Adams Dr

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	L
Maximum Queue (ft)	45	52	31	50
Average Queue (ft)	21	16	4	8
95th Queue (ft)	40	43	21	31
Link Distance (ft)	326	341		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			130	385
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 5: Robertson Blvd & Myer Dr/Anderson Pump Dwy

Movement	EB	WB	NB	SB
Directions Served	LTR	LTR	L	R
Maximum Queue (ft)	45	30	30	22
Average Queue (ft)	21	8	11	1
95th Queue (ft)	39	29	33	7
Link Distance (ft)	233	497		
Upstream Blk Time (%)				
Queuing Penalty (veh)				
Storage Bay Dist (ft)			95	50
Storage Blk Time (%)				
Queuing Penalty (veh)				

Intersection: 6: Robertson Blvd & Palm Pkwy

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	55	55
Average Queue (ft)	25	12
95th Queue (ft)	48	42
Link Distance (ft)	277	
Upstream Blk Time (%)		
Queuing Penalty (veh)		
Storage Bay Dist (ft)	100	
Storage Blk Time (%)		
Queuing Penalty (veh)		

Queuing and Blocking Report

Intersection: 8: Robertson Blvd & Rd 15

Movement	WB	SB
Directions Served	LR	L
Maximum Queue (ft)	31	68
Average Queue (ft)	15	24
95th Queue (ft)	41	52
Link Distance (ft)	329	52
Upstream Blk Time (%)		0
Queuing Penalty (veh)		0
Storage Bay Dist (ft)		
Storage Blk Time (%)		
Queuing Penalty (veh)		

Intersection: 10: Rd 15 & Project Dwy 1

Movement	SB
Directions Served	LR
Maximum Queue (ft)	32
Average Queue (ft)	13
95th Queue (ft)	37
Link Distance (ft)	416
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Intersection: 11: Rd 15/Road 15 & Project Dwy 2

Movement	SB
Directions Served	LR
Maximum Queue (ft)	30
Average Queue (ft)	14
95th Queue (ft)	38
Link Distance (ft)	507
Upstream Blk Time (%)	
Queuing Penalty (veh)	
Storage Bay Dist (ft)	
Storage Blk Time (%)	
Queuing Penalty (veh)	

Zone Summary

Zone wide Queuing Penalty: 0