DRAFT FOCUSED ENVIRONMENTAL IMPACT REPORT

Concord Center Industrial Project

January 2020

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Draft Focused Environmental Impact Report

Concord Center Industrial Project

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January 2020

State Clearinghouse Number: 2019090505

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Chapter 1

INTRODUCTION

INTRODUCTION

This Focused Environmental Impact Report (EIR) has been prepared on behalf of the City of Woodlake (City) in accordance with the California Environmental Quality Act (CEQA). This chapter outlines the purpose of and overall approach to the preparation of the EIR for the construction and operation of the Concord Center Industrial Project (Project). The City of Woodlake is the Lead Agency responsible for ensuring that the proposed Project complies with CEQA.

It is the intent of this EIR to provide the City of Woodlake, decision makers, and the general public with the relevant environmental information to use in considering the required approval for the proposed Project. The City will use this EIR for the discretionary approvals of entitlements required to develop the proposed Project.

1.1 Purpose of EIR

This document is an Environmental Impact Report (EIR) prepared in accordance with the California Environmental Quality Act CEQA of 1970 and CEQA Guidelines, as amended. This EIR has been prepared by the City of Woodlake as the "Lead Agency," in consultation with the appropriate local, regional and state agencies.

The purpose of the EIR is to inform the public generally of the significant environmental effects of the project, identify possible ways to minimize the significant effects, and describe reasonable alternatives that support the objectives of the project. As defined by the CEQA Guidelines, Section 15382, a "significant effect on the environment" is as follows:

> *"... a substantial, or potentially substantial adverse change in any of the physical conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance."*

An Initial Study was prepared by the City of Woodlake (City) for the Project. The Initial Study determined the Project could have potentially significant impacts in the area of transportation. The City, therefore, determined that an EIR would be required for the project. This EIR is a "Focused EIR" that concentrates on the potentially significant impacts of the project on one environmental issue area: transportation. All other impact areas were determined to either have no impact or have a less than significant impact (with or without mitigation). This Focused EIR

references the Initial Study and Notice of Preparation prepared for the project for all other areas of impact analysis not provided in this Focused EIR (see Appendix A).

1.2 Environmental Process

Notice of Preparation

In accordance with PRC Section 21092 and CEQA Guidelines Section 15082, the City of Woodlake issued a Notice of Preparation (NOP) to inform agencies and the public that an EIR was being prepared and to invite comments on the scope and content of the document. The NOP of the EIR was circulated to the public and public agencies from September 20, 2019 to October 21, 2019 (State Clearinghouse #2019090505) (refer to Appendix A). The City received four comment letters; from the Native American Heritage Commission, the California Department of Food & Agriculture, the Central Valley Regional Water Quality Control Board, and the California Department of Transportation. All comments on environmental issues received during the NOP public comment period are considered and addressed in this Draft EIR. Appendix B contains the comment letters submitted during the NOP public comment period.

Public Review of this Draft EIR

This Draft EIR is being circulated for public review and comment for a period of 45 days, from January 1, 2020 to February 14, 2020.

During the public review period, written comments from the public, organizations, and agencies on the Draft EIR content may be submitted to the City of Woodlake. Because of time limits mandated by State law, comments should be provided no later than 5:00 p.m. on February 14, 2020. Please send all comments to:

City of Woodlake
Attention: Jason Waters, Community Services Director
350 N. Valencia Ave
Woodlake, CA 93286

Telephone: (559) 564-8776
Email: jwaters@ci.woodlake.ca.us

Copies of this Draft EIR are available for public review at the City Administrative Office at 350 N. Valencia Avenue in Woodlake.

Final EIR

Following public review of the Draft EIR, responses to written comments on the Draft EIR will be prepared and any revisions to the Draft EIR will be summarized. The Final EIR will consist of the Draft EIR; a list of persons, organizations, and public agencies commenting on the Draft EIR; comments and responses thereto; and other information, as applicable.

Before approving the proposed Project, the lead agency is required to certify that the EIR has been completed in compliance with CEQA, that the decision-making body reviewed and considered the information in the EIR, and that the EIR reflects the independent judgement of the lead agency.

State law requires that a public agency adopt a monitoring program for mitigation measures that have been incorporated into the approved project to reduce or avoid significant effects on the environment. The purpose of the monitoring program is to ensure compliance with environmental mitigation during project implementation and operation. Since there are potentially significant impacts requiring mitigation associated with the project, a Mitigation Monitoring Program will be included in the project's Final EIR.

1.3 EIR Summary

Project Description Summary

The Project Applicant intends to construct and operate an industrial center that will house various industrial uses allowable by the zone district, including cannabis cultivation and distribution which is allowable with a Conditional Use Permit.

Environmental Impacts and Mitigation Summary

Based on the analysis in this EIR and accompanying Initial Study, the proposed Project would not result in significant and unavoidable impacts. Mitigation measures are required to reduce potential impacts to less than significant and are included in the MMRP.

Alternatives Evaluated

The EIR analyzed the No Project Alternative which would avoid both the adverse and beneficial effects of the Project and it was determined that this alternative would not meet the Project's ovjectives to create an economically sustainable industrial center.

Areas of Controversy

During the environmental review process, the City of Woodlake identified that transportation would likely be an area of concern.

Chapter 2

PROJECT DESCRIPTION

Project Description

2.1 City Overview

The City of Woodlake is located in Tulare County in the southern part of the San Joaquin Valley. Woodlake is 15 miles northeast of Visalia and 20 miles west of Sequoia National Park. Woodlake is bisected by State Route 216 which runs east and west, and State Route 245, which runs north and south. The community is situated five miles north of State Route 198, a major east/west route that connects the coast range with the Sierras. Since incorporation in 1941, the City of Woodlake has grown to an estimated population of 7,891 in 2019.[1]

2.2 Objectives

The following are the primary goals of the City of Woodlake's Concord Center Industrial Project (Project):

- To create an economically sustainable industrial complex that will provide business and job opportunities within the City of Woodlake.
- To ensure the provision of services and facilities needed to accommodate planned population densities in the project area.

2.3 Location

The City of Woodlake is located in Tulare County in the southern part of the San Joaquin Valley. The proposed Project is located on the southwest corner of West Ropes Avenue and Mulberry Street on APN 060-270-010. Woodlake is bisected by SR 216 and SR 245 and the City is situated five miles north of SR 198.

2.4 Setting and Surrounding Land Use

[1] California Department of Finance. Tables of January 2018 City Population Ranked by Size, Numeric, and Percent Change. http://www.dof.ca.gov/Forecasting/Demographics/Estimates/E-1/. Accessed December 2019.

The proposed Project site is currently fallow, historically planted in fruit orchards.

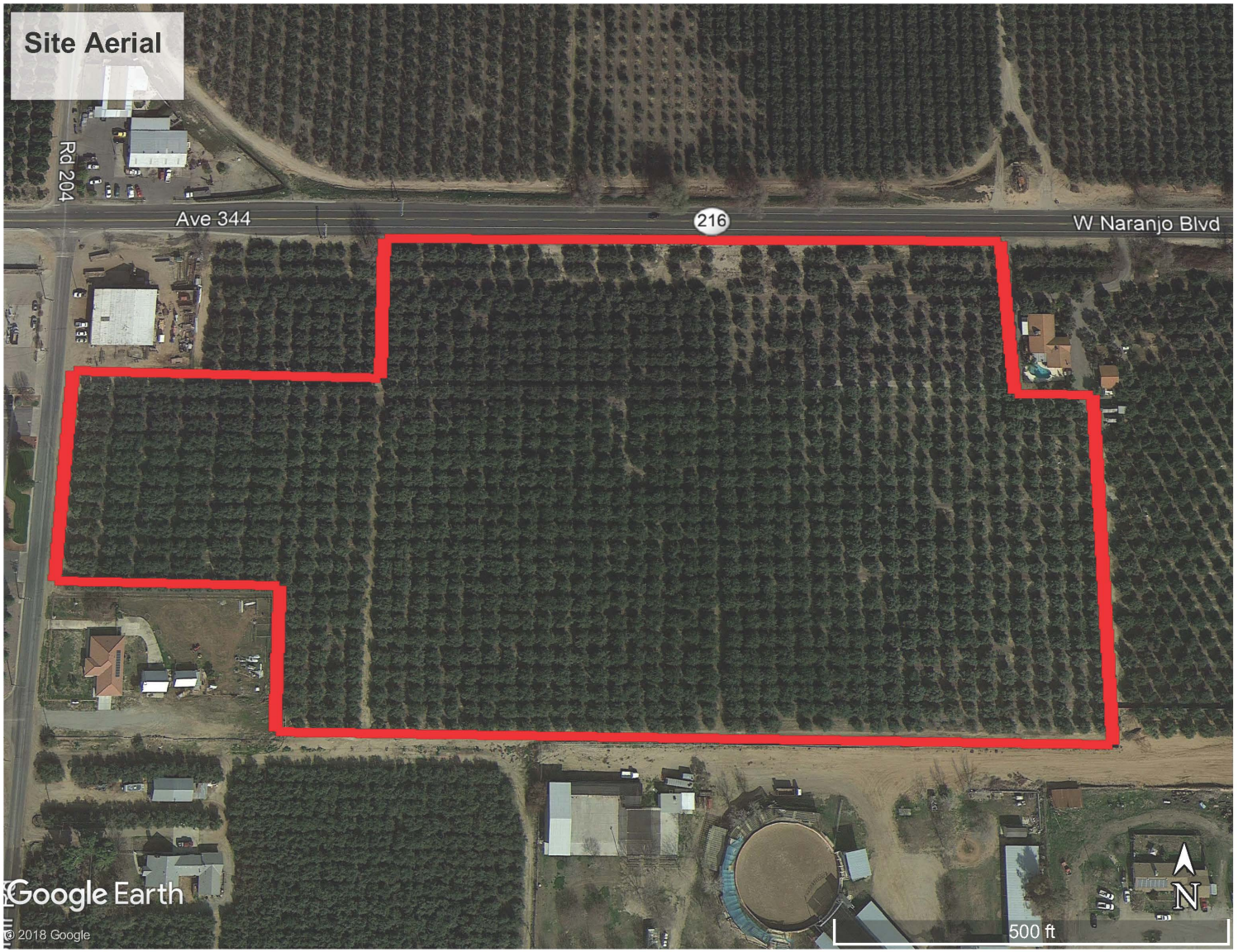
Lands surrounding the proposed Project are described as follows:

- North: Unincorporated agricultural land, industrial use within City limits on the corner wedge.
- South: Agricultural land/ rural residential.
- East: Agricultural land/ rural residential.
- West: Industrial

Figure 1 - Regional Map



Figure 2 - Site Aerial



2.5 Project Description

The Project Applicant intends to construct and operate an industrial center that will house various industrial uses allowable by the zone district, including cannabis cultivation and distribution which is allowable with a Conditional Use Permit.

Project Components

- A Tentative Parcel Map to allow for the division of the existing parcel 060-27-010 into 13 parcels, ranging in size of between 42,000 and 62,000 square feet each.
- Constructing and operating one building on each lot, ranging from 10,000 to 22000 square feet each, for a total of up to 210,000 square feet of industrial space.
- Constructing internal access roads, parking spaces and associated landscaping, as detailed on Figure 3 – Site Plan.
- Connecting the Project to the existing City water, wastewater, and stormdrain systems.
- Installation of perimeter security, including lighting and an alarm system, in accordance with Chapter 5.48 of the Woodlake Municipal Code.

Construction will occur in one phase and is anticipated to take up to two years to complete.

Project Operations

The project at full build-out will house thirteen individual industrial businesses either allowable within the Light Industrial (ML) Zone District or cannabis businesses allowable with the approval of an individual Conditional Use Permit. Cannabis businesses could include various aspects of processing, including, but not limited to cultivation, storage, drying, greenhouse space and packaging. It is assumed that the Project at full build-out will employ up to 30 full time staff and will operate from 8am to 5pm, up to seven days per week. According to the Institute of Transportation Engineers (ITE) Trip Generation, 10th Edition, 210,000 square feet of general light industrial space is estimated to generate 1,467 daily vehicle trips.

The facility's electrical needs will continue to be serviced by existing Southern California Edison connections that have been assessed as sufficient for full operation of allowable uses industrial uses, including indoor/mixed light cannabis cultivation.

Once a business is established, water needs, including cultivation water needs for cannabis will be serviced by an existing on-site well or by connecting to City water, while water for sanitary facilities for the entire complex will come from the City. Stormwater will be kept on-site and wastewater, including sewer use, will be serviced by on-site septic systems.

To accommodate this Project, the following City of Woodlake entitlements are required:

- Tentative Parcel Map to divide the existing parcel into 13 separate parcels
- Conditional Use Permit to operate under a Cannabis Business License (Cultivation, Manufacturing, and Distribution) for cannabis businesses

2.6 Other Required Approvals

The proposed Project would include, but not be limited to, the following regulatory requirements:

- The certification of an Environmental Impact Report by the City of Woodlake
- Approval of a Conditional Use Permit
- Issuance of a license to cultivate, propagate and process commercial cannabis from the California Department of Food and Agriculture
- Coverage under General Waste Discharge Requirements and Waiver of Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation Activities Order No. WQ 2019-0001-DWQ (the Cannabis General Order), issued by the State Water Resources Control Board.
- Approval of a Stormwater Pollution Prevention Plan by the Central Valley Regional Water Quality Control Board
- Dust Control Plan Approval letter from the San Joaquin Valley Air Pollution Control District
- Compliance with Rule 9510 of the San Joaquin Valley Air Pollution Control District
- Compliance with other federal, state and local requirements

Figure 3 – Site Plan



Chapter 3

ENVIRONMENTAL SETTING, IMPACTS & MITIGATION

Environmental Setting, Impacts & Mitigation

3.1 Transportation

This section of the DEIR identifies potential impacts of the proposed Project pertaining to transportation in and around the Project vicinity. One IS/NOP comment letter was received pertaining to this topic, from Caltrans. The information and analysis presented in this Section are based on the Traffic Impact Study prepared for the Project which is included as Appendix C.

Environmental Setting

Major roads in the Project area include:

Millwood Drive is generally a north-south roadway that extends north from State Route 216 and provides access to agricultural land uses. In the Project vicinity, it exists as a two-lane roadway with graded shoulders.

Naranjo Boulevard (SR 216) is an east-west arterial that provides access to agricultural, commercial, and residential land uses in Woodlake. In the vicinity of the proposed Project it exists as a two-lane roadway with paved shoulders and a posted speed limit of 55 mph.

Road 196 is a north-south roadway that extends from Millwood Drive to Avenue 336. It provides access to agricultural land uses, and in the vicinity of the proposed Project, it exists as a two-lane roadway with graded shoulders.

Road 204 is a north-south two-lane roadway that extends from Naranjo Boulevard to Avenue 348. It provides access to residential and agricultural land uses.

Ropes Avenue is an east-west roadway that extends from Blair Road to Valencia Boulevard. West of Oaks Street, it proves access to agricultural land use, and east of Oaks Street it provides access to agricultural land use, and east of Oaks Street, it provides access to residential land uses. It exists as a two-lane roadway with curb and gutter adjacent to development. Ropes Avenue is a dedicated roadway for traffic accessing directly to the industrial park from the South.

Valencia Boulevard is a major north-south arterial that extends through the metropolitan region of the City of Woodlake. It exists as a two-lane roadway with curb and gutter and provides access to commercial, residential, and agricultural land uses.

There is one airport in Woodlake; the Woodlake airport, which is a public airport located two miles south of the City. It covers 88 acres and has one runway.

Bus service in the City of Woodlake is accommodated through the City Dial-A-Ride service. It runs in the city limits of Woodlake and some unincorporated areas of Tulare County only. This service is available Monday through Friday from 7am to 3:30pm. Tulare County also offers out of town bus service with multiple locations around the City. The nearest bus stop to the proposed Project is at the corner of N. Cypress Street and SR 216, approximately 0.67 miles east.

There are no established pedestrian or bicycle paths in the City.

Regulatory Setting

Several federal regulations govern transportation issues. They include:

- Title 49, CFR, Sections 171-177 (49 CFR 171-177), governs the transportation of hazardous materials, the types of materials defined as hazardous, and the marking of the transportation vehicles.
- 49 CFR 350-399, and Appendices A-G, Federal Motor Carrier Safety Regulations, address safety considerations for the transport of goods, materials, and substances over public highways.
- 49 CFR 397.9, the Hazardous Materials Transportation Act of 1974, directs the U.S. Department of Transportation to establish criteria and regulations for the safe transportation of hazardous materials.

Thresholds of Significance

In accordance with the CEQA Guidelines, a project impact would be considered significant if the project would:

- Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?
- Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

- Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?
- Result in inadequate emergency access?

Analysis Methodology

Ruettgers & Schuler Engineering, Inc. prepared a Traffic Impact Study (TIS) (see Appendix C) analyzing potential impacts the proposed Project would have on the existing roadway and transportation system. This was prepared in general conformance with City of Woodlake requirements and *Caltrans Guide for the Preparation of Traffic Impact Studies* dated December 2002. The TIS provides an analysis of the surrounding roadway system and the effects of the proposed Concord Industrial Center Project on the existing and planned roadway infrastructure, including potential mitigation measures to reduce Project transportation impacts. Study results are summarized in the text below. For the full text, graphics, and traffic counts, please refer to Appendix C.

Project Impacts and Mitigation Measures

Impact: *Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*

Less Than Significant with Mitigation: The information and analysis presented in this section are based on the Traffic Impact Study prepared for the Project which is included as Appendix C and is summarized herein.

Project Information

Project Trip Generation and Design Hour Volumes

The trip generation and design hour volumes shown in Table 3.1 were calculated using the Institute of Transportation Engineers (ITE) Trip Generation, 10th Edition. The ADT, AM and PM peak hour rates, and peak hour directional splits for ITE Land Use Code 110 (General Light Industrial) were used to estimate the project traffic for peak hour of adjacent street traffic.

Table 3.1 – Project Trip Generation

General Information			Daily Trips		AM Peak Hour Trips			PM Peak Hour Trips		
ITE Code	Development Type	Variable	ADT RATE	ADT	Rate	In % Split/ Trips	Out % Split/ Trips	Rate	In % Split/ Trips	Out % Split/ Trips
110	General Light Industrial	210 1000 sq ft GFA	eq	1467	0.92	88% 170	12% 23	0.97	12% 24	88% 179
Total				1,467		170	23		24	179

Project Trip Distribution and Assignment

The project trip distribution in Table 3.2 represents the most logically traveled routes for traffic accessing the project. Project traffic distribution was estimated based on a review of the potential draw from population centers within the region and the type of land use involved. The City anticipates a significant amount of project traffic to travel along State Route 65 between Woodlake and other towns such as Exeter, Lindsey, Porterville, Visalia, and Tulare. These assumptions were used to distribute project traffic as shown in Figure 3.1.

Table 3.2 – Project Trip Distribution

Direction	Percent	Roadway
North	10%	Valencia Blvd (SR 245)
South	40%	Rd 204 / Valencia Blvd (SR 245)
East	20%	Naranjo Blvd (SR 216)
West	30%	Naranjo Blvd (SR 216)

Existing and Future Traffic

Existing peak hour turn movement volumes were field measured in September 2019 at the study intersections and are shown in Figure 3.2. Existing plus project peak hour volumes are shown in Figure 3.

Annual growth rates of 0.49% to 2.72% were applied to existing traffic volumes to estimate future traffic volumes for the years 2021 and 2040. These growth rates were estimated based on a review of TCAG traffic model data. Opening year peak hour, opening year plus project, future peak hour and future peak hour plus project volumes are shown in Figures 3.4-3.7, respectively.

An investigation was made with the City of Woodlake's Transportation Planning Department to determine if there are any pending projects which would influence future traffic beyond what the TCAG model is predicting. A trip generation table the traffic generated by the cumulative projects is provided in Appendix C. Based on the information given, it is anticipated that the cumulative projects will be completed by 2021. Future peak hour volumes with the cumulative projects added are shown in Figures 3.4 through 3.7. Potential impacts resulting from existing and cumulative traffic generation is considered ***less than significant.***

Roadway Analysis

The published ADT information and future projected traffic, as shown in Table 3.3, were used to calculate the volume-to-capacity ratios shown in Table 3.4.

A volume-to-capacity ratio (v/c) of greater than 0.80 corresponds to a LOS of D, as defined in the Highway Capacity Manual. Mitigation is required where project traffic reduces the LOS to below

Figure 3.1 – Project Peak Hour Traffic

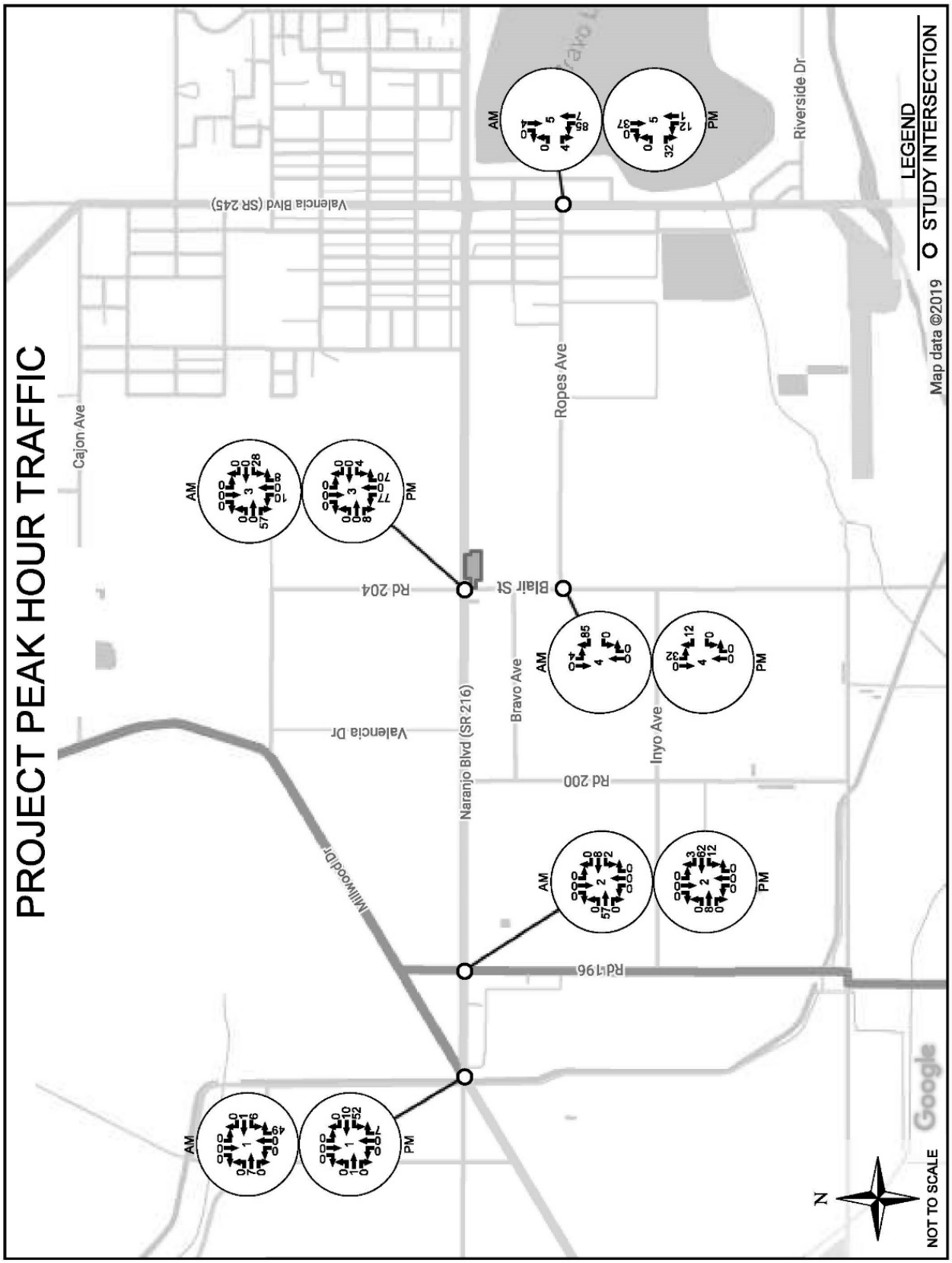


Figure 3.2 – 2019 Peak Hour Traffic

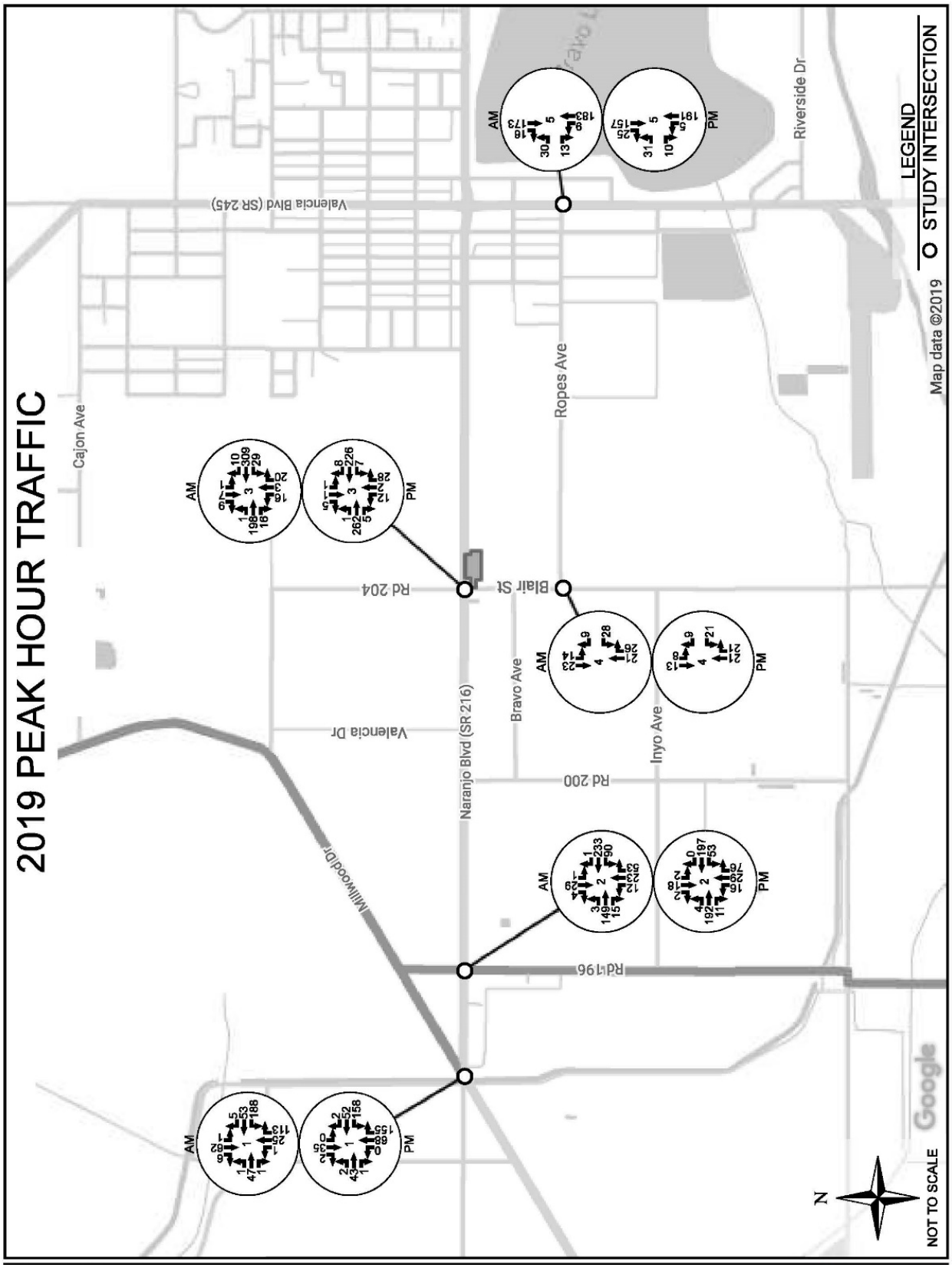


Figure 3.3 – 2019 + Project Peak Hour Traffic

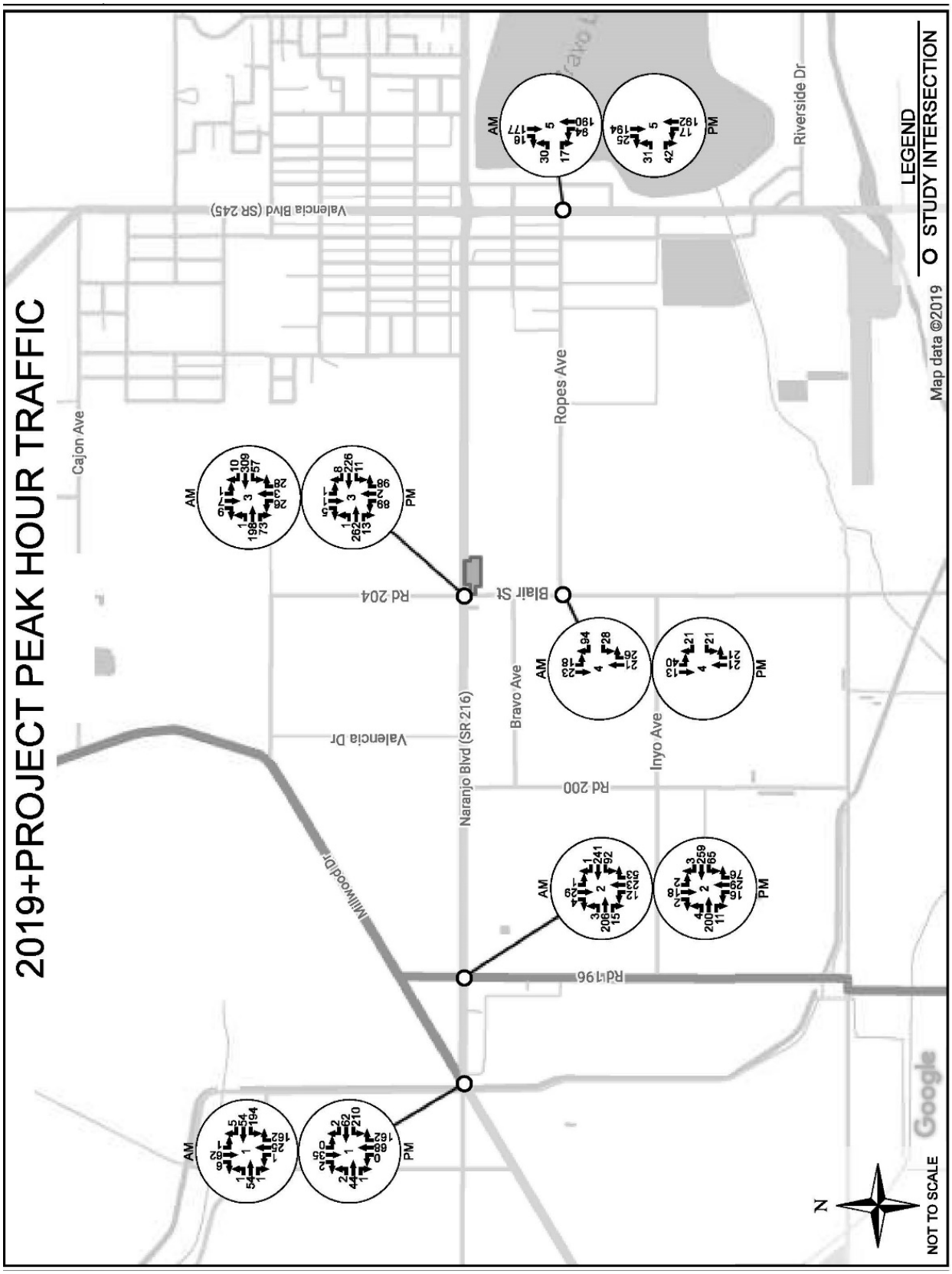


Figure 3.4 – 2021 Peak Hour Traffic

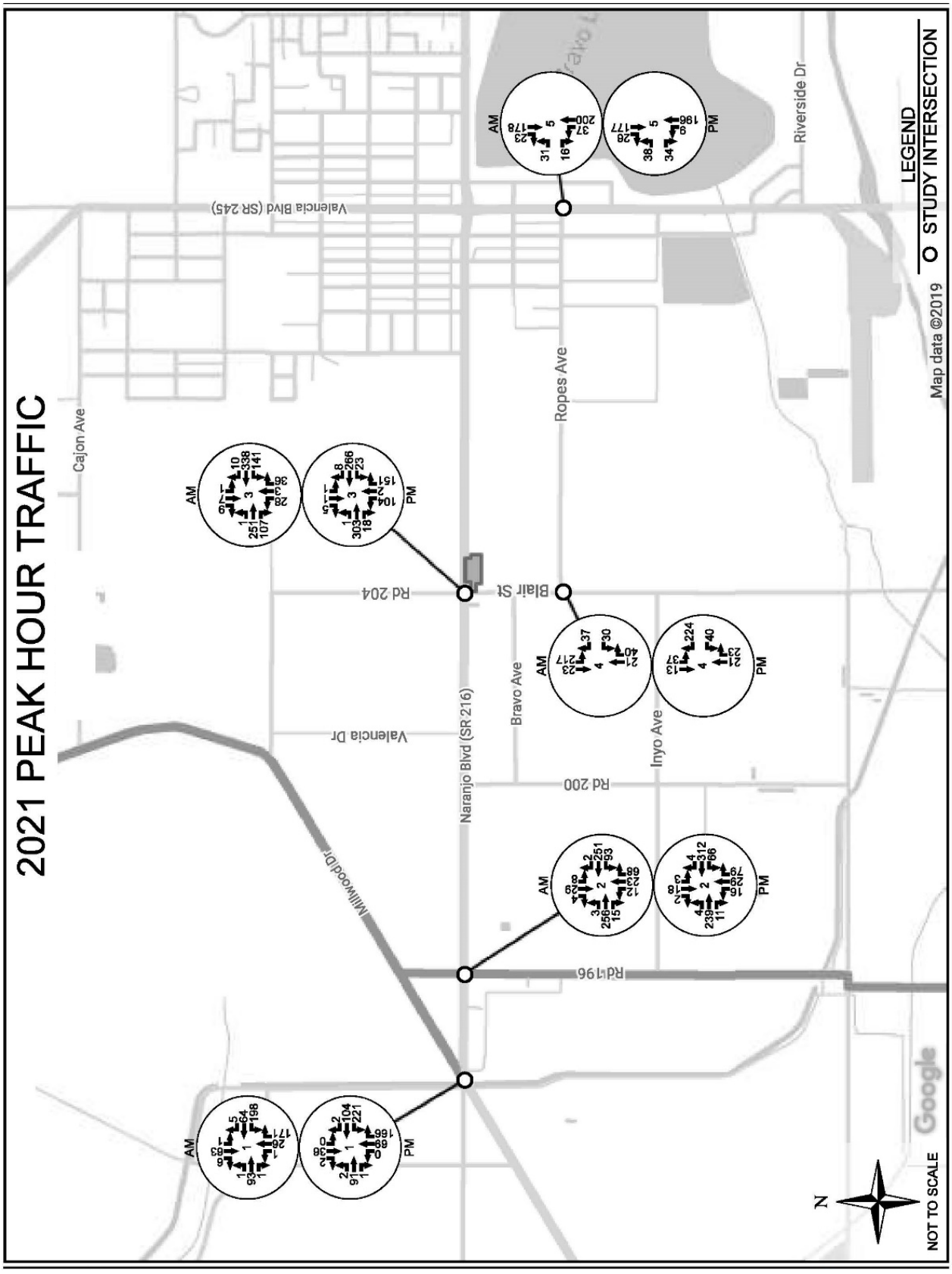


Figure 3.5 – 2021 + Project Peak Hour Traffic

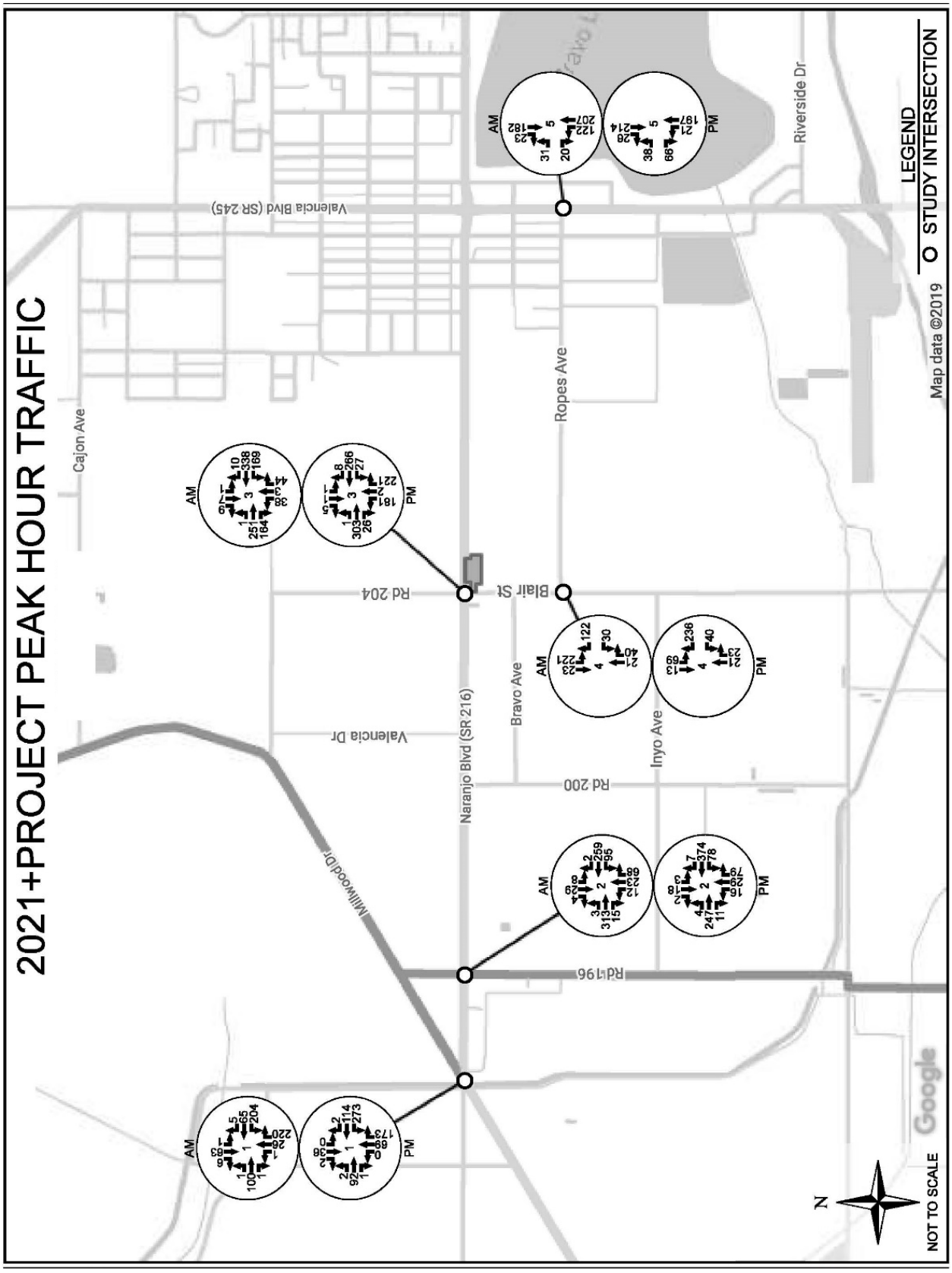


Figure 3.6 – 2040 Peak Hour Traffic

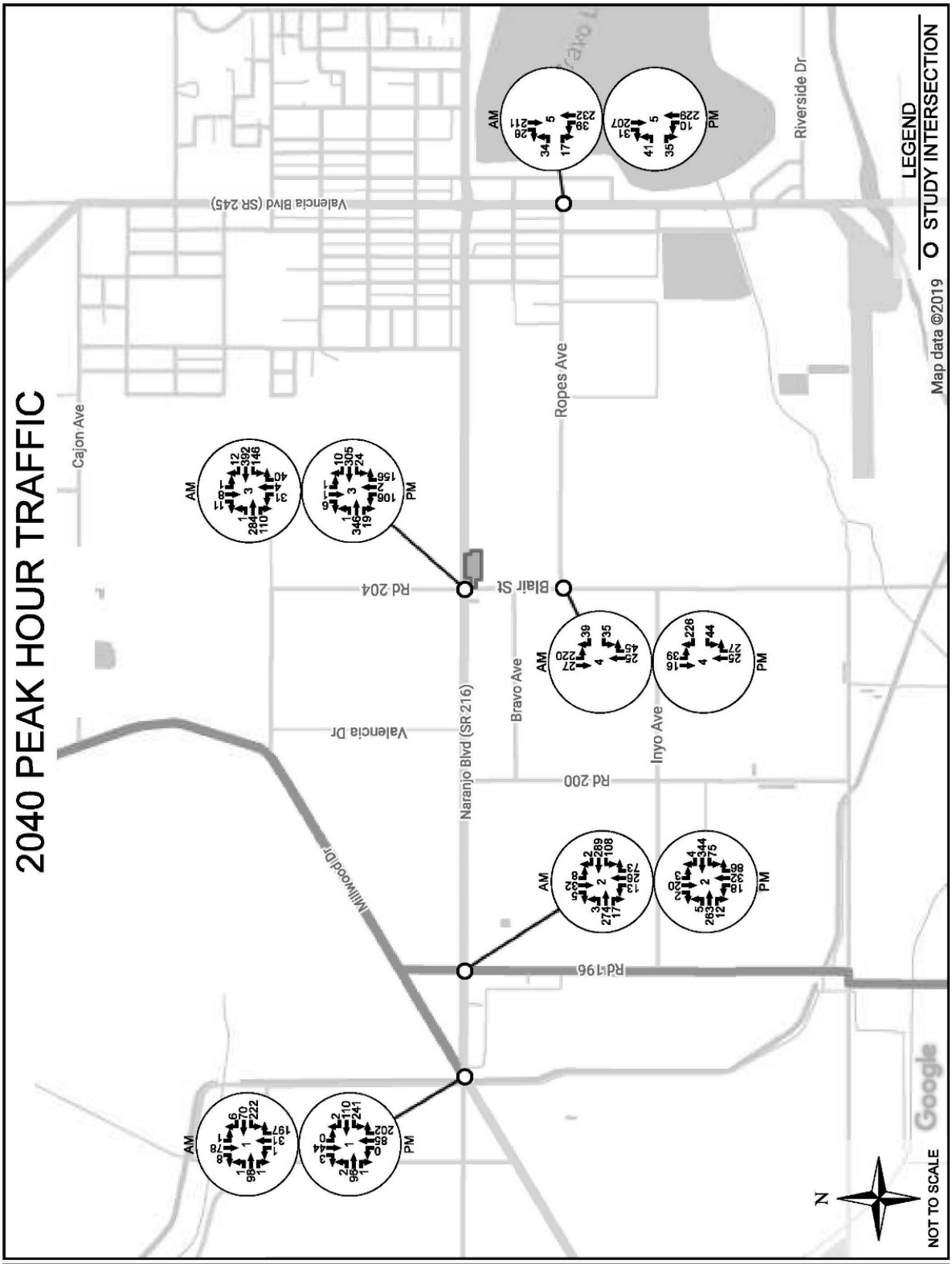
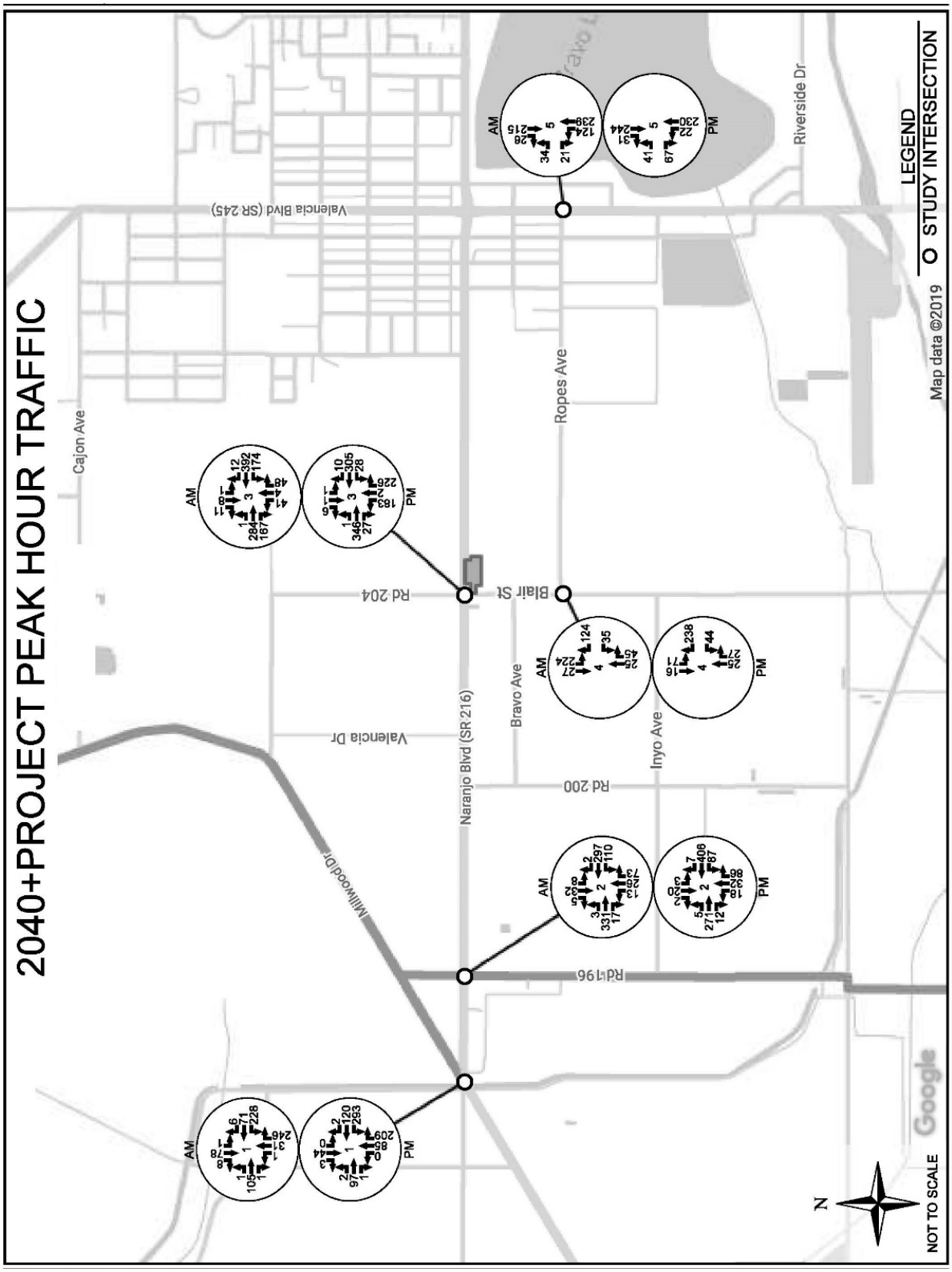


Figure 3.7 – 2040 + Project Peak Hour Traffic



an acceptable level, or where the pre-existing condition of the roadway is below an acceptable level of service and degrades below the pre-existing LOS with the addition of the project.

Table 3.3 – Roadway ADT & Capacity

Street	2019[1]	Project ADT	2021 ADT[2]	2021+ Project[2]	2040 ADT[2]	2040+ Project[2]	Existing Capacity
Naranjo Blvd (SR 216): Millwood Dr to Rd 196	4605[2]	506	4661	5167	5229	5735	15000
Naranjo Blvd (SR 216): Rd 196 to Road 204/Blair Rd	6197[2]	614	6295	6909	7313	7927	15000
Naranjo Blvd (SR 216): Rd 204/Blair Rd to Valencia Blvd (SR 245)	5388[2]	535	5478	6013	6411	6946	15000
Ropes Ave: Blair Rd to Mulberry St	590	318	595	913	649	967	15000
Ropes Ave: Mulberry St to Valencia Blvd (SR 245)	710	318	717	1035	783	1101	15000
Blair Rd: Ropes Ave to Naranjo Blvd (SR 216)	550	1380	559	1939	657	2037	15000
Valencia Blvd (SR 245): Ropes Ave to Naranjo Blvd (SR 216)	6822[2]	275	6946	7221	8242	8517	15000

[1]2019 Data not available. Data grown out from previous year available year.

Table 3.4 – Roadway Level of Service

Street	v/c(Ex) 2019	v/c 2019+Proj	v/c 2021	v/c 2021+Proj	v/c 2040	v/c 2040+Proj
Naranjo Blvd (SR 216): Millwood Dr to Rd 196	0.31	0.34	0.31	0.34	0.35	0.38
Naranjo Blvd (SR 216): Rd 196 to Road 204/Blair Rd	0.41	0.45	0.42	0.46	0.49	0.53
Naranjo Blvd (SR 216): Rd 204/Blair Rd to Valencia Blvd (SR 245)	0.36	0.39	0.37	0.40	0.43	0.46
Ropes Ave: Blair Rd to Mulberry St	0.04	0.06	0.04	0.06	0.04	0.06
Ropes Ave: Mulberry St to Valencia Blvd (SR 245)	0.05	0.07	0.05	0.07	0.05	0.07
Blair Rd: Ropes Ave to Naranjo Blvd (SR 216)	0.04	0.13	0.04	0.13	0.04	0.14
Valencia Blvd (SR 245): Ropes Ave to Naranjo Blvd (SR 216)	0.45	0.47	0.46	0.48	0.55	0.57

NOTE: Cumulative traffic from other projects included in all future volumes.

All roadways within the Project scope currently operate at acceptable levels of service and are expected to continue to do so with the addition of project traffic through the future year.

As demonstrated in Table 3.4, no scenario has a volume to capacity ratio of over 0.80 (LOS D) and as such, impacts resulting from LOS degradation are ***less than significant.***

Intersection Analysis

A capacity analysis of the study intersections was conducted using Synchro 9 software from Trafficware. This software utilizes the capacity analysis methodology in the Transportation Research Board's 2010 Highway Capacity Manual. The analysis was performed for the following AM and PM traffic scenarios:

- Existing (2019)
- Existing+Project (2019)
- Opening Year (2021)
- Opening Year+Project (2021)
- Future Cumulative (2040)
- Future Cumulative+Project (2040)

Criteria for intersection level of service (LOS) are shown in the tables below.

LOS Service Criteria for Unsignalized Intersections

Average Control Delay (sec/veh)	Level of Service	Expected Delay to Minor Street Traffic
≤ 10	A	Little or no delay
> 10 and ≤ 15	B	Short traffic delays
> 15 and ≤ 25	C	Average traffic delays
> 25 and ≤ 35	D	Long traffic delays
> 35 and ≤ 50	E	Very long traffic delays
> 50	F	Extreme delays

LOS Service Criteria for Signalized Intersections

Volume/Capacity	Control Delay (sec/veh)	Level of Service
< 0.60	≤ 10	A
0.61 - 0.70	> 10 and ≤ 20	B
0.71 - 0.80	> 20 and ≤ 35	C
0.81 - 0.90	> 35 and ≤ 55	D
0.91 - 1.00	> 55 and ≤ 80	E
> 1.0	> 80	F

According to the City of Woodlake Roads Department, the peak hour level of service shall be no lower than LOS "D" for urban areas and LOS "C" for rural areas. Levels of service for the study intersections are presented in Tables 3.5 and 3.6. The intersection peak hour level of service goal for the study intersections is LOS C or better.

Table 3.5 – AM Intersection Level of Service

#	Intersection	Control Type	2019	2019+ Project	2021	2021+ Project	2040	2040+ Project	2040+ Project w/Mitigation[1]
1	Millwood Dr & Naranjo Blvd (SR 216)	AWSC	A	A	B	B	B	B	-
2	Rd 196 & Naranjo Blvd (SR 216)	N B S B	B C	B C	B C	C C	C C	C C	-
3	Rd 204 & Naranjo Blvd (SR 216)	N B S B	B B	C C	C C	C C	D (25.7) C	E (37.7) C	B
4	Rd 204 & Ropes Ave	WB	A	A	B	B	B	B	-
5	Valencia Blvd & Ropes Ave	EB	B	B	B	B	B	C	-

[1]See Table 3.11 for Mitigation Measures.

Table 3.6 – PM Intersection Level of Service

#	Intersection	Control Type	2019	2019+ Project	2021	2021+ Project	2040	2040+ Project	2040+ Project w/Mitigation[1]
1	Millwood Dr & Naranjo Blvd (SR 216)	AWSC	A	A	B	B	B	B	-
2	Rd 196 & Naranjo Blvd (SR 216) NB SB		B B	B C	B C	C C	C C	C C	-
3	Rd 204 & Naranjo Blvd (SR 216) NB SB		B B	C B	C B	F (54.3) B	D (26.8) B	F (91.0) B	C
4	Rd 204 & Ropes Ave	WB	A	A	B	B	B	B	-
5	Valencia Blvd & Ropes Ave	EB	B	B	B	B	B	B	-

[1]See Table 3.11 for Mitigation Measures.

Traffic Signal Warrant Analysis

Peak hour signal warrants were evaluated for each of the unsignalized intersections within the study area based on the California Manual on Uniform Traffic Control Devices (MUTCD). Peak hour signal warrants assess delay to traffic on the minor street approaches when entering or crossing a major street. Signal warrant analysis results for AM and PM peak hours are shown in Tables 3.7 through 3.10.

It is important to note that a signal warrant defines the minimum condition under which signalization of an intersection might be warranted. Meeting this threshold does not suggest traffic signals are required, but rather, that other traffic factors and conditions be considered in order to determine whether signals are truly justified.

It is also noted that signal warrants do not necessarily correlate with level of service. An intersection may satisfy a signal warrant condition and operate at or above an acceptable level of service, or operate below an acceptable level of service and not meet signal warrant criteria.

Table 3.7 – Existing Scenario AM Traffic Signal Warrant Analysis

		2019			2019+Project		
#	Intersection	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met
1	Millwood Dr at Naranjo Blvd	295	139	NO	309	188	NO
2	Rd 196 at Naranjo Blvd	491	88	NO	558	88	NO
3	Rd 204 at Naranjo Blvd	563	39	NO	648	57	NO
4	Rd 204 at Ropes Ave	84	37	NO	122	47	NO
5	Valencia Blvd at Ropes Ave	381	43	NO	477	47	NO

Table 3.8 – Future Scenarios AM Traffic Signal Warrant Analysis

		2021			2021+Project			2040			2040+Project		
#	Intersection	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met
1	Millwood Dr at Naranjo Blvd	362	198	NO	376	247	NO	398	229	NO	412	278	YES
2	Rd 196 at Naranjo Blvd	620	103	NO	687	103	NO	693	112	NO	760	112	NO
3	Rd 204 at Naranjo Blvd	848	67	NO	933	85	NO	945	75	NO	1030	93	YES
4	Rd 204 at Ropes Ave	301	67	NO	305	152	NO	317	74	NO	321	159	NO
5	Valencia Blvd at Ropes Ave	438	47	NO	534	51	NO	508	51	NO	604	55	NO

Table 3.9 – Existing Scenario PM Traffic Signal Warrant Analysis

#	Intersection	2019			2019+Project		
		Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met
1	Millwood Dr at Naranjo Blvd	260	212	NO	321	230	NO
2	Rd 196 at Naranjo Blvd	457	121	NO	542	121	NO
3	Rd 204 at Naranjo Blvd	509	42	NO	521	189	NO
4	Rd 204 at Ropes Ave	63	30	NO	95	42	NO
5	Valencia Blvd at Ropes Ave	378	41	NO	428	73	NO

Table 3.10 – Future Scenarios PM Traffic Signal Warrant Analysis

#	Intersection	2021			2021+Project			2040			2040+Project		
		Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met
1	Millwood Dr at Naranjo Blvd	421	235	NO	484	242	YES	452	287	YES	515	294	YES
2	Rd 196 at Naranjo Blvd	636	124	NO	721	124	NO	703	136	NO	788	136	YES
3	Rd 204 at Naranjo Blvd	619	257	YES	631	404	YES	705	264	YES	717	411	YES
4	Rd 204 at Ropes Ave	264	50	NO	276	82	NO	270	55	NO	282	87	NO
5	Valencia Blvd at Ropes Ave	408	72	NO	458	104	NO	477	76	NO	527	108	NO

All intersections operate with an acceptable level of service during peak hours in the existing year with the addition of project traffic.

In the opening year (2021), all intersections are anticipated to operate at an acceptable level of service. With the addition of project traffic, the intersection Road 204 and Naranjo Boulevard (SR 216) is anticipated to operate below an acceptable level of service, which would be considered a significant impact. All remaining intersections with an acceptable level of service are anticipated

to do so in 2040 prior to, and with the addition of project traffic. As such, impacts would be significant; however, implementation of TRA-1 would reduce impacts to less than significant.

Mitigation Measure:

TRA -1

The Project shall be responsible for paying its fair share cost percentages and/or constructing improvements as detailed in Table 3.11, subject to reimbursement for the costs that are in excess of the Project's equitable responsibility as determined by the City of Woodlake. This shall be itemized and enforced through conditions of approval or a development agreement, at the discretion of the City of Woodlake.

Table 3.11 – Future Intersection Improvements and Local Mitigation

#	Intersection	Total Improvements Required by 2040	Project % Share for Local Mitigation
3	Rd 204 F& Naranjo Blvd (SR 216)	Add Signal	31.49%

Level of Significance after Mitigation

With implementation of TRA-1, the impacts to the effected intersections would be ***less than significant.***

Impact: *Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?*

Less Than Significant Impact: In accordance with the California Environmental Quality Act (CEQA), an evaluation of the average vehicle miles traveled (VMT) for the Project's traffic was conducted.

VMT data was obtained from the Tulare County Association of Governments (TCAG) in order to establish a baseline for daily vehicle miles traveled in the Woodlake area. The data provided by TCAG data is estimated based on Select Zone Analysis conducted for the region for establishing traffic models of existing and future land development projects. Based on household and employment populations in the Woodlake area, as well as travel patterns throughout the region, TCAG data has established the regional average VMT per inbound and outbound trip to be 15.21 miles and 15.31 miles, respectively.

In order to establish the anticipated VMT profile for the proposed light industrial project, an investigation into the employee trips was conducted. The primary factor involved in this evaluation is the location of the project site in relation to the surrounding population centers. The City anticipates a significant amount of traffic will travel between Woodlake and surrounding cities.

Based on the information gathered and the project traffic distribution, 39% of the employees will be traveling from within Woodlake city limits while 43% of employees are anticipated to be traveling from Visalia, Tulare and Hanford and 17% of the employees are anticipated to be traveling from Exeter, Lindsay, and Porterville.

The average trip length for employees traveling from surrounding cities was determined to be approximately 20.77 miles. The average trip length for employees traveling from Woodlake was determined to be approximately 1.50 miles. The combined average trip length for all employees resulted in an average trip length of 13.19 miles.

Based on CEQA Guideline Section 15064.3 subdivision (b), the Project would create a less than significant transportation impact, because the project's VMT is less than the regional average. As previously mentioned, the regional average VMT for inbound and outbound trips as established by TCAG is 15.21 miles and 15.31 miles, respectively. The project's average VMT is anticipated to bring down the regional average, and therefore will not cause a significant transportation impact. Impacts are ***less than significant.***

Mitigation Measures: None are required.

Impact: *Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment) or result in inadequate emergency access?*

Less Than Significant Impact. The Project site has been designed with one point of ingress and egress from Road 204. The Project will be responsible for construction of internal roadways to City standards. No roadway design features associated with this proposed Project would result in an increase in hazards due to a design feature or be an incompatible use. There are no non-industrial uses (such as farm equipment) associated with the project. The City has reviewed the site layout and determined that the Project provides adequate emergency access. There is a ***less than significant impact.***

Mitigation Measures: None are required.

Chapter 4

CUMULATIVE IMPACTS

Cumulative Impacts

4.1 Introduction

Section 15130 of the CEQA Guidelines requires an EIR to discuss cumulative impacts of a proposed project when the project's incremental effect is cumulatively considerable. Cumulative impacts refer to two or more individual effects that, when combined, are considerable or that compound or increase other environmental impacts. The purpose of the cumulative impact analysis is to identify and summarize the environmental impacts of the proposed project in conjunction with existing, approved, and anticipated development in the project area. Since transportation issues are the only potentially significant issues of concern for this project, only the cumulative effects related to transportation are evaluated in this analysis.

The CEQA Guidelines allow for the use of two alternative methods to determine the scope of projects for the cumulative impact analysis:

- List Method – a list of past, present and probable future projects producing related or cumulative impacts, including, if necessary those projects outside the control of the agency.
- General Plan Projection Method – A summary of projections contained in an adopted General Plan, or related planning document, which described or evaluated regional or area wide conditions contributing to the cumulative impact.

The cumulative impacts analyses in this document are based on the General Plan Projection Method from the 2007 Woodlake General Plan (and its EIR) (CEQA Guidelines Section 15130(1)(B)).

4.2 Transportation

The cumulative setting for transportation impacts is the roadway system on and around the Project site, including any roadways or intersections that may be impacted by the Project. A cumulative conditions analysis was performed to identify potential impacts in year 2040. It was determined that the proposed Project would not create new significant impacts on circulation conditions on the local and regional traffic and transportation network, as analyzed and discussed in the Project Traffic Study (Appendix C) and in Section 3.1 Transportation.

The City will require roadway improvements and payment of traffic impact fees as described in Section 3.1. Ultimately, the improvements outlined in mitigation measure TRA-1 will ensure that Project-related traffic impacts will be less than significant. Payment of fees into a program is considered under CEQA to be sufficient for mitigation and as such, impacts would ***not be cumulatively considerable.***

Chapter 5

PROJECT ALTERNATIVES

Project Alternatives

5.1 Introduction

CEQA Guidelines Section 15126.6 requires the consideration of a range of reasonable alternatives to the proposed project that could feasibly attain most of the objectives of the proposed project. The Guidelines further require that the discussion focus on alternatives capable of eliminating significant adverse impacts of the project or reducing them to a less-than-significant level, even if the alternative would not fully attain the project objectives or would be more costly. According to CEQA Guidelines, the range of alternatives required in an EIR is governed by the "rule of reason" that requires an EIR to evaluate only those alternatives necessary to permit a reasoned choice. An EIR need not consider alternatives that have effects that cannot be reasonably ascertained and/or are remote and speculative.

5.2 Project Objectives and Significant Impacts

The Project Applicant intends to construct and operate an industrial center that will house various industrial uses allowable by the zone district, including cannabis cultivation and distribution which is allowable with a Conditional Use Permit. The Project objectives are to:

- To create an economically sustainable industrial complex that will provide business and job opportunities within the City of Woodlake.
- To ensure the provision of services and facilities needed to accommodate planned population densities in the project area.

Based on the rule of reason as set forth in the CEQA Guidelines (Section 15126.6), the only alternatives that should be analyzed in the EIR are those that are capable of eliminating or substantially reducing significant adverse environmental impacts. The results of the analysis in this EIR and accompanying IS indicate that the proposed Project would not result in any significant environmental impacts; therefore, no alternative development scenarios are evaluated.

5.3 No Project

CEQA Section 15126.6(e) requires the discussion of the No Project Alternative "to allow decision makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project." The No Project scenario in this case consists of retaining the property in its original configuration, with no construction or operation of the proposed industrial project. Under this alternative, no new development would occur on the site.

This alternative would avoid both the adverse and beneficial effects of the Project. This alternative would avoid site-disturbance and construction-related impacts associated with construction of the proposed industrial development. The No Project Alternative would avoid the generation of any environmental inpacts; however, none of the impacts of the project are considered significant. This alternative would not meet the Project's objectives to create an economically sustainable industrial center.

Chapter 6

CEQA Considerations

CEQA Considerations

6.1 Growth-Inducing Impacts

CEQA Section 15126 (d) requires that any growth-inducing aspect of a project be addressed in an EIR. This discussion includes consideration of ways in which the proposed Project could directly or indirectly foster economic or population growth with the construction and operation of an industrial center project in the surrounding area. Projects which could remove obstacles to population growth (such as a major public service expansion) are also considered in this discussion. The proposed Project is the establishment of an industrial center project. It is consistent with the City of Woodlake's General Plan and Zone District with the approval of a Conditional Use Permit to accommodate the cannabil cultivation and distribution. The proposd Project would create a relatively minor amount of new employment opportunities; however, those positions would likely be readily filled by the existing employment base, given the 8.0% unemployment rate in the Visalia-Porterville Metropolitan statistical area[1]. This compares with an unadjusted unemployment rate of 3.7% for California and 3.3% for the nation during the same time period. The proposed Project would not result in significant growth-inducing impacts.

Conclusion: The project would have ***less than significant*** growth-inducing impacts.

6.2 Irreversible Environmental Changes

Section 15126(f) of the CEQA Guidelines requires that an EIR include a discussion of significant irreversible environmental changes that would result from project implementation. CEQA Section 15126.2(c) identifies irreversible environmental changes as those involving a large commitment of nonrenewable resources or irreversible damage resulting from environmental accidents.

Irreversible changes associated with the project include the use of nonrenewable resources during construction, including concrete, plastic, and petroleum products. During the operational phase of the proposed Project, energy would be used for lighting, heating, cooling, fuel dispensers and

[1] State of California, Employment Development Department, Labor Market Information Division. November 15, 2019. https://www.labormarketinfo.edd.ca.gov/file/lfmonth/visa$pds.pdf. Accessed 12/19.

other requirements. The use of these resources would not be substantial and would not constitute a significant effect.

Conclusion: The project would have ***less than significant*** irreversible environmental changes.

6.3 Significant and Unavoidable Impacts

Based on the analysis in this EIR and the accompanying Notice of Preparation and Initial Study (Appendix A), the proposed Project would not result in any significant unavoidable impacts.

Conclusion: There would be ***no significant and unavoidable impacts*** as a result of proposed Proejct implementation.

Chapter 7

PREPARERS

PREPARERS

7.1 List of Preparers

Crawford & Bowen Planning, Inc. (EIR Consultants)

- Travis Crawford, AICP, Principal Environmental Planner
- Emily Bowen, LEED AP, Principal Environmental Planner

Ruettgers and Schuler Civil Engineering, Inc. (Traffic Impact Analysis)

7.2 Persons and Agencies Consulted

City of Woodlake

- Jason Waters, Community Services Director
- Rebecca Griswold, Planner I

Appendix A

Initial Study/Notice of Preparation

Initial Study

Concord Center Industrial Project

Prepared for:

City of Woodlake
350 N. Valencia Ave
Woodlake, CA 93286
(559) 564-8055
Contact: Jason Waters

Prepared by:

Crawford & Bowen Planning, Inc.
113 N. Church Street, Suite 302
Visalia, CA 93291
(559) 840-4414
Contact: Emily Bowen, LEED AP

September 2019

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PROJECT INFORMATION

This document is the Initial Study for the potential environmental effects of the City of Woodlake's (City) Concord Center Industrial Project (Project). The City of Woodlake will act as the Lead Agency for this project pursuant to the California Environmental Quality Act (CEQA) and the CEQA Guidelines. Copies of all materials referenced in this report are available for review in the project file during regular business hours at 350 N. Valencia Avenue, Woodlake, CA 93286.

Project title

Concord Center Development Project

Lead agency name and address

City of Woodlake
350 N. Valencia Avenue
Woodlake, CA 93286

Contact person and phone number

Jason Waters, Community Services Director
City of Woodlake
(559) 564-8055

Project location

The City of Woodlake is located in Tulare County in the southern part of the San Joaquin Valley. The proposed Project is located on the southwest corner of Road 204 and Avenue 344 (State Route 216) on APN 060-170-071 and -098. Woodlake is bisected by SR 216 and SR 245 and the City is situated five miles north of SR 198.

Figure 1 - Location



Figure 2 – Site Aerial



Project sponsor's name/address

Moe Essa
Woodlake Concord Center, Inc.
2300 W. Shaw Ave #140
Fresno, CA 93711

General plan designation

Industrial

Zoning

Light Industrial (ML)

Project Description

The Project Applicant intends to construct and operate a 17.8-acre industrial center that will house various industrial uses allowable by the zone district, including cannabis cultivation and distribution which is allowable with a Conditional Use Permit.

Project Components

- A Tentative Parcel Map to allow for the division of the existing parcels into 13 parcels, ranging in size of between 42,000 and 62,000 square feet each.
- Constructing and operating one building on each lot, ranging from 10,000 to 22000 square feet each, for a total of up to 210,000 square feet of industrial space.
- Constructing internal access roads, parking spaces and associated landscaping, as detailed on Figure 3 – Site Plan.
- Connecting the Project to the existing City water, wastewater, and stormdrain systems.
- Installation of perimeter security, including lighting and an alarm system, in accordance with Chapter 5.48 of the Woodlake Municipal Code.

Construction will occur in one phase and is anticipated to take up to two years to complete.

Project Operations

The project at full build-out will house thirteen individual industrial businesses either allowable within the Light Industrial (ML) Zone District or cannabis businesses allowable with the approval of a Conditional Use Permit.

The facility's electrical needs will continue to be serviced by existing Southern California Edison connections that have been assessed as sufficient for full operation of allowable uses industrial uses, including indoor/mixed light cannabis cultivation.

Once a business is established, water needs, including cultivation water needs for cannabis will be serviced by an existing on-site well or by connecting to City water, while water for sanitary facilities for the entire complex will come from the City. Stormwater will be kept on-site and wastewater, including sewer use, will be serviced by on-site septic systems.

To accommodate this Project, the following entitlements are required:

- Tentative Parcel Map to divide the existing parcel into 13 separate parcels
- Conditional Use Permit to operate under a Cannabis Business License (Cultivation, Manufacturing, and Distribution) for cannabis businesses

Surrounding Land Uses/Existing Conditions

The proposed Project site is currently being utilized for agricultural purposes, specifically fruit orchards.

Lands surrounding the proposed Project are described as follows:

- North: Unincorporated agricultural land, industrial use within City limits on the corner wedge.
- South: Agricultural land/ rural residential.
- East: Agricultural land/ rural residential.
- West: Industrial.

Figure 3 – Site Plan



Other Public Agencies Involved

- State of California Native American Heritage Commission
- San Joaquin Valley Air Pollution Control District
- Central Valley Regional Water Quality Control Board

Tribal Consultation

The City of Woodlake has not received any project-specific requests from any Tribes in the geographic area with which it is traditionally and culturally affiliated with or otherwise to be notified about projects in the City of Woodlake.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☐ Aesthetics	☐ Agriculture Resources and Forest Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Energy
☐ Geology / Soils	☐ Greenhouse Gas Emissions	☐ Hazards & Hazardous Materials
☐ Hydrology / Water Quality	☐ Land Use / Planning	☐ Mineral Resources
☐ Noise	☐ Population / Housing	☐ Public Services
☐ Recreation	☒ Transportation	☐ Tribal Cultural Resources
☐ Utilities / Service Systems	☐ Wildfire	☐ Mandatory Findings of Significance

DETERMINATION

On the basis of this initial evaluation:

☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☒ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐ I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



September 20, 2019

Jason Waters — Date

Community Services Director

City of Woodlake

ENVIRONMENTAL CHECKLIST

I. AESTHETICS

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and regulations governing scenic quality?	☐	☐	☒	☐
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

ENVIRONMENTAL SETTING

The City of Woodlake is located on the San Joaquin Valley floor at the western foothills of the Sierra Nevada mountain range. On clear days, the peaks are visible from the majority of the City. The site is located in an industrial and agricultural area with large industrial facilities and citrus orchards dominating the landscape. The proposed Project site is bounded to the north by Avenue 344 (SR 216), to the west by Road 204, to the east by agriculture and a rural home, and to the south by agriculture and rural homes. There are no adopted scenic resources or scenic in the area. State Routes (SR) in the proposed Project vicinity include 216, 245 and 198.

RESPONSES

a. Have a substantial adverse effect on a scenic vista?

b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and regulations governing scenic quality?

Less than Significant Impact. The City of Woodlake General Plan does not identify any scenic vistas within the proposed Project area; however, the peaks of the Sierra Nevada mountain range are clearly visible on many days of the year. A scenic vista is generally considered a view of an area that has remarkable scenery or a resource that is indigenous to the area.

The proposed Project is consistent with the existing character and uses of the surrounding area, as other built-up land, including industrial/commercial businesses, are in the neighboring vicinities. As such, Project operations will not degrade the existing visual character of the site. Construction activities may be visible from the adjacent roadside; however, the construction activities will be temporary in nature and will not affect a scenic vista.

There are no state designated scenic highways within the immediate proximity to the Project site. California Department of Transportation Scenic Highway Mapping System identifies SR 198 east of SR 99 as an Eligible State Scenic Highway.[1] This is the closest highway, located approximately 5.2 miles southeast of the Project site; however, the Project site is both physically and visually separated from SR 198 by intervening land uses. In addition, no scenic highways or roadways are listed within the Project area in the City of Woodlake's General Plan or Tulare County's General Plan. Based on the National Register of Historic Places (NRHP) and the City's General Plan, no historic buildings exist on the Project site. The proposed Project would not cause damage to rock outcroppings or historic buildings within a State scenic highway corridor. Any impacts would be considered ***less than significant***.

Mitigation Measures: None are required.

[1] California Department of Transportation. California Scenic Highway Mapping System, Tulare County. http://www.dot.ca.gov/hq/LandArch/16_livability/scenic_highways/index.htm. Accessed July 2019.

d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less Than Significant Impact. Nighttime lighting is necessary to provide and maintain safe, secure, and attractive environments; however, these lights have the potential to produce spillover light and glare and waste energy, and if designed incorrectly, could be considered unattractive. Light that falls beyond the intended area is referred to as "light trespass." Types of light trespass include spillover light and glare. Minimizing all these forms of obtrusive light is an important environmental consideration. A less obtrusive and well-designed energy efficient fixture would face downward, emit the correct intensity of light for the use, and incorporate energy timers.

Glare results when a light source directly in the field of vision is brighter than the eye can comfortably accept. Squinting or turning away from a light source is an indication of glare. The presence of a bright light in an otherwise dark setting may be distracting or annoying, referred to as discomfort glare, or it may diminish the ability to see other objects in the darkened environment, referred to as disability glare. Glare can be reduced by design features that block direct line of sight to the light source and that direct light downward, with little or no light emitted at high (near horizontal) angles, since this light would travel long distances. Cutoff-type light fixtures minimize glare because they emit relatively low-intensity light at these angles.

Currently the sources of light in the Project area are from the surrounding industrial and agricultural uses and the vehicles traveling along Avenue 344 and Road 204. The Project would include nighttime lighting for building and security, as required by Chapter 5.48 of the Woodlake Municipal Code. Accordance with the Municipal Code will also ensure that outdoor lighting does not produce obtrusive glare onto the public right-of-way or adjoining properties. Lighting fixtures for security would be designed with "cutoff" type fixtures or shielded light fixtures, or a combination of fixture types to cast light downward, thereby providing lighting at the ground level for safety while reducing glare to adjacent properties. Accordingly, the Project would not create substantial new sources of light or glare. Potential impacts are ***less than significant***.

Mitigation Measures: None are required.

II. AGRICULTURE AND FOREST RESOURCES

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

While the proposed Project site is currently being utilized for agricultural purposes, it is officially designated by the City of Woodlake[2] as ML (Light Industrial). The Project site is considered *Prime Farmland* and *Farmland of Statewide Importance*[3]; however the land is not under the Williamson Act.

RESPONSES

a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?

c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

d. Result in the loss of forest land or conversion of forest land to non-forest use?

e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

No Impact. The Project site is *Prime Farmland* and *Farmland of Statewide Importance* according to the California Important Farmland Finder, however it is located in an area considered Light Industrial by the City of Woodlake. As such, potential conversion of farmlands on this site have been found to be significant and unavoidable in the Woodlake General Plan, 2008-2028 EIR (Sch#2008101159) and a Statement of Overriding Consideration has been adopted by the City. The Project site is not under the Williamson Act contract. Therefore, no land conversion from Farmland would occur for the Project. The Project is not zoned for forestland and does not propose any zone changes related to forest or timberland. There is ***no impact***.

Mitigation Measures: None are required.

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[2] City of Woodlake General Plan, Zoning Map. http://www.cityofwoodlake.com/wp-content/uploads/2017/11/City-of-Woodlake-Zoning-Map.pdf. Accessed July 2019.
[3] Department of Conservation, California Important Farmland Finder. https://maps.conservation.ca.gov/DLRP/CIFF/. Accessed July 2019.

III. AIR QUALITY

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	☐	☒	☐
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d. Result in other emissions (such as those leading to odors or adversely affecting a substantial number of people)?	☐	☐	☒	☐

ENVIRONMENTAL SETTING

The climate of the City of Woodlake and the San Joaquin Valley is characterized by long, hot summers and stagnant, foggy winters. Precipitation is low and temperature inversions are common. These characteristics are conducive to the formation and retention of air pollutants and are in part influenced by the surrounding mountains which intercept precipitation and act as a barrier to the passage of cold air and air pollutants.

The proposed Project lies within the San Joaquin Valley Air Basin, which is managed by the San Joaquin Valley Air Pollution Control District (SJVAPCD or Air District). National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) have been established for the following criteria pollutants: carbon monoxide (CO), ozone (O_3), sulfur dioxide (SO_2), nitrogen dioxide (NO_2), particulate matter (PM_{10} and $PM_{2.5}$), and lead (Pb). The CAAQS also set standards for sulfates, hydrogen sulfide, and visibility.

Air quality plans or attainment plans are used to bring the applicable air basin into attainment with all state and federal ambient air quality standards designed to protect the health and safety of residents

within that air basin. Areas are classified under the Federal Clean Air Act as either "attainment", "non-attainment", or "extreme non-attainment" areas for each criteria pollutant based on whether the NAAQS have been achieved or not. Attainment relative to the State standards is determined by the California Air Resources Board (CARB). The San Joaquin Valley is designated as a State and Federal extreme non-attainment area for O3, a State and Federal non-attainment area for PM2.5, a State non-attainment area for PM10, and Federal and State attainment area for CO, SO2, NO2, and Pb.

Standards and attainment status for listed pollutants in the Air District can be found in Table 1. Note that both state and federal standards are presented.

Table 1
Standards and Attainment Status for Listed Pollutants in the Air District

	Federal Standard	California Standard
Ozone	0.075 ppm (8-hr avg)	0.07 ppm (8-hr avg) 0.09 ppm (1-hr avg)
Carbon Monoxide	9.0 ppm (8-hr avg) 35.0 ppm (1-hr avg)	9.0 ppm (8-hr avg) 20.0 ppm (1-hr avg)
Nitrogen Dioxide	0.053 ppm (annual avg)	0.30 ppm (annual avg) 0.18 ppm (1-hr avg)
Sulfur Dioxide	0.03 ppm (annual avg) 0.14 ppm (24-hr avg) 0.5 ppm (3-hr avg)	0.04 ppm (24-hr avg) 0.25 ppm (1hr avg)
Lead	1.5 µg/m3 (calendar quarter) 0.15 µg/m3 (rolling 3-month avg)	1.5 µg/m3 (30-day avg)
Particulate Matter (PM10)	150 µg/m3 (24-hr avg)	20 µg/m3 (annual avg) 50 µg/m3 (24-hr avg)
Particulate Matter (PM2.5)	15 µg/m3 (annual avg)	35 µg/m3 (24-hr avg) 12 µg/m3 (annual avg)

µg/m3 = micrograms per cubic meter

Additional State regulations include:

CARB Portable Equipment Registration Program – This program was designed to allow owners and operators of portable engines and other common construction or farming equipment to register their equipment under a statewide program so they may operate it statewide without the need to obtain a permit from the local air district.

U.S. EPA/CARB Off-Road Mobile Sources Emission Reduction Program – The California Clean Air Act (CCAA) requires CARB to achieve a maximum degree of emissions reductions from off-road mobile sources to attain State Ambient Air Quality Standards (SAAQS); off- road mobile sources include most construction equipment. Tier 1 standards for large compression-ignition engines used in off-road mobile sources went into effect in California in 1996. These standards, along with ongoing rulemaking, address emissions of nitrogen oxides (NOX) and toxic particulate matter from diesel engines. CARB is currently

developing a control measure to reduce diesel PM and NOX emissions from existing off-road diesel equipment throughout the state.

California Global Warming Solutions Act – Established in 2006, Assembly Bill 32 (AB 32) requires that California's GHG emissions be reduced to 1990 levels by the year 2020. This will be implemented through a statewide cap on GHG emissions, which will be phased in beginning in 2012. AB 32 requires CARB to develop regulations and a mandatory reporting system to monitor global warming emissions levels.

RESPONSES

a. Conflict with or obstruct implementation of the applicable air quality plan?

b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

c. Expose sensitive receptors to substantial pollutant concentrations?

Less than Significant Impact. Less Than Significant Impact. The proposed Project lies within the San Joaquin Valley Air Basin (SJVAB). At the Federal level, the SJVAB is designated as extreme nonattainment for the 8-hour ozone standard, attainment for PM_{10} and CO, and nonattainment fort $PM_{2.5}$. At the State level, the SJVAB is designated as nonattainment for the 8-hour ozone, PM_{10}, and $PM_{2.5}$ standards. Although the Federal 1-hour ozone standard was revoked in 2005, areas must still attain this standard, and the SJVAPCD recently requested an EPA finding that the SJVAB has attained the standard based on 2011-2013 data[4]. To meet Federal Clean Air Act (CAA) requirements, the SJVAPCD has multiple air quality attainment plan (AQAP) documents, including:

- Extreme Ozone Attainment Demonstration Plan (EOADP) for attainment of the 1-hour ozone standard (2004);
- 2007 Ozone Plan for attainment of the 8-hour ozone standard;
- 2007 PM_{10} Maintenance Plan and Request for Redesignation; and
- 2008 $PM_{2.5}$ Plan.

Because of the region's non-attainment status for ozone, $PM_{2.5}$, and PM_{10}, if the project-generated emissions of either of the ozone precursor pollutants (ROG or NOx), PM_{10}, or $PM_{2.5}$ were to exceed the

[4] San Joaquin Valley Air Pollution Control District. Guide to Assessing and Mitigating Air Quality Impacts. March 19, 2015. Page 28. http://www.valleyair.org/transportation/GAMAQI_3-19-15.pdf. Accessed July 2019.

SJVAPCD's significance thresholds, then the project uses would be considered to conflict with the attainment plans. In addition, if the project uses were to result in a change in land use and corresponding increases in vehicle miles traveled, they may result in an increase in vehicle miles traveled that is unaccounted for in regional emissions inventories contained in regional air quality control plans.

The annual significance thresholds to be used for the Project for construction and operational emissions are as follows[5]:

- 10 tons per year ROG;
- 10 tons per year NOx;
- 15 tons per year PM_{10}; and
- 15 tons per year $PM_{2.5}$.

The project will result in both construction emissions and operational emissions as described below.

Short-Term (Construction) Emissions

Site preparation and project construction would involve grading, hauling, and various activities needed to construct the project. During construction, the project could generate pollutants such as hydrocarbons, oxides of nitrogen, carbon monoxide, and suspended PM. A major source of PM would be windblown dust generated during construction activities. Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying uncovered loads of soils. Vehicles leaving the site could deposit dirt and mud on local streets, which could be an additional source of airborne dust after it dries. PM10 emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. PM10 emissions would depend on soil moisture, the silt content of soil, wind speed, and the amount of operating equipment. Larger dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site. These emissions would be temporary and limited to the immediate area surrounding the construction site.

Operational Emissions

Operational emissions would primarily be generated from vehicles traveling to and from the Facility. According to the CalEEMod trip summary information for general light industry, the proposed Project would generate an average of 1,467 trips per day; however, the Project is only expected to generate an additional 60 trips per day. There are no substantial stationary emission generators associated with the project.

[5] San Joaquin Valley Air Control District – Air Quality Threshold of Significance – Criteria Pollutants. http://www.valleyair.org/transportation/0714-GAMAQI-Criteria-Pollutant-Thresholds-of-Significance.pdf. Accessed July 2019.

Total Project Emissions

The estimated annual construction and operational emissions are shown below. The California Emissions Estimator (CalEEMod), Version 2016.3.2, was used to estimate construction and operational (vehicle trips) emissions resulting from the proposed Project. The modeling is based on the square footage of the general light industrial building, construction activities, and project trip generation. The conservative trip estimate generated by CalEEMod was utilized; however, actual project trip generation is expected to be significantly lower (see traffic section of this document for project trip generation information). Modeling results are provided in Table 2 and the CalEEMod output files are provided in Appendix A.

Table 2
Proposed Project Construction and Operation Emissions

	VOC (ROG) (tons/year)	NO_x (tons/year)	PM_{10} (tons/year)	$PM_{2.5}$ (tons/year
Years 2019/2020/2021 Construction (max annual contribution)	1.49	3.08	0.25	0.19
Project Operation	1.46	5.37	1.67	0.47
Threshold of Significance	10	10	15	15
Significant?	**No**	**No**	**No**	**No**

Source: CalEEMod results (Appendix A). Crawford & Bowen Planning (2019)

As demonstrated in Table 2, estimated construction and operational emissions would not exceed the SJVAPCD's significance thresholds for ROG, NOx, PM_{10}, and $PM_{2.5}$. As a result, the Project uses would not conflict with emissions inventories contained in regional air quality attainment plans and would not result in a significant contribution to the region's air quality non-attainment status[6].

Localized high levels of CO are associated with traffic congestion and idling or slow-moving vehicles. The SJVAPCD provides screening criteria to determine when to quantify local CO concentrations based on impacts to the level of service (LOS) of roadways in the Project vicinity.

As further discussed in the Transportation/Traffic checklist evaluation, the Project would not generate substantial traffic that would reduce the level of service on local roadways. Therefore, the Project would not significantly contribute to an exceedance that would exceed state or federal CO standards. Additionally, as the estimated construction and operational emissions are below SJVAPCD thresholds, any cumulative considerable increase in criteria pollutants would be less than significant.

Any impacts to air resources would be considered ***less than significant***.

[6] San Joaquin Valley Air Pollution Control District. Guide to Assessing and Mitigating Air Quality Impacts. March 19, 2015. Page 65. http://www.valleyair.org/transportation/GAMAQI_3-19-15.pdf. Accessed July 2019.

Mitigation Measures: None are required.

d. Result in other emissions (such as those leading to odors adversely affecting a substantial number of people?

Less than Significant Impact. The proposed Project is located in an industrial and agricultural portion of the City of Woodlake. During construction, the various diesel-powered vehicles and equipment in use on-site would create localized odors. These odors would be temporary and are not likely to be noticeable for extended periods of time beyond the Project site. The potential for diesel odor impacts is therefore considered less than significant.

In accordance with Chapter 5.48 (N) of the Woodlake Municipal Code, "Cannabis business shall provide a sufficient odor absorbing ventilation and exhaust system so that odor generated inside the facility that is distinctive to its operation is not detected outside the Premises, outside the building housing the Cannabis business, or anywhere on adjacent property of public rights-of-way." As such, the proposed Project and its future tenants are not expected to produce any offensive odors that would result in frequent odor complaints. Any impacts would be ***less than significant.***

Mitigation Measures: None are required.

IV. BIOLOGICAL RESOURCES

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☒	☐	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒

e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

The proposed Project site is located in a portion of the central San Joaquin Valley that has, for decades, experienced intensive agricultural and urban disturbances. Current agricultural endeavors in the region include dairies, groves, and row crops.

Like most of California, the Central San Joaquin Valley experiences a Mediterranean climate. Warm dry summers are followed by cool moist winters. Summer temperatures usually exceed 90 degrees Fahrenheit, and the relative humidity is generally very low. Winter temperatures rarely raise much above 70 degrees Fahrenheit, with daytime highs often below 60 degrees Fahrenheit. Annual precipitation within the proposed Project site is about 10 inches, almost 85% of which falls between the months of October and March. Nearly all precipitation falls in the form of rain and storm-water readily infiltrates the soils of the surrounding the sites.

Native plant and animal species once abundant in the region have become locally extirpated or have experienced large reductions in their populations due to conversion of upland, riparian, and aquatic habitats to agricultural and urban uses. Remaining native habitats are particularly valuable to native wildlife species including special status species that still persist in the region. According to the Woodlake General Plan, most of the open space in the Woodlake area is dominated by agriculture. Citrus, olives, and grazing land are the dominant crops, which may attract the San Joaquin kit fox and burrowing owls.

The site currently consists of fruit orchards. The Project site's surrounding lands consist of industrial facilities, active agriculture and rural residences.

No aquatic or wetland features occur on the proposed Project site; therefore, jurisdictional waters are considered absent from the site.

RESPONSES

a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Less than Significant Impact with Mitigation Incorporation. The site is currently developed for fruit orchards. The site is highly disturbed; however the existing orchard trees, along with the few large trees along the perimeter of the Project site may serve as habitat for bird species. Several bird species in the Project area are protected under the Migratory Bird Treaty Act. Migratory birds can typically be seen foraging in fallow fields and grassland habitats and they nest in dense vegetation. The dense tree growth on the site and presence of nearby fields can potentially attract Migratory Birds or other sensitive bird species for nesting or foraging purposes. Construction activities such as excavating, trenching, and grading that disturb a nesting bird on the Project site or immediately adjacent to the construction zone could constitute a significant effect. Implementation of Mitigation Measure BIO-1 will ensure that any impacts remain ***less than significant***.

Mitigation Measures:

BIO-1

To the extent practicable, construction shall be scheduled to avoid the nesting season, which extends from February through August. If it is not possible to schedule construction between September and January, a pre-construction clearance survey for nesting birds shall be conducted by a qualified biologist to ensure that no active nests will be disturbed during the implementation of the Project. A pre-construction clearance survey shall be conducted no more than 14 days prior to the start of construction activities. During this survey, the qualified biologist shall inspect all potential nest substrates in and immediately adjacent to the impact areas, including within 250 feet in the case of raptor nests. If an active nest is found close enough to the construction area to be disturbed by these activities, the qualified biologist shall determine the extent of a construction-free buffer to be established around the nest. If work cannot proceed without disturbing the nesting birds, work may need to be halted or redirected to other areas until nesting and fledging are completed or the nest has failed for non-construction related reasons.

b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No Impact. There are no natural waterways, sensitive natural communities, or protected wetlands on the subject site. As such, there is ***no impact.***

Mitigation Measures: None are required.

d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

No Impact. There are no natural waterways or natural vegetation on the subject site. There would be ***no impact*** to native species movement.

Mitigation Measures: None are required.

e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impact. The City of Woodlake's General Plan includes policies for the protection of biological resources. The proposed Project would not conflict with any of the adopted policies. There is ***no impact.***

Mitigation Measures: None are required.

f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact. The proposed Project site is not within an area set aside for the conservation of habitat or sensitive plant or animal species pursuant to a Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. As such, there is ***no impact***.

Mitigation Measures: None are required.

V. CULTURAL RESOURCES

Would the project:

		Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a.	Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	☒
b.	Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	☒	☐	☐
c.	Disturb any human remains, including those interred outside of formal cemeteries?	☐	☒	☐	☐

ENVIRONMENTAL SETTING

Archaeological resources are places where human activity has measurably altered the earth or left deposits of physical remains. Archaeological resources may be either prehistoric (before the introduction of writing in a particular area) or historic (after the introduction of writing). The majority of such places in this region are associated with either Native American or Euroamerican occupation of the area. The most frequently encountered prehistoric and early historic Native American archaeological sites are village settlements with residential areas and sometimes cemeteries; temporary camps where food and raw materials were collected; smaller, briefly occupied sites where tools were manufactured or repaired; and special-use areas like caves, rock shelters, and sites of rock art. Historic archaeological sites may include foundations or features such as privies, corrals, and trash dumps.

The prehistoric and historic site records and literature search was completed by the California Historical Resources Information System, Southern San Joaquin Valley Information Center (CHRIS/ SSJVIC), California State University Bakersfield. Specialized listings for cultural resources consulted by the SSJVIC include the Historic Properties Directory for Tulare County with the most recent updates of the National Register of Historic Places, California Historical Landmarks, and California Points of Historical Interest as well as other evaluations of properties reviewed by the State of California Office of Historic Preservation. Other sources consulted by the SSJVIC include California Inventory of Historic Resources, California Points of Historical Interest, and California Register. In addition, The California History Plan and Five Views: An Ethnic Sites Survey for California,

Historic Properties Directory and available local and regional surveys/inventories/historic maps were consulted.

The records search found no recorded cultural resources (including archaeological sites and architectural properties) located within or adjacent to the proposed Project area. This review included cultural resources listed in the National Register of Historic Places, California Register of Historical Resources, California State Landmarks, and the California Points of Historical Interest. None of the archaeological compliance reports on file at the CHRIS/SSJVIC include the project.

No additional archaeological or historic resources were identified within or near the project site.

RESPONSES

a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

No Impact. As discussed above, no historic resources were identified within or adjacent to the project site. There is ***no impact***.

Mitigation Measures: None are required.

b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

c. Disturb any human remains, including those interred outside of formal cemeteries?

Less Than Significant Impact With Mitigation. The project area is highly disturbed, consisting of fruit orchards. There are no known or visible cultural or archaeological resources, paleontological resources, or human remains that exist on the surface of the project area. Therefore, it is determined that the project has low potential to impact any sensitive resources and no further cultural resources work is required unless project plans change to include work not currently identified in the project description.

Although no cultural or archaeological resources, paleontological resources or human remains have been identified in the project area, the possibility exists that such resources or remains may be discovered during Project site preparation, excavation and/or grading activities.

Mitigation Measures CUL – 1 and CUL – 2 will be implemented to ensure that Project will result in ***less than significant impacts with mitigation***.

Mitigation Measures:

CUL – 1 Should evidence of prehistoric archeological resources be discovered during construction, the contractor shall halt all work within 25 feet of the find and the resource shall be evaluated by a qualified archaeologist. If evidence of any archaeological, cultural, and/or historical deposits is found, hand excavation and/or mechanical excavation shall proceed to evaluate the deposits for determination of significance as defined by the CEQA guidelines. The archaeologist shall submit reports, to the satisfaction of the City of Fresno, describing the testing program and subsequent results. These reports shall identify any program mitigation that the project proponent shall complete in order to mitigate archaeological impacts (including resource recovery and/or avoidance testing and analysis, removal, reburial, and curation of archaeological resources).

CUL – 2 In order to ensure that the proposed project does not impact buried human remains during project construction, the project proponent shall be responsible for on-going monitoring of project construction. Prior to the issuance of any grading permit, the project proponent shall provide the City of Fresno with documentation identifying construction personnel that will be responsible for on-site monitoring. If buried human remains are encountered during construction, further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains shall be halted until the Fresno coroner is contacted and the coroner has made the determinations and notifications required pursuant to Health and Safety Code Section 7050.5. If the coroner determines that Health and Safety Code Section 7050.5(c) require that he give notice to the Native American Heritage Commission, then such notice shall be given within 24 hours, as required by Health and Safety Code Section 7050.5(c). In that event, the NAHC will conduct the notifications required by Public Resources Code Section 5097.98. Until the consultations described below have been completed, the landowner shall further ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices where Native American human remains are located, is not disturbed by further development activity until the landowner has discussed and conferred with the Most Likely Descendants on all reasonable options regarding the descendants' preferences and treatments, as prescribed by Public Resources Code Section 5097.98(b). The NAHC will mediate any disputes regarding treatment of remains in accordance with Public Resources Code Section 5097.94(k). The landowner shall be

entitled to exercise rights established by Public Resources Code Section 5097.98(e) if any of the circumstances established by that provision become applicable.

VI. ENERGY

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

ENVIRONMENTAL SETTING

California's total energy consumption is second-highest in the nation, but, in 2016, the state's per capita energy consumption ranked 48th, due in part to its mild climate and its energy efficiency programs. In 2017, California ranked second in the nation in conventional hydroelectric generation and first as a producer of electricity from solar, geothermal, and biomass resources while also in 2017, solar PV and solar thermal installations provided about 16% of California's net electricity generation.[7]

Energy usage is typically quantified using the British thermal unit (BTU). As a point of reference, the approximately amounts of energy contained in common energy sources are as follows:

Energy Source	BTUs[8]
Gasoline	120,429 per gallon
Natural Gas	1,037 per cubic foot
Electricity	3,412 per kilowatt-hour

[7] U.S. Energy Information Administration. Independent Statistics and Analysis. California Profile Overview. https://www.eia.gov/state/?sid=CA#tabs-1. Accessed July 2019.
[8] U.S. Energy Information Administration. Energy Units and Calculators Explained. https://www.eia.gov/energyexplained/index.php?page=about_energy_units. Accessed July 2019.

California electrical consumption in 2016 was 7,830.8 trillion BTU[9], as provided in Table 3, while total electrical consumption by Tulare County in 2017 was 14.530 trillion BTU.[10]

Table 3 – 2016 California Energy Consumption[11]

End User	BTU of energy consumed (in trillions)	Percentage of total consumption
Residential	1,384.4	17.7
Commercial	1,477.2	18.9
Industrial	1,854.3	23.7
Transportation	3,114.9	39.8
Total	**7,830.8**	--

The California Department of Transportation (Caltrans) reports that approximately 25.1 million automobiles, 5.7 million trucks, and 889,024 motorcycles were registered in the state in 2017, resulting in a total estimated 339.8 billion vehicles miles traveled (VMT).[12] Within Tulare County, an estimated 3.7 million vehicle miles were traveled in 2017 for an average of 10,099 miles per day.[13]

Applicable Regulations

California Energy Code (Title 24, Part 6, Building Energy Efficiency Standards)

California Code of Regulations Title 24, Part 6 comprises the California Energy Code, which was adopted to ensure that building construction, system design and installation achieve energy efficiency. The California Energy Code was first established in 1978 by the CEC in response to a legislative mandate to reduce California's energy consumption, and apply to energy consumed for heating, cooling, ventilation, water heating, and lighting in new residential and non-residential buildings. The standards are updated periodically to increase the baseline energy efficiency requirements. The 2013 Building Energy Efficiency Standards focus on several key areas to improve the energy efficiency of newly constructed buildings and additions and alterations to existing buildings and include requirements to enable both demand reductions during critical peak periods and future solar electric and thermal system installations. Although it was not originally intended to reduce greenhouse gas (GHG) emissions, electricity production

[9] U.S. Energy Information Administration. Independent Statistics and Analysis. California Profile Overview. https://www.eia.gov/state/?sid=CA#tabs-1. Accessed July2019.
[10] California Energy Commission. Electricity Consumption by County. http://ecdms.energy.ca.gov/elecbycounty.aspx. Accessed July 2019.
[11] U.S. Energy Information Administration. Independent Statistics and Analysis. California Profile Overview. https://www.eia.gov/state/?sid=CA#tabs-1. Accessed July 2019.
[12] Caltrans. 2017. California Transportation Quick Facts. http://www.dot.ca.gov/drisi/library/qf/qf2017.pdf. Accessed July 2019
[13] Caltrans. 2017. Tulare County Transportation Quick Facts. http://www.dot.ca.gov/drisi/library/qfco/tul/tul2017.pdf. Accessed July 2019.

by fossil fuels results in GHG emissions and energy efficient buildings require less electricity. Therefore, increased energy efficiency results in decreased GHG emissions.

California Green Building Standards Code (Title 24, Part II, CALGreen)

The California Building Standards Commission adopted the California Green Buildings Standards Code (CALGreen in Part 11 of the Title 24 Building Standards Code) for all new construction statewide on July 17, 2008. Originally a volunteer measure, the code became mandatory in 2010 and the most recent update (2019) will go into effect on January 1, 2020. CALGreen sets targets for energy efficiency, water consumption, dual plumbing systems for potable and recyclable water, diversion of construction waste from landfills, and use of environmentally sensitive materials in construction and design, including eco-friendly flooring, carpeting, paint, coatings, thermal insulation, and acoustical wall and ceiling panels. The 2019 CALGreen Code includes mandatory measures for non-residential development related to site development; water use; weather resistance and moisture management; construction waste reduction, disposal, and recycling; building maintenance and operation; pollutant control; indoor air quality; environmental comfort; and outdoor air quality. Mandatory measures for residential development pertain to green building; planning and design; energy efficiency; water efficiency and conservation; material conservation and resource efficiency; environmental quality; and installer and special inspector qualifications.

Clean Energy and Pollution Reduction Act (SB 350)

The Clean Energy and Pollution Reduction Act (SB 350) was passed by California Governor Brown on October 7, 2015, and establishes new clean energy, clean air, and greenhouse gas reduction goals for the year 2030 and beyond. SB 350 establishes a greenhouse gas reduction target of 40 percent below 1990 levels for the State of California, further enhancing the ability for the state to meet the goal of reducing greenhouse gas emissions by 80 percent below 1990 levels by the year 2050.

Renewable Portfolio Standard (SB 1078 and SB 107)

Established in 2002 under SB 1078, the state's Renewables Portfolio Standard (RPS) was amended under SB 107 to require accelerated energy reduction goals by requiring that by the year 2010, 20 percent of electricity sales in the state be served by renewable energy resources. In years following its adoption, Executive Order S-14-08 was signed, requiring electricity retail sellers to provide 33 percent of their service loads with renewable energy by the year 2020. In 2011, SB X1-2 was signed, aligning the RPS target with the 33 percent requirement by the year 2020. This new RPS applied to all state electricity retailers, including publicly owned utilities, investor-owned utilities, electrical service providers, and community choice aggregators. All entities included under the RPS were required to adopt the RPS 20 percent by year 2020 reduction goal by the end of 2013, adopt a reduction goal of 25 percent by the end

of 2016, and meet the 33 percent reduction goal by the end of 2020. In addition, the Air Resources Board, under Executive Order S-21-09, was required to adopt regulations consistent with these 33 percent renewable energy targets.

RESPONSES

a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Less Than Significant Impact. The proposed Project includes construction and operation of an industrial center, including thirteen buildings ranging from 10,000 to 22,00 square feet each. The Project would introduce energy usage on a site that is currently demanding minimal energy. By comparison, at buildout, the Project would consume large amounts of energy in both the short-term during Project construction and in the long-term during Project operation.

During construction, the Project would consume energy in two general forms: (1) the fuel energy consumed by construction vehicles and equipment; and (2) bound energy in construction materials, such as asphalt, steel, concrete, pipes, and manufactured or processed materials such as lumber and glass. Title 24 Building Energy Efficiency Standards provide guidance on construction techniques to maximize energy conservation and it is expected that contractors and owners have a strong financial incentive to use recycled materials and products originating from nearby sources in order to reduce materials costs. As such, it is anticipated that materials used in construction and construction vehicle fuel energy would not involve the wasteful, inefficient, or unnecessary consumption of energy.

Operational Project energy consumption would occur for multiple purposes, including but not limited to, building heating and cooling, refrigeration, lighting and electronics. Operational energy would also be consumed during each vehicle trip associated with the proposed use. CalEEMod was utilized to generate the estimated energy demand of the proposed Project, and the results are provided in Table 4 and in Appendix A.

Table 4 – Annual Project Energy Consumption

Land Use	Electricity Use in kWh/year	Natural Gas Use in kBTU/year	Annual Energy Consumption (in Million BTU)
Light Industry	495,600	3,528,000	1.691

The proposed Project would be required to comply with Title 24 Building Energy Efficiency Standards, which provide minimum efficiency standards related to various building features, including appliances,

water and space heating and cooling equipment, building insulation and roofing, and lighting. Implementation of Title 24 standards significantly increases energy savings, and it is generally assumed that compliance with Title 24 ensures projects will not result in the inefficient, wasteful, or unnecessary consumption of energy.

As discussed in Impact XVII – Transportation/Traffic, the proposed Project would generate approximately 1,467 daily vehicle trips. The length of these trips and the individual vehicle fuel efficiencies are not known; therefore, the resulting energy consumption cannot be accurately calculated. Adopted federal vehicle fuel standards have continually improved since their original adoption in 1975 and assists in avoiding the inefficient, wasteful, and unnecessary use of energy by vehicles.

As discussed previously, the proposed Project would be required to implement and be consistent with existing energy design standards at the local and state level. The Project would be subject to energy conservation requirements in the California Energy Code and CALGreen. Adherence to state code requirements would ensure that the Project would not result in wasteful and inefficient use of non-renewable resources due to building operation.

Therefore, any impacts are ***less than significant***.

Mitigation Measures: None are required.

VII. GEOLOGY AND SOILS

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☒	☐
ii. Strong seismic ground shaking?	☐	☐	☒	☐
iii. Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv. Landslides?	☐	☐	☒	☐
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d. Be located on expansive soil, as defined in Table 18-1-B of the most recently adopted Uniform Building Code	☐	☐	☒	☐

	creating substantial direct or indirect risks to life or property?				
e.	Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☒	☐
f.	Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐

ENVIRONMENTAL SETTING

The City of Woodlake is situated along the western slope of a northwest-trending belt of rocks comprising the Sierra Nevada and within the southern portion of the Cascade Range. The Sierra Nevada geomorphic province is primarily composed of cretaceous granitic plutons and remnants of Paleozoic and Mesozoic metavolcanic and metasedimentary rocks, and Cenozoic volcan and sedimentary rocks.

There are no known active earthquake faults in the City of Woodlake. According to the Woodlake General Plan, the nearest active faults are the San Andreas, 65 miles west; the Owens Valley, 75 miles east; and the White Wolf; 75 miles south.

According to the City's General Plan, much of the Project area has soils with high clay content that can expand and contract as water conditions change.

RESPONSES

a-i. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

a-ii. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

a-iii. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?

a-iv. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

Less Than Significant Impact. The proposed project site is not located in an earthquake fault zone as delineated by the 1972 Alquist-Priolo Earthquake Fault Zoning Map Act. The nearest known potentially active fault is the Clovis Fault, located over thirty miles northwest of the site. No active faults have been mapped within the project boundaries, so there is no potential for fault rupture. It is anticipated that the proposed Project site would be subject to some ground acceleration and ground shaking associated with seismic activity during its design life. The Project site would be engineered and constructed in strict accordance with the earthquake resistant design requirements contained in the latest edition of the California Building Code (CBC) for seismic zone III, as well as Title 24 of the California Administrative Code, and therefore would avoid potential seismically induced hazards on planned structures. The impact of seismic hazards on the project would be ***less than significant.***

Mitigation Measures: None are required.

b. Result in substantial soil erosion or the loss of topsoil?

Less than Significant Impact. The proposed Project will construct and operate an industrial facility with associated improvements. The Project site has a generally flat topography, is in an established urban area and does not include any Project features that would result in soil erosion or loss of topsoil. Therefore, the impact is ***less than significant***.

Mitigation Measures: None are required.

c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Less than Significant Impact. As described in Responses (a.iii) and (a.iv) above, the proposed Project would not require a substantial grade change or change in topography. Any impacts would be ***less than significant.***

Mitigation Measures: None are required.

d. Be located on expansive soil, as defined in Table 18-1-B of the most recently adopted Uniform Building Code creating substantial risks to life or property?

Less than Significant Impact. See Responses (c) and (a-ii). The impact is ***less than significant***.

Mitigation Measures: None are required.

e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

Less than Significant Impact. The proposed Project includes the installation of a septic system on each parcel with the intent that the parcels will eventually tie into the City wastewater system. The septic systems will be designed to the specifications necessitated by the on-site soils, in compliance with the building code. Any impacts will be ***less than significant***.

Mitigation Measures: None are required.

f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Less Than Significant Impact. As identified in the previous cultural studies perform for the project site, there are no known paleontological resources on or near the site. (See Section V. for more details). Mitigation measures have been added that will protect unknown (buried) resources during construction, including paleontological resources. There are no unique geological features on site or in the area. Therefore, there is a ***less than significant impact.***

Mitigation Measures: None are required.

VIII. GREENHOUSE GAS EMISSIONS

Would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

ENVIRONMENTAL SETTING

Various gases in the earth's atmosphere play an important role in moderating the earth's surface temperature. Solar radiation enters earth's atmosphere from space and a portion of the radiation is absorbed by the earth's surface. The earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation. GHGs are transparent to solar radiation but are effective in absorbing infrared radiation. Consequently, radiation that would otherwise escape back into space is retained, resulting in a warming of the earth's atmosphere. This phenomenon is known as the greenhouse effect. Scientific research to date indicates that some of the observed climate change is a result of increased GHG emissions associated with human activity. Among the GHGs contributing to the greenhouse effect are water vapor, carbon dioxide (CO_2), methane (CH_4), ozone, Nitrous Oxide (NO_x), and chlorofluorocarbons. Human-caused emissions of these GHGs in excess of natural ambient concentrations are considered responsible for enhancing the greenhouse effect. GHG emissions contributing to global climate change are attributable, in large part, to human activities associated with the industrial/manufacturing, utility, transportation, residential, and agricultural sectors. In California, the transportation sector is the largest emitter of GHGs, followed by electricity generation. Global climate change is, indeed, a global issue. GHGs are global pollutants, unlike criteria pollutants and TACs (which are pollutants of regional and/or local concern). Global climate change, if it occurs, could potentially affect water resources in California. Rising temperatures could be anticipated to result in sea-level rise (as polar ice caps melt) and possibly change the timing and amount of precipitation, which could alter water quality. According to some, climate change could result in more extreme weather patterns; both heavier precipitation that could lead to flooding, as well as more extended drought periods. There is uncertainty regarding the timing, magnitude, and nature of the potential changes to water resources as a result of climate change; however, several trends are evident.

Snowpack and snowmelt may also be affected by climate change. Much of California's precipitation falls as snow in the Sierra Nevada and southern Cascades, and snowpack represents approximately 35 percent of the state's useable annual water supply. The snowmelt typically occurs from April through July; it provides natural water flow to streams and reservoirs after the annual rainy season has ended. As air temperatures increase due to climate change, the water stored in California's snowpack could be affected by increasing temperatures resulting in: (1) decreased snowfall, and (2) earlier snowmelt.

RESPONSES

a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Less Than Significant Impact. The U.S. Environmental Protection Agency published a rule for the mandatory reporting of greenhouse gases from sources that in general emit 25,000 metric tons or more of carbon dioxide (CO2) per year. As shown in the CalEEMod results (Appendix A), the project will produce the following CO2:

Construction (2019)	204.62 MT/yr
Construction (2020)	542.34 MT/yr
Construction (2021)	42.49 MT/yr
Operation (2020)	2,684 MT/yr

To be conservative, the CO2 emissions generated in 2020 (542.34 MT/yr) were amortized over 30 years and added to the annual operational emissions, which results in 2,702.08 MT/yr of CO2 emissions. This represents approximately eleven percent of the reporting threshold. As such, any impacts resulting from conflicting a GHG plan, policy, or regulation, or significantly impacting the environment as a result of project development is considered ***less than significant.***

Mitigation Measures: None are required.

IX. HAZARDS AND HAZARDOUS MATERIALS

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☐	☐	☒	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☒	☐
f. Impair implementation of or physically interfere with an adopted emergency	☐	☐	☐	☒

IX. HAZARDS AND HAZARDOUS MATERIALS **Would the project:**	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
response plan or emergency evacuation plan?				
g. Expose people or structures either directly or indirectly to a significant risk of loss, injury or death involving wildland fires?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

The area immediately surrounding the proposed Project consists of industrial and agricultural uses. The parcel is currently utilized for fruit orchards.

RESPONSES

a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Less than Significant Impact. This impact is associated with hazards caused by the routine transport, use, or disposal of hazardous materials or through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Proposed Project construction activities may involve the use and transport of hazardous materials. These materials may include fuels, oils, mechanical fluids, and other chemicals used during construction. Transportation, storage, use, and disposal of hazardous materials during construction activities would be required to comply with applicable federal, state, and local statutes and regulations. Compliance would ensure that human health and the environment are not exposed to hazardous materials. In addition, the Project would be required to comply with the National Pollutant Discharge Elimination System (NPDES) permit program through the submission and implementation of a Stormwater Pollution Prevention Plan during construction activities to prevent contaminated runoff from leaving the project site. Therefore, no significant impacts would occur during construction activities.

The operational phase of the proposed Project would occur after construction is completed and employees move in to occupy the expanded space on a day-to-day basis. The proposed Project includes land uses that are considered compatible with the surrounding uses. None of these land uses routinely transport, use, or dispose of hazardous materials, or present a reasonably foreseeable release of hazardous materials, with the exception of common commercial grade hazardous materials such as household and commercial cleaners, paint, etc. The proposed Project would not create a significant hazard through the routine transport, use, or disposal of hazardous materials, nor would a significant hazard to the public or to the environment through the reasonably foreseeable upset and accidental conditions involving the likely release of hazardous materials into the environment occur. Therefore, the proposed Project will not create a significant hazard to the public or the environment and any impacts would be ***less than significant***.

Mitigation Measures: None are required.

c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No Impact. No schools are located within 0.25 mile of the Project site. This condition precludes the possibility of activities associated with the proposed Project exposing schools within a 0.25-mile radius of the project site to hazardous materials. ***No impact*** would occur.

Mitigation Measures: None are required.

d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Impact. The proposed Project site is not located on a list of hazardous materials sites complied pursuant to Government Code Section 65962.5 (Geotracker and DTSC Envirostor databases – accessed in July 2019).[14] There are no hazardous materials sites that impact the Project. As such, ***no impacts*** would occur that would create a significant hazard to the public or the environment.

Mitigation Measures: None are required.

[14] California Department of Toxic Substances Control. Envirostor Database. http://www.envirostor.dtsc.ca.gov/public/map/?myaddress=woodlake+ca. Accessed July 2019.

e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

Less than Significant Impact. There are no private airstrips in the Project vicinity. The Woodlake Municipal Airport is located one mile south of the site. However, the proposed site is located outside the Airport Land Use Plan's Safety Zone 6 (Traffic Pattern Zone).[15] As such, the proposed Project would not result in a safety hazard for people residing or working in the Project area. Any impacts are ***less than significant***.

Mitigation Measures: None are required.

f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Impact. The Project will not interfere with any adopted emergency response or evacuation plan. There is ***no impact.***

Mitigation Measures: None are required.

g. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

No Impact. There are no wildlands on or near the Project site. There is ***no impact***.

Mitigation Measures: None are required.

[15] Tulare County Comprehensive Airport Land Use Plan. December 2012. https://tularecounty.ca.gov/rma/index.cfm/rma-documents/planning-documents/tulare-county-comprehensive-airport-land-use-plan/. Accessed July 2019.

X. HYDROLOGY AND WATER QUALITY

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	☒	☐
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:	☐	☐	☒	☐
i. Result in substantial erosion or siltation on- or off- site;	☐	☐	☒	☐
ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;	☐	☐	☒	☐
iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
iv. impede or redirect flood flows?	☐	☐	☒	☐

X. HYDROLOGY AND WATER QUALITY

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	☒
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

The City of Woodlake obtains its water supply from a vast aquifer underlying the San Joaquin Valley. The City provides water service to all developed areas within the City and the unincorporated county service area called Wells Tract, which contains approximately 50 residential dwellings.

Water is supplied to the City by five wells that are located in the southern portion of the City; adjacent to the St. Johns River. The yield of city wells ranges from 350 to 1,500 gallons per minute.

RESPONSES

a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Less Than Significant Impact. The Project has the potential to impact water quality standards and/or waste discharge requirements during construction (temporary impacts) and operation. Impacts are discussed below.

Construction

Although the proposed project site is relatively small in scale, grading, excavation and loading activities associated with construction activities could temporarily increase runoff, erosion, and sedimentation. Construction activities also could result in soil compaction and wind erosion effects that could adversely affect soils and reduce the revegetation potential at construction sites and staging areas.

Three general sources of potential short-term construction-related stormwater pollution associated with the proposed project are: 1) the handling, storage, and disposal of construction materials containing pollutants; 2) the maintenance and operation of construction equipment; and 3) earth moving activities which, when not controlled, may generate soil erosion and transportation, via storm runoff or mechanical equipment. Generally, routine safety precautions for handling and storing construction materials may effectively mitigate the potential pollution of stormwater by these materials. These same types of common sense, "good housekeeping" procedures can be extended to non-hazardous stormwater pollutants such as sawdust and other solid wastes.

Poorly maintained vehicles and heavy equipment leaking fuel, oil, antifreeze, or other fluids on the construction site are also common sources of stormwater pollution and soil contamination. In addition, grading activities can greatly increase erosion processes. Two general strategies are recommended to prevent construction silt from entering local storm drains. First, erosion control procedures should be implemented for those areas that must be exposed. Secondly, the area should be secured to control offsite migration of pollutants. These Best Management Practices (BMPs) would be required in the Stormwater Pollution Prevention Plan (SWPPP) to be prepared prior to commencement of Project construction. When properly designed and implemented, these "good-housekeeping" practices are expected to reduce short-term construction-related impacts to less than significant.

In accordance with the National Pollution Discharge Elimination System (NPDES) Stormwater Program, the Project will be required to comply with existing regulatory requirements to prepare a SWPPP designed to control erosion and the loss of topsoil to the extent practicable using BMPs that the Regional Water Quality Control Board (RWQCB) has deemed effective in controlling erosion, sedimentation, runoff during construction activities. The specific controls are subject to the review and approval by the RWQCB and are an existing regulatory requirement.

Operation

The Central Valley Regional Water Quality Control Board adopted a General Waste Discharge Requirements Order for Discharges of Waste Associated with Medical Cannabis Cultivation Activities (Order No. R5-2015-0113). The proposed Project's tenants will be in compliance with the rules and requirements set forth in the Discharge Requirements.

Therefore, any impacts are ***less than significant.***

Mitigation Measures: None are required.

b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

Less than Significant Impact. Project demands for groundwater resources in connection with the proposed Project would not substantially deplete groundwater supplies and/or otherwise interfere with groundwater recharge efforts being implemented by the City of Woodlake. The proposed Project is not anticipated to result in additional demands for groundwater resources beyond those considered in the adopted City of Woodlake General Plan. The proposed Project would continue to use a combination of City water for sanitary facilities and an existing on-site water well for cultivation. Any impacts would be ***less than significant***.

Mitigation Measures: None are required.

c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i. result in substantial erosion or siltation on- or offsite;

ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;

iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

iv. impede or redirect flood flows?

The proposed Project includes changes to the existing stormwater drainage pattern of the area through the installation of new buildings, parking areas, landscaping, and sidewalks. Stormwater will continue to be directed to the on-site stormwater basin. The proposed Project will be required to comply with existing regulatory requirements to prepare a SWPPP which will limit on or offsite erosion or siltation. The Project would not otherwise degrade water quality. The project will have a ***less than significant impact.***

Mitigation Measures: None required.

d. In flood hazard, tsunami or seiche zones, risk release of pollutants due to project inundation?

e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Less than Significant Impact. The Project is located outside the Flood Inundation Area, defined by the City of Woodlake Special Flood Hazard Area Map. These maps are provided by the Tulare County Multi-Jurisdictional Local Hazard Mitigation Plan[16] (MJLHMP) a compiled by Tulare County, FEMA, USGS, USDA and US Census.

The City of Woodlake is located inside the Terminus Dam inundation area. If the Terminus Dam failed while at full capacity, its floodwaters would arrive in Woodlake within approximately six hours. The Project is located just outside the Dam Inundation Area, defined by the City of Woodlake Dam Inundation Area Map. Dam failure has been adequately planned for through the Tulare County MJLHMP, which the proposed Project is required to be in compliance with. The project will not conflict with any water quality control plans or sustainable groundwater management plan. Therefore, any impacts are ***less than significant***.

Mitigation Measures: None are required.

[16] Tulare County Multi-Jurisdictional Local Hazard Mitigation Plan. March, 2018. http://www.dinuba.org/images/2018/Tulare_County_MJLHMP-COMP-2018.pdf. Accessed July 2019.

XI. LAND USE AND PLANNING

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Physically divide an established community?	☐	☐	☐	☒
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

The proposed Project site is western portion of the City of Woodlake. The Project vicinity is heavily disturbed with industrial and agricultural uses. The site is currently being utilized for fruit orchards, see Figure 3 – Aerial Map. The site is zoned Light Industrial and the General Plan Land Use Designation is Industrial.

RESPONSES

a. Physically divide an established community?

No Impact. The construction and operation of the Project would not cause any land use changes in the surrounding vicinity nor would it divide an established community, as the industrial use would not change. ***No impacts*** would occur as a result of this Project.

Mitigation Measures: None are required.

b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the General Plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact. The proposed Project includes construction and operation of an industrial facility. The facility would be composed of 13 individual buildings, some of which may house cannabis cultivation,

manufacturing and distribution businesses. This is an allowable use within the existing zone district, with the approval of a Conditional Use Permit for the Cannabis Cultivation, Manufacturing and Distribution License. The proposed Project will be in accordance with Chapter 5.48 of the Woodlake Municipal Code which allows cannabis businesses and establishes permitting procedures and regulations. There is ***no impact.***

Mitigation Measures: None are required.

XII. MINERAL RESOURCES

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

There are no known mineral resources within the planning area and no known mining of mineral resources occurs in the City of Woodlake. The closest significant mineral resources consist of sand and gravel deposits along the St. Johns River southeast of Woodlake, near the Sierra Nevada foothills.[17]

RESPONSES

a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No Impact. There are no known mineral resources in the proposed Project area and the site is not included in a State classified mineral resource zones. Therefore, there is ***no impact***.

Mitigation Measures: None are required.

[17] City of Woodlake General Plan. Open Space, Parks, Recreation and Conservation Element. Page 7.

XIII. NOISE

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	☒	☐
b. Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

The Project site is located within the City of Woodlake in an industrial and agricultural area, see Figure 2 – Site Aerial.

RESPONSES

a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

b. Generation of excessive groundborne vibration or groundborne noise levels?

Less than Significant Impact.

Short-term (Construction) Noise Impacts

Proposed Project construction related activities will involve temporary noise sources and are anticipated to begin in 2019 and last approximately two years. Typical construction related equipment include graders, trenchers, small tractors and excavators. During the proposed Project construction, noise from construction related activities will contribute to the noise environment in the immediate vicinity. Activities involved in construction will generate maximum noise levels, as indicated in Table 5, ranging from 79 to 91 dBA at a distance of 50 feet, without feasible noise control (e.g., mufflers) and ranging from 75 to 80 dBA at a distance of 50 feet, with feasible noise controls.

Table 5
Typical Construction Noise Levels

Type of Equipment	dBA at 50 ft	
	Without Feasible Noise Control	With Feasible Noise Control
Dozer or Tractor	80	75
Excavator	88	80
Scraper	88	80
Front End Loader	79	75
Backhoe	85	75
Grader	85	75
Truck	91	75

The distinction between short-term construction noise impacts and long-term operational noise impacts is a typical one in both CEQA documents and local noise ordinances, which generally recognize the reality that short-term noise from construction is inevitable and cannot be mitigated beyond a certain level. Thus, local agencies frequently tolerate short-term noise at levels that they would not accept for permanent noise sources. A more severe approach would be impractical and might preclude the kind of construction activities that are to be expected from time to time in urban environments. Most residents of urban areas recognize this reality and expect to hear construction activities on occasion.

In addition, construction activities would not occur between the hours of 10:00 PM and 7:00 AM, Monday through Saturday, in accordance with Fresno Municipal Code Section 10-109, which limits work hours "to between the hours of 7 AM and 10 PM on any day except Sunday." Further restrictions on construction noise may be placed on the project as determined through the Conditional Use permit process.

Long-term (Operational) Noise Impacts

The primary source of on-going noise from the proposed Project will be from vehicles traveling to and from the site; however, the relatively low number of new trips associated with the project is not likely to increase the ambient noise levels by a significant amount. In accordance with the Woodlake Municipal Code, commercial cannabis operations shall be subject to the City's noise and nuisance ordinances. Additionally, deliveries to the commercial cannabis business may only take place during regular business hours. As such, any impacts would be ***less than significant***.

Mitigation Measures: None are required.

c. For a project located within the vicinity of a private airstrip or an airport land use plan, or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

No Impact. The Project is located within an airport land use plan but is located well outside the CNEL contours. Therefore, there is ***no impact***.

Mitigation Measures: None are required.

XIV. POPULATION AND HOUSING

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

The City of Woodlake's 2000 population was 6,651 up from the 1990 census figure of 5,678. The State Department of Finance, which provides population projections for cities and counties in California, estimated Woodlake's population to be 7,524 on January 1, 2008.[18]

The proposed Project is located in an area dominated by agricultural and industrial uses. The nearest residences are within 0.25 miles to the east, southwest, and southeast.

RESPONSESs

a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

[18] City of Woodlake General Plan Draft Environmental Impact Report. Page 21.

No Impact. There are no new homes associated with the proposed Project and there are no residential structures currently on-site. The proposed Project would be an industrial operation that would provide new jobs in the Woodlake area, which could be readily filled by the existing employment base, given the City's existing unemployment rates. The proposed Project will not affect any regional population, housing, or employment projections anticipated by City policy documents. There is ***no impact***.

Mitigation Measures: None are required.

XV. PUBLIC SERVICES

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?	☐	☐	☒	☐
Police protection?	☐	☐	☒	☐
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other public facilities?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

The proposed Project site is located in an area that is already served by public service systems. The City of Woodlake Fire Department provides the city and the surrounding area with fire protection services. The Fire Department is less than one mile east of the proposed Project site. The Woodlake Police Department is also located one mile east of the proposed Project site. The Woodlake Unified School District and Tulare County Office of Education serves the Project area and the City provides several types of parks and other public facilities.

RESPONSES

a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

Fire protection?

Less than Significant Impact. The proposed Project site will continue to be served by the City of Woodlake Fire Department, which is less than one mile east of the proposed Project site. No additional fire personnel or equipment is anticipated, as the site is already served by the Fire Station. The impact is ***less than significant***.

Police Protection?

Less than Significant Impact. The proposed Project will continue to be served by the City of Woodlake police department. No additional police personnel or equipment is anticipated. The impact is ***less than significant.***

Schools?

No Impact. The direct increase in demand for schools is normally associated with new residential projects that bring new families with school-aged children to a region. The proposed Project does not contain any residential uses. The proposed Project, therefore, would not result in an influx of new students in the Project area and is not expected to result in an increased demand upon District resources and would not require the construction of new facilities. There is ***no impact***.

Parks?

No Impact. The Project would not result in an increase in demand for parks and recreation facilities because it would not result in an increase in population. Accordingly, the proposed Project would have ***no impacts*** on parks.

Other public facilities?

No Impact. The proposed Project is within the land use and growth projections identified in the City's General Plan and other infrastructure studies. The Project, therefore, would not result in increased demand for, or impacts on, other public facilities such as library services. Accordingly, ***no impact*** would occur.

Mitigation Measures: None are required.

XVI. RECREATION

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

ENVIRONMENTAL SETTING

The City of Woodlake currently has two developed park sites and one privately owned park site, located in Olivewood Estates. Willow Court Park, containing 3.91 acres, contains a baseball filed, playground equipment and a low elevation area designated for storm water detention. Miller-Brown Park, containing 6.74 acres, houses playground equipment, picnic arbors, a skate park feature, and a basketball court. A small watercourse traverses the area. In addition to the city's parks, the athletic fields on the campuses of Woodlake's two school districts provide recreational opportunities after school hours.

RESPONSES

a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

No Impact. The proposed Project does not include the construction of residential uses and would not directly or indirectly induce population growth. Therefore, the proposed Project would not cause physical deterioration of existing recreational facilities from increased usage or result in the need for new or expanded recreational facilities. The Project would have ***no impact*** to existing parks.

Mitigation Measures: None are required.

XVII. TRANSPORTATION/ TRAFFIC **Would the project:**	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☒	☐	☐	☐
b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☒	☐	☐	☐
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☒	☐	☐	☐
d. Result in inadequate emergency access?	☒	☐	☐	☐

ENVIRONMENTAL SETTING

The proposed Project is located on the southwest corner of Road 204 and Avenue 344 (State Route 216) on APN 060-170-071 and -098. The site is approximately 17.8 acres and includes construction of 13 buildings with associated improvements as an industrial facility.

RESPONSES

a. Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

d. Result in inadequate emergency access?

Less than Significant Impact. The Project Applicant intends to subdivide two existing parcels into 13 different parcels, each with an industrial building and separate address. Each building would range from 15,000 to 22,000 square feet. It is currently unknown what types of businesses would inhabit the 15 different buildings, however typical industrial purposes (including cannabis cultivation, manufacturing, and distribution) are expected. According to the ITE Trip Generation Report, 8th edition, the proposed Project will generate approximately 1,467 calculated daily trips with 179 pm peak trips. Due to the estimated trip generation numbers, the proposed Project may conflict with a program plan, conflict with CEQA Guidelines section 15064.3 or increase hazards to the local roadways; therefore, this impact is ***potentially significant***. This topic will be addressed in the Project's forthcoming EIR.

Mitigation Measures: None are required.

XVIII. TRIBAL CULTURAL RESOURCES

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
i. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or	☐	☐	☒	☐
ii. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code section 5024.1. In applying the criteria set forth in subdivision (c) of the Public Resources Code section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	☐	☒	☐

RESPONSES

a). Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

i) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or

ii) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Less than Significant Impact. A Tribal Cultural Resource (TCR) is defined under Public Resources Code section 21074 as a site, feature, place, cultural landscape that is geographically defined in terms of size and scope, sacred place, and object with cultural value to a California Native American tribe that are either included and that is listed or eligible for inclusion in the California Register of Historic Resources or in a local register of historical resources, or if the City of Woodlake, acting as the Lead Agency, supported by substantial evidence, chooses at its discretion to treat the resource as a TCR. As discussed above, under Section V, Cultural Resources, criteria (b) and (d), no known archeological resources, ethnographic sites or Native American remains are located on the proposed Project site. As discussed under criterion (b) implementation of Mitigation Measure CULT-1 would reduce impacts to unknown archaeological deposits, including TCRs, to a less than significant level. As discussed under criterion (d), compliance with California Health and Safety Code Section 7050.5 would reduce the likelihood of disturbing or discovering human remains, including those of Native Americans.

The Native American Heritage Commission (NAHC) has performed a Sacred Lands File search for sites located on or near the Project site, with negative results. The NAHC also provided a consultation list of tribal governments with traditional lands or cultural places located within the project area. An opportunity has been provided to Native American tribes listed by the Native American Heritage Commission during the CEQA process as required by AB 52. No responses were received by the City in response to the consultation request within the mandatory response timeframes; therefore, this Initial Study has been completed consistent and compliant with AB 52. Any impacts to TCR would be considered ***less than significant***.

Mitigation Measures: No additional measures are required.

XIX. UTILITIES AND SERVICE SYSTEMS

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☒	☐
c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

ENVIRONMENTAL SETTING

The Visalia Landfill plant is approximately 15 miles southwest of the proposed Project site, while the Woodlake Wastewater Treatment Plant is located approximately one-half mile southeast of the site.

RESPONSES

a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

c. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

Less than Significant Impact. The proposed Project includes the construction and operation of an industrial facility and associated improvements. The proposed Project would be served by on-site septic for sewage disposal, on-site water well for potential cultivation, on site stormwater retention, and by Mid-Valley Disposal for solid waste disposal. The City's water system and solid waste disposal programs have capacity for, or are planned to maintain capacity for, community growth in accordance with the adopted General Plan. Any impacts would be ***less than significant***.

Mitigation Measures: None are required.

XX. WILDFIRE

If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐
d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☒	☐

ENVIRONMENTAL SETTING

Human activities such as smoking, debris burning, and equipment operation are the major causes of wildland fires. Within Tulare County, over 1,029,130 acres (33% of the total area) are classified as "Very High" fire threat and approximately 454,680 acres (15% of the total area) are classified as "High" fire threat. The portion of the county that transitions from the valley floor into the foothills and mountains is characterized by high to very high threat of wildland fires.[19] While the City of Woodlake is nestled at the base of the foothills, the majority of the City is developed into urban uses or in active agriculture, severely

[19] Tulare County General Plan Background Report. February 2010. Page 8-21.

reducing the risk of wildland fire. According to the Tulare County Background Report Figure 8-2, the majority of the City has no threat of wildfire. The proposed Project site is relatively flat in an area actively utilized with primarily industrial and agricultural uses.

RESPONSES

a. Substantially impair an adopted emergency response plan or emergency evacuation plan?

b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Less Than Significant Impact. The proposed Project is located in an area developed with industrial and agricultural uses, which precludes the risk of wildfire. The area is flat in nature which would limit the risk of downslope flooding and landslides, and limit any wildfire spread.

To receive building permits, the proposed Project would be required to be in compliance with the adopted emergency response plan. As such, any wildfire risk to the project structures or people would be ***less than significant.***

Mitigation Measures: None are required.

XXI. MANDATORY FINDINGS OF SIGNIFICANCE

Would the project:

	Potentially Significant Impact	Less than Significant With Mitigation Incorporation	Less than Significant Impact	No Impact
a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☒	☐	☐
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☐	☐	☒	☐
c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

RESPONSES

a. <u>Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict</u>

the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Less than Significant Impact With Mitigation. The analyses of environmental issues contained in this Initial Study indicate that the proposed Project is not expected to have substantial impact on the environment or on any resources identified in the Initial Study. Mitigation measures have been incorporated in the Project to reduce all potentially significant impacts to ***less than significant***.

b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Less than Significant Impact. CEQA Guidelines Section 15064(i) states that a Lead Agency shall consider whether the cumulative impact of a project is significant and whether the effects of the project are cumulatively considerable. The assessment of the significance of the cumulative effects of a project must, therefore, be conducted in connection with the effects of past projects, other current projects, and probable future projects. Due to the nature of the Project and consistency with environmental policies, incremental contributions to impacts are considered less than cumulatively considerable. The proposed Project would not contribute substantially to adverse cumulative conditions, or create any substantial indirect impacts (i.e., increase in population could lead to an increase need for housing, increase in traffic, air pollutants, etc.). The impact is ***less than significant***.

c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Less than Significant Impact With Mitigation. The analyses of environmental issues contained in this Initial Study indicate that the project is not expected to have substantial impact on human beings, either directly or indirectly. Mitigation measures have been incorporated in the Project to reduce all potentially significant impacts to ***less than significant.***

LIST OF PREPARERS

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Persons and Agencies Consulted

City of Woodlake

- Jason Waters, Community Services Director
- Rebecca Griswold, Planner I

California Historic Resources Information System

- Celeste Thomson, Coordinator

Native American Heritage Commission

Sharaya Souza, Staff Services Analyst

Appendix B

Cultural Results

Woodlake Concorde Center Industrial Project

San Joaquin Valley Unified APCD Air District, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
General Light Industry	210.00	1000sqft	19.00	210,000.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	45
Climate Zone	7			**Operational Year**	2021
Utility Company					
CO2 Intensity (lb/MWhr)	0	**CH4 Intensity (lb/MWhr)**	0	**N2O Intensity (lb/MWhr)**	0

1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - lot size is approximately 19 acres

Table Name	Column Name	Default Value	New Value
tblLandUse	LotAcreage	4.82	19.00
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.1777	1.7936	1.1905	2.2800e-003	0.2466	0.0856	0.3322	0.1106	0.0794	0.1900	0.0000	204.6218	204.6218	0.0519	0.0000	205.9185
2020	0.3622	3.0820	2.7927	6.1100e-003	0.1700	0.1500	0.3200	0.0458	0.1411	0.1869	0.0000	542.3420	542.3420	0.0870	0.0000	544.5160
2021	1.4865	0.2312	0.2598	4.8000e-004	9.2900e-003	0.0117	0.0209	2.4900e-003	0.0109	0.0134	0.0000	42.4912	42.4912	9.3500e-003	0.0000	42.7249
Maximum	**1.4865**	**3.0820**	**2.7927**	**6.1100e-003**	**0.2466**	**0.1500**	**0.3322**	**0.1106**	**0.1411**	**0.1900**	**0.0000**	**542.3420**	**542.3420**	**0.0870**	**0.0000**	**544.5160**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2019	0.1777	1.7936	1.1905	2.2800e-003	0.2466	0.0856	0.3322	0.1106	0.0794	0.1900	0.0000	204.6216	204.6216	0.0519	0.0000	205.9183
2020	0.3622	3.0820	2.7927	6.1100e-003	0.1700	0.1500	0.3200	0.0458	0.1411	0.1869	0.0000	542.3416	542.3416	0.0870	0.0000	544.5157
2021	1.4865	0.2312	0.2598	4.8000e-004	9.2900e-003	0.0117	0.0209	2.4900e-003	0.0109	0.0134	0.0000	42.4912	42.4912	9.3500e-003	0.0000	42.7249
Maximum	**1.4865**	**3.0820**	**2.7927**	**6.1100e-003**	**0.2466**	**0.1500**	**0.3322**	**0.1106**	**0.1411**	**0.1900**	**0.0000**	**542.3416**	**542.3416**	**0.0870**	**0.0000**	**544.5157**

Woodlake Concorde Center Industrial Project - San Joaquin Valley Unified APCD Air District, Annual

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**8-28-2019**	**11-27-2019**	1.6208	1.6208
2	**11-28-2019**	**2-27-2020**	0.8984	0.8984
3	**2-28-2020**	**5-27-2020**	0.8453	0.8453
4	**5-28-2020**	**8-27-2020**	0.8628	0.8628
5	**8-28-2020**	**11-27-2020**	0.8650	0.8650
6	**11-28-2020**	**2-27-2021**	1.5169	1.5169
7	**2-28-2021**	**5-27-2021**	0.5283	0.5283
		Highest	1.6208	1.6208

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.9663	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.7500e-003	3.7500e-003	1.0000e-005	0.0000	4.0000e-003
Energy	0.0190	0.1729	0.1453	1.0400e-003		0.0131	0.0131		0.0131	0.0131	0.0000	188.2675	188.2675	3.6100e-003	3.4500e-003	189.3863
Mobile	0.4736	5.1926	5.4237	0.0262	1.6289	0.0242	1.6532	0.4382	0.0229	0.4611	0.0000	2,427.6693	2,427.6693	0.1388	0.0000	2,431.1384
Waste						0.0000	0.0000		0.0000	0.0000	52.8589	0.0000	52.8589	3.1239	0.0000	130.9556
Water						0.0000	0.0000		0.0000	0.0000	15.4066	0.0000	15.4066	1.5824	0.0374	66.1014
Total	**1.4590**	**5.3656**	**5.5709**	**0.0272**	**1.6289**	**0.0374**	**1.6663**	**0.4382**	**0.0361**	**0.4742**	**68.2655**	**2,615.9406**	**2,684.2061**	**4.8487**	**0.0408**	**2,817.5856**

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.9663	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.7500e-003	3.7500e-003	1.0000e-005	0.0000	4.0000e-003
Energy	0.0190	0.1729	0.1453	1.0400e-003		0.0131	0.0131		0.0131	0.0131	0.0000	188.2675	188.2675	3.6100e-003	3.4500e-003	189.3863
Mobile	0.4736	5.1926	5.4237	0.0262	1.6289	0.0242	1.6532	0.4382	0.0229	0.4611	0.0000	2,427.6693	2,427.6693	0.1388	0.0000	2,431.1384
Waste						0.0000	0.0000		0.0000	0.0000	52.8589	0.0000	52.8589	3.1239	0.0000	130.9556
Water						0.0000	0.0000		0.0000	0.0000	15.4066	0.0000	15.4066	1.5824	0.0374	66.1014
Total	**1.4590**	**5.3656**	**5.5709**	**0.0272**	**1.6289**	**0.0374**	**1.6663**	**0.4382**	**0.0361**	**0.4742**	**68.2655**	**2,615.9406**	**2,684.2061**	**4.8487**	**0.0408**	**2,817.5856**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Woodlake Concorde Center Industrial Project - San Joaquin Valley Unified APCD Air District, Annual

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	8/28/2019	9/24/2019	5	20	
2	Site Preparation	Site Preparation	9/25/2019	10/8/2019	5	10	
3	Grading	Grading	10/9/2019	11/19/2019	5	30	
4	Building Construction	Building Construction	11/20/2019	1/12/2021	5	300	
5	Paving	Paving	1/13/2021	2/9/2021	5	20	
6	Architectural Coating	Architectural Coating	2/10/2021	3/9/2021	5	20	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 75

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 315,000; Non-Residential Outdoor: 105,000; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Woodlake Concorde Center Industrial Project - San Joaquin Valley Unified APCD Air District, Annual

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Demolition	Excavators	3	8.00	158	0.38
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Grading	Excavators	2	8.00	158	0.38
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Paving	Pavers	2	8.00	130	0.42
Paving	Rollers	2	8.00	80	0.38
Demolition	Rubber Tired Dozers	2	8.00	247	0.40
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Paving	Paving Equipment	2	8.00	132	0.36
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Building Construction	Welders	1	8.00	46	0.45

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	88.00	34.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0351	0.3578	0.2206	3.9000e-004		0.0180	0.0180		0.0167	0.0167	0.0000	34.6263	34.6263	9.6300e-003	0.0000	34.8672
Total	**0.0351**	**0.3578**	**0.2206**	**3.9000e-004**		**0.0180**	**0.0180**		**0.0167**	**0.0167**	**0.0000**	**34.6263**	**34.6263**	**9.6300e-003**	**0.0000**	**34.8672**

3.2 Demolition - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.7000e-004	7.3000e-004	7.1300e-003	2.0000e-005	1.8600e-003	1.0000e-005	1.8800e-003	5.0000e-004	1.0000e-005	5.1000e-004	0.0000	1.7110	1.7110	5.0000e-005	0.0000	1.7123
Total	**9.7000e-004**	**7.3000e-004**	**7.1300e-003**	**2.0000e-005**	**1.8600e-003**	**1.0000e-005**	**1.8800e-003**	**5.0000e-004**	**1.0000e-005**	**5.1000e-004**	**0.0000**	**1.7110**	**1.7110**	**5.0000e-005**	**0.0000**	**1.7123**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0351	0.3578	0.2206	3.9000e-004		0.0180	0.0180		0.0167	0.0167	0.0000	34.6263	34.6263	9.6300e-003	0.0000	34.8671
Total	**0.0351**	**0.3578**	**0.2206**	**3.9000e-004**		**0.0180**	**0.0180**		**0.0167**	**0.0167**	**0.0000**	**34.6263**	**34.6263**	**9.6300e-003**	**0.0000**	**34.8671**

3.2 Demolition - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.7000e-004	7.3000e-004	7.1300e-003	2.0000e-005	1.8600e-003	1.0000e-005	1.8800e-003	5.0000e-004	1.0000e-005	5.1000e-004	0.0000	1.7110	1.7110	5.0000e-005	0.0000	1.7123
Total	**9.7000e-004**	**7.3000e-004**	**7.1300e-003**	**2.0000e-005**	**1.8600e-003**	**1.0000e-005**	**1.8800e-003**	**5.0000e-004**	**1.0000e-005**	**5.1000e-004**	**0.0000**	**1.7110**	**1.7110**	**5.0000e-005**	**0.0000**	**1.7123**

3.3 Site Preparation - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0217	0.2279	0.1103	1.9000e-004		0.0120	0.0120		0.0110	0.0110	0.0000	17.0843	17.0843	5.4100e-003	0.0000	17.2195
Total	**0.0217**	**0.2279**	**0.1103**	**1.9000e-004**	**0.0903**	**0.0120**	**0.1023**	**0.0497**	**0.0110**	**0.0607**	**0.0000**	**17.0843**	**17.0843**	**5.4100e-003**	**0.0000**	**17.2195**

3.3 Site Preparation - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8000e-004	4.4000e-004	4.2800e-003	1.0000e-005	1.1200e-003	1.0000e-005	1.1300e-003	3.0000e-004	1.0000e-005	3.0000e-004	0.0000	1.0266	1.0266	3.0000e-005	0.0000	1.0274
Total	**5.8000e-004**	**4.4000e-004**	**4.2800e-003**	**1.0000e-005**	**1.1200e-003**	**1.0000e-005**	**1.1300e-003**	**3.0000e-004**	**1.0000e-005**	**3.0000e-004**	**0.0000**	**1.0266**	**1.0266**	**3.0000e-005**	**0.0000**	**1.0274**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0903	0.0000	0.0903	0.0497	0.0000	0.0497	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0217	0.2279	0.1103	1.9000e-004		0.0120	0.0120		0.0110	0.0110	0.0000	17.0843	17.0843	5.4100e-003	0.0000	17.2195
Total	**0.0217**	**0.2279**	**0.1103**	**1.9000e-004**	**0.0903**	**0.0120**	**0.1023**	**0.0497**	**0.0110**	**0.0607**	**0.0000**	**17.0843**	**17.0843**	**5.4100e-003**	**0.0000**	**17.2195**

3.3 Site Preparation - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8000e-004	4.4000e-004	4.2800e-003	1.0000e-005	1.1200e-003	1.0000e-005	1.1300e-003	3.0000e-004	1.0000e-005	3.0000e-004	0.0000	1.0266	1.0266	3.0000e-005	0.0000	1.0274
Total	**5.8000e-004**	**4.4000e-004**	**4.2800e-003**	**1.0000e-005**	**1.1200e-003**	**1.0000e-005**	**1.1300e-003**	**3.0000e-004**	**1.0000e-005**	**3.0000e-004**	**0.0000**	**1.0266**	**1.0266**	**3.0000e-005**	**0.0000**	**1.0274**

3.4 Grading - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1301	0.0000	0.1301	0.0540	0.0000	0.0540	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0711	0.8178	0.5007	9.3000e-004		0.0357	0.0357		0.0329	0.0329	0.0000	83.5520	83.5520	0.0264	0.0000	84.2129
Total	**0.0711**	**0.8178**	**0.5007**	**9.3000e-004**	**0.1301**	**0.0357**	**0.1658**	**0.0540**	**0.0329**	**0.0868**	**0.0000**	**83.5520**	**83.5520**	**0.0264**	**0.0000**	**84.2129**

3.4 Grading - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9400e-003	1.4500e-003	0.0143	4.0000e-005	3.7300e-003	3.0000e-005	3.7600e-003	9.9000e-004	2.0000e-005	1.0200e-003	0.0000	3.4220	3.4220	1.1000e-004	0.0000	3.4246
Total	**1.9400e-003**	**1.4500e-003**	**0.0143**	**4.0000e-005**	**3.7300e-003**	**3.0000e-005**	**3.7600e-003**	**9.9000e-004**	**2.0000e-005**	**1.0200e-003**	**0.0000**	**3.4220**	**3.4220**	**1.1000e-004**	**0.0000**	**3.4246**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.1301	0.0000	0.1301	0.0540	0.0000	0.0540	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0711	0.8178	0.5007	9.3000e-004		0.0357	0.0357		0.0329	0.0329	0.0000	83.5519	83.5519	0.0264	0.0000	84.2128
Total	**0.0711**	**0.8178**	**0.5007**	**9.3000e-004**	**0.1301**	**0.0357**	**0.1658**	**0.0540**	**0.0329**	**0.0868**	**0.0000**	**83.5519**	**83.5519**	**0.0264**	**0.0000**	**84.2128**

3.4 Grading - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.9400e-003	1.4500e-003	0.0143	4.0000e-005	3.7300e-003	3.0000e-005	3.7600e-003	9.9000e-004	2.0000e-005	1.0200e-003	0.0000	3.4220	3.4220	1.1000e-004	0.0000	3.4246
Total	**1.9400e-003**	**1.4500e-003**	**0.0143**	**4.0000e-005**	**3.7300e-003**	**3.0000e-005**	**3.7600e-003**	**9.9000e-004**	**2.0000e-005**	**1.0200e-003**	**0.0000**	**3.4220**	**3.4220**	**1.1000e-004**	**0.0000**	**3.4246**

3.5 Building Construction - 2019

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0354	0.3162	0.2575	4.0000e-004		0.0194	0.0194		0.0182	0.0182	0.0000	35.2656	35.2656	8.5900e-003	0.0000	35.4804
Total	**0.0354**	**0.3162**	**0.2575**	**4.0000e-004**		**0.0194**	**0.0194**		**0.0182**	**0.0182**	**0.0000**	**35.2656**	**35.2656**	**8.5900e-003**	**0.0000**	**35.4804**

3.5 Building Construction - 2019

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.3400e-003	0.0650	0.0130	1.4000e-004	3.0600e-003	4.7000e-004	3.5300e-003	8.8000e-004	4.5000e-004	1.3300e-003	0.0000	12.8774	12.8774	1.1500e-003	0.0000	12.9061
Worker	8.5400e-003	6.3900e-003	0.0628	1.7000e-004	0.0164	1.2000e-004	0.0165	4.3600e-003	1.1000e-004	4.4700e-003	0.0000	15.0566	15.0566	4.6000e-004	0.0000	15.0682
Total	**0.0109**	**0.0714**	**0.0758**	**3.1000e-004**	**0.0195**	**5.9000e-004**	**0.0201**	**5.2400e-003**	**5.6000e-004**	**5.8000e-003**	**0.0000**	**27.9340**	**27.9340**	**1.6100e-003**	**0.0000**	**27.9743**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0354	0.3162	0.2575	4.0000e-004		0.0194	0.0194		0.0182	0.0182	0.0000	35.2656	35.2656	8.5900e-003	0.0000	35.4804
Total	**0.0354**	**0.3162**	**0.2575**	**4.0000e-004**		**0.0194**	**0.0194**		**0.0182**	**0.0182**	**0.0000**	**35.2656**	**35.2656**	**8.5900e-003**	**0.0000**	**35.4804**

3.5 Building Construction - 2019

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	2.3400e-003	0.0650	0.0130	1.4000e-004	3.0600e-003	4.7000e-004	3.5300e-003	8.8000e-004	4.5000e-004	1.3300e-003	0.0000	12.8774	12.8774	1.1500e-003	0.0000	12.9061
Worker	8.5400e-003	6.3900e-003	0.0628	1.7000e-004	0.0164	1.2000e-004	0.0165	4.3600e-003	1.1000e-004	4.4700e-003	0.0000	15.0566	15.0566	4.6000e-004	0.0000	15.0682
Total	**0.0109**	**0.0714**	**0.0758**	**3.1000e-004**	**0.0195**	**5.9000e-004**	**0.0201**	**5.2400e-003**	**5.6000e-004**	**5.8000e-003**	**0.0000**	**27.9340**	**27.9340**	**1.6100e-003**	**0.0000**	**27.9743**

3.5 Building Construction - 2020

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2777	2.5134	2.2072	3.5300e-003		0.1463	0.1463		0.1376	0.1376	0.0000	303.4091	303.4091	0.0740	0.0000	305.2596
Total	**0.2777**	**2.5134**	**2.2072**	**3.5300e-003**		**0.1463**	**0.1463**		**0.1376**	**0.1376**	**0.0000**	**303.4091**	**303.4091**	**0.0740**	**0.0000**	**305.2596**

3.5 Building Construction - 2020

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0166	0.5195	0.0982	1.1700e-003	0.0267	2.7200e-003	0.0294	7.7200e-003	2.6000e-003	0.0103	0.0000	111.5121	111.5121	9.4200e-003	0.0000	111.7477
Worker	0.0679	0.0490	0.4873	1.4100e-003	0.1433	9.8000e-004	0.1443	0.0381	9.0000e-004	0.0390	0.0000	127.4208	127.4208	3.5200e-003	0.0000	127.5087
Total	**0.0845**	**0.5686**	**0.5855**	**2.5800e-003**	**0.1700**	**3.7000e-003**	**0.1737**	**0.0458**	**3.5000e-003**	**0.0493**	**0.0000**	**238.9329**	**238.9329**	**0.0129**	**0.0000**	**239.2564**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.2777	2.5134	2.2072	3.5300e-003		0.1463	0.1463		0.1376	0.1376	0.0000	303.4087	303.4087	0.0740	0.0000	305.2592
Total	**0.2777**	**2.5134**	**2.2072**	**3.5300e-003**		**0.1463**	**0.1463**		**0.1376**	**0.1376**	**0.0000**	**303.4087**	**303.4087**	**0.0740**	**0.0000**	**305.2592**

3.5 Building Construction - 2020

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0166	0.5195	0.0982	1.1700e-003	0.0267	2.7200e-003	0.0294	7.7200e-003	2.6000e-003	0.0103	0.0000	111.5121	111.5121	9.4200e-003	0.0000	111.7477
Worker	0.0679	0.0490	0.4873	1.4100e-003	0.1433	9.8000e-004	0.1443	0.0381	9.0000e-004	0.0390	0.0000	127.4208	127.4208	3.5200e-003	0.0000	127.5087
Total	**0.0845**	**0.5686**	**0.5855**	**2.5800e-003**	**0.1700**	**3.7000e-003**	**0.1737**	**0.0458**	**3.5000e-003**	**0.0493**	**0.0000**	**238.9329**	**238.9329**	**0.0129**	**0.0000**	**239.2564**

3.5 Building Construction - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.6000e-003	0.0697	0.0663	1.1000e-004		3.8300e-003	3.8300e-003		3.6100e-003	3.6100e-003	0.0000	9.2655	9.2655	2.2400e-003	0.0000	9.3214
Total	**7.6000e-003**	**0.0697**	**0.0663**	**1.1000e-004**		**3.8300e-003**	**3.8300e-003**		**3.6100e-003**	**3.6100e-003**	**0.0000**	**9.2655**	**9.2655**	**2.2400e-003**	**0.0000**	**9.3214**

3.5 Building Construction - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.1000e-004	0.0144	2.6200e-003	4.0000e-005	8.2000e-004	4.0000e-005	8.5000e-004	2.4000e-004	4.0000e-005	2.7000e-004	0.0000	3.3731	3.3731	2.8000e-004	0.0000	3.3800
Worker	1.9100e-003	1.3300e-003	0.0135	4.0000e-005	4.3800e-003	3.0000e-005	4.4000e-003	1.1600e-003	3.0000e-005	1.1900e-003	0.0000	3.7553	3.7553	1.0000e-004	0.0000	3.7577
Total	**2.3200e-003**	**0.0158**	**0.0161**	**8.0000e-005**	**5.2000e-003**	**7.0000e-005**	**5.2500e-003**	**1.4000e-003**	**7.0000e-005**	**1.4600e-003**	**0.0000**	**7.1284**	**7.1284**	**3.8000e-004**	**0.0000**	**7.1377**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	7.6000e-003	0.0697	0.0663	1.1000e-004		3.8300e-003	3.8300e-003		3.6100e-003	3.6100e-003	0.0000	9.2655	9.2655	2.2400e-003	0.0000	9.3214
Total	**7.6000e-003**	**0.0697**	**0.0663**	**1.1000e-004**		**3.8300e-003**	**3.8300e-003**		**3.6100e-003**	**3.6100e-003**	**0.0000**	**9.2655**	**9.2655**	**2.2400e-003**	**0.0000**	**9.3214**

3.5 Building Construction - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	4.1000e-004	0.0144	2.6200e-003	4.0000e-005	8.2000e-004	4.0000e-005	8.5000e-004	2.4000e-004	4.0000e-005	2.7000e-004	0.0000	3.3731	3.3731	2.8000e-004	0.0000	3.3800
Worker	1.9100e-003	1.3300e-003	0.0135	4.0000e-005	4.3800e-003	3.0000e-005	4.4000e-003	1.1600e-003	3.0000e-005	1.1900e-003	0.0000	3.7553	3.7553	1.0000e-004	0.0000	3.7577
Total	**2.3200e-003**	**0.0158**	**0.0161**	**8.0000e-005**	**5.2000e-003**	**7.0000e-005**	**5.2500e-003**	**1.4000e-003**	**7.0000e-005**	**1.4600e-003**	**0.0000**	**7.1284**	**7.1284**	**3.8000e-004**	**0.0000**	**7.1377**

3.6 Paving - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0126	0.1292	0.1465	2.3000e-004		6.7800e-003	6.7800e-003		6.2400e-003	6.2400e-003	0.0000	20.0235	20.0235	6.4800e-003	0.0000	20.1854
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0126**	**0.1292**	**0.1465**	**2.3000e-004**		**6.7800e-003**	**6.7800e-003**		**6.2400e-003**	**6.2400e-003**	**0.0000**	**20.0235**	**20.0235**	**6.4800e-003**	**0.0000**	**20.1854**

3.6 Paving - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.1000e-004	5.7000e-004	5.7600e-003	2.0000e-005	1.8600e-003	1.0000e-005	1.8800e-003	5.0000e-004	1.0000e-005	5.1000e-004	0.0000	1.6003	1.6003	4.0000e-005	0.0000	1.6013
Total	**8.1000e-004**	**5.7000e-004**	**5.7600e-003**	**2.0000e-005**	**1.8600e-003**	**1.0000e-005**	**1.8800e-003**	**5.0000e-004**	**1.0000e-005**	**5.1000e-004**	**0.0000**	**1.6003**	**1.6003**	**4.0000e-005**	**0.0000**	**1.6013**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0126	0.1292	0.1465	2.3000e-004		6.7800e-003	6.7800e-003		6.2400e-003	6.2400e-003	0.0000	20.0235	20.0235	6.4800e-003	0.0000	20.1854
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0126**	**0.1292**	**0.1465**	**2.3000e-004**		**6.7800e-003**	**6.7800e-003**		**6.2400e-003**	**6.2400e-003**	**0.0000**	**20.0235**	**20.0235**	**6.4800e-003**	**0.0000**	**20.1854**

3.6 Paving - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	8.1000e-004	5.7000e-004	5.7600e-003	2.0000e-005	1.8600e-003	1.0000e-005	1.8800e-003	5.0000e-004	1.0000e-005	5.1000e-004	0.0000	1.6003	1.6003	4.0000e-005	0.0000	1.6013
Total	**8.1000e-004**	**5.7000e-004**	**5.7600e-003**	**2.0000e-005**	**1.8600e-003**	**1.0000e-005**	**1.8800e-003**	**5.0000e-004**	**1.0000e-005**	**5.1000e-004**	**0.0000**	**1.6003**	**1.6003**	**4.0000e-005**	**0.0000**	**1.6013**

3.7 Architectural Coating - 2021

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.4600					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1900e-003	0.0153	0.0182	3.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004	0.0000	2.5533	2.5533	1.8000e-004	0.0000	2.5576
Total	**1.4622**	**0.0153**	**0.0182**	**3.0000e-005**		**9.4000e-004**	**9.4000e-004**		**9.4000e-004**	**9.4000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.8000e-004**	**0.0000**	**2.5576**

3.7 Architectural Coating - 2021

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.8000e-004	6.8000e-004	6.9100e-003	2.0000e-005	2.2400e-003	1.0000e-005	2.2500e-003	5.9000e-004	1.0000e-005	6.1000e-004	0.0000	1.9203	1.9203	5.0000e-005	0.0000	1.9216
Total	**9.8000e-004**	**6.8000e-004**	**6.9100e-003**	**2.0000e-005**	**2.2400e-003**	**1.0000e-005**	**2.2500e-003**	**5.9000e-004**	**1.0000e-005**	**6.1000e-004**	**0.0000**	**1.9203**	**1.9203**	**5.0000e-005**	**0.0000**	**1.9216**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	1.4600					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1900e-003	0.0153	0.0182	3.0000e-005		9.4000e-004	9.4000e-004		9.4000e-004	9.4000e-004	0.0000	2.5533	2.5533	1.8000e-004	0.0000	2.5576
Total	**1.4622**	**0.0153**	**0.0182**	**3.0000e-005**		**9.4000e-004**	**9.4000e-004**		**9.4000e-004**	**9.4000e-004**	**0.0000**	**2.5533**	**2.5533**	**1.8000e-004**	**0.0000**	**2.5576**

3.7 Architectural Coating - 2021

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.8000e-004	6.8000e-004	6.9100e-003	2.0000e-005	2.2400e-003	1.0000e-005	2.2500e-003	5.9000e-004	1.0000e-005	6.1000e-004	0.0000	1.9203	1.9203	5.0000e-005	0.0000	1.9216
Total	**9.8000e-004**	**6.8000e-004**	**6.9100e-003**	**2.0000e-005**	**2.2400e-003**	**1.0000e-005**	**2.2500e-003**	**5.9000e-004**	**1.0000e-005**	**6.1000e-004**	**0.0000**	**1.9203**	**1.9203**	**5.0000e-005**	**0.0000**	**1.9216**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.4736	5.1926	5.4237	0.0262	1.6289	0.0242	1.6532	0.4382	0.0229	0.4611	0.0000	2,427.6693	2,427.6693	0.1388	0.0000	2,431.1384
Unmitigated	0.4736	5.1926	5.4237	0.0262	1.6289	0.0242	1.6532	0.4382	0.0229	0.4611	0.0000	2,427.6693	2,427.6693	0.1388	0.0000	2,431.1384

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
General Light Industry	1,463.70	277.20	142.80	4,271,062	4,271,062
Total	1,463.70	277.20	142.80	4,271,062	4,271,062

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
General Light Industry	14.70	6.60	6.60	59.00	28.00	13.00	92	5	3

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
General Light Industry	0.506092	0.032602	0.169295	0.124521	0.019914	0.005374	0.021664	0.110051	0.001797	0.001623	0.005307	0.000969	0.000792

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	0.0190	0.1729	0.1453	1.0400e-003		0.0131	0.0131		0.0131	0.0131	0.0000	188.2675	188.2675	3.6100e-003	3.4500e-003	189.3863
NaturalGas Unmitigated	0.0190	0.1729	0.1453	1.0400e-003		0.0131	0.0131		0.0131	0.0131	0.0000	188.2675	188.2675	3.6100e-003	3.4500e-003	189.3863

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	3.528e+006	0.0190	0.1729	0.1453	1.0400e-003		0.0131	0.0131		0.0131	0.0131	0.0000	188.2675	188.2675	3.6100e-003	3.4500e-003	189.3863
Total		**0.0190**	**0.1729**	**0.1453**	**1.0400e-003**		**0.0131**	**0.0131**		**0.0131**	**0.0131**	**0.0000**	**188.2675**	**188.2675**	**3.6100e-003**	**3.4500e-003**	**189.3863**

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
General Light Industry	3.528e+006	0.0190	0.1729	0.1453	1.0400e-003		0.0131	0.0131		0.0131	0.0131	0.0000	188.2675	188.2675	3.6100e-003	3.4500e-003	189.3863
Total		**0.0190**	**0.1729**	**0.1453**	**1.0400e-003**		**0.0131**	**0.0131**		**0.0131**	**0.0131**	**0.0000**	**188.2675**	**188.2675**	**3.6100e-003**	**3.4500e-003**	**189.3863**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	495600	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
General Light Industry	495600	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.9663	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.7500e-003	3.7500e-003	1.0000e-005	0.0000	4.0000e-003
Unmitigated	0.9663	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.7500e-003	3.7500e-003	1.0000e-005	0.0000	4.0000e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1460					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.8202					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.8000e-004	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.7500e-003	3.7500e-003	1.0000e-005	0.0000	4.0000e-003
Total	**0.9663**	**2.0000e-005**	**1.9400e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**3.7500e-003**	**3.7500e-003**	**1.0000e-005**	**0.0000**	**4.0000e-003**

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1460					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.8202					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.8000e-004	2.0000e-005	1.9400e-003	0.0000		1.0000e-005	1.0000e-005		1.0000e-005	1.0000e-005	0.0000	3.7500e-003	3.7500e-003	1.0000e-005	0.0000	4.0000e-003
Total	**0.9663**	**2.0000e-005**	**1.9400e-003**	**0.0000**		**1.0000e-005**	**1.0000e-005**		**1.0000e-005**	**1.0000e-005**	**0.0000**	**3.7500e-003**	**3.7500e-003**	**1.0000e-005**	**0.0000**	**4.0000e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	15.4066	1.5824	0.0374	66.1014
Unmitigated	15.4066	1.5824	0.0374	66.1014

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	48.5625 / 0	15.4066	1.5824	0.0374	66.1014
Total		**15.4066**	**1.5824**	**0.0374**	**66.1014**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
General Light Industry	48.5625 / 0	15.4066	1.5824	0.0374	66.1014
Total		**15.4066**	**1.5824**	**0.0374**	**66.1014**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	52.8589	3.1239	0.0000	130.9556
Unmitigated	52.8589	3.1239	0.0000	130.9556

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	260.4	52.8589	3.1239	0.0000	130.9556
Total		**52.8589**	**3.1239**	**0.0000**	**130.9556**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
General Light Industry	260.4	52.8589	3.1239	0.0000	130.9556
Total		**52.8589**	**3.1239**	**0.0000**	**130.9556**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Appendix B

NOP Comments Received

NATIVE AMERICAN HERITAGE COMMISSION
Cultural and Environmental Department
1550 Harbor Blvd., Suite 100
West Sacramento, CA 95691 Phone: (916) 373-3710
Email: nahc@nahc.ca.gov
Website: http://www.nahc.ca.gov

Governor's Office of Planning & Research

OCT 02 2019

STATE CLEARINGHOUSE

September 24, 2019

Jason Waters
Woodlake, City of
350 North Valencia
Woodlake, CA 93257

RE: SCH# 2019090505, Concord Center Industrial Project, Tulare County

Dear Mr. Waters:

The Native American Heritage Commission (NAHC) has received the Notice of Preparation (NOP), Draft Environmental Impact Report (DEIR) or Early Consultation for the project referenced above. The California Environmental Quality Act (CEQA) (Pub. Resources Code §21000 et seq.), specifically Public Resources Code §21084.1, states that a project that may cause a substantial adverse change in the significance of a historical resource, is a project that may have a significant effect on the environment. (Pub. Resources Code § 21084.1; Cal. Code Regs., tit.14, §15064.5 (b) (CEQA Guidelines §15064.5 (b)). If there is substantial evidence, in light of the whole record before a lead agency, that a project may have a significant effect on the environment, an Environmental Impact Report (EIR) shall be prepared. (Pub. Resources Code §21080 (d); Cal. Code Regs., tit. 14, § 5064 subd.(a)(1) (CEQA Guidelines §15064 (a)(1)). In order to determine whether a project will cause a substantial adverse change in the significance of a historical resource, a lead agency will need to determine whether there are historical resources within the area of potential effect (APE).

CEQA was amended significantly in 2014. Assembly Bill 52 (Gatto, Chapter 532, Statutes of 2014) (AB 52) amended CEQA to create a separate category of cultural resources, "tribal cultural resources" (Pub. Resources Code §21074) and provides that a project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment. (Pub. Resources Code §21084.2). Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource. (Pub. Resources Code §21084.3 (a)). **AB 52 applies to any project for which a notice of preparation, a notice of negative declaration, or a mitigated negative declaration is filed on or after July 1, 2015.** If your project involves the adoption of or amendment to a general plan or a specific plan, or the designation or proposed designation of open space, on or after March 1, 2005, it may also be subject to Senate Bill 18 (Burton, Chapter 905, Statutes of 2004) (SB 18). **Both SB 18 and AB 52 have tribal consultation requirements**. If your project is also subject to the federal National Environmental Policy Act (42 U.S.C. § 4321 et seq.) (NEPA), the tribal consultation requirements of Section 106 of the National Historic Preservation Act of 1966 (154 U.S.C. 300101, 36 C.F.R. §800 et seq.) may also apply.

The NAHC recommends consultation with California Native American tribes that are traditionally and culturally affiliated with the geographic area of your proposed project as early as possible in order to avoid inadvertent discoveries of Native American human remains and best protect tribal cultural resources. Below is a brief summary of portions of AB 52 and SB 18 as well as the NAHC's recommendations for conducting cultural resources assessments.

Consult your legal counsel about compliance with AB 52 and SB 18 as well as compliance with any other applicable laws.

AB 52

AB 52 has added to CEQA the additional requirements listed below, along with many other requirements:

1. Fourteen Day Period to Provide Notice of Completion of an Application/Decision to Undertake a Project: Within fourteen (14) days of determining that an application for a project is complete or of a decision by a public agency to undertake a project, a lead agency shall provide formal notification to a designated contact of, or tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, to be accomplished by at least one written notice that includes:
   - **a.** A brief description of the project.
   - **b.** The lead agency contact information.
   - **c.** Notification that the California Native American tribe has 30 days to request consultation. (Pub. Resources Code §21080.3.1 (d)).
   - **d.** A "California Native American tribe" is defined as a Native American tribe located in California that is on the contact list maintained by the NAHC for the purposes of Chapter 905 of Statutes of 2004 (SB 18). (Pub. Resources Code §21073).

2. Begin Consultation Within 30 Days of Receiving a Tribe's Request for Consultation and Before Releasing a Negative Declaration, Mitigated Negative Declaration, or Environmental Impact Report: A lead agency shall begin the consultation process within 30 days of receiving a request for consultation from a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project. (Pub. Resources Code §21080.3.1, subds. (d) and (e)) and prior to the release of a negative declaration, mitigated negative declaration or Environmental Impact Report. (Pub. Resources Code §21080.3.1(b)).
   - **a.** For purposes of AB 52, "consultation shall have the same meaning as provided in Gov. Code §65352.4 (SB 18). (Pub. Resources Code §21080.3.1 (b)).

3. Mandatory Topics of Consultation If Requested by a Tribe: The following topics of consultation, if a tribe requests to discuss them, are mandatory topics of consultation:
   - **a.** Alternatives to the project**.**
   - **b.** Recommended mitigation measures**.**
   - **c.** Significant effects**.** (Pub. Resources Code §21080.3.2 (a)).

4. Discretionary Topics of Consultation: The following topics are discretionary topics of consultation:
   - **a.** Type of environmental review necessary.
   - **b.** Significance of the tribal cultural resources.
   - **c.** Significance of the project's impacts on tribal cultural resources.
   - **d.** If necessary, project alternatives or appropriate measures for preservation or mitigation that the tribe may recommend to the lead agency. (Pub. Resources Code §21080.3.2 (a)).

5. Confidentiality of Information Submitted by a Tribe During the Environmental Review Process: With some exceptions, any information, including but not limited to, the location, description, and use of tribal cultural resources submitted by a California Native American tribe during the environmental review process shall not be included in the environmental document or otherwise disclosed by the lead agency or any other public agency to the public, consistent with Government Code §6254 (r) and §6254.10. Any information submitted by a California Native American tribe during the consultation or environmental review process shall be published in a confidential appendix to the environmental document unless the tribe that provided the information consents, in writing, to the disclosure of some or all of the information to the public. (Pub. Resources Code §21082.3 (c)(1)).

6. Discussion of Impacts to Tribal Cultural Resources in the Environmental Document: If a project may have a significant impact on a tribal cultural resource, the lead agency's environmental document shall discuss both of the following:
   - **a.** Whether the proposed project has a significant impact on an identified tribal cultural resource.
   - **b.** Whether feasible alternatives or mitigation measures, including those measures that may be agreed to pursuant to Public Resources Code §21082.3, subdivision (a), avoid or substantially lessen the impact on the identified tribal cultural resource. (Pub. Resources Code §21082.3 (b)).

7. Conclusion of Consultation: Consultation with a tribe shall be considered concluded when either of the following occurs:
    a. The parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a tribal cultural resource; or
    b. A party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached. (Pub. Resources Code §21080.3.2 (b)).

8. Recommending Mitigation Measures Agreed Upon in Consultation in the Environmental Document: Any mitigation measures agreed upon in the consultation conducted pursuant to Public Resources Code §21080.3.2 shall be recommended for inclusion in the environmental document and in an adopted mitigation monitoring and reporting program, if determined to avoid or lessen the impact pursuant to Public Resources Code §21082.3, subdivision (b), paragraph 2, and shall be fully enforceable. (Pub. Resources Code §21082.3 (a)).

9. Required Consideration of Feasible Mitigation: If mitigation measures recommended by the staff of the lead agency as a result of the consultation process are not included in the environmental document or if there are no agreed upon mitigation measures at the conclusion of consultation, or if consultation does not occur, and if substantial evidence demonstrates that a project will cause a significant effect to a tribal cultural resource, the lead agency shall consider feasible mitigation pursuant to Public Resources Code §21084.3 (b). (Pub. Resources Code §21082.3 (e)).

10. Examples of Mitigation Measures That, If Feasible, May Be Considered to Avoid or Minimize Significant Adverse Impacts to Tribal Cultural Resources:
    a. Avoidance and preservation of the resources in place, including, but not limited to:
        i. Planning and construction to avoid the resources and protect the cultural and natural context.
        ii. Planning greenspace, parks, or other open space, to incorporate the resources with culturally appropriate protection and management criteria.
    b. Treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including, but not limited to, the following:
        i. Protecting the cultural character and integrity of the resource.
        ii. Protecting the traditional use of the resource.
        iii. Protecting the confidentiality of the resource.
    c. Permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or utilizing the resources or places.
    d. Protecting the resource. (Pub. Resource Code §21084.3 (b)).
    e. Please note that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC to protect a California prehistoric, archaeological, cultural, spiritual, or ceremonial place may acquire and hold conservation easements if the conservation easement is voluntarily conveyed. (Civ. Code §815.3 (c)).
    f. Please note that it is the policy of the state that Native American remains and associated grave artifacts shall be repatriated. (Pub. Resources Code §5097.991).

11. Prerequisites for Certifying an Environmental Impact Report or Adopting a Mitigated Negative Declaration or Negative Declaration with a Significant Impact on an Identified Tribal Cultural Resource: An Environmental Impact Report may not be certified, nor may a mitigated negative declaration or a negative declaration be adopted unless one of the following occurs:
    a. The consultation process between the tribes and the lead agency has occurred as provided in Public Resources Code §21080.3.1 and §21080.3.2 and concluded pursuant to Public Resources Code §21080.3.2.
    b. The tribe that requested consultation failed to provide comments to the lead agency or otherwise failed to engage in the consultation process.
    c. The lead agency provided notice of the project to the tribe in compliance with Public Resources Code §21080.3.1 (d) and the tribe failed to request consultation within 30 days. (Pub. Resources Code §21082.3 (d)).

The NAHC's PowerPoint presentation titled, "Tribal Consultation Under AB 52: Requirements and Best Practices" may be found online at: http://nahc.ca.gov/wp-content/uploads/2015/10/AB52TribalConsultation_CalEPAPDF.pdf

SB 18

SB 18 applies to local governments and requires local governments to contact, provide notice to, refer plans to, and consult with tribes prior to the adoption or amendment of a general plan or a specific plan, or the designation of open space. (Gov. Code §65352.3). Local governments should consult the Governor's Office of Planning and Research's "Tribal Consultation Guidelines," which can be found online at: https://www.opr.ca.gov/docs/09_14_05_Updated_Guidelines_922.pdf.

Some of SB 18's provisions include:

1. Tribal Consultation: If a local government considers a proposal to adopt or amend a general plan or a specific plan, or to designate open space it is required to contact the appropriate tribes identified by the NAHC by requesting a "Tribal Consultation List." If a tribe, once contacted, requests consultation the local government must consult with the tribe on the plan proposal. **A tribe has 90 days from the date of receipt of notification to request consultation unless a shorter timeframe has been agreed to by the tribe.** (Gov. Code §65352.3 (a)(2)).
2. No Statutory Time Limit on SB 18 Tribal Consultation. There is no statutory time limit on SB 18 tribal consultation.
3. Confidentiality: Consistent with the guidelines developed and adopted by the Office of Planning and Research pursuant to Gov. Code §65040.2, the city or county shall protect the confidentiality of the information concerning the specific identity, location, character, and use of places, features and objects described in Public Resources Code §5097.9 and §5097.993 that are within the city's or county's jurisdiction. (Gov. Code §65352.3 (b)).
4. Conclusion of SB 18 Tribal Consultation: Consultation should be concluded at the point in which:
    a. The parties to the consultation come to a mutual agreement concerning the appropriate measures for preservation or mitigation; or
    b. Either the local government or the tribe, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached concerning the appropriate measures of preservation or mitigation. (Tribal Consultation Guidelines, Governor's Office of Planning and Research (2005) at p. 18).

Agencies should be aware that neither AB 52 nor SB 18 precludes agencies from initiating tribal consultation with tribes that are traditionally and culturally affiliated with their jurisdictions before the timeframes provided in AB 52 and SB 18. For that reason, we urge you to continue to request Native American Tribal Contact Lists and "Sacred Lands File" searches from the NAHC. The request forms can be found online at: http://nahc.ca.gov/resources/forms/

NAHC Recommendations for Cultural Resources Assessments

To adequately assess the existence and significance of tribal cultural resources and plan for avoidance, preservation in place, or barring both, mitigation of project-related impacts to tribal cultural resources, the NAHC recommends the following actions:

1. Contact the appropriate regional California Historical Research Information System (CHRIS) Center (http://ohp.parks.ca.gov/?page_id=1068) for an archaeological records search. The records search will determine:
    a. If part or all of the APE has been previously surveyed for cultural resources.
    b. If any known cultural resources have already been recorded on or adjacent to the APE.
    c. If the probability is low, moderate, or high that cultural resources are located in the APE.
    d. If a survey is required to determine whether previously unrecorded cultural resources are present.

2. If an archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey.
    a. The final report containing site forms, site significance, and mitigation measures should be submitted immediately to the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum and not be made available for public disclosure.
    b. The final written report should be submitted within 3 months after work has been completed to the appropriate regional CHRIS center.

3. Contact the NAHC for:
    a. A Sacred Lands File search. Remember that tribes do not always record their sacred sites in the Sacred Lands File, nor are they required to do so. A Sacred Lands File search is not a substitute for consultation with tribes that are traditionally and culturally affiliated with the geographic area of the project's APE.
    b. A Native American Tribal Consultation List of appropriate tribes for consultation concerning the project site and to assist in planning for avoidance, preservation in place, or, failing both, mitigation measures.

4. Remember that the lack of surface evidence of archaeological resources (including tribal cultural resources) does not preclude their subsurface existence.
    a. Lead agencies should include in their mitigation and monitoring reporting program plan provisions for the identification and evaluation of inadvertently discovered archaeological resources per Cal. Code Regs., tit. 14, §15064.5(f) (CEQA Guidelines §15064.5(f)). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American with knowledge of cultural resources should monitor all ground-disturbing activities.
    b. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the disposition of recovered cultural items that are not burial associated in consultation with culturally affiliated Native Americans.
    c. Lead agencies should include in their mitigation and monitoring reporting program plans provisions for the treatment and disposition of inadvertently discovered Native American human remains. Health and Safety Code §7050.5, Public Resources Code §5097.98, and Cal. Code Regs., tit. 14, §15064.5, subdivisions (d) and (e) (CEQA Guidelines §15064.5, subds. (d) and (e)) address the processes to be followed in the event of an inadvertent discovery of any Native American human remains and associated grave goods in a location other than a dedicated cemetery.

If you have any questions or need additional information, please contact me at my email address: Andrew.Green@nahc.ca.gov.

Sincerely,



Andrew Green
Staff Services Analyst

cc: State Clearinghouse

cdfa CALIFORNIA DEPARTMENT OF FOOD & AGRICULTURE

October 21, 2019

Jason Waters
Community Services Director
City of Woodlake
350 North Valencia Avenue
Woodlake, CA 93286

Re: CDFA Comments on City of Woodlake Initial Study and Notice of Preparation of an Environmental Impact Report for Evaluating the Proposed Concord Center Industrial Development Project (State Clearinghouse No. 2019090505)

Dear Mr. Waters:

The California Department of Food and Agriculture's (CDFA's) CalCannabis Division (CalCannabis) is pleased to submits the following comments on the Initial Study (IS) and Notice of Preparation (NOP) for the Environmental Impact Report (EIR) prepared by the City of Woodlake for the Concord Center Industrial Development Project (Proposed Project), located in Woodlake, California.

CDFA is a Responsible Agency with respect to the Proposed Project, with jurisdiction over the issuance of licenses to cultivate, propagate and process commercial cannabis in the State of California. CDFA issues licenses to outdoor, indoor, and mixed-light cannabis cultivators, cannabis nurseries and cannabis processor facilities, where the local jurisdiction authorizes these activities. This authority is pursuant to the Business and Professions Code, Division 10, Chapter 2, Section 26012(2). All commercial cannabis cultivation within the State of California requires a cultivation license from CDFA.

CDFA certified a Programmatic Environmental Impact Report (PEIR) for cannabis activities throughout the state on November 13, 2017. The PEIR can be found at the following link: https://www.cdfa.ca.gov/calcannabis/PEIR.html. For a complete list of all license requirements please visit: https://static.cdfa.ca.gov/MCCP/document/CDFA%20Final%20Regulation%20Text_01162019_Clean.pdf.

Background

The City of Woodlake is the Lead Agency on the Proposed Project, a 17.8-acre industrial center that would house industrial uses allowable by the zone district, including cannabis cultivation. The City of Woodlake allows commercial cannabis cultivation following procurement of a Conditional Use Permit (CUP) and a Commercial Cannabis Regulatory Permit (Regulatory Permit), per Section 5.48.020 of the City's Cannabis Ordinance (Ordinance No. 611). Ordinance No. 611 states, "*the Regulatory Permit shall be site specific and shall specifically identify the commercial cannabis activity that will be allowed at that site. No commercial cannabis activity will be allowed unless specifically identified in the Regulatory Permit* (Section 5.48.020)."

CDFA Comments and Recommendations

In response to the NOP, CDFA has several general comments and recommendations about the anticipated scope of the EIR and recommendations regarding issues the City should address and consider as part of its preparation of the EIR. In addition, CDFA has several specific comments about the IS that was submitted with the NOP. Both general and specific comments are included below.

General Comments (GCs)

GC 1: Scope of EIR. Neither the IS nor the NOP specifies whether the EIR for the Proposed Project is intended to extend CEQA coverage to any later activities or projects, as defined by the City, by future tenants approved to operate on those individual parcels; or whether the scope of the EIR is intended to be solely for the construction of the Concord Center Industrial Development facility. As described above, future proposed cannabis cultivation projects are required to procure site-specific City-issued permits (CUPs and Regulatory Permits), as specified under Ordinance No. 611. CDFA requests the City of Woodlake clarify what City-issued permits and approvals are intended to be covered by the Proposed Project EIR.

Note that CDFA requires an annual-license applicant to provide operation-specific evidence of exemption from, or compliance with, CEQA (3 Cal. Code of Regs. § 8102). If a local jurisdiction prepares a site-specific CEQA compliance document, or record of decision for the conclusion that no further CEQA documentation is required, it improves the efficiency with which CDFA can issue annual licenses for projects located within that jurisdiction.

GC 2: Project Description. If the City intends the Proposed Project EIR to cover all cannabis cultivation activities that would take place at the industrial development facility, CDFA requests the City provide detailed assumptions for future tenants' proposed cultivation activities as part of the EIR's Project Description. The IS's Project Description very generally discusses that the industrial complex will support the operation of cannabis cultivation businesses, but it does not provide any details about specific cultivation operations and maintenance that would take place at the project site. To the extent these details are known at this time, or provided as an estimation, assumption, and/or worst-case-scenario, the project description should include operation details for cannabis cultivation facilities, including:

- the proposed canopy size of the cultivation operation and the types of operations and cultivation methods that would occur on site;
- the expected number of employees;
- the number of daily trips to and from the site for employee commuting, delivery of materials or supplies, and shipment of product;
- the source and amounts of water to be used for the cultivation facility, including any water efficiency equipment that would be used;
- the types of lighting that would be used;
- the types of odor control methods to be employed;
- the types of hazardous materials that will be used on the cultivation site;
- environmental protection measures that will be incorporated into the future proposed cultivation operation, and whether these measures will be considered Proposed Project mitigation measures or conditions of permit issuance;
- the utilities needed to serve the cultivation facility, including sewer service, and whether such utilities are currently available to serve the site with sufficient capacity for the project; and
- the source (equipment) and amounts of energy expected to be used in operating the cultivation facility, including any energy management and efficiency features incorporated into the Proposed Project.

If the City intends to evaluate both the construction of the facility as well as the cultivation operations that will take place in the facility, the project description should clearly describe the details of both of these elements.

GC3: Analysis of Resource Impacts from Future Tenants. If the City intends for the EIR to cover the cultivation activities of future tenants, it must provide an analysis of impacts specifically resulting from the cultivation operations and maintenance activities that will take place at the site. While several of the CEQA Checklist question responses contain general descriptions of the potential impacts that may result from cultivation, site-

specific analysis for future cultivation projects are not provided. As examples, resource impacts may result from energy or water use, greenhouse gas emissions from operations and vehicle traffic, odor impacts, and noise generation.

CEQA requires that Lead Agencies evaluate the environmental impacts of proposed projects and support factual conclusions with substantial evidence. CDFA requests that any analyses of operations and maintenance activities clearly cite the source(s) of the evidence relied upon for each impact discussion. If the City relies upon assumptions or estimates to determine impacts from potential future tenants' activities based on other similar cultivation projects, those assumptions should be clearly described and analyzed. This information would be particularly useful for resource topics, such as air quality, energy, greenhouse gas emissions, and transportation and traffic, where modeling requires baseline assumptions for operational equipment usage, including cannabis ventilation systems, power generators, indoor lighting, and vehicle trips.

GC 4: Subsequent CEQA Analysis/Tiering and Streamlining. If the City anticipates that site-specific CEQA compliance for individual cannabis cultivation projects within the Concord Center Industrial Development would be completed at a later date, CDFA requests that the City of Woodlake indicate how the City intends to complete any subsequent site-specific environmental assessments. This may include subsequent CEQA documents (e.g., IS/NDs, IS/MNDs, and EIRs), addenda to the Proposed Project EIR, and/or determinations that no further documentation would be needed.

CDFA encourages local jurisdictions to use CEQA streamlining options when appropriate. For tenant projects that are not fully covered under the Proposed Project EIR and not exempt from CEQA, CDFA recommends that the City prepare a CEQA document (an addendum, IS/ND, IS/MND, or EIR that tiers from the Proposed Project EIR, as appropriate (i.e., incorporating by reference general discussions and concentrating a later environmental assessment solely on the issues specific to the later project). CDFA recommends that the City of Woodlake prepare Notices of Determination (NODs) and file them with the State Clearinghouse for all subsequent site-specific CEQA documentation, addenda, and/or other later activities approved using CEQA streamlining approaches.

GC 5: Analysis of Site-Specific Resource Impacts. The CDFA PEIR determined that some environmental topics generally fell outside of CDFA's regulatory authority because these topics are regulated by local land use. These include issues such as aesthetics, land use and planning, geology and soils, mineral resources, noise, odors, regional recreational structures and services, compliance with building standards, provisions for police and fire protection, and connections to public utilities (e.g., public water, wastewater, and storm drainage systems). Additionally, there are other topics for which

detailed analysis in the CDFA PEIR was not possible because of the statewide nature of the CDFA licensure program. Many of these topics involve the evaluation of site-specific conditions, the details of which were infeasible to identify and evaluate in a statewide PEIR, and the characteristics of which were unknown at the time the PEIR was published (e.g., the locations of new cultivation sites that would be planned and licensed were unknown at the time the PEIR was published).

For these topics, listed below, the CDFA PEIR determined that potential impacts would most appropriately be evaluated in local regulatory program-level documents or site-specific project-level documents. The PEIR, where appropriate, provides more general conclusions regarding the likelihood and types of impacts caused by cannabis cultivation, including the cumulative impacts that would be expected under the statewide CDFA Program.

CDFA requests that the City of Woodlake's Proposed Project EIR, and/or other subsequent environmental analyses completed for tenant activities, evaluate potential impacts of licensed commercial cannabis cultivation activities on the following resource topics at an appropriate site-specific level. Evaluations should include mitigation measures that, when applied to the Proposed Project and later defined tenant cultivation activities, will ensure that the Proposed Project will not result in significant adverse impacts on the environment, as determined necessary.

Aesthetics

- Substantial adverse effects on scenic vistas, scenic resources, or State-designated scenic highway, and/or the existing visual character or quality of a site and its surroundings.

Land Use and Planning

- Conflicts with any and all local land use plans, ordinances, policies, and/or resource programs; including but not limited to applicable Habitat Conservation Plans and Natural Community Conservation Plans.

Mineral Resources

- Potential loss of availability of a known mineral resource that would be of value to the region and the residents of the state.
- Potential for the extraction of substantial mineral resources from lands classified by the State as areas that contain mineral resources (Mineral Resource Zone [MRZ]-3).

- Loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

Noise

- Exposure of people or residences to excessive noise levels within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport.
- Generation of excessive groundborne vibration or groundborne noise levels.
- Substantial permanent increase in ambient noise levels in the vicinity of a licensed cultivation activities above existing levels.
- Excessive noise for sensitive receptors, and/or resulting in a substantial temporary or periodic increase in ambient noise levels.
- Short-term construction-related impacts to noise (if applicable).
- Long-term operation-related noise impacts resulting from traffic and related changes to existing noise levels.

Odor (Air Quality)

- Create objectionable odors affecting a substantial number of people as a result of cannabis cultivation.

Recreation

- Potential impacts to existing neighborhood and regional parks or other recreational facilities.

Public Services and Utilities

- Exceedance of wastewater treatment requirements, resulting in the need to expand wastewater treatment facilities, or result in a determination by the wastewat.er treatment provider that it has inadequate capacity to serve the project.
- Require or result in the construction of new or expanded water treatment and/or stormwater facilities.
- Potential to be served by a landfill with insufficient capacity.

Traffic and Transportation

- Conflict with circulation plans, ordinances, or policies.
- Conflict with congestion management programs.

- Increase hazards due to a design feature or incompatible uses.

GC 6: Cumulative Impacts. It is important for the Proposed Project EIR to disclose and evaluate potential cumulative impacts of cannabis cultivation. Of particular importance are topics for which the impacts of the Proposed Project may be less than significant, but collectively with other existing and proposed cannabis growing operations, and/or other industrial complexes where it is allowable, and reasonable to predict future cannabis operations may be permitted, would contribute to a significant cumulative impact. These topics include:

- Impacts of groundwater diversions on the health of the underlying aquifer, including impacts on other users, impacts on stream-related resources connected to the aquifer;
- Impacts on terrestrial biological species and habitats, particularly special-status species as defined under CEQA;
- Impacts related to noise; and
- Impacts related to air quality and objectionable odors.

Specifically, the EIR should discuss any cumulative impacts that may result from the operation of the 7Points Industrial Complex Project, an industrial center also proposed to house cannabis cultivation and distribution operations, proposed for development on the southwest corner of West Ropes Avenue and Mulberry Street within the City of Woodlake.

GC 7: CDFA Noticing. In order to ensure that the EIR is sufficient for CDFA's needs when it reviews cultivation applications related to the Proposed Project, CDFA requests the City of Woodlake include CDFA in the Reviewing Agencies Checklist for the Proposed Project, and that a copy of the draft EIR be provided to CDFA for comment when complete. This comment applies to all future CEQA documents for cannabis cultivation projects within the City of Woodlake. Further, CDFA requests that a copy of the final EIR and a signed Notice of Determination be provided to future tenants, so future cannabis applicants can include them with their application package submitted to CDFA. When the City files Initial Studies or EIRs with the State Clearinghouse, CEQA documents should be sent directly to Crystal D'Souza, CDFA staff counsel, at: crystal.dsouza@cdfa.ca.gov.

GC 8: CDFA Regulations. The EIR analysis would benefit from discussion of the protections for environmental resources provided by CDFA's regulations. In particular, the impact analysis should acknowledge the effects of state regulations on reducing the severity of impacts on the following resource topics:

- Aesthetics (*See* 3 California Code of Regulations §8304(c); §8304(g).)

- Air Quality and Greenhouse Gas Emissions (*See* §8102(s); §8304(e); §8305; §8306.)
- Biological Resources (*See* §8102(w); §8102(dd); §8216; §8304(a-c); §8304(g).)
- Cultural Resources (*See* §8304(d).)
- Hazards and Hazardous Materials (*See* §8102(q); §8106(a)(3); §8304(f); §8307.)
- Hydrology and Water Quality (*See* §8102(p); §8102(v); §8102(w); §8102(dd); §8107(b); §8216; §8304(a and b); §8307.)
- Noise (*See* §8304(e); §8306.)
- Utilities and Service Systems (*See* §8102(s); §8108; §8308.)
- Energy (*See* §8102(s); §8305; §8306.)
- Cumulative Impacts (related to the above topics).

Specific Comments

In addition to the general comments provide above, CDFA provides a table on the following page with specific comments regarding the information and analyses provided in the IS. CDFA requests that these comments be addressed in preparing the EIR.

Comment No.	Page No(s).	Resource Topic	IS Text	CDFA Comment
1	10	Project Information	Other Public Agencies Involved	The EIR should list all agencies requiring approval of the Proposed Project, including CDFA, the California Department of Fish and Wildlife, the Regional Water Quality Control Board, and the State Water Resources Control Board, as applicable. In addition, if the Proposed Project will require licenses for commercial cannabis manufacturing, the California Department of Health should be listed as a licensing agency. If the Proposed Project will require licenses for commercial cannabis distribution, laboratory testing, retail, or microbusiness, the Bureau of Cannabis Control should be listed as a licensing agency. The type of permit or approval required from each agency should also be listed.
2	21 and 57	III. Air Quality and XIII. Noise	(pg. 21) According to the CalEEMod trip summary information for general light industry, the proposed Project would generate an average of 1,467 trips per day; however, the Project is only	The EIR should describe any underlying assumptions considered for vehicle trips estimates, including baseline estimates of current operations at the existing fruit orchard and estimates for future operations to be conducted within the industrial complex. These assumptions, or estimates, should discuss site-specific cultivation operations by future tenants, as feasible. Discussions would

Comment No.	Page No(s).	Resource Topic	IS Text	CDFA Comment
			expected to generate an additional 60 trips per day. (pg. 57) The primary source of on-going noise from the proposed Project will be from vehicles traveling to and from the site; however, the relatively low number of new trips associated with the project is not likely to increase the ambient noise levels by a significant amount.	support the assertion that "an additional 60 trips per day" is expected at the facility and support impact determinations for air quality and noise sections.
3	27	IV. Biological Resources (e)	The City of Woodlake's General Plan includes policies for the protection of biological resources.	The EIR should describe the policies that would be applicable to the Proposed Project and evaluate whether and how the Proposed Project would be consistent with the General Plan policies.
4	30	V. Cultural Resources	The archaeologist shall submit reports, to the satisfaction of the City of Fresno, describing	Mitigation Measures CUL-1 and CUL-2 require disclosures to the City of Fresno. If these are typographical errors, please correct

Comment No.	Page No(s).	Resource Topic	IS Text	CDFA Comment
			the testing program and subsequent results. [...] Prior to the issuance of any grading permit, the project proponent shall provide the City of Fresno with documentation identifying construction personnel that will be responsible for on-site monitoring.	them and specify the correct entity for cultural resources disclosures.
5	43	IX. Hazards and Hazardous Materials	N/A (General Comment)	If applicable, the EIR should disclose and evaluate the use of hazardous materials such as pesticides for pest management and other hazardous materials that may be used on site for the operation and maintenance of proposed cultivation projects.
6	47	X. Hydrology and Water Quality	The Central Valley Regional Water Quality Control Board adopted a General Waste Discharge Requirements Order for Discharges of Waste	The CVRWQCB order has been superseded by SWRCB General Order WQ 2019-0001-DWQ. All enrollees under the Central Valley Order were required to transition to the SWRCB Cannabis Cultivation General Order by July 1, 2019.

Comment No.	Page No(s).	Resource Topic	IS Text	CDFA Comment
			Associated with Medical Cannabis Cultivation Activities (Order No. R5-2015-0113). The proposed Project's tenants will be in compliance with the rules and requirements set forth in the [General Waste Discharge Requirements.	
7	50	X. Hydrology and Water Quality	Project demands for groundwater resources in connection with the proposed Project would not substantially deplete groundwater supplies and/or otherwise interfere with groundwater recharge efforts being implemented by the City of Woodlake. The proposed Project is not anticipated to result in additional demands for	The EIR should indicate the overdraft status of the groundwater basin from which the Proposed Project would draw its water. It should also provide an estimate of the amount of groundwater projected to be used in operation of the Proposed Project, and provide some evidence for the conclusion that activities would not result in a significant impact to groundwater beyond those considered in the adopted City of Woodlake General Plan.

Comment No.	Page No(s).	Resource Topic	IS Text	CDFA Comment
			groundwater resources beyond those considered in the adopted City of Woodlake General Plan.	
8	60	XV. Public Services	The proposed Project site will continue to be served by the City of Woodlake Fire Department, which is less than one mile east of the proposed Project site. No additional fire personnel or equipment is anticipated, as the site is already served by the Fire Station.	The State requires indoor cultivation license applicants obtain an attestation that the local fire department has been notified of the cultivation site. The EIR should disclose whether the Woodlake Fire Department has been notified of proposed cultivation activities and/or an attestation may be included as an attachment that supports the determination that no additional fire personnel or equipment would be required for operation.
9	63	XVII. Transportation and Traffic .	According to the ITE Trip Generation Report, 8th edition, the proposed Project will generate approximately 1,467 calculated daily trips with 179 pm peak trips.	The EIR should provide underlying assumptions considered for daily and peak vehicle trips estimates, including estimates used for future tenant operations. The analysis should disclose trips estimated for construction and operation phases separately.

Comment No.	Page No(s).	Resource Topic	IS Text	CDFA Comment
10	67	XIX. Utilities and Service Systems	The City's water system and solid waste disposal programs have capacity for, or are planned to maintain capacity for, community growth in accordance with the adopted General Plan.	The EIR should provide supporting evidence, such as estimated water and waste disposal requirements for operation of the Proposed Project, including projected requirements for cannabis cultivation businesses, and known water system and waste disposal capacity to support the impact determination.

Conclusion

CDFA appreciates the opportunity to provide comments on the IS and NOP for the City of Woodlake's forthcoming Concord Center Industrial Development Project EIR. If you require additional information, please contact Kevin Ponce, Senior Environmental Scientist Supervisor, at (916) 263-0801 or via e-mail at kevin.ponce@cdfa.ca.gov.

Sincerely,

Lindsay Rains
Licensing Program Manager

23 October 2019

Jason Waters
City of Woodlake
350 North Valencia Avenue
Woodlake, CA 93286

CERTIFIED MAIL
7019 0700 0002 0112 1344

COMMENTS TO REQUEST FOR REVIEW FOR THE NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT REPORT, CONCORD CENTER INDUSTRIAL PROJECT, TULARE COUNTY

Pursuant to the City of Woodlake's 20 September 2019 request, the Central Valley Regional Water Quality Control Board (Central Valley Water Board) has reviewed the *Request for Review for the Notice of Preparation of a Draft Environmental Impact Report* for the Concord Center Industrial Project, located in Tulare County.

Our agency is delegated with the responsibility of protecting the quality of surface and groundwaters of the state; therefore our comments will address concerns surrounding those issues.

I. Regulatory Setting

Basin Plan

The Central Valley Water Board is required to formulate and adopt Basin Plans for all areas within the Central Valley region under Section 13240 of the Porter-Cologne Water Quality Control Act. Each Basin Plan must contain water quality objectives to ensure the reasonable protection of beneficial uses, as well as a program of implementation for achieving water quality objectives with the Basin Plans. Federal regulations require each state to adopt water quality standards to protect the public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act. In California, the beneficial uses, water quality objectives, and the Antidegradation Policy are the State's water quality standards. Water quality standards are also contained in the National Toxics Rule, 40 CFR Section 131.36, and the California Toxics Rule, 40 CFR Section 131.38.

The Basin Plan is subject to modification as necessary, considering applicable laws, policies, technologies, water quality conditions and priorities. The original Basin Plans were adopted in 1975, and have been updated and revised periodically as required, using Basin Plan amendments. Once the Central Valley Water Board has adopted a Basin Plan amendment in noticed public hearings, it must be approved by the State Water Resources Control Board (State Water Board), Office

of Administrative Law (OAL) and in some cases, the United States Environmental Protection Agency (USEPA). Basin Plan amendments only become effective after they have been approved by the OAL and in some cases, the USEPA. Every three (3) years, a review of the Basin Plan is completed that assesses the appropriateness of existing standards and evaluates and prioritizes Basin Planning issues. For more information on the *Water Quality Control Plan for the Sacramento and San Joaquin River Basins*, please visit our website: http://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/

Antidegradation Considerations

All wastewater discharges must comply with the Antidegradation Policy (State Water Board Resolution 68-16) and the Antidegradation Implementation Policy contained in the Basin Plan. The Antidegradation Implementation Policy is available on page 74 at: https://www.waterboards.ca.gov/centralvalley/water_issues/basin_plans/sacsjr_201805.pdf

In part it states:

> *Any discharge of waste to high quality waters must apply best practicable treatment or control not only to prevent a condition of pollution or nuisance from occurring, but also to maintain the highest water quality possible consistent with the maximum benefit to the people of the State.*
>
> *This information must be presented as an analysis of the impacts and potential impacts of the discharge on water quality, as measured by background concentrations and applicable water quality objectives.*

The antidegradation analysis is a mandatory element in the National Pollutant Discharge Elimination System and land discharge Waste Discharge Requirements (WDRs) permitting processes. The environmental review document should evaluate potential impacts to both surface and groundwater quality.

II. Permitting Requirements

Cannabis General Order

Pursuant to the State Water Resources Control Board's Cannabis Policy, cannabis cultivation operations must enroll for coverage under General Waste Discharge Requirements and Waiver of Waste Discharge Requirements for Discharges of Waste Associated with Cannabis Cultivation Activities Order No. WQ 2019-0001-DWQ (the Cannabis General Order).

Page 49 of the Initial Study states "*The Central Valley Regional Water Quality Control Board adopted a General Waste Discharge Requirements Order for Discharges of Waste Associated with Medical Cannabis Cultivation Activities (Order No. R5-2015-0113). The proposed Project's tenants will be in compliance with the rules and requirements set forth in the Discharge Requirements.*"

Please note that cannabis cultivation operations are required to obtain coverage under State Water Resources Control Board's General Waste Discharge Requirements and Waiver of Waste Discharge Requirements for Discharges of

Waste Associated with Cannabis Cultivation Activities Order No. WQ 2019-0001-DWQ (the statewide Cannabis General Order). The statewide Cannabis General Order supersedes the Central Valley Regional General Order. The proposed projects tenants must enroll for coverage and comply with the requirements of the statewide Cannabis General Order.

Page 8 of the Initial Study states that "*Once a business is established… wastewater, including sewer use, will be serviced by on-site septic systems*". The Cannabis General Order requires indoor cannabis cultivation activities that discharge cultivation operation wastewater to on-site wastewater treatment systems (i.e. septic systems) **obtain separate Waste Discharge Requirements** from the Water Board. Please see comments related to onsite wastewater treatment systems. For more information on waste discharges to land, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/water_issues/waste_to_land/index.shtml

The Water Boards Cannabis Cultivation Programs offer an easy to use online Portal for cultivators to apply for Cannabis General Order coverage at:
https://public2.waterboards.ca.gov/CGO

Additional information about the Cannabis General Order, Cannabis Small Irrigation Use Registration (SIUR) Program, and Portal can be found at:
www.waterboards.ca.gov/cannabis

For questions about the Cannabis General Order, please contact the Central Valley Water Board's Cannabis Permitting and Compliance Unit at:
centralvalleysacramento@waterboards.ca.gov or (916) 464-3291.

Construction Storm Water General Permit

Dischargers whose project disturb one or more acres of soil or where projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the General Permit for Storm Water Discharges Associated with Construction Activities (Construction General Permit), Construction General Permit Order No. 2009-009-DWQ. Construction activity subject to this permit includes clearing, grading, grubbing, disturbances to the ground, such as stockpiling, or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility. The Construction General Permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP). For more information on the Construction General Permit, visit the State Water Resources Control Board website at:
http://www.waterboards.ca.gov/water_issues/programs/stormwater/constpermits.shtml

Waste Discharge Requirements – Discharges to Land

Pursuant to the State Board's Onsite Wastewater Treatment Systems Policy (Policy), the regulation of the septic system for the discharge of domestic wastewater may be regulated under the local agency's management program.

The project proposes to use onsite septic systems for the disposal of comingled domestic and process related wastewaters. Please note that the Policy only covers onsite wastewater treatment systems that just receive domestic wastewater. The discharge of high-strength industrial wastewater to onsite wastewater treatment systems is generally not eligible for coverage under the Policy. Cannabis cultivation can generate other wastewaters such as irrigation runoff, water treatment effluent, cleaning agents, and wash waters. Discharges of these wastewaters to an onsite wastewater system such as a septic tank and leach field must obtain separate regulatory authorization, such as waste discharge requirements (WDRs), a conditional waiver of WDRs, or other permit mechanism, prior to discharge. The application to obtain WDRs or a conditional waiver of WDRs can take over a year to process and requires that you characterize the wastewater chemistry and volume.

Unless technically justified, domestic wastewater and industrial wastewater should be segregated and treated and disposed of separately (as required per section 4.4.12 of the Water Quality Control Plan for the Tulare Lake Basin).

For more information on waste discharges to land, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/water_issues/waste_to_land/index.shtml

Dewatering Permit

If the proposed project includes construction or groundwater dewatering to be discharged to land, the proponent may apply for coverage under State Water Board General Water Quality Order (Low Risk General Order) 2003-0003 or the Central Valley Water Board's Waiver of Report of Waste Discharge and Waste Discharge Requirements (Low Risk Waiver) R5-2013-0145. Small temporary construction dewatering projects are projects that discharge groundwater to land from excavation activities or dewatering of underground utility vaults. Dischargers seeking coverage under the General Order or Waiver must file a Notice of Intent with the Central Valley Water Board prior to beginning discharge.

For more information regarding the Low Risk General Order and the application process, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/board_decisions/adopted_orders/water_quality/2003/wqo/wqo2003-0003.pdf

For more information regarding the Low Risk Waiver and the application process, visit the Central Valley Water Board website at:
http://www.waterboards.ca.gov/centralvalley/board_decisions/adopted_orders/waivers/r5-2013-0145_res.pdf

If you have questions regarding these comments, please contact me at (916) 464-4812 or Jordan.Hensley@waterboards.ca.gov.

Original Signed by

Jordan Hensley
Environmental Scientist

DEPARTMENT OF TRANSPORTATION
DISTRICT 6
1352 WEST OLIVE AVENUE
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Making Conservation a California Way of Life.

October 25, 2019

06-TUL-216-13.07
NOP
INDUSTRIAL-RETAIL COMPLEX
WOODLAKE CONCORD CENTER

SENT VIA EMAIL

Jason Waters
Community Services Director
City of Woodlake
350 N. Valencia Boulevard; Suite 2
Woodlake, CA 93286

Dear Mr. Waters:

Thank you for the opportunity to review the Notice of Preparation (NOP) for a draft Environmental Impact report (EIR) for the Concord Center Industrial Project. The Project proposes a Tentative Parcel Map to create 13 lots for potentially 210,000 square feet of total floor space on the approximately 17.8-acre project site. The project site is located at the southeast corner of State Route (SR) 216 (Avenue 344) and Road 204 (Blair Road).

The mission of Caltrans is to provide a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability. The Local Development -Intergovernmental Review (LD-IGR) Program reviews land use projects and plans through the lenses of our mission and state planning priorities of infill, conservation, and travel-efficient development. To ensure a safe and efficient transportation system, we encourage early consultation and coordination with local jurisdictions and project proponents on all development projects that utilize the multimodal transportation network.

Caltrans provides the *following comments* consistent with the State's smart mobility goals that support a vibrant economy and sustainable communities:

1. Access to the Project site is provided from Road 204 via a shared driveway and internal access road to each building pad. No driveway access is proposed to State Route (SR) 216.

2. Stormwater retention is provided by a series of landscaped basins throughout the site and along SR 216.

3. In the vicinity of the proposed project, SR 216 is a two-lane conventional highway with a posted speed limit of 55 mph.

4. The intersection of SR 216 and Road 204 is a two-way stop control intersection, requiring traffic on Road 204 to stop and yield to free flow highway traffic on SR 216.

5. Please show the distance of the Project's new access road driveway (measured from the near side of the road) to the SR 216/Road 204 intersection on the site plan.

6. The Transportation/Traffic section of the initial study states that the Project would have a potentially significant impact based on the estimated trip generation numbers. Caltrans concurs with this conclusion. Caltrans provided comments and recommendation on the Scope for the Transportation Impact Study (TIS) in our August 19, 2019 letter. However, the initial study does not reference that a TIS will be completed rather this impact will be addressed in the forthcoming EIR. Caltrans looks forward to reviewing the TIS.

7. The Transportation/Traffic section indicates that the Project will generate approximately 179 pm peak trips. Based on the estimated Trip Generation table submitted for the TIS scope, the Project was estimated to generate 203 trips during the evening peak hour and 193 trips during the morning peak hour (approximately 1467 daily trips). Please explain and modify accordingly, the difference between the initial study and the TIS scope.

8. Please check the answers provided for the Transportation/Traffic portion of the initial study (page 64-65). The study indicates potentially significant impacts however the analysis title states "less than significant impact". This should be modified accordingly.

9. According to the Caltrans Transportation Concept Report (TCR), this segment of SR 216 in the vicinity of the proposed project is currently planned as a 2-lane conventional highway and ultimately planned to be a 4-lane facility within a total of 84 feet of right-of-way (42 feet from the centerline). Caltrans right-of-way maps shows this segment of SR 216 existing at 73 feet (with only 25 feet from the centerline on the south side of SR 216).

10. Caltrans recommends that an Irrevocable Offer of Dedication (IOD) of 17 feet will be required for the south side of SR 216 from the centerline to accommodate the ultimate configuration of SR 216 and for the following *interim* cross-section design when warranted.

11. The following interim cross-section design of SR 216, based on the above 84-foot right-of-way width for a 4-lane highway, was discussed and agreed to by Caltrans and the City of Woodlake. For development projects directly adjacent to SR 216, the opening day curb line (face of curb) will be approximately 33 feet from the SR 216 centerline which will allow a travel lane, bike lane and shoulder. The above IOD will preserve the additional right-of-way needed for the interim 3-lane cross section, when warranted in the future. The interim 3-lane configuration will consist of a 14-foot wide two-way left turn (TWLT) lane (7 feet on both side centerline), one (1) 12-foot wide lane in each east-west direction, with a shoulder. Caltrans determined that a TWLT lane would allow safer access and turning movements for properties that are developed along SR 216. When warranted, the transition from the existing 2-lane to the interim 3-lane highway would take place west of Acacia Street as the City's downtown area merges with the envisioned "industrial park" area, west of Woodlake's downtown. In the future, restriping SR 216 to the two-way left turn lane would require Caltrans to eliminate and prohibit on-street parking.

12. Dedications required by the Lead Agency need to be shown on a revised site plan and forwarded for our review. Right-of-way dedicated to the State due to the proposed project or work proposed in the State right-of-way, will need to be dedicated and conveyed to the State (in a form approved by the State) before an encroachment permit is issued for any work in the State right-of-way. A summary of the requirements for right-of-way dedications is enclosed.

13. Dust control measures shall be implemented on the site in a manner to prevent dust from entering the State right-of-way.

14. No water from the proposed project shall flow into the State right-of-way without approval from the District Hydraulic Engineer.

15. An encroachment permit must be obtained for all proposed activities for placement of encroachments within, under or over the State highway rights-of-way. Activity and work planned in the State right-of-way shall be performed to State standards and specifications, at no cost to the State. Engineering plans, calculations, specifications, and reports (documents) shall be stamped and signed by a licensed Engineer or Architect. Engineering documents for encroachment permit activity and work in the State right-of-way may be submitted using English Units. The Permit Department and the Environmental Planning Branch will review and approve the activity and work in the State right-of-way before an encroachment permit is issued. The Streets and Highways Code Section 670 provides Caltrans discretionary approval authority for projects that encroach on the State Highway System. Encroachment permits will be issued in accordance with Streets and Highway Codes, Section 671.5, "Time Limitations." Encroachment permits do not run with the land. A change of ownership requires a new permit application. Only the legal property owner or his/her authorized agent can pursue obtaining an encroachment permit. **Please call the Caltrans Encroachment Permit Office - District 6: 1352 W. Olive, Fresno, CA 93778, at (559) 488-4058. Please review the permit application checklist at:** https://forms.dot.ca.gov/v2Forms/servlet/FormRenderer?frmid=TR0402&distpath=MAOTO&brapath=PERM

16. An assessment of multi-modal facilities should be conducted to develop an integrated multi-modal transportation system to serve and help alleviate traffic congestion caused by the project and related development in this area of the City. The assessment should include the following:

    a. Pedestrian walkways should link this proposal to an internal project area walkway, transit facilities, as well as other walkways in the surrounding area.

    b. The project should consider bicycles as an alternative mode of transportation and offer internal amenities to encourage bicycle use which should include parking, security, lockers and showers.

    c. If transit is not available within ¼-mile of the site, transit should be extended to provide services to what will be a high activity center.

If you have any other questions, please call me at (559) 488-7396.

Sincerely,

DAVID DEEL
Associate Transportation Planner
Transportation Planning – North

Appendix C

Traffic Impact Study

Project No: 524-09

TRAFFIC STUDY

Industrial Development

Southeast Corner of Naranjo Blvd (SR 216) & Rd 204

City of Woodlake, CA

Prepared for:

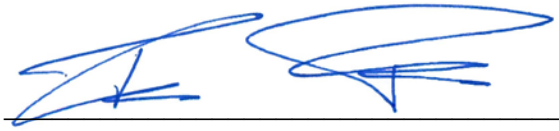
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INTRODUCTION

The purpose of this study is to evaluate the potential traffic impact of a light industrial complex on the southeast corner of Road 204 and State Route 216 (Naranjo Boulevard) in the City of Woodlake, California.

A. Land Use, Site and Study Area Boundaries

The proposed project consists of 210,000 square feet of industrial building space. Based on the City of Woodlake's General Plan, the current land use designation for the project site is Neighborhood Commercial and zoning is Light Industrial (ML).

The scope of the study was developed in association with the City of Woodlake Roads Department and Caltrans. Five unsignalized intersections are included in this study as follows:

- Millwood Drive & Naranjo Boulevard
- Road 196 & Naranjo Boulevard
- Road 204 & Naranjo Boulevard
- Road 204 & Ropes Avenue
- Valencia Boulevard & Ropes Avenue

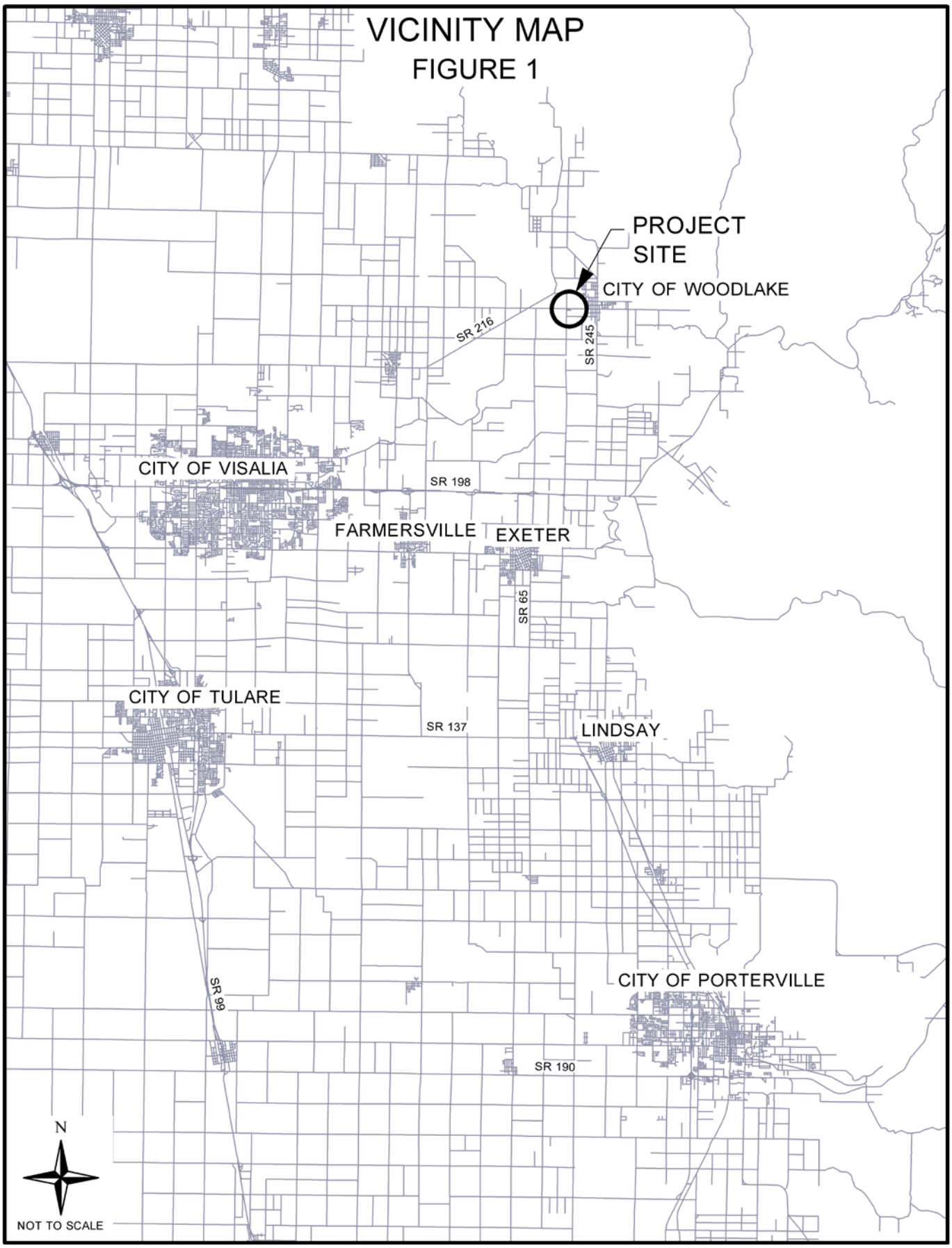
A vicinity map is presented in Figure 1 and a location map is presented in Figure 2.

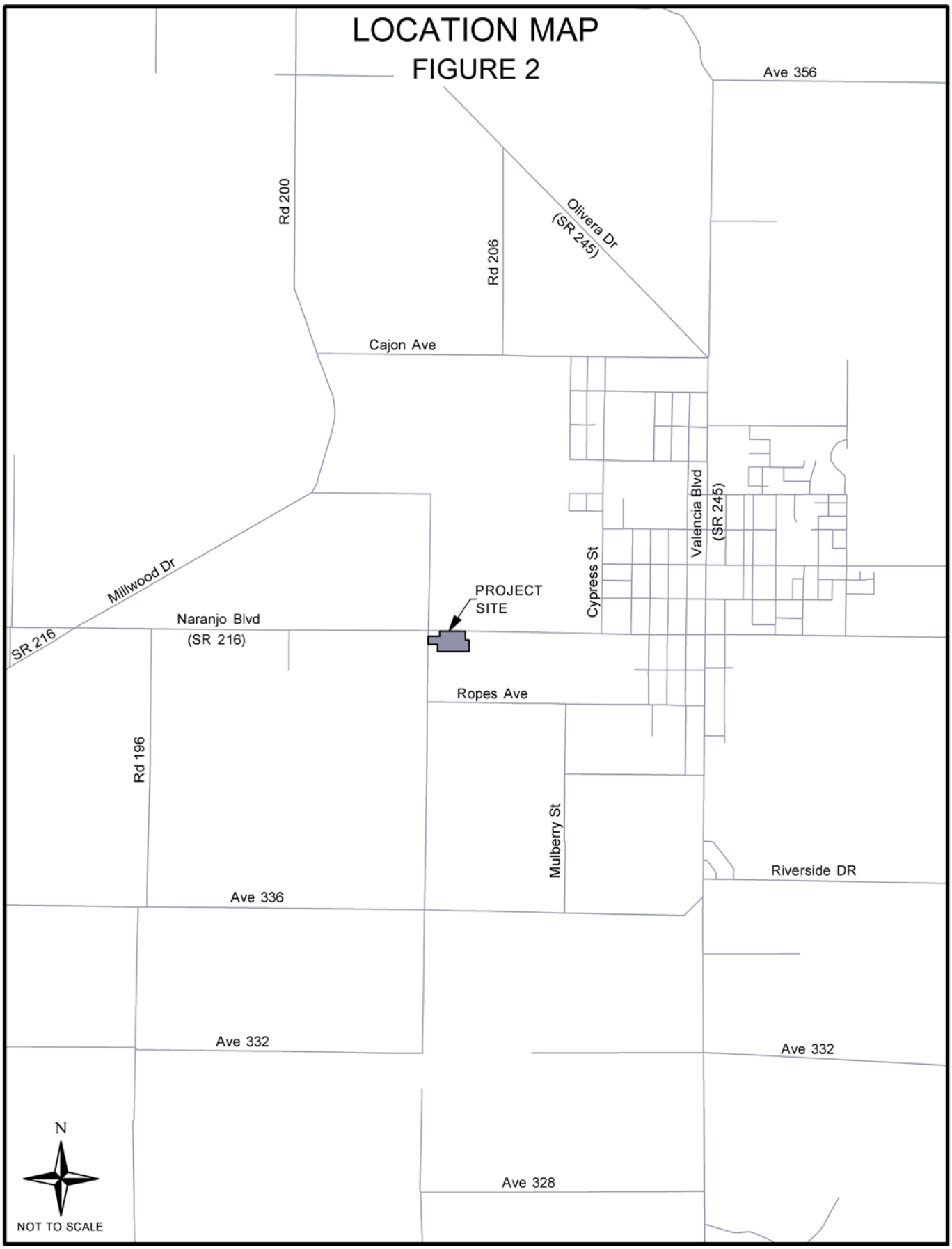
B. Existing Site Uses and Site Access

The project site is currently being used for agricultural purposes. Primary access to the project is anticipated from Road 204.

C. Existing Uses in the Vicinity of the Site

Existing land uses in the immediate vicinity of the project include agriculture to the north, south and east and light industrial to the west.


VICINITY MAP
FIGURE 1
PROJECT SITE
CITY OF WOODLAKE
SR 216
SR 245
CITY OF VISALIA
SR 198
FARMERSVILLE
EXETER
SR 65
CITY OF TULARE
SR 137
LINDSAY
CITY OF PORTERVILLE
SR 99
SR 190
N
NOT TO SCALE


LOCATION MAP
FIGURE 2
Ave 356
Rd 200
Rd 206
Olivera Dr
(SR 245)
Cajon Ave
Valencia Blvd
(SR 245)
Cypress St
Millwood Dr
PROJECT
SITE
Naranjo Blvd
(SR 216)
SR 216
Ropes Ave
Rd 196
Mulberry St
Riverside DR
Ave 336
Ave 332
Ave 332
Ave 328
N
NOT TO SCALE

SITE PLAN

FIGURE 3



D. Existing Street Descriptions

Millwood Drive is generally a north-south roadway that extends north from State Route 216 and provides access to agricultural land uses. In the vicinity of the project it exists as a two-lane roadway with graded shoulders.

Naranjo Boulevard (SR 216) is an east-west arterial that provides access to agricultural, commercial, and residential land uses in Woodlake. In the vicinity of the project it exists as a two-lane roadway with paved shoulders.

Road 196 is a north-south roadway that extends from Millwood Drive to Avenue 336. It provides access to agricultural land uses, and in the vicinity of the project, it exists as a two-lane roadway with graded shoulders.

Road 204 is a north-south two-lane roadway that extends from Naranjo Boulevard to Avenue 348. It provides access to residential and agricultural land uses

Ropes Avenue is an east-west roadway that extends from Blair Road to Valencia Boulevard. West of Oaks Street, it provides access to agricultural land use, and east of Oaks Street it provides access to residential land uses. It exists as a two-lane roadway with curb and gutter adjacent to development. Based on information provided by the City of Woodlake Transportation Department, Ropes Avenue is a dedicated roadway for traffic accessing directly to the industrial park from the south.

Valencia Boulevard is a major north-south arterial that extends through the metropolitan region of the City of Woodlake. It exists as a two-lane roadway with curb and gutter and provides access to commercial, residential, and agricultural land uses.

PROJECT TRIP GENERATION AND DESIGN HOUR VOLUMES

The trip generation and design hour volumes shown in Table 1 were calculated using the Institute of Transportation Engineers (ITE) Trip Generation, 10th Edition. The ADT, AM and PM peak hour rates, and peak hour directional splits for ITE Land Use Code 110 (General Light Industrial) were used to estimate the project traffic for peak hour of adjacent street traffic.

Table 1
Project Trip Generation

General Information			Daily Trips		AM Peak Hour Trips			PM Peak Hour Trips		
ITE Code	Development Type	Variable	ADT RATE	ADT	Rate	In % Split/ Trips	Out % Split/ Trips	Rate	In % Split/ Trips	Out % Split/ Trips
110	General Light Industrial	210 1000 sq ft GFA	eq	1467	0.92	88% 170	12% 23	0.97	12% 24	88% 179
Total				1,467		170	23		24	179

PROJECT TRIP DISTRIBUTION AND ASSIGNMENT

The project trip distribution in Table 2 represents the most logically traveled routes for traffic accessing the project. Project traffic distribution was estimated based on a review of the potential draw from population centers within the region and the type of land use involved. The City anticipates a significant amount of project traffic to travel along State Route 65 between Woodlake and other towns such as Exeter, Lindsey, Porterville, Visalia, and Tulare. These assumptions were used to distribute project traffic as shown in Figure 4.

Table 2
Project Trip Distribution

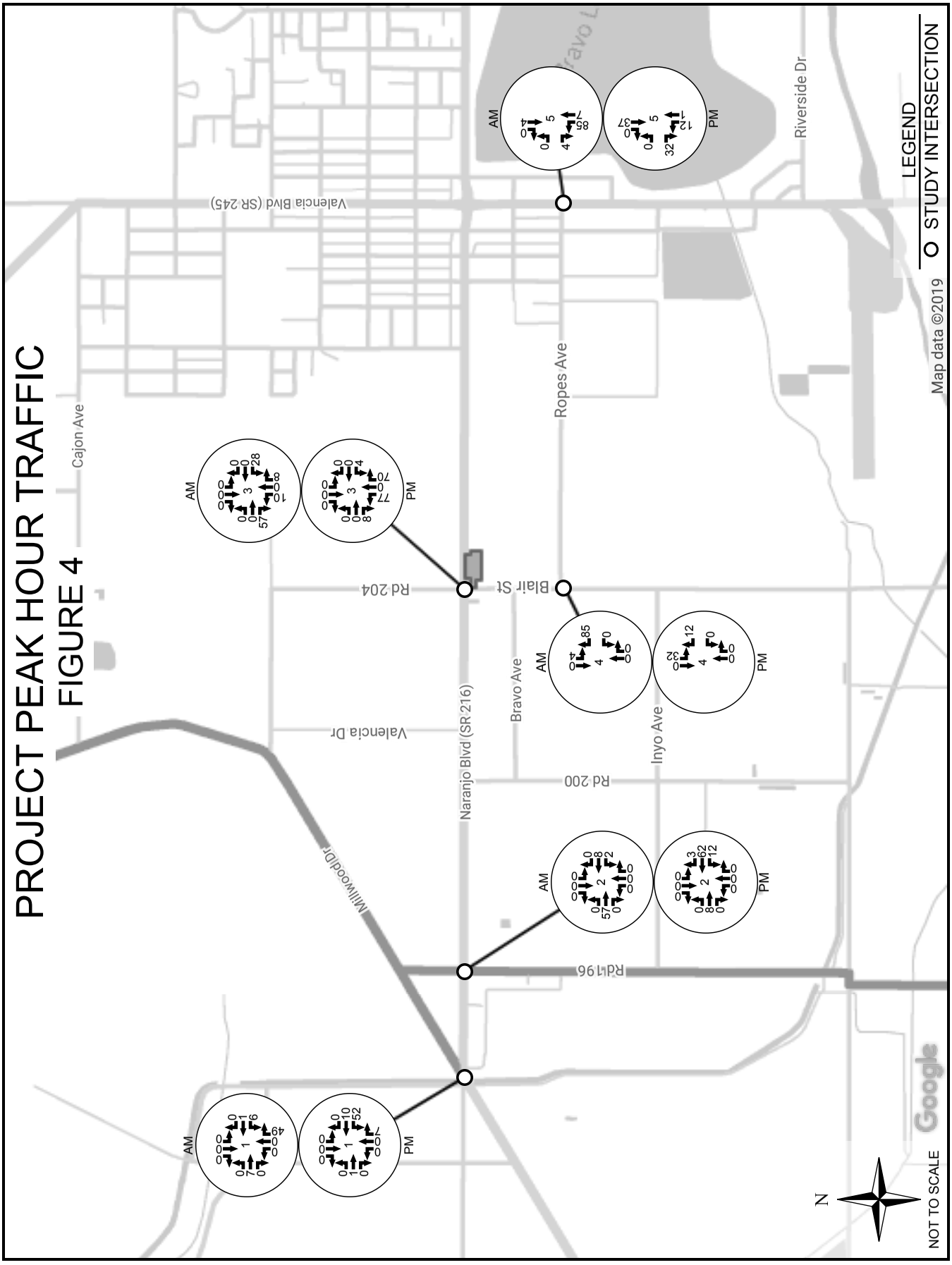
Direction	Percent	Roadway
North	10%	Valencia Blvd (SR 245)
South	40%	Rd 204 / Valencia Blvd (SR 245)
East	20%	Naranjo Blvd (SR 216)
West	30%	Naranjo Blvd (SR 216)

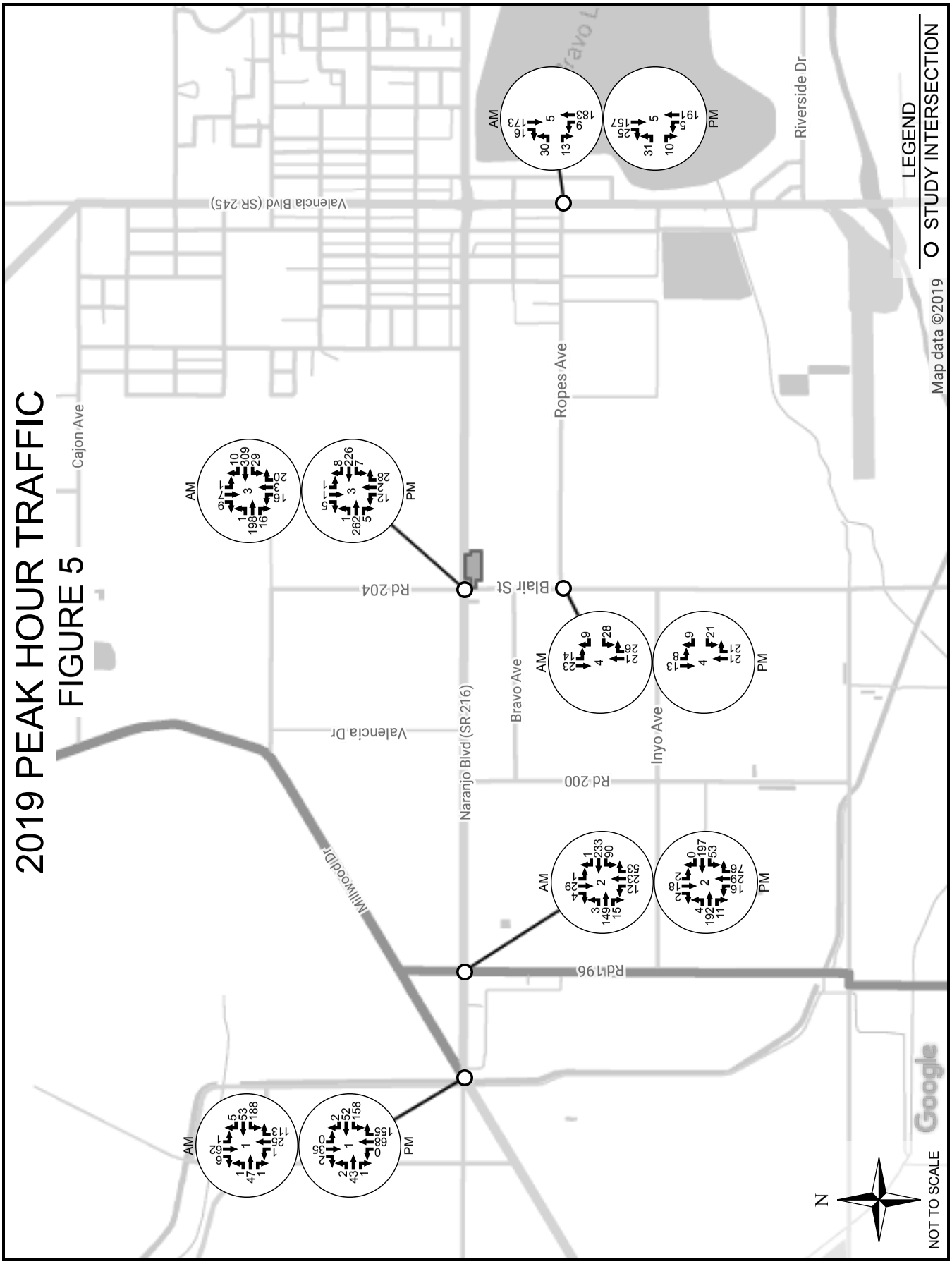
EXISTING AND FUTURE TRAFFIC

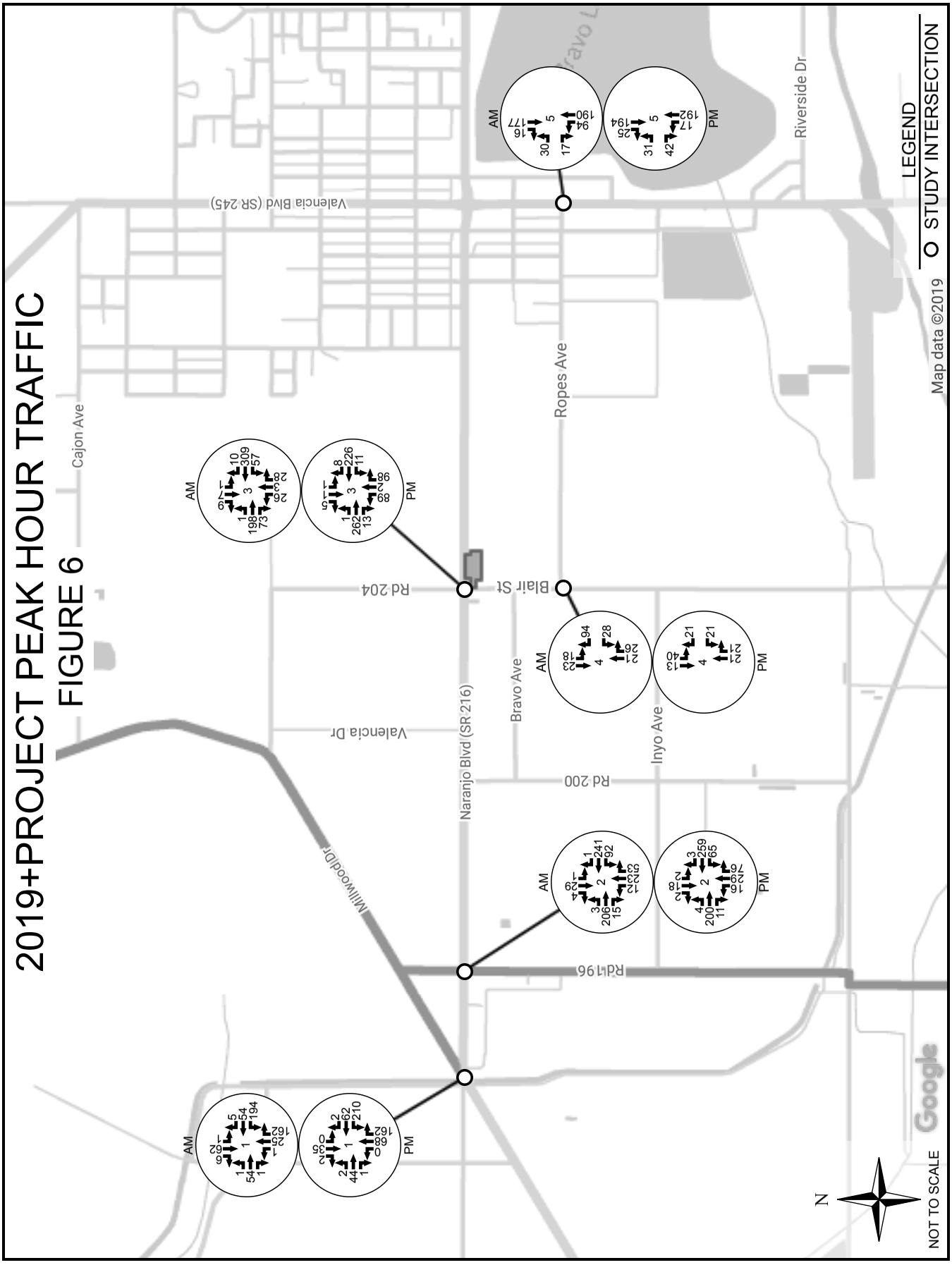
Existing peak hour turn movement volumes were field measured in September 2019 at the study intersections and are shown in Figure 5. Existing plus project peak hour volumes are shown in Figure 6.

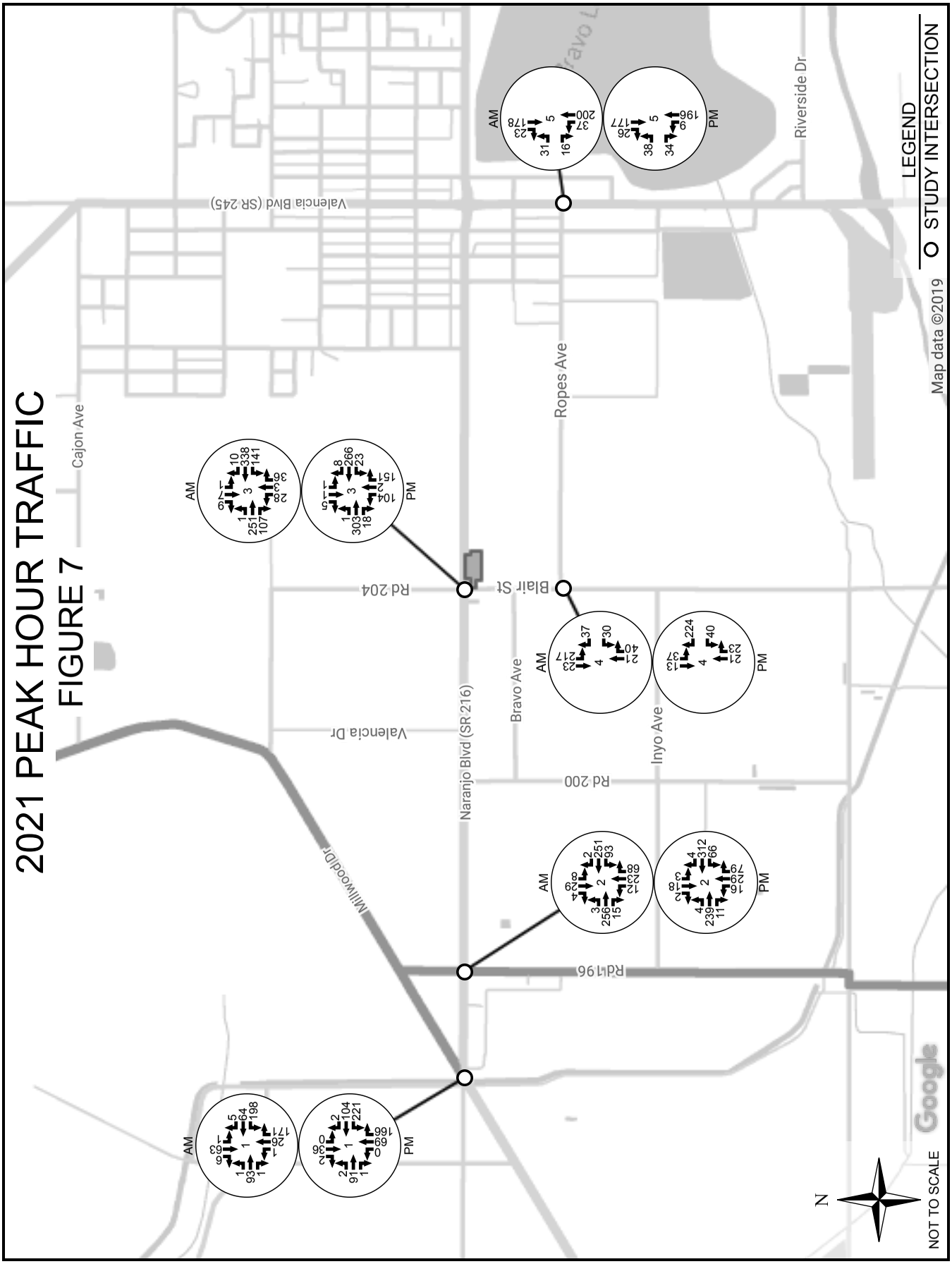
Annual growth rates of 0.49% to 2.72% were applied to existing traffic volumes to estimate future traffic volumes for the years 2021 and 2040. These growth rates were estimated based on a review of TCAG traffic model data. Opening year peak hour, opening year plus project, future peak hour and future peak hour plus project volumes are shown in Figures 7-10, respectively.

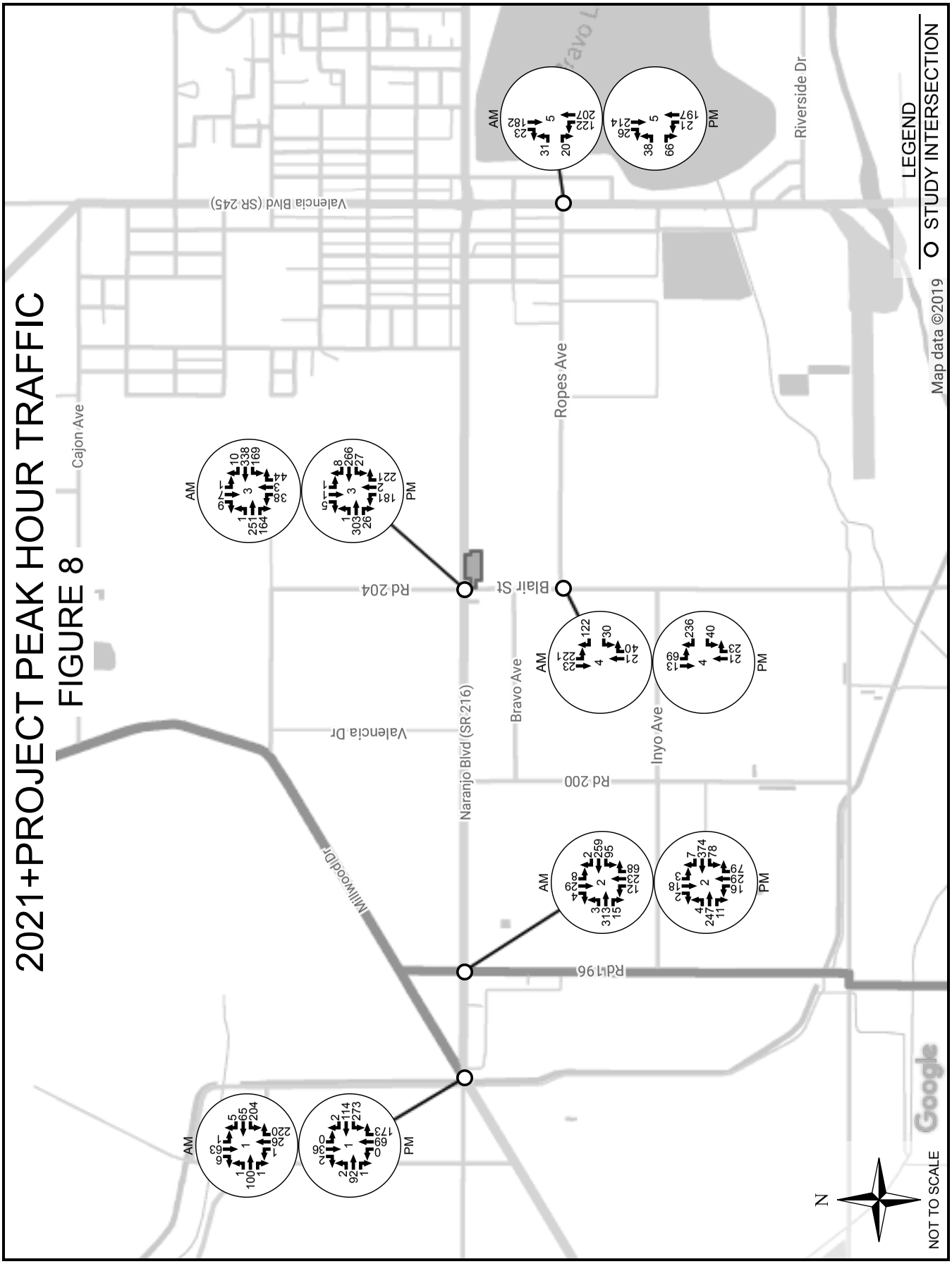
An investigation was made with the City of Woodlake's Transportation Planning Department to determine if there are any pending projects which would influence future traffic beyond what the TCAG model is predicting. A trip generation table the traffic generated by the cumulative projects is provided in the attached appendix. Based on the information given, it is anticipated that the cumulative projects will be completed by 2021. Future peak hour volumes with the cumulative projects added are shown in Figures 7 through 10.

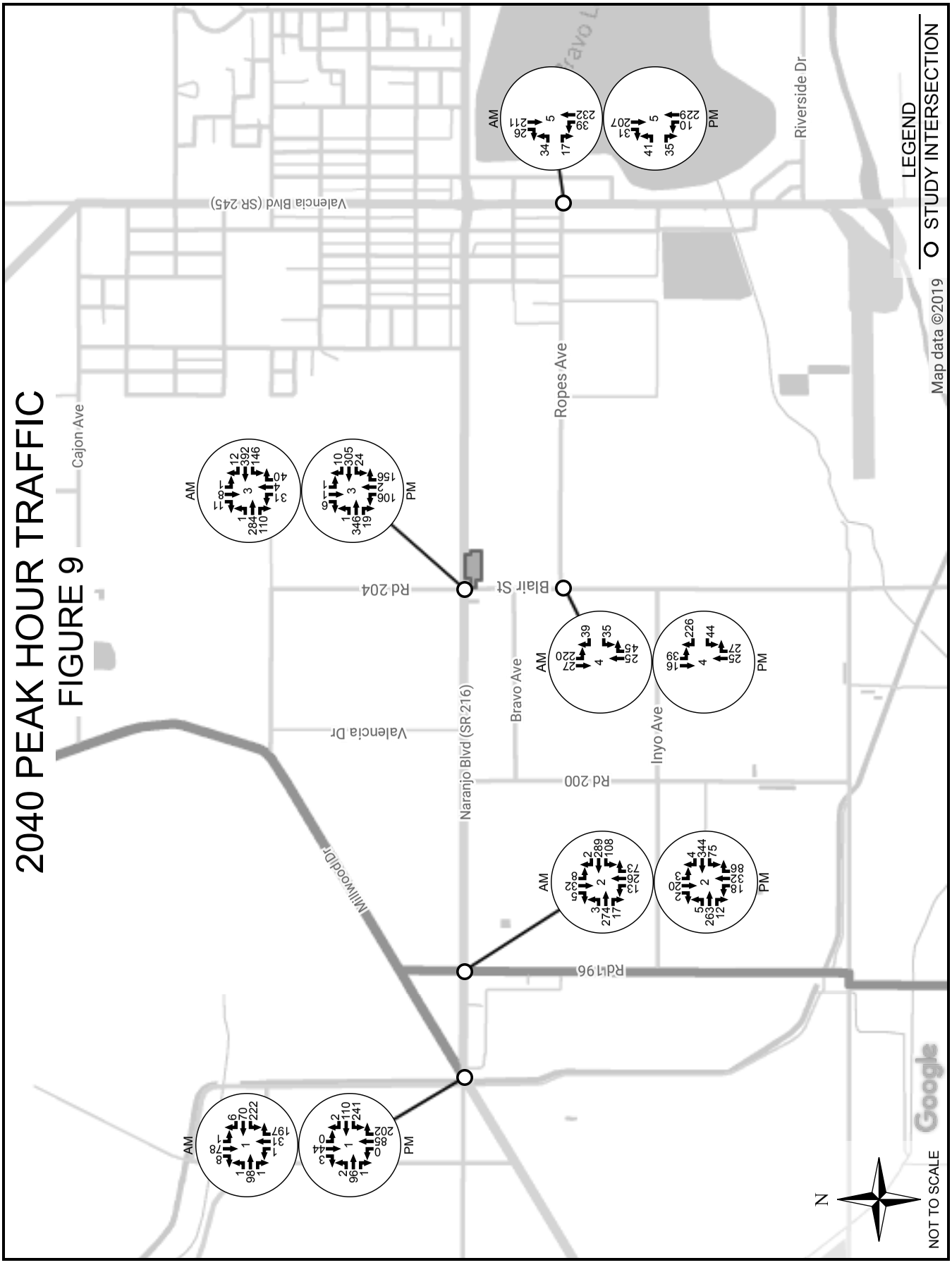

PROJECT PEAK HOUR TRAFFIC
FIGURE 4
LEGEND
STUDY INTERSECTION
NOT TO SCALE
N
Google
Map data ©2019
Valencia Blvd (SR 245)
Cajon Ave
Ropes Ave
Riverside Dr
Rd 204
Blair St
Bravo Ave
Inyo Ave
Valencia Dr
Naranjo Blvd (SR 216)
Rd 200
Millwood Dr
Rd 196
AM
PM

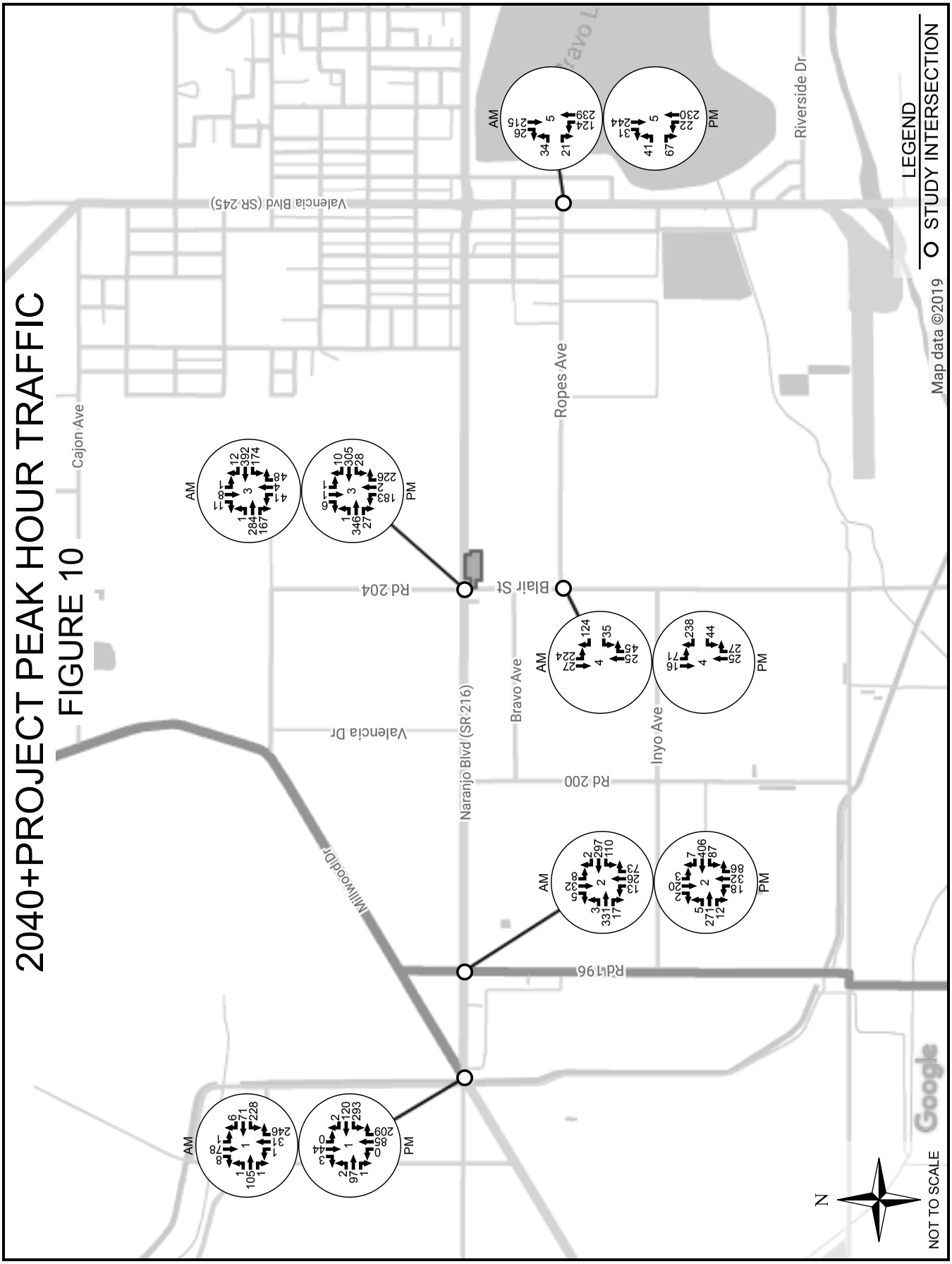

2019 PEAK HOUR TRAFFIC
FIGURE 5
LEGEND
STUDY INTERSECTION
Valencia Blvd (SR 245)
Riverside Dr
Ropes Ave
Cajon Ave
Rd 204
Blair St
Bravo Ave
Naranjo Blvd (SR 216)
Inyo Ave
Valencia Dr
Rd 200
Millwood Dr
Rd 196
AM
PM
N
NOT TO SCALE
Map data ©2019
Google


2019+PROJECT PEAK HOUR TRAFFIC
FIGURE 6
LEGEND
STUDY INTERSECTION
Map data ©2019
Google
NOT TO SCALE
N
Valencia Blvd (SR 245)
Riverside Dr
Ropes Ave
Cajon Ave
Rd 204
Blair St
Bravo Ave
Naranjo Blvd (SR 216)
Inyo Ave
Valencia Dr
Rd 200
Millwood Dr
Rd 196
AM
PM


2021 PEAK HOUR TRAFFIC
FIGURE 7
LEGEND
STUDY INTERSECTION
Valencia Blvd (SR 245)
Riverside Dr
Ropes Ave
Cajon Ave
Rd 204
Blair St
Bravo Ave
Naranjo Blvd (SR 216)
Inyo Ave
Valencia Dr
Rd 200
Millwood Dr
Rd 196
AM
PM
Map data ©2019
Google
N
NOT TO SCALE


2021+PROJECT PEAK HOUR TRAFFIC
FIGURE 8
LEGEND
STUDY INTERSECTION
Map data ©2019
Google
NOT TO SCALE
N
Valencia Blvd (SR 245)
Riverside Dr
Ropes Ave
Cajon Ave
Rd 204
Blair St
Bravo Ave
Naranjo Blvd (SR 216)
Inyo Ave
Valencia Dr
Rd 200
Millwood Dr
Rd 196
AM
PM


2040 PEAK HOUR TRAFFIC
FIGURE 9
LEGEND
STUDY INTERSECTION
Valencia Blvd (SR 245)
Riverside Dr
Ropes Ave
Cajon Ave
Rd 204
Blair St
Bravo Ave
Naranjo Blvd (SR 216)
Inyo Ave
Valencia Dr
Rd 200
Millwood Dr
Rd 196
AM
PM
Map data ©2019
Google
N
NOT TO SCALE


2040+PROJECT PEAK HOUR TRAFFIC
FIGURE 10
LEGEND
STUDY INTERSECTION
Valencia Blvd (SR 245)
Riverside Dr
Ropes Ave
Cajon Ave
Rd 204
Blair St
Bravo Ave
Naranjo Blvd (SR 216)
Inyo Ave
Valencia Dr
Rd 200
Millwood Dr
Rd 196
AM
PM
Map data ©2019
Google
N
NOT TO SCALE

INTERSECTION ANALYSIS

A capacity analysis of the study intersections was conducted using Synchro 9 software from Trafficware. This software utilizes the capacity analysis methodology in the Transportation Research Board's 2010 Highway Capacity Manual. The analysis was performed for the following AM and PM traffic scenarios:

- Existing (2019)
- Existing+Project (2019)
- Opening Year (2021)
- Opening Year+Project (2021)
- Future Cumulative (2040)
- Future Cumulative+Project (2040)

Criteria for intersection level of service (LOS) are shown in the tables below.

LEVEL OF SERVICE CRITERIA
UNSIGNALIZED INTERSECTION

Average Control Delay (sec/veh)	Level of Service	Expected Delay to Minor Street Traffic
≤ 10	A	Little or no delay
> 10 and ≤ 15	B	Short traffic delays
> 15 and ≤ 25	C	Average traffic delays
> 25 and ≤ 35	D	Long traffic delays
> 35 and ≤ 50	E	Very long traffic delays
> 50	F	Extreme delays

LEVEL OF SERVICE CRITERIA
SIGNALIZED INTERSECTIONS

Volume/Capacity	Control Delay (sec/veh)	Level of Service
< 0.60	≤ 10	A
0.61 - 0.70	> 10 and ≤ 20	B
0.71 - 0.80	> 20 and ≤ 35	C
0.81 - 0.90	> 35 and ≤ 55	D
0.91 - 1.00	> 55 and ≤ 80	E
> 1.0	> 80	F

According to the City of Woodlake Roads Department, the peak hour level of service shall be no lower than LOS "D" for urban areas and LOS "C" for rural areas. Levels of service for the study intersections are presented in Tables 5a and 5b. The intersection peak hour level of service goal for the study intersections is LOS C or better.

Table 3a
AM Intersection Level of Service

#	Intersection	Control Type	2019	2019+ Project	2021	2021+ Project	2040	2040+ Project	2040+ Project w/Mitigation[1]
1	Millwood Dr & Naranjo Blvd (SR 216)	AWSC	A	A	B	B	B	B	-
2	Rd 196 & Naranjo Blvd (SR 216)	NB SB	B C	B C	B C	C C	C C	C C	-
3	Rd 204 & Naranjo Blvd (SR 216)	NB SB	B B	C C	C C	C C	D (25.7) C	E (37.7) C	B
4	Rd 204 & Ropes Ave	WB	A	A	B	B	B	B	-
5	Valencia Blvd & Ropes Ave	EB	B	B	B	B	B	C	-

[1]See Table 7 for Mitigation Measures.

Table 3b
PM Intersection Level of Service

#	Intersection	Control Type	2019	2019+ Project	2021	2021+ Project	2040	2040+ Project	2040+ Project w/Mitigation[1]
1	Millwood Dr & Naranjo Blvd (SR 216)	AWSC	A	A	B	B	B	B	-
2	Rd 196 & Naranjo Blvd (SR 216)	NB SB	B B	B C	B C	C C	C C	C C	-
3	Rd 204 & Naranjo Blvd (SR 216)	NB SB	B B	C B	C B	F (54.3) B	D (26.8) B	F (91.0) B	C
4	Rd 204 & Ropes Ave	WB	A	A	B	B	B	B	-
5	Valencia Blvd & Ropes Ave	EB	B	B	B	B	B	B	-

[1]See Table 7 for Mitigation Measures.

TRAFFIC SIGNAL WARRANT ANALYSIS

Peak hour signal warrants were evaluated for each of the unsignalized intersections within the study area based on the California Manual on Uniform Traffic Control Devices (MUTCD). Peak hour signal warrants assess delay to traffic on the minor street approaches when entering or crossing a major street. Signal warrant analysis results for AM and PM peak hours are shown in Tables 4a through 4d.

It is important to note that a signal warrant defines the minimum condition under which signalization of an intersection might be warranted. Meeting this threshold does not suggest traffic signals are required, but rather, that other traffic factors and conditions be considered in order to determine whether signals are truly justified.

It is also noted that signal warrants do not necessarily correlate with level of service. An intersection may satisfy a signal warrant condition and operate at or above an acceptable level of service, or operate below an acceptable level of service and not meet signal warrant criteria.

Table 4a – Existing Scenario
AM Traffic Signal Warrant Analysis

		2019			2019+Project		
#	Intersection	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met
1	Millwood Dr at Naranjo Blvd	295	139	NO	309	188	NO
2	Rd 196 at Naranjo Blvd	491	88	NO	558	88	NO
3	Rd 204 at Naranjo Blvd	563	39	NO	648	57	NO
4	Rd 204 at Ropes Ave	84	37	NO	122	47	NO
5	Valencia Blvd at Ropes Ave	381	43	NO	477	47	NO

Table 4b – Future Scenarios
AM Traffic Signal Warrant Analysis

		2021			2021+Project			2040			2040+Project		
#	Intersection	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met
1	Millwood Dr at Naranjo Blvd	362	198	NO	376	247	NO	398	229	NO	412	278	YES
2	Rd 196 at Naranjo Blvd	620	103	NO	687	103	NO	693	112	NO	760	112	NO
3	Rd 204 at Naranjo Blvd	848	67	NO	933	85	NO	945	75	NO	1030	93	YES
4	Rd 204 at Ropes Ave	301	67	NO	305	152	NO	317	74	NO	321	159	NO
5	Valencia Blvd at Ropes Ave	438	47	NO	534	51	NO	508	51	NO	604	55	NO

Table 4c – Existing Scenario
PM Traffic Signal Warrant Analysis

		2019			2019+Project		
#	Intersection	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met
1	Millwood Dr at Naranjo Blvd	260	212	NO	321	230	NO
2	Rd 196 at Naranjo Blvd	457	121	NO	542	121	NO
3	Rd 204 at Naranjo Blvd	509	42	NO	521	189	NO
4	Rd 204 at Ropes Ave	63	30	NO	95	42	NO
5	Valencia Blvd at Ropes Ave	378	41	NO	428	73	NO

Table 4d – Future Scenarios
PM Traffic Signal Warrant Analysis

		2021			2021+Project			2040			2040+Project		
#	Intersection	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met	Major Street Total Approach Vol	Minor Street High Approach Vol	Warrant Met
1	Millwood Dr at Naranjo Blvd	421	235	NO	484	242	YES	452	287	YES	515	294	YES
2	Rd 196 at Naranjo Blvd	636	124	NO	721	124	NO	703	136	NO	788	136	YES
3	Rd 204 at Naranjo Blvd	619	257	YES	631	404	YES	705	264	YES	717	411	YES
4	Rd 204 at Ropes Ave	264	50	NO	276	82	NO	270	55	NO	282	87	NO
5	Valencia Blvd at Ropes Ave	408	72	NO	458	104	NO	477	76	NO	527	108	NO

ROADWAY ANALYSIS

The published ADT information and future projected traffic, as shown in Table 5, were used to calculate the volume-to-capacity ratios shown in Table 6.

A volume-to-capacity ratio (v/c) of greater than 0.80 corresponds to a LOS of D, as defined in the Highway Capacity Manual. Mitigation is required where project traffic reduces the LOS to below an acceptable level, or where the pre-existing condition of the roadway is below an acceptable level of service and degrades below the pre-existing LOS with the addition of the project.

Table 5
Roadway ADT & Capacity

Street	2019[1]	Project ADT	2021 ADT[2]	2021+ Project[2]	2040 ADT[2]	2040+ Project[2]	Existing Capacity
Naranjo Blvd (SR 216): Millwood Dr to Rd 196	4605[2]	506	4661	5167	5229	5735	15000
Naranjo Blvd (SR 216): Rd 196 to Road 204/Blair Rd	6197[2]	614	6295	6909	7313	7927	15000
Naranjo Blvd (SR 216): Rd 204/Blair Rd to Valencia Blvd (SR 245)	5388[2]	535	5478	6013	6411	6946	15000
Ropes Ave: Blair Rd to Mulberry St	590	318	595	913	649	967	15000
Ropes Ave: Mulberry St to Valencia Blvd (SR 245)	710	318	717	1035	783	1101	15000
Blair Rd: Ropes Ave to Naranjo Blvd (SR 216)	550	1380	559	1939	657	2037	15000
Valencia Blvd (SR 245): Ropes Ave to Naranjo Blvd (SR 216)	6822[2]	275	6946	7221	8242	8517	15000

[1]2019 Data not available. Data grown out from pervious year available year.

Table 6
Roadway Level of Service

Street	v/c(Ex) 2019	v/c 2019+Proj	v/c 2021	v/c 2021+Proj	v/c 2040	v/c 2040+Proj
Naranjo Blvd (SR 216): Millwood Dr to Rd 196	0.31	0.34	0.31	0.34	0.35	0.38
Naranjo Blvd (SR 216): Rd 196 to Road 204/Blair Rd	0.41	0.45	0.42	0.46	0.49	0.53
Naranjo Blvd (SR 216): Rd 204/Blair Rd to Valencia Blvd (SR 245)	0.36	0.39	0.37	0.40	0.43	0.46
Ropes Ave: Blair Rd to Mulberry St	0.04	0.06	0.04	0.06	0.04	0.06
Ropes Ave: Mulberry St to Valencia Blvd (SR 245)	0.05	0.07	0.05	0.07	0.05	0.07
Blair Rd: Ropes Ave to Naranjo Blvd (SR 216)	0.04	0.13	0.04	0.13	0.04	0.14
Valencia Blvd (SR 245): Ropes Ave to Naranjo Blvd (SR 216)	0.45	0.47	0.46	0.48	0.55	0.57

NOTE: Cumulative traffic from other projects included in all future volumes.

VEHICLE MILES TRAVELED (VMT) EVALUATION

In accordance with the California Environmental Quality Act (CEQA), an evaluation of the average vehicle miles traveled (VMT) for the project's traffic was conducted.

VMT data was obtained from the Tulare County Association of Governments (TCAG) in order to establish a baseline for daily vehicle miles traveled in the Woodlake area. The data provided by TCAG data is estimated based on Select Zone Analysis conducted for the region for establishing traffic models of existing and future land development projects. Based on household and employment populations in the Woodlake area, as well as travel patterns throughout the region, TCAG data has established the regional average VMT per inbound and outbound trip to be 15.21 miles and 15.31 miles, respectively.

In order to establish the anticipated VMT profile for the proposed light industrial project, an investigation into the employee trips was conducted. The primary factor involved in this evaluation is the location of the project site in relation to the surrounding population centers. The City anticipates a significant amount of traffic will travel between Woodlake and surrounding cities.

Based on the information gathered and the project traffic distribution, 39% of the employees will be traveling from within Woodlake city limits while 43% of employees are anticipated to be traveling from Visalia, Tulare and Hanford and 17% of the employees are anticipated to be traveling from Exeter, Lindsay, and Porterville.

The average trip length for employees traveling from surrounding cities was determined to be approximately 20.77 miles. The average trip length for employees traveling from Woodlake was determined to be approximately 1.50 miles. The combined average trip length for all employees resulted in an average trip length of 13.19 miles.

Based on CEQA Guideline Section 15064.3 subdivision (b), the project would create a less-than-significant transportation impact, because the project's VMT is less than the regional average. As previously mentioned, the regional average VMT for inbound and outbound trips as established by TCAG is 15.21 miles and 15.31 miles, respectively. The project's average VMT is anticipated to bring down the regional average, and therefore will not cause a significant transportation impact.

MITIGATION

Intersection improvements needed by the year 2040 to maintain or improve the operational level of service of the street system in the vicinity of the project is shown in Table 7.

Table 7
Future Intersection Improvements and Local Mitigation

#	Intersection	Total Improvements Required by 2040	Project % Share for Local Mitigation
3	Rd 204 F& Naranjo Blvd (SR 216)	Add Signal	31.49%

SUMMARY

This study evaluated the potential traffic impacts of a proposed light industrial complex on the southeast corner of Road 204 and State Route 216 in the City of Woodlake.

Intersection Analysis

All intersections operate with an acceptable level of service during peak hours in the existing year with the addition of project traffic.

In the opening year (2021), all intersections are anticipated to operate at an acceptable level of service. With the addition of project traffic, the intersection Road 204 and Naranjo Boulevard (SR 216) is anticipated to operate below an acceptable level of service.

All remaining intersections with an acceptable level of service are anticipated to do so in 2040 prior to, and with the addition of project traffic.

Roadway Analysis

All roadways within the project scope currently operate at acceptable levels of service and are expected to continue to do so with the addition of project traffic through the future year.

Vehicle Miles Traveled Evaluation

The average vehicle miles traveled (VMT) is lower than the regional VMT, therefore there are no impacts.

Conclusion

Based on the City of Woodlake's standards for determining whether project traffic has a significant impact on intersections and roadways, the mitigation measures identified in Table 7 are anticipated to be needed in order to reduce the impacts for the listed facilities to less-than-significant levels in the year 2040.

REFERENCES

1. Annual Traffic Census, Kern COG
2. City of Woodlake General Plan, 2014.
3. Highway Capacity Manual, Special Report 209, Transportation Research Board
4. California Manual on Uniform Traffic Control Devices for Streets and Highways, 2014 Edition, Federal Highway Administration (FHA)
5. Trip Generation, 10th Edition, Institute of Transportation Engineers (ITE)

APPENDIX

TRIP GENERATION 524-09
Cumulative Projects

General Information			Daily Trips		AM Peak Hour Trips			PM Peak Hour Trips		
ITE Code	Development Type	Variable	ADT RATE	ADT	Rate	In % Split/ Trips	Out % Split/ Trips	Rate	In % Split/ Trips	Out % Split/ Trips
934	Fast-Food Restaurant w/Drive-Thru	2.175 1000 sq ft GFA	470.95	1024	40.19	51% 45	49% 43	32.67	52% 37	48% 34
941	Quick Lubrication Vehicle Shop	3 1000 sq ft GFA	69.57	209	5.8	75% 13	25% 4	8.7	42% 11	58% 15
820	Shopping Center	5.294 1000 sq ft GLA	eq	815	eq	62% 96	38% 59	eq	48% 30	52% 32
945	Gasoline/Service Station with Convenience Market	8 Vehicle fueling positions	eq	987	eq	51% 28	49% 27	13.99	51% 57	49% 55
sub-total				3,035		182	133		135	136
Adjustments										
Capture		5%		152		9	7		7	7
Pass-by		15%		455		27	20		20	20
Total				2,428		146	106		108	109

Intersection 1
Millwood Dr & Naranjo Blvd

Intersection	
Intersection Delay, s/veh	9.2
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Traffic Vol, veh/h	0	1	47	1	0	188	53	5	0	1	25	113	0	1	62	6
Future Vol, veh/h	0	1	47	1	0	188	53	5	0	1	25	113	0	1	62	6
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	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1	51	1	0	204	58	5	0	1	27	123	0	1	67	7
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.2	10.1	8.3	8.4
HCM LOS	A	B	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	1%	2%	76%	1%
Vol Thru, %	18%	96%	22%	90%
Vol Right, %	81%	2%	2%	9%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	139	49	246	69
LT Vol	1	1	188	1
Through Vol	25	47	53	62
RT Vol	113	1	5	6
Lane Flow Rate	151	53	267	75
Geometry Grp	1	1	1	1
Degree of Util (X)	0.181	0.07	0.345	0.101
Departure Headway (Hd)	4.314	4.757	4.648	4.832
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	831	750	773	740
Service Time	2.345	2.802	2.684	2.869
HCM Lane V/C Ratio	0.182	0.071	0.345	0.101
HCM Control Delay	8.3	8.2	10.1	8.4
HCM Lane LOS	A	A	B	A
HCM 95th-tile Q	0.7	0.2	1.5	0.3

Intersection	
Intersection Delay, s/veh	9.5
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Traffic Vol, veh/h	0	1	54	1	0	194	54	5	0	1	25	162	0	1	62	6
Future Vol, veh/h	0	1	54	1	0	194	54	5	0	1	25	162	0	1	62	6
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	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1	59	1	0	211	59	5	0	1	27	176	0	1	67	7
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.4	10.6	8.8	8.6
HCM LOS	A	B	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	1%	2%	77%	1%
Vol Thru, %	13%	96%	21%	90%
Vol Right, %	86%	2%	2%	9%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	188	56	253	69
LT Vol	1	1	194	1
Through Vol	25	54	54	62
RT Vol	162	1	5	6
Lane Flow Rate	204	61	275	75
Geometry Grp	1	1	1	1
Degree of Util (X)	0.246	0.083	0.365	0.103
Departure Headway (Hd)	4.339	4.903	4.78	4.949
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	826	726	751	721
Service Time	2.38	2.962	2.827	3.002
HCM Lane V/C Ratio	0.247	0.084	0.366	0.104
HCM Control Delay	8.8	8.4	10.6	8.6
HCM Lane LOS	A	A	B	A
HCM 95th-tile Q	1	0.3	1.7	0.3

Intersection	
Intersection Delay, s/veh	9.9
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Traffic Vol, veh/h	0	1	93	1	0	198	64	5	0	1	26	171	0	1	63	6
Future Vol, veh/h	0	1	93	1	0	198	64	5	0	1	26	171	0	1	63	6
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	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1	101	1	0	215	70	5	0	1	28	186	0	1	68	7
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.9	11.1	9.2	8.8
HCM LOS	A	B	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	1%	1%	74%	1%
Vol Thru, %	13%	98%	24%	90%
Vol Right, %	86%	1%	2%	9%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	198	95	267	70
LT Vol	1	1	198	1
Through Vol	26	93	64	63
RT Vol	171	1	5	6
Lane Flow Rate	215	103	290	76
Geometry Grp	1	1	1	1
Degree of Util (X)	0.268	0.143	0.393	0.108
Departure Headway (Hd)	4.487	4.974	4.872	5.124
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	796	715	734	694
Service Time	2.545	3.05	2.936	3.197
HCM Lane V/C Ratio	0.27	0.144	0.395	0.11
HCM Control Delay	9.2	8.9	11.1	8.8
HCM Lane LOS	A	A	B	A
HCM 95th-tile Q	1.1	0.5	1.9	0.4

Intersection	
Intersection Delay, s/veh	10.4
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Traffic Vol, veh/h	0	1	100	1	0	204	65	5	0	1	26	220	0	1	63	6
Future Vol, veh/h	0	1	100	1	0	204	65	5	0	1	26	220	0	1	63	6
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	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1	109	1	0	222	71	5	0	1	28	239	0	1	68	7
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9.2	11.7	9.9	9
HCM LOS	A	B	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	1%	74%	1%
Vol Thru, %	11%	98%	24%	90%
Vol Right, %	89%	1%	2%	9%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	247	102	274	70
LT Vol	1	1	204	1
Through Vol	26	100	65	63
RT Vol	220	1	5	6
Lane Flow Rate	268	111	298	76
Geometry Grp	1	1	1	1
Degree of Util (X)	0.338	0.158	0.415	0.111
Departure Headway (Hd)	4.53	5.127	5.012	5.254
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	787	691	712	674
Service Time	2.6	3.226	3.096	3.35
HCM Lane V/C Ratio	0.341	0.161	0.419	0.113
HCM Control Delay	9.9	9.2	11.7	9
HCM Lane LOS	A	A	B	A
HCM 95th-tile Q	1.5	0.6	2	0.4

Intersection	
Intersection Delay, s/veh	10.7
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Traffic Vol, veh/h	0	1	98	1	0	222	70	6	0	1	31	197	0	1	78	8
Future Vol, veh/h	0	1	98	1	0	222	70	6	0	1	31	197	0	1	78	8
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	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1	107	1	0	241	76	7	0	1	34	214	0	1	85	9
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9.3	12.3	9.9	9.3
HCM LOS	A	B	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	1%	74%	1%
Vol Thru, %	14%	98%	23%	90%
Vol Right, %	86%	1%	2%	9%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	229	100	298	87
LT Vol	1	1	222	1
Through Vol	31	98	70	78
RT Vol	197	1	6	8
Lane Flow Rate	249	109	324	95
Geometry Grp	1	1	1	1
Degree of Util (X)	0.321	0.16	0.452	0.142
Departure Headway (Hd)	4.639	5.288	5.022	5.398
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	764	682	709	668
Service Time	2.728	3.294	3.121	3.406
HCM Lane V/C Ratio	0.326	0.16	0.457	0.142
HCM Control Delay	9.9	9.3	12.3	9.3
HCM Lane LOS	A	A	B	A
HCM 95th-tile Q	1.4	0.6	2.4	0.5

Intersection	
Intersection Delay, s/veh	11.5
Intersection LOS	B

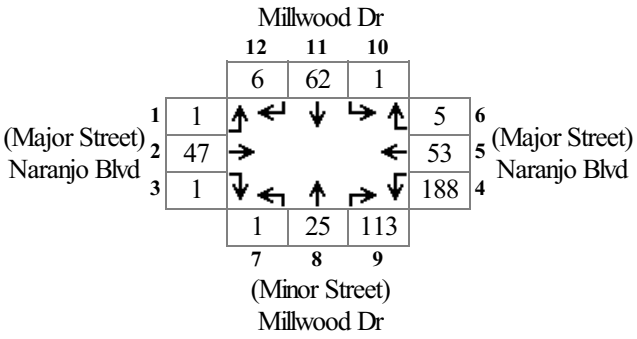
Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Traffic Vol, veh/h	0	1	105	1	0	228	71	6	0	1	31	246	0	1	78	8
Future Vol, veh/h	0	1	105	1	0	228	71	6	0	1	31	246	0	1	78	8
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	1	114	1	0	248	77	7	0	1	34	267	0	1	85	9
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9.7	13.2	10.9	9.5
HCM LOS	A	B	B	A

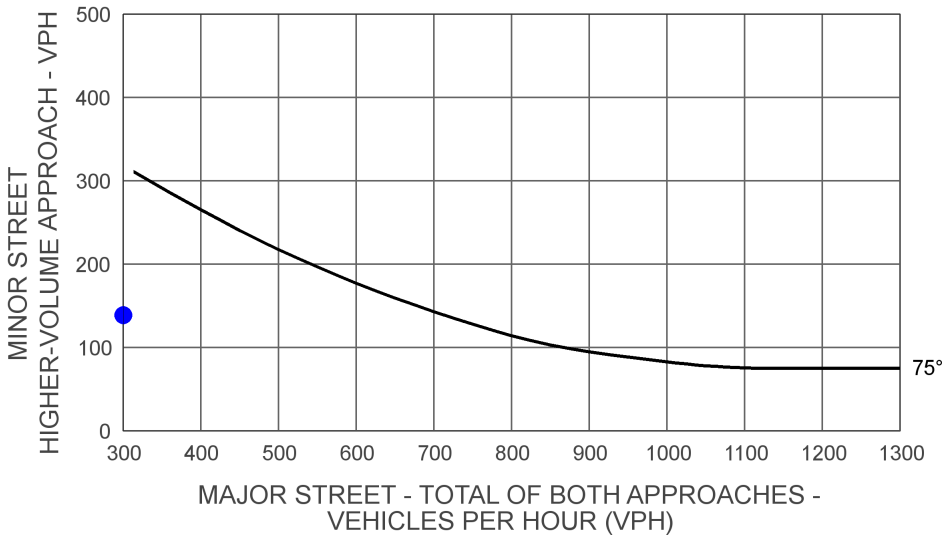
Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	1%	75%	1%
Vol Thru, %	11%	98%	23%	90%
Vol Right, %	88%	1%	2%	9%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	278	107	305	87
LT Vol	1	1	228	1
Through Vol	31	105	71	78
RT Vol	246	1	6	8
Lane Flow Rate	302	116	332	95
Geometry Grp	1	1	1	1
Degree of Util (X)	0.393	0.177	0.486	0.146
Departure Headway (Hd)	4.813	5.476	5.278	5.564
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	752	657	686	645
Service Time	2.813	3.493	3.289	3.594
HCM Lane V/C Ratio	0.402	0.177	0.484	0.147
HCM Control Delay	10.9	9.7	13.2	9.5
HCM Lane LOS	B	A	B	A
HCM 95th-tile Q	1.9	0.6	2.7	0.5

Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Existing
Intersection #: 1

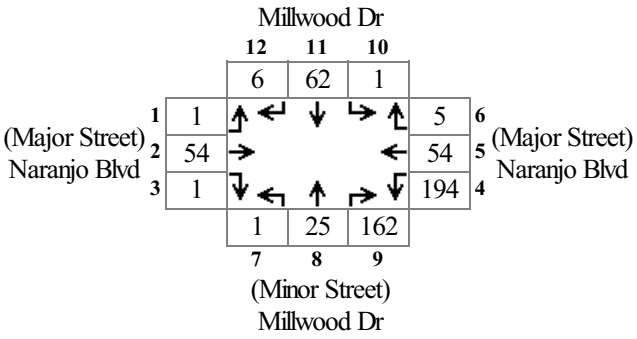


Major Total: 295
Minor High Volume: 139

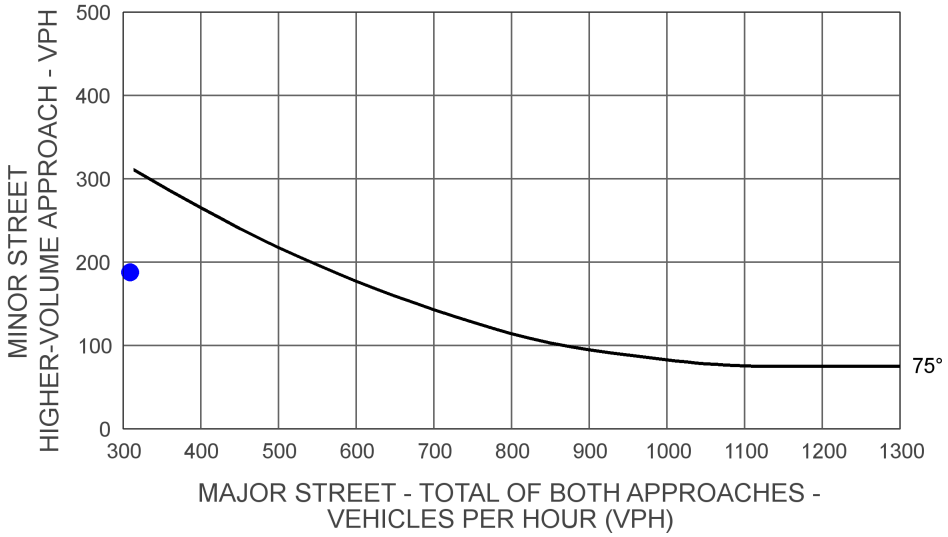


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Existing+Project
Intersection #: 1

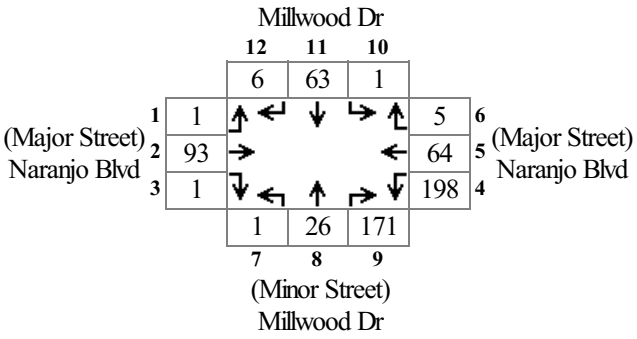


Major Total: 309
Minor High Volume: 188

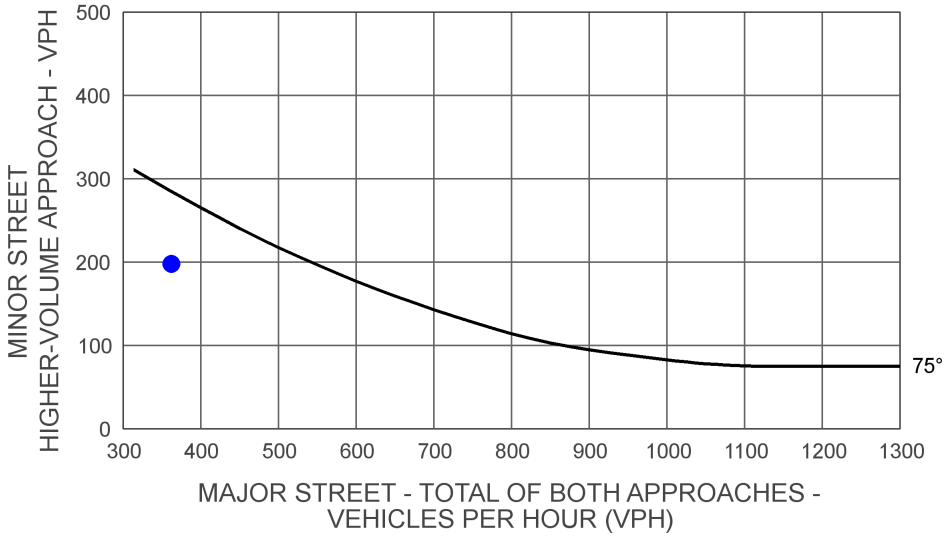


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Future
Intersection #: 1

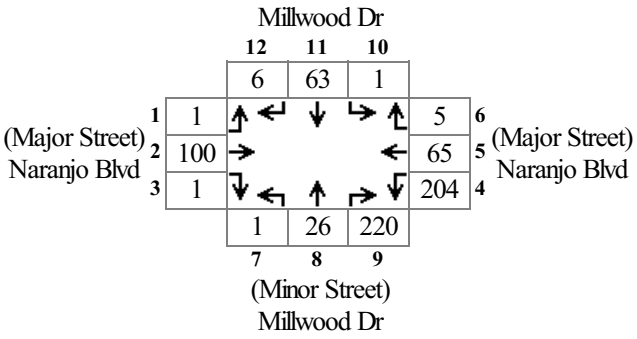


Major Total: 362
Minor High Volume: 198

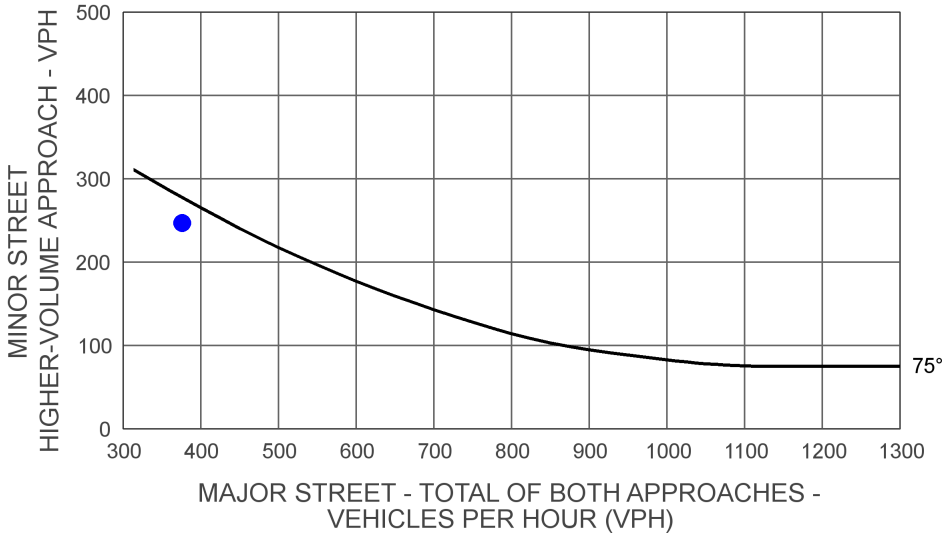


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Future+Project
Intersection #: 1

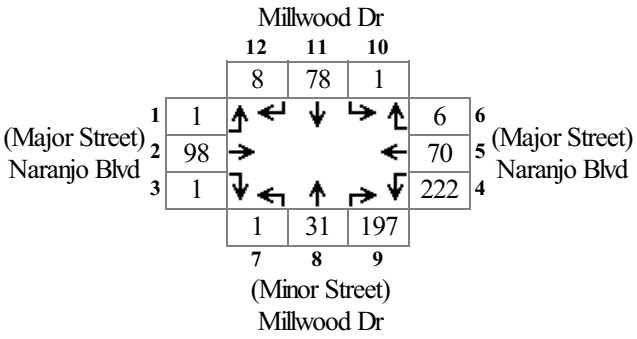


Major Total: 376
Minor High Volume: 247

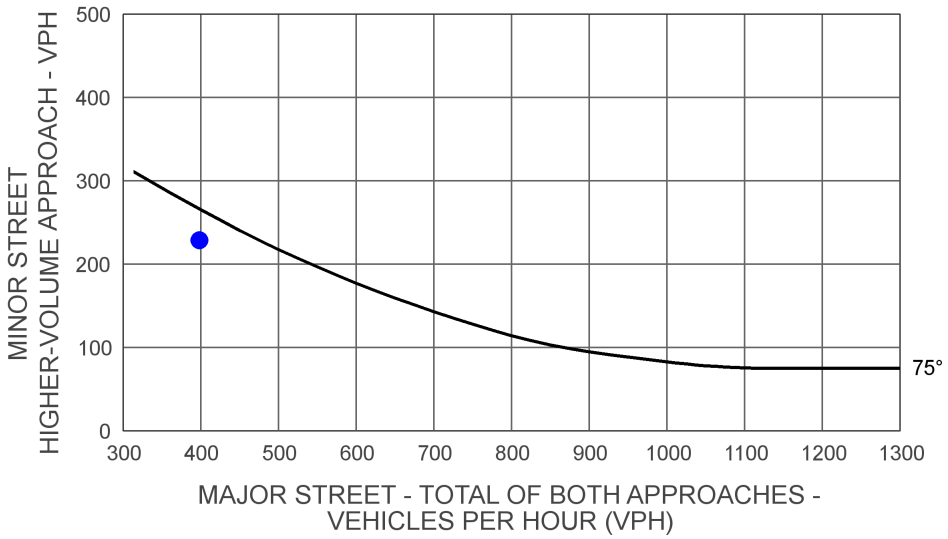


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Future
Intersection #: 1

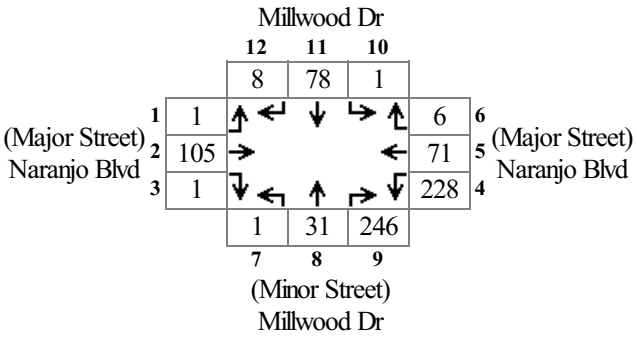


Major Total: 398
Minor High Volume: 229

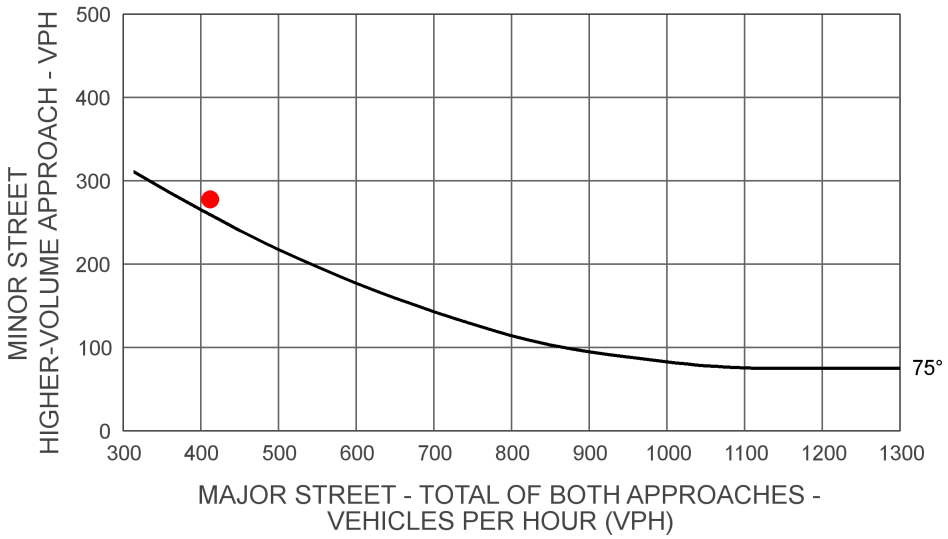


Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: AM Future+Project
Intersection #: 1



Major Total: 412
Minor High Volume: 278



Intersection	
Intersection Delay, s/veh	9.2
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Traffic Vol, veh/h	0	2	43	1	0	158	52	2	0	0	68	155	0	0	35	2
Future Vol, veh/h	0	2	43	1	0	158	52	2	0	0	68	155	0	0	35	2
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	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	2	47	1	0	172	57	2	0	0	74	168	0	0	38	2
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.2	9.9	9	8.2
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	4%	75%	0%
Vol Thru, %	30%	93%	25%	95%
Vol Right, %	70%	2%	1%	5%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	223	46	212	37
LT Vol	0	2	158	0
Through Vol	68	43	52	35
RT Vol	155	1	2	2
Lane Flow Rate	242	50	230	40
Geometry Grp	1	1	1	1
Degree of Util (X)	0.287	0.067	0.305	0.054
Departure Headway (Hd)	4.256	4.842	4.763	4.865
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	844	737	754	734
Service Time	2.284	2.891	2.803	2.908
HCM Lane V/C Ratio	0.287	0.068	0.305	0.054
HCM Control Delay	9	8.2	9.9	8.2
HCM Lane LOS	A	A	A	A
HCM 95th-tile Q	1.2	0.2	1.3	0.2

Intersection	
Intersection Delay, s/veh	10
Intersection LOS	A

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Traffic Vol, veh/h	0	2	44	1	0	210	62	2	0	0	68	162	0	0	35	2
Future Vol, veh/h	0	2	44	1	0	210	62	2	0	0	68	162	0	0	35	2
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	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	2	48	1	0	228	67	2	0	0	74	176	0	0	38	2
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	8.4	11	9.4	8.4
HCM LOS	A	B	A	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	4%	77%	0%
Vol Thru, %	30%	94%	23%	95%
Vol Right, %	70%	2%	1%	5%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	230	47	274	37
LT Vol	0	2	210	0
Through Vol	68	44	62	35
RT Vol	162	1	2	2
Lane Flow Rate	250	51	298	40
Geometry Grp	1	1	1	1
Degree of Util (X)	0.307	0.071	0.398	0.057
Departure Headway (Hd)	4.427	4.969	4.808	5.067
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	810	716	745	703
Service Time	2.468	3.033	2.857	3.128
HCM Lane V/C Ratio	0.309	0.071	0.4	0.057
HCM Control Delay	9.4	8.4	11	8.4
HCM Lane LOS	A	A	B	A
HCM 95th-tile Q	1.3	0.2	1.9	0.2

Intersection	
Intersection Delay, s/veh	11.1
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Traffic Vol, veh/h	0	2	91	1	0	221	104	2	0	0	69	166	0	0	36	2
Future Vol, veh/h	0	2	91	1	0	221	104	2	0	0	69	166	0	0	36	2
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	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	2	99	1	0	240	113	2	0	0	75	180	0	0	39	2
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9.1	12.6	10.1	8.8
HCM LOS	A	B	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	2%	68%	0%
Vol Thru, %	29%	97%	32%	95%
Vol Right, %	71%	1%	1%	5%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	235	94	327	38
LT Vol	0	2	221	0
Through Vol	69	91	104	36
RT Vol	166	1	2	2
Lane Flow Rate	255	102	355	41
Geometry Grp	1	1	1	1
Degree of Util (X)	0.333	0.145	0.484	0.062
Departure Headway (Hd)	4.696	5.096	4.902	5.381
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	759	696	729	658
Service Time	2.763	3.188	2.975	3.478
HCM Lane V/C Ratio	0.336	0.147	0.487	0.062
HCM Control Delay	10.1	9.1	12.6	8.8
HCM Lane LOS	B	A	B	A
HCM 95th-tile Q	1.5	0.5	2.7	0.2

Intersection	
Intersection Delay, s/veh	12.5
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Traffic Vol, veh/h	0	2	92	1	0	273	114	2	0	0	69	173	0	0	36	2
Future Vol, veh/h	0	2	92	1	0	273	114	2	0	0	69	173	0	0	36	2
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	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	2	100	1	0	297	124	2	0	0	75	188	0	0	39	2
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9.3	14.8	10.7	9.1
HCM LOS	A	B	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	2%	70%	0%
Vol Thru, %	29%	97%	29%	95%
Vol Right, %	71%	1%	1%	5%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	242	95	389	38
LT Vol	0	2	273	0
Through Vol	69	92	114	36
RT Vol	173	1	2	2
Lane Flow Rate	263	103	423	41
Geometry Grp	1	1	1	1
Degree of Util (X)	0.356	0.153	0.581	0.066
Departure Headway (Hd)	4.866	5.343	4.949	5.715
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	729	675	719	630
Service Time	2.959	3.347	3.043	3.721
HCM Lane V/C Ratio	0.361	0.153	0.588	0.065
HCM Control Delay	10.7	9.3	14.8	9.1
HCM Lane LOS	B	A	B	A
HCM 95th-tile Q	1.6	0.5	3.8	0.2

Intersection	
Intersection Delay, s/veh	12.4
Intersection LOS	B

Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Traffic Vol, veh/h	0	2	96	1	0	241	110	2	0	0	85	202	0	0	44	3
Future Vol, veh/h	0	2	96	1	0	241	110	2	0	0	85	202	0	0	44	3
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	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	2	104	1	0	262	120	2	0	0	92	220	0	0	48	3
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9.6	14.4	11.5	9.3
HCM LOS	A	B	B	A

Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	2%	68%	0%
Vol Thru, %	30%	97%	31%	94%
Vol Right, %	70%	1%	1%	6%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	287	99	353	47
LT Vol	0	2	241	0
Through Vol	85	96	110	44
RT Vol	202	1	2	3
Lane Flow Rate	312	108	384	51
Geometry Grp	1	1	1	1
Degree of Util (X)	0.418	0.164	0.553	0.081
Departure Headway (Hd)	4.949	5.47	5.193	5.723
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	733	657	698	626
Service Time	2.949	3.486	3.201	3.754
HCM Lane V/C Ratio	0.426	0.164	0.55	0.081
HCM Control Delay	11.5	9.6	14.4	9.3
HCM Lane LOS	B	A	B	A
HCM 95th-tile Q	2.1	0.6	3.4	0.3

Intersection	
Intersection Delay, s/veh	14.6
Intersection LOS	B

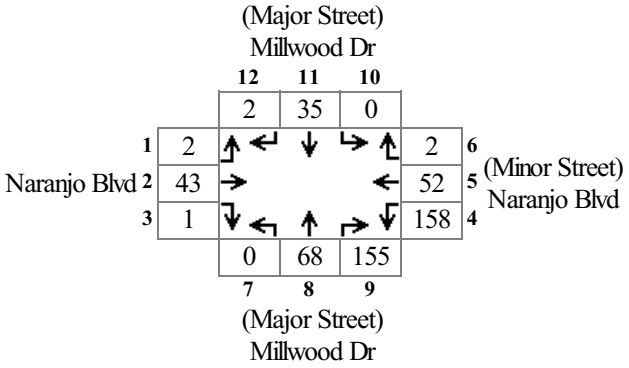
Movement	EBU	EBL	EBT	EBR	WBU	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBU	SBL	SBT	SBR
Traffic Vol, veh/h	0	2	97	1	0	293	120	2	0	0	85	209	0	0	44	3
Future Vol, veh/h	0	2	97	1	0	293	120	2	0	0	85	209	0	0	44	3
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	2	105	1	0	318	130	2	0	0	92	227	0	0	48	3
Number of Lanes	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	1	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	1	1	1
HCM Control Delay	9.9	17.9	12.4	9.6
HCM LOS	A	C	B	A

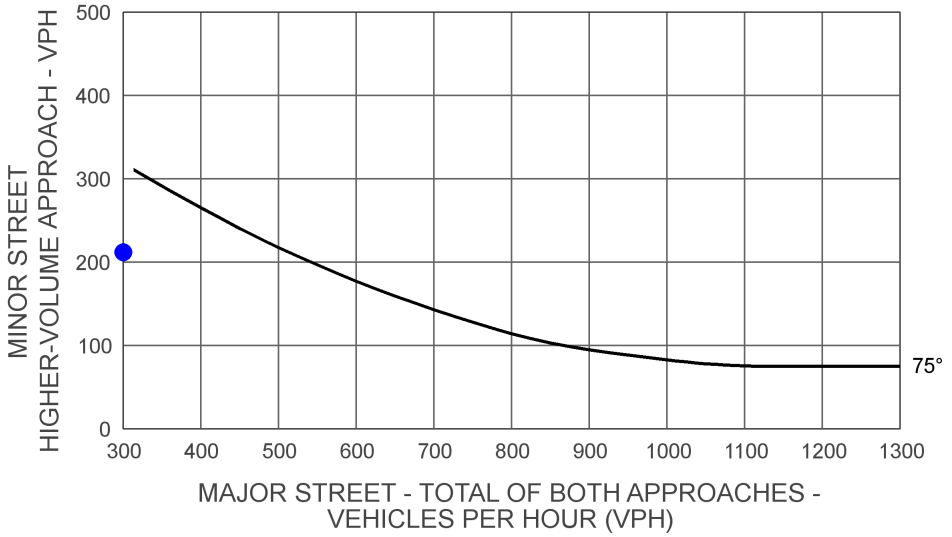
Lane	NBLn1	EBLn1	WBLn1	SBLn1
Vol Left, %	0%	2%	71%	0%
Vol Thru, %	29%	97%	29%	94%
Vol Right, %	71%	1%	0%	6%
Sign Control	Stop	Stop	Stop	Stop
Traffic Vol by Lane	294	100	415	47
LT Vol	0	2	293	0
Through Vol	85	97	120	44
RT Vol	209	1	2	3
Lane Flow Rate	320	109	451	51
Geometry Grp	1	1	1	1
Degree of Util (X)	0.455	0.17	0.659	0.085
Departure Headway (Hd)	5.121	5.645	5.262	5.982
Convergence, Y/N	Yes	Yes	Yes	Yes
Cap	703	634	686	597
Service Time	3.16	3.693	3.294	4.036
HCM Lane V/C Ratio	0.455	0.172	0.657	0.085
HCM Control Delay	12.4	9.9	17.9	9.6
HCM Lane LOS	B	A	C	A
HCM 95th-tile Q	2.4	0.6	5	0.3

Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Existing
Intersection #: 1

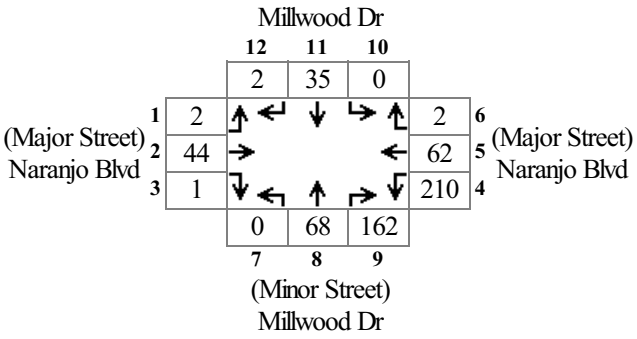


Major Total: 260
Minor High Volume: 212

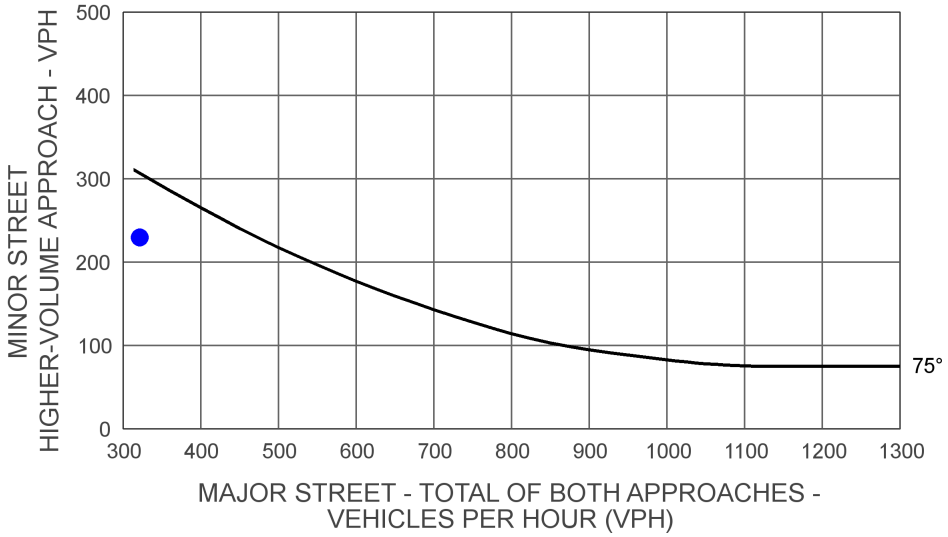


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Existing+Project
Intersection #: 1

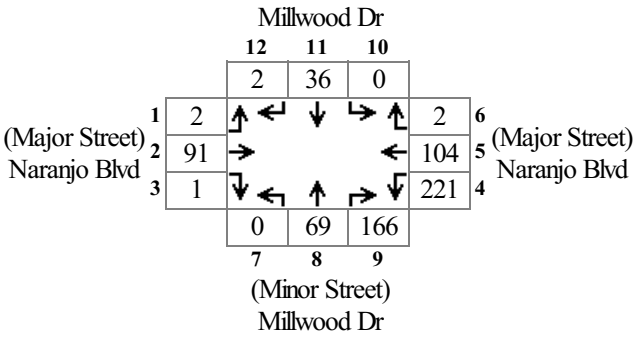


Major Total: 321
Minor High Volume: 230

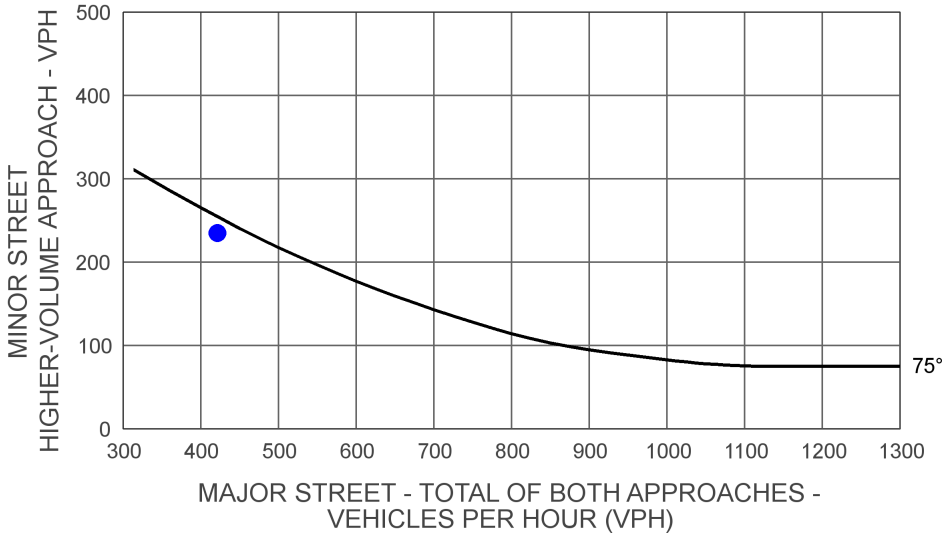


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Future
Intersection #: 1

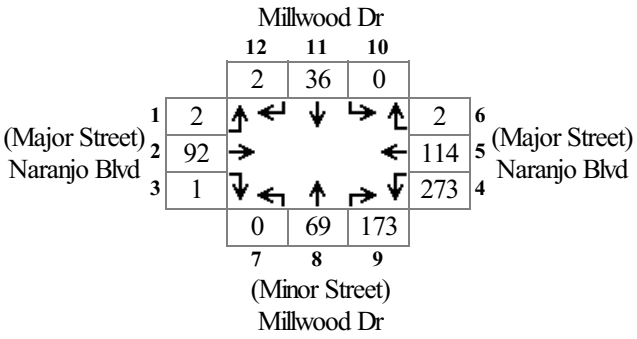


Major Total: 421
Minor High Volume: 235

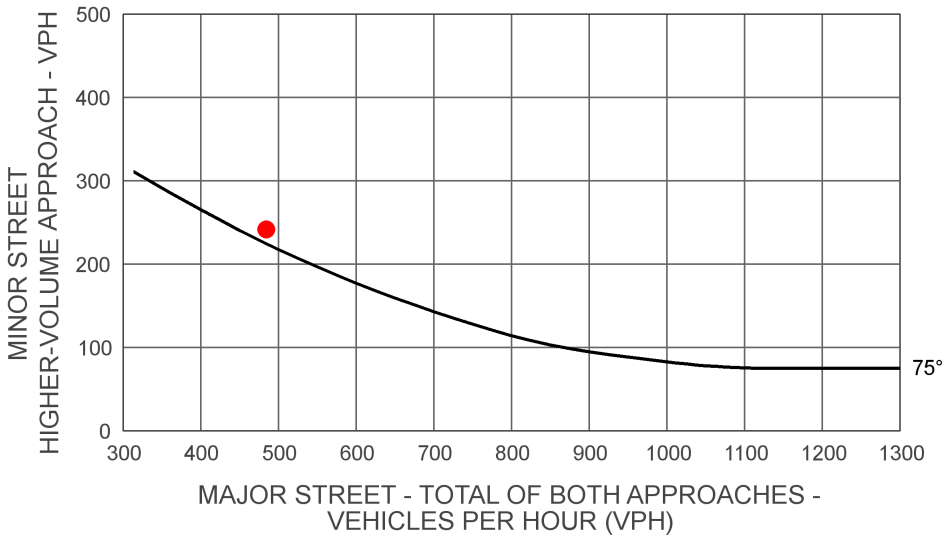


Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: PM Future+Project
Intersection #: 1

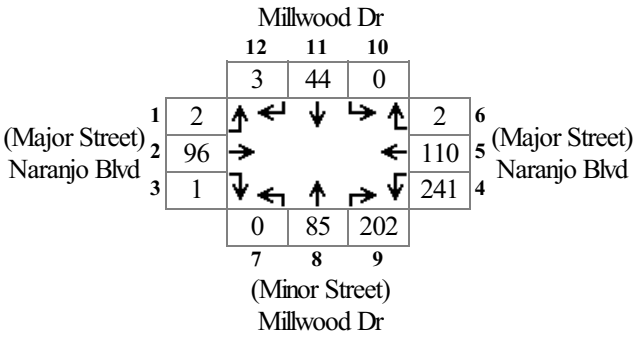


Major Total: 484
Minor High Volume: 242

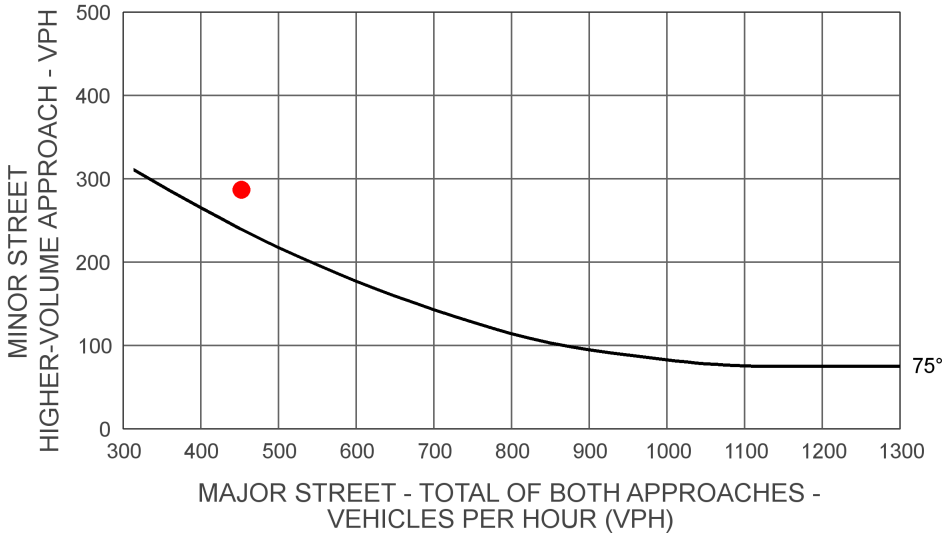


Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: PM Future
Intersection #: 1

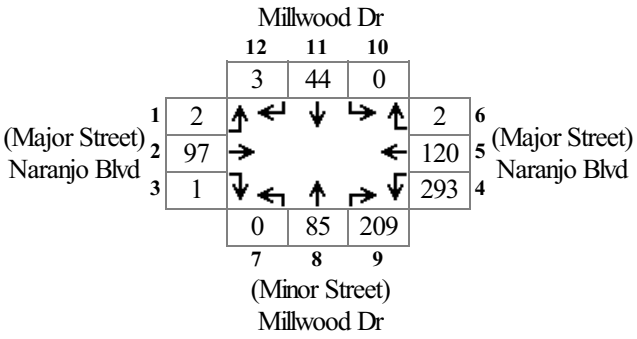


Major Total: 452
Minor High Volume: 287

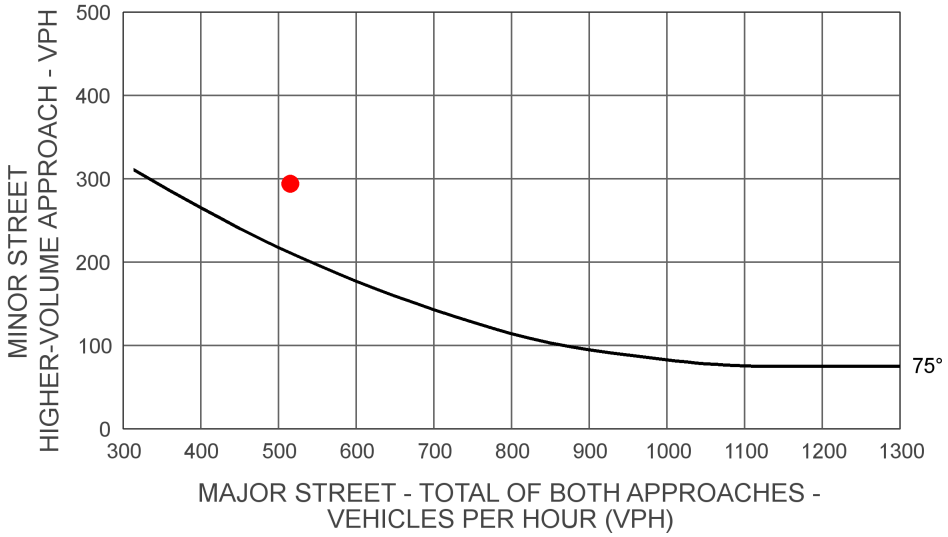


Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: PM Future+Project
Intersection #: 1



Major Total: 515
Minor High Volume: 294



Intersection 2
Rd 196 & Naranjo Blvd

Intersection	
Int Delay, s/veh	3.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	3	149	15	90	233	1	12	23	53	1	29	4
Future Vol, veh/h	3	149	15	90	233	1	12	23	53	1	29	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	162	16	98	253	1	13	25	58	1	32	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	254	0	0	178	0	0	644	627	170	667	634	254
Stage 1	-	-	-	-	-	-	177	177	-	449	449	-
Stage 2	-	-	-	-	-	-	467	450	-	218	185	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1311	-	-	1398	-	-	386	400	874	372	397	785
Stage 1	-	-	-	-	-	-	825	753	-	589	572	-
Stage 2	-	-	-	-	-	-	576	572	-	784	747	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1311	-	-	1398	-	-	335	366	874	308	363	785
Mov Cap-2 Maneuver	-	-	-	-	-	-	335	366	-	308	363	-
Stage 1	-	-	-	-	-	-	823	751	-	587	525	-
Stage 2	-	-	-	-	-	-	494	525	-	706	745	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	2.2	12.9	15.3
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	552	1311	-	-	1398	-	-	385
HCM Lane V/C Ratio	0.173	0.002	-	-	0.07	-	-	0.096
HCM Control Delay (s)	12.9	7.8	0	-	7.8	0	-	15.3
HCM Lane LOS	B	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.6	0	-	-	0.2	-	-	0.3

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	3	206	15	92	241	1	12	23	53	1	29	4
Future Vol, veh/h	3	206	15	92	241	1	12	23	53	1	29	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	224	16	100	262	1	13	25	58	1	32	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	263	0	0	240	0	0	719	702	232	743	710	263
Stage 1	-	-	-	-	-	-	239	239	-	463	463	-
Stage 2	-	-	-	-	-	-	480	463	-	280	247	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1301	-	-	1327	-	-	344	362	807	331	359	776
Stage 1	-	-	-	-	-	-	764	708	-	579	564	-
Stage 2	-	-	-	-	-	-	567	564	-	727	702	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1301	-	-	1327	-	-	295	329	807	270	326	776
Mov Cap-2 Maneuver	-	-	-	-	-	-	295	329	-	270	326	-
Stage 1	-	-	-	-	-	-	762	706	-	577	514	-
Stage 2	-	-	-	-	-	-	483	514	-	649	700	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	2.2	13.9	16.6
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	499	1301	-	-	1327	-	-	348
HCM Lane V/C Ratio	0.192	0.003	-	-	0.075	-	-	0.106
HCM Control Delay (s)	13.9	7.8	0	-	7.9	0	-	16.6
HCM Lane LOS	B	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.7	0	-	-	0.2	-	-	0.4

Intersection	
Int Delay, s/veh	4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	3	256	15	93	251	2	12	23	68	8	29	4
Future Vol, veh/h	3	256	15	93	251	2	12	23	68	8	29	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	278	16	101	273	2	13	25	74	9	32	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	275	0	0	295	0	0	787	770	286	818	777	274
Stage 1	-	-	-	-	-	-	293	293	-	476	476	-
Stage 2	-	-	-	-	-	-	494	477	-	342	301	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1288	-	-	1266	-	-	309	331	753	295	328	765
Stage 1	-	-	-	-	-	-	715	670	-	570	557	-
Stage 2	-	-	-	-	-	-	557	556	-	673	665	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1288	-	-	1266	-	-	262	299	753	231	296	765
Mov Cap-2 Maneuver	-	-	-	-	-	-	262	299	-	231	296	-
Stage 1	-	-	-	-	-	-	713	668	-	568	505	-
Stage 2	-	-	-	-	-	-	470	504	-	582	663	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	2.2	14.7	19.2
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	483	1288	-	-	1266	-	-	297
HCM Lane V/C Ratio	0.232	0.003	-	-	0.08	-	-	0.15
HCM Control Delay (s)	14.7	7.8	0	-	8.1	0	-	19.2
HCM Lane LOS	B	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.9	0	-	-	0.3	-	-	0.5

Intersection	
Int Delay, s/veh	4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	3	313	15	95	259	2	12	23	68	8	29	4
Future Vol, veh/h	3	313	15	95	259	2	12	23	68	8	29	4
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	340	16	103	282	2	13	25	74	9	32	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	284	0	0	357	0	0	862	845	348	893	852	283
Stage 1	-	-	-	-	-	-	355	355	-	489	489	-
Stage 2	-	-	-	-	-	-	507	490	-	404	363	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1278	-	-	1202	-	-	275	300	695	262	297	756
Stage 1	-	-	-	-	-	-	662	630	-	561	549	-
Stage 2	-	-	-	-	-	-	548	549	-	623	625	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1278	-	-	1202	-	-	229	269	695	200	266	756
Mov Cap-2 Maneuver	-	-	-	-	-	-	229	269	-	200	266	-
Stage 1	-	-	-	-	-	-	660	628	-	559	493	-
Stage 2	-	-	-	-	-	-	458	493	-	533	623	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	2.2	16.1	21.2
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	437	1278	-	-	1202	-	-	266
HCM Lane V/C Ratio	0.256	0.003	-	-	0.086	-	-	0.168
HCM Control Delay (s)	16.1	7.8	0	-	8.3	0	-	21.2
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	1	0	-	-	0.3	-	-	0.6

Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	3	274	17	108	289	2	13	26	73	8	32	5
Future Vol, veh/h	3	274	17	108	289	2	13	26	73	8	32	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	298	18	117	314	2	14	28	79	9	35	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	316	0	0	316	0	0	884	865	307	917	873	315
Stage 1	-	-	-	-	-	-	314	314	-	550	550	-
Stage 2	-	-	-	-	-	-	570	551	-	367	323	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1244	-	-	1244	-	-	266	292	733	253	289	725
Stage 1	-	-	-	-	-	-	697	656	-	519	516	-
Stage 2	-	-	-	-	-	-	506	515	-	653	650	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1244	-	-	1244	-	-	216	258	733	189	255	725
Mov Cap-2 Maneuver	-	-	-	-	-	-	216	258	-	189	255	-
Stage 1	-	-	-	-	-	-	695	654	-	517	457	-
Stage 2	-	-	-	-	-	-	411	456	-	555	648	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	2.2	16.6	22.2
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	430	1244	-	-	1244	-	-	258
HCM Lane V/C Ratio	0.283	0.003	-	-	0.094	-	-	0.19
HCM Control Delay (s)	16.6	7.9	0	-	8.2	0	-	22.2
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	1.1	0	-	-	0.3	-	-	0.7

Intersection	
Int Delay, s/veh	4.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	3	331	17	110	297	2	13	26	73	8	32	5
Future Vol, veh/h	3	331	17	110	297	2	13	26	73	8	32	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	3	360	18	120	323	2	14	28	79	9	35	5

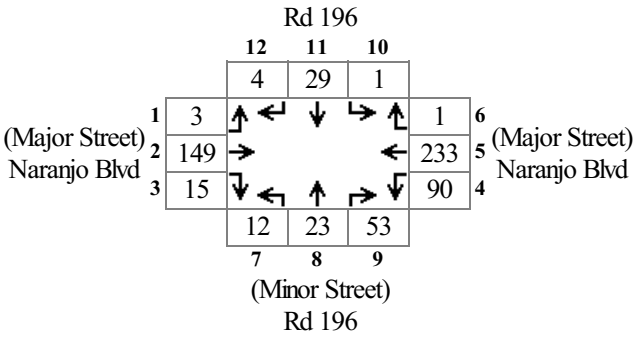
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	325	0	0	378	0	0	959	940	369	992	948	324
Stage 1	-	-	-	-	-	-	376	376	-	563	563	-
Stage 2	-	-	-	-	-	-	583	564	-	429	385	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1235	-	-	1180	-	-	237	264	677	225	261	717
Stage 1	-	-	-	-	-	-	645	616	-	511	509	-
Stage 2	-	-	-	-	-	-	498	508	-	604	611	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1235	-	-	1180	-	-	188	231	677	163	228	717
Mov Cap-2 Maneuver	-	-	-	-	-	-	188	231	-	163	228	-
Stage 1	-	-	-	-	-	-	643	614	-	509	446	-
Stage 2	-	-	-	-	-	-	399	445	-	507	609	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	2.3	18.5	24.9
HCM LOS			C	C

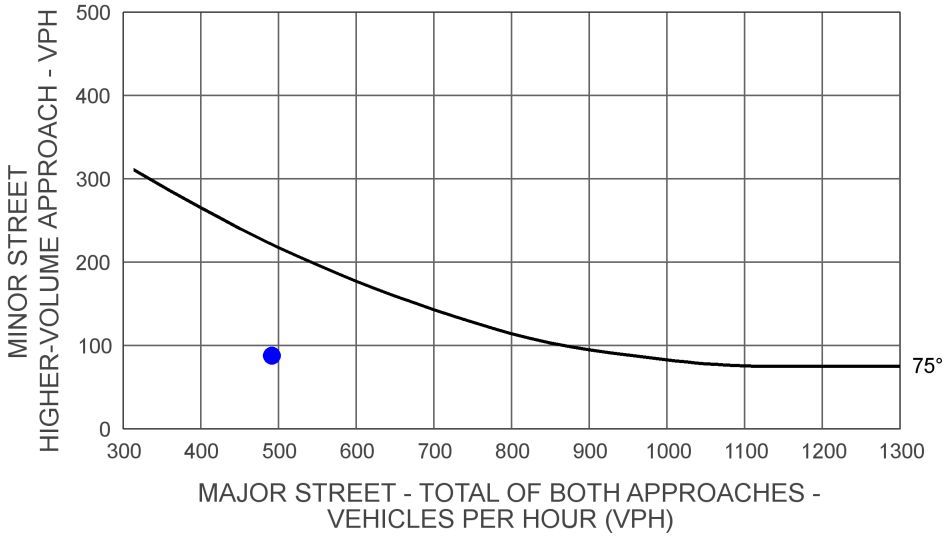
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	387	1235	-	-	1180	-	-	229
HCM Lane V/C Ratio	0.315	0.003	-	-	0.101	-	-	0.214
HCM Control Delay (s)	18.5	7.9	0	-	8.4	0	-	24.9
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	1.3	0	-	-	0.3	-	-	0.8

Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Existing
Intersection #: 2

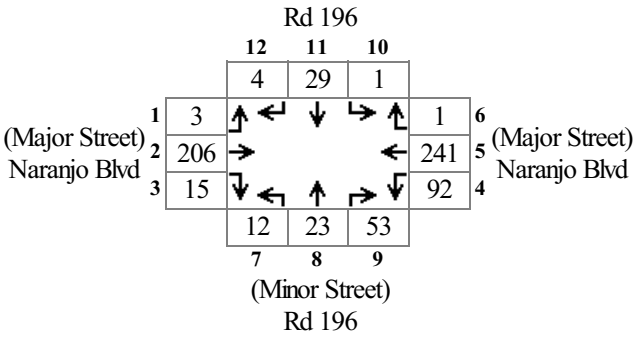


Major Total: 491
Minor High Volume: 88

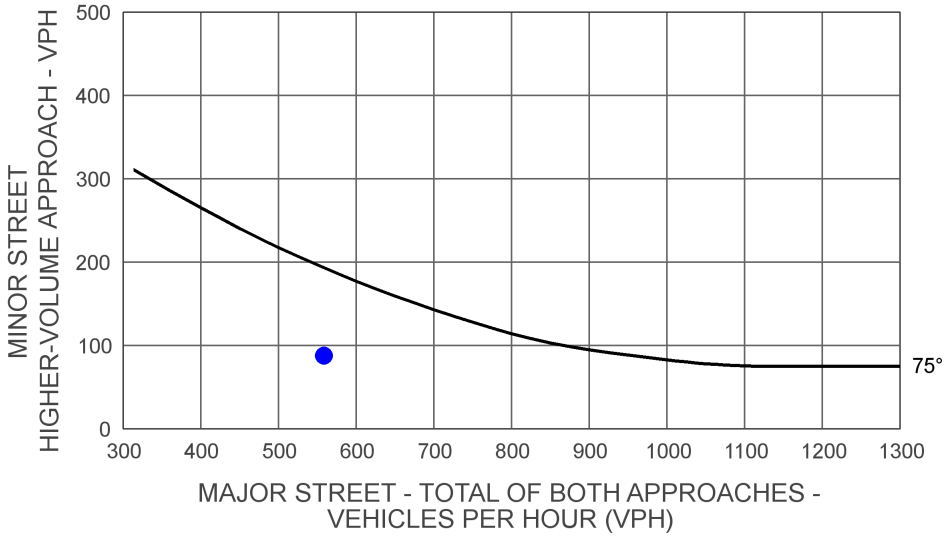


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Existing+Project
Intersection #: 2

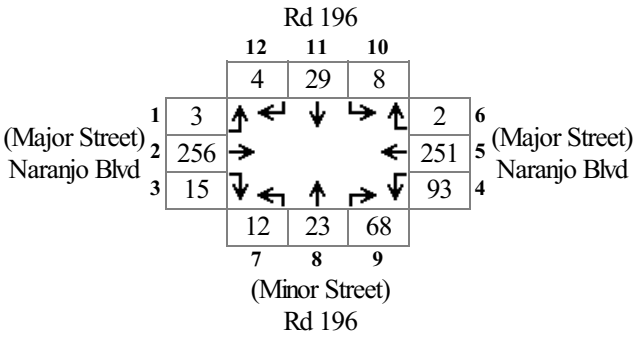


Major Total: 558
Minor High Volume: 88

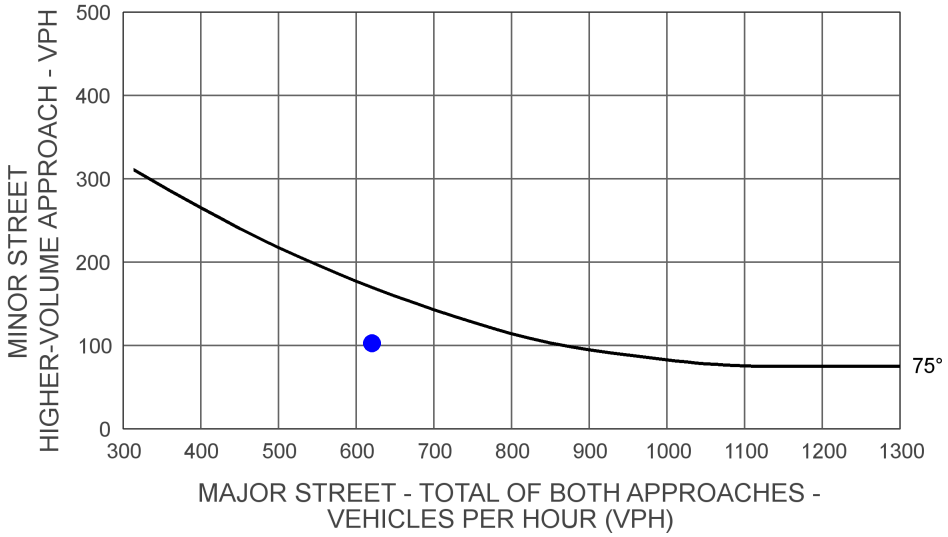


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Future
Intersection #: 2

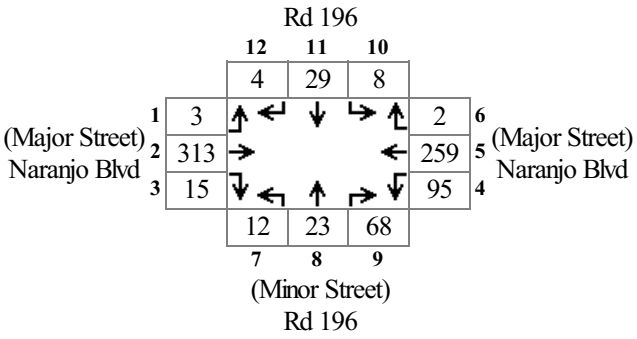


Major Total: 620
Minor High Volume: 103

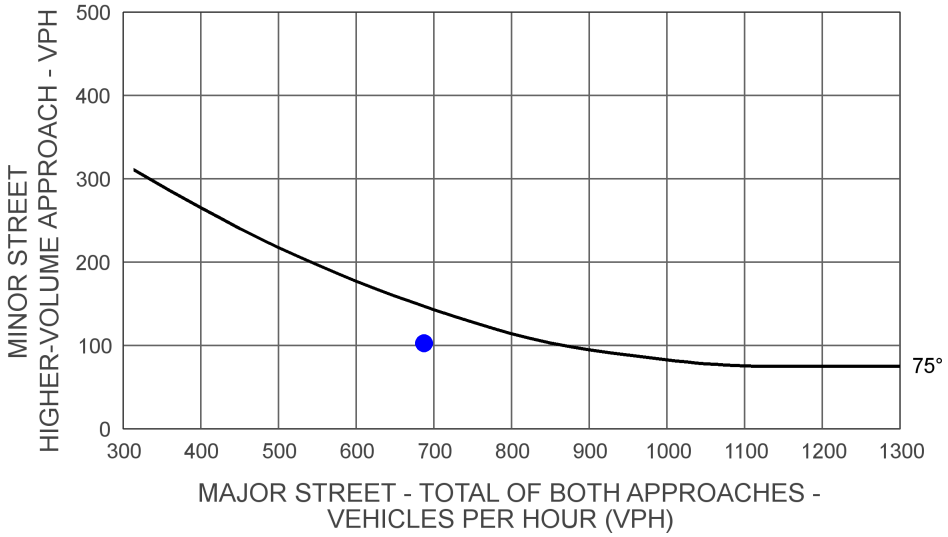


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Future+Project
Intersection #: 2

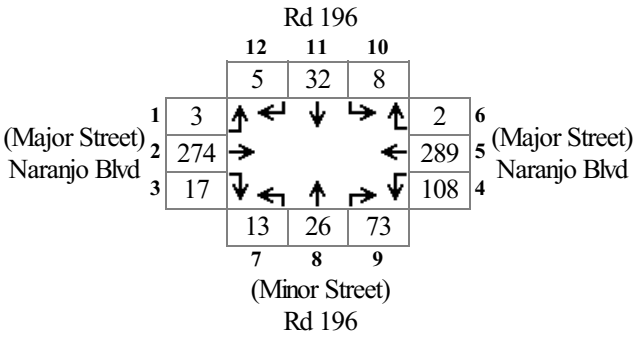


Major Total: 687
Minor High Volume: 103

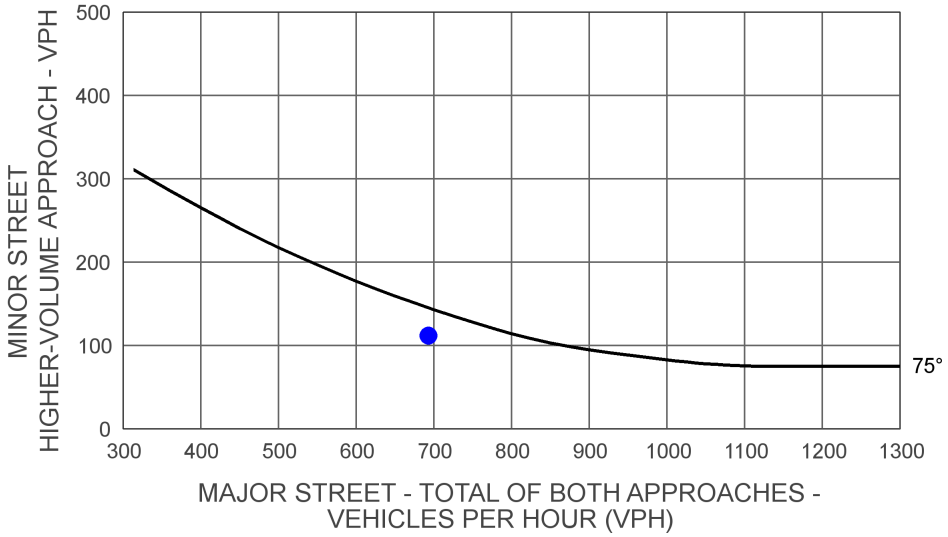


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Future
Intersection #: 2

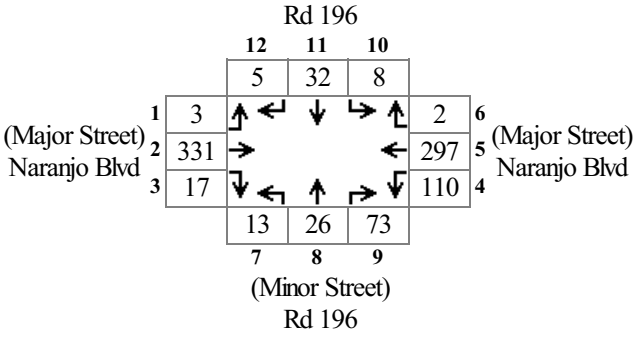


Major Total: 693
Minor High Volume: 112

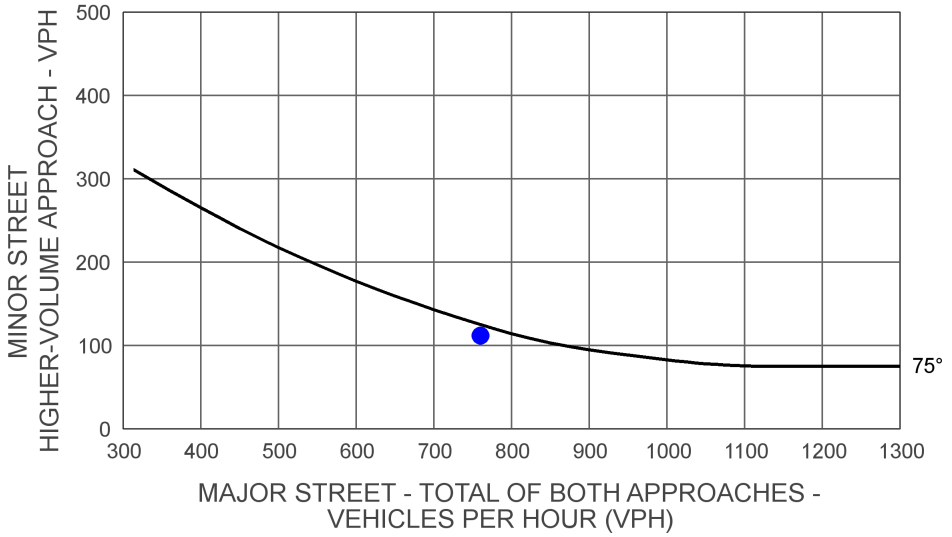


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Future+Project
Intersection #: 2



Major Total: 760
Minor High Volume: 112



Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	4	192	11	53	197	0	16	29	76	2	18	2
Future Vol, veh/h	4	192	11	53	197	0	16	29	76	2	18	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	209	12	58	214	0	17	32	83	2	20	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	214	0	0	221	0	0	563	552	215	609	558	214
Stage 1	-	-	-	-	-	-	223	223	-	329	329	-
Stage 2	-	-	-	-	-	-	340	329	-	280	229	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1356	-	-	1348	-	-	437	442	825	407	438	826
Stage 1	-	-	-	-	-	-	780	719	-	684	646	-
Stage 2	-	-	-	-	-	-	675	646	-	727	715	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1356	-	-	1348	-	-	404	419	825	332	415	826
Mov Cap-2 Maneuver	-	-	-	-	-	-	404	419	-	332	415	-
Stage 1	-	-	-	-	-	-	778	717	-	682	614	-
Stage 2	-	-	-	-	-	-	620	614	-	624	713	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	1.7	12.6	14
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	602	1356	-	-	1348	-	-	425
HCM Lane V/C Ratio	0.218	0.003	-	-	0.043	-	-	0.056
HCM Control Delay (s)	12.6	7.7	0	-	7.8	0	-	14
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.8	0	-	-	0.1	-	-	0.2

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	4	200	11	65	259	3	16	29	76	2	18	2
Future Vol, veh/h	4	200	11	65	259	3	16	29	76	2	18	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	217	12	71	282	3	17	32	83	2	20	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	285	0	0	229	0	0	667	658	223	713	662	283
Stage 1	-	-	-	-	-	-	232	232	-	424	424	-
Stage 2	-	-	-	-	-	-	435	426	-	289	238	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1277	-	-	1339	-	-	372	384	817	347	382	756
Stage 1	-	-	-	-	-	-	771	713	-	608	587	-
Stage 2	-	-	-	-	-	-	600	586	-	719	708	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1277	-	-	1339	-	-	337	358	817	276	357	756
Mov Cap-2 Maneuver	-	-	-	-	-	-	337	358	-	276	357	-
Stage 1	-	-	-	-	-	-	768	710	-	606	550	-
Stage 2	-	-	-	-	-	-	541	549	-	615	705	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	1.6	13.7	15.6
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	546	1277	-	-	1339	-	-	365
HCM Lane V/C Ratio	0.241	0.003	-	-	0.053	-	-	0.066
HCM Control Delay (s)	13.7	7.8	0	-	7.8	0	-	15.6
HCM Lane LOS	B	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.9	0	-	-	0.2	-	-	0.2

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	4	239	11	66	312	4	16	29	79	3	18	2
Future Vol, veh/h	4	239	11	66	312	4	16	29	79	3	18	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	260	12	72	339	4	17	32	86	3	20	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	343	0	0	272	0	0	770	761	266	818	765	341
Stage 1	-	-	-	-	-	-	274	274	-	485	485	-
Stage 2	-	-	-	-	-	-	496	487	-	333	280	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1216	-	-	1291	-	-	318	335	773	295	333	701
Stage 1	-	-	-	-	-	-	732	683	-	563	552	-
Stage 2	-	-	-	-	-	-	556	550	-	681	679	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1216	-	-	1291	-	-	285	311	773	229	309	701
Mov Cap-2 Maneuver	-	-	-	-	-	-	285	311	-	229	309	-
Stage 1	-	-	-	-	-	-	729	680	-	561	514	-
Stage 2	-	-	-	-	-	-	496	512	-	575	676	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	1.4	15	17.6
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	493	1216	-	-	1291	-	-	310
HCM Lane V/C Ratio	0.273	0.004	-	-	0.056	-	-	0.081
HCM Control Delay (s)	15	8	0	-	8	0	-	17.6
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	1.1	0	-	-	0.2	-	-	0.3

Intersection	
Int Delay, s/veh	3.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	4	247	11	78	374	7	16	29	79	3	18	2
Future Vol, veh/h	4	247	11	78	374	7	16	29	79	3	18	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	268	12	85	407	8	17	32	86	3	20	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	414	0	0	280	0	0	874	867	274	922	869	410
Stage 1	-	-	-	-	-	-	283	283	-	580	580	-
Stage 2	-	-	-	-	-	-	591	584	-	342	289	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1145	-	-	1283	-	-	270	291	765	251	290	642
Stage 1	-	-	-	-	-	-	724	677	-	500	500	-
Stage 2	-	-	-	-	-	-	493	498	-	673	673	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1145	-	-	1283	-	-	237	265	765	189	264	642
Mov Cap-2 Maneuver	-	-	-	-	-	-	237	265	-	189	264	-
Stage 1	-	-	-	-	-	-	721	674	-	498	457	-
Stage 2	-	-	-	-	-	-	430	455	-	567	670	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	1.4	16.6	20.1
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	443	1145	-	-	1283	-	-	264
HCM Lane V/C Ratio	0.304	0.004	-	-	0.066	-	-	0.095
HCM Control Delay (s)	16.6	8.2	0	-	8	0	-	20.1
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	1.3	0	-	-	0.2	-	-	0.3

Intersection	
Int Delay, s/veh	4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	5	263	12	75	344	4	18	32	86	3	20	2
Future Vol, veh/h	5	263	12	75	344	4	18	32	86	3	20	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	286	13	82	374	4	20	35	93	3	22	2

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	378	0	0	299	0	0	854	844	292	906	849	376
Stage 1	-	-	-	-	-	-	303	303	-	539	539	-
Stage 2	-	-	-	-	-	-	551	541	-	367	310	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1180	-	-	1262	-	-	279	300	747	257	298	670
Stage 1	-	-	-	-	-	-	706	664	-	527	522	-
Stage 2	-	-	-	-	-	-	519	521	-	653	659	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1180	-	-	1262	-	-	244	274	747	190	272	670
Mov Cap-2 Maneuver	-	-	-	-	-	-	244	274	-	190	272	-
Stage 1	-	-	-	-	-	-	702	661	-	524	479	-
Stage 2	-	-	-	-	-	-	453	478	-	539	656	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	1.4	17.1	19.8
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	445	1180	-	-	1262	-	-	271
HCM Lane V/C Ratio	0.332	0.005	-	-	0.065	-	-	0.1
HCM Control Delay (s)	17.1	8.1	0	-	8.1	0	-	19.8
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	1.4	0	-	-	0.2	-	-	0.3

Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	5	271	12	87	406	7	18	32	86	3	20	2
Future Vol, veh/h	5	271	12	87	406	7	18	32	86	3	20	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	5	295	13	95	441	8	20	35	93	3	22	2

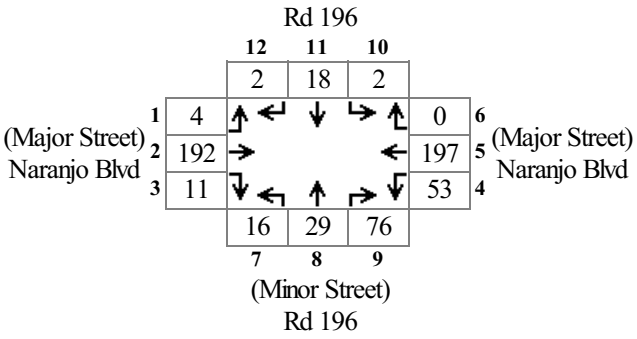
Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	449	0	0	308	0	0	958	950	301	1010	952	445
Stage 1	-	-	-	-	-	-	312	312	-	634	634	-
Stage 2	-	-	-	-	-	-	646	638	-	376	318	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1111	-	-	1253	-	-	237	260	739	218	259	613
Stage 1	-	-	-	-	-	-	699	658	-	467	473	-
Stage 2	-	-	-	-	-	-	460	471	-	645	654	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1111	-	-	1253	-	-	202	233	739	155	232	613
Mov Cap-2 Maneuver	-	-	-	-	-	-	202	233	-	155	232	-
Stage 1	-	-	-	-	-	-	696	655	-	465	425	-
Stage 2	-	-	-	-	-	-	391	423	-	531	651	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0.1	1.4	19.3	22.7
HCM LOS			C	C

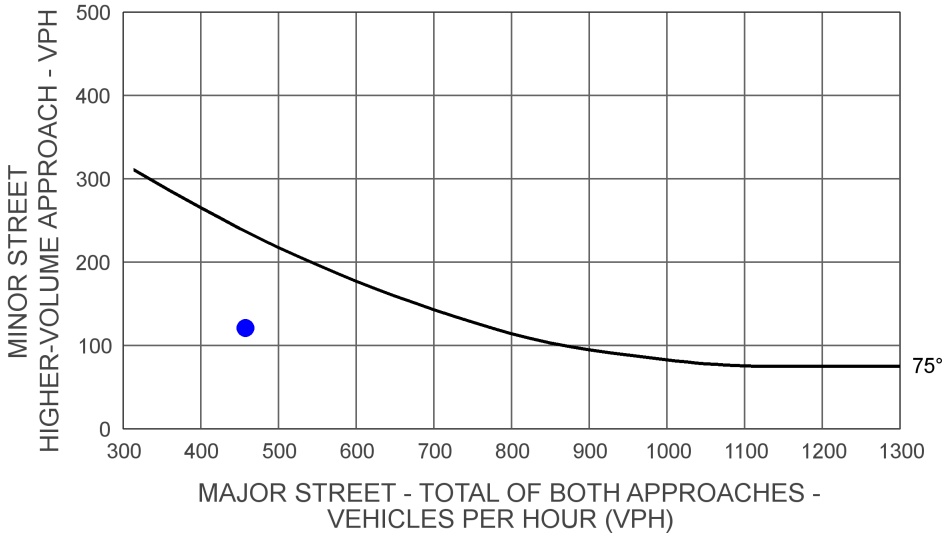
Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	397	1111	-	-	1253	-	-	230
HCM Lane V/C Ratio	0.372	0.005	-	-	0.075	-	-	0.118
HCM Control Delay (s)	19.3	8.3	0	-	8.1	0	-	22.7
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	1.7	0	-	-	0.2	-	-	0.4

Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Existing
Intersection #: 2

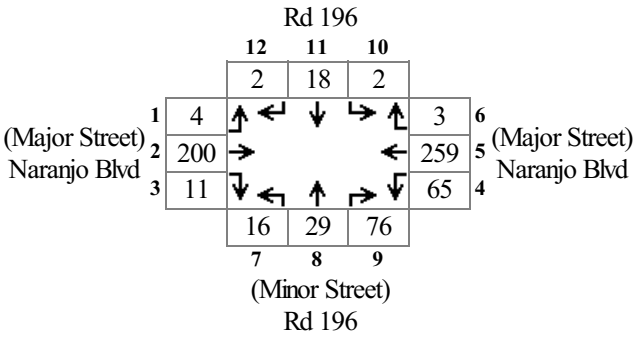


Major Total: 457
Minor High Volume: 121

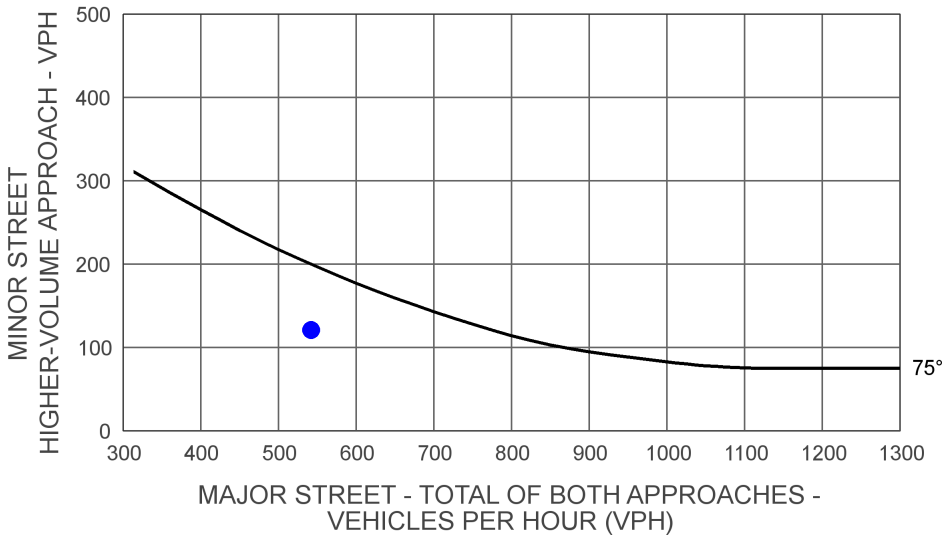


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Existing+Project
Intersection #: 2

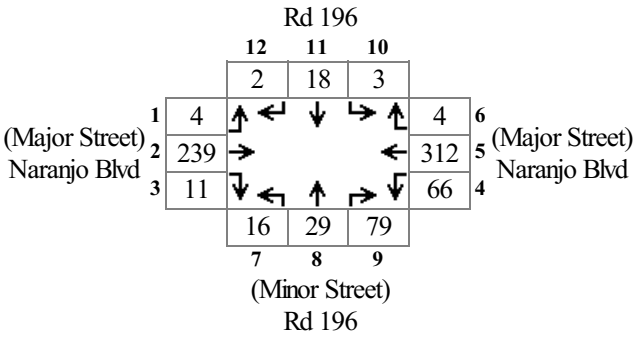


Major Total: 542
Minor High Volume: 121

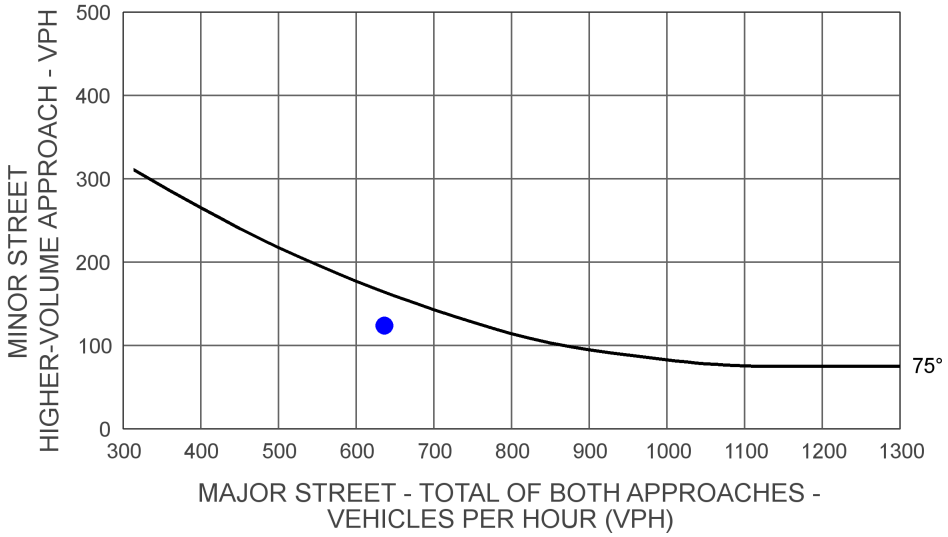


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Future
Intersection #: 2

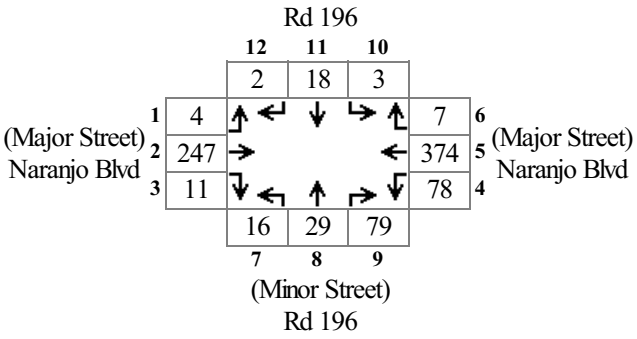


Major Total: 636
Minor High Volume: 124

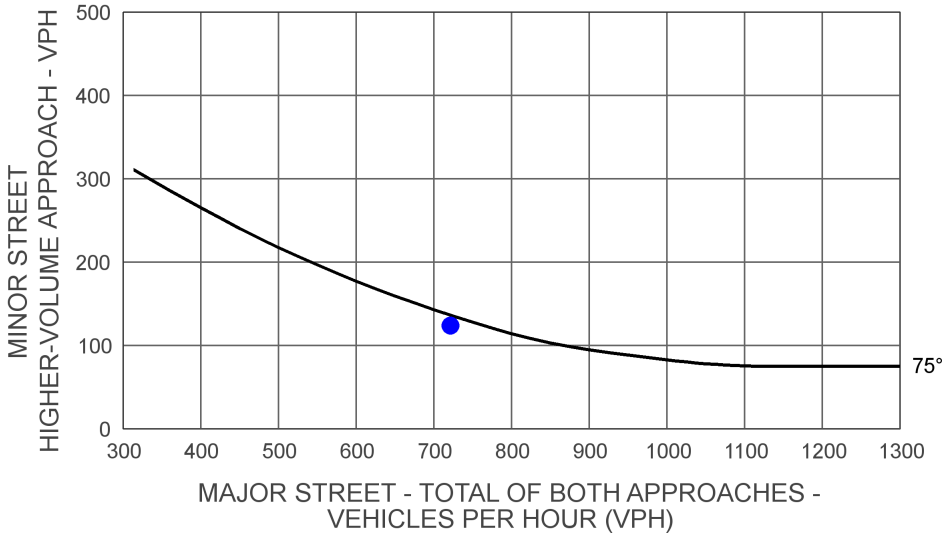


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Future+Project
Intersection #: 2

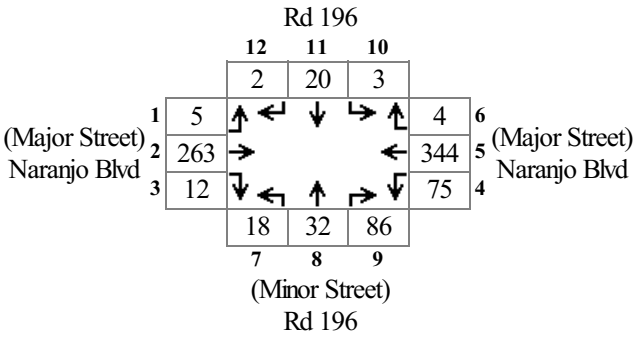


Major Total: 721
Minor High Volume: 124

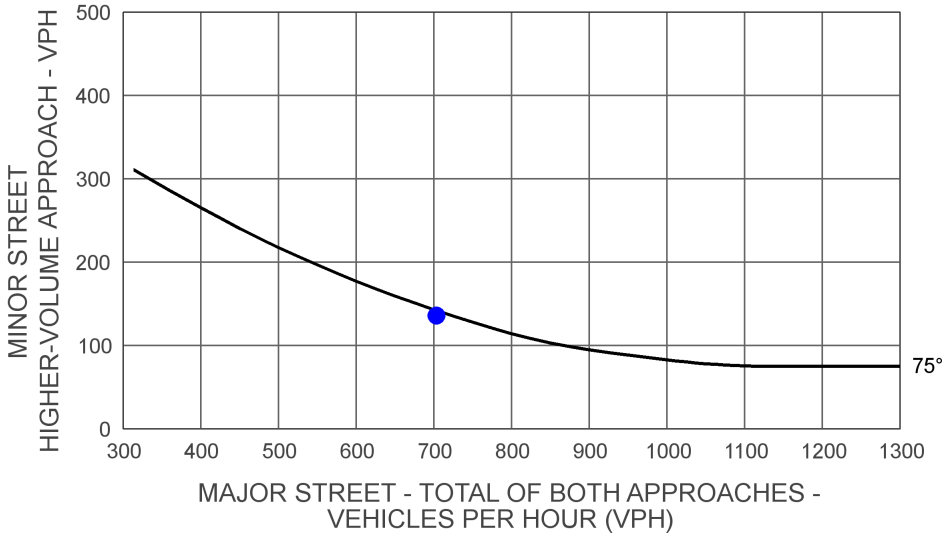


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Future
Intersection #: 2

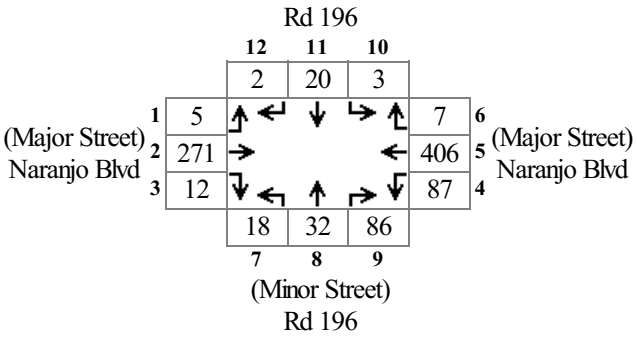


Major Total: 703
Minor High Volume: 136

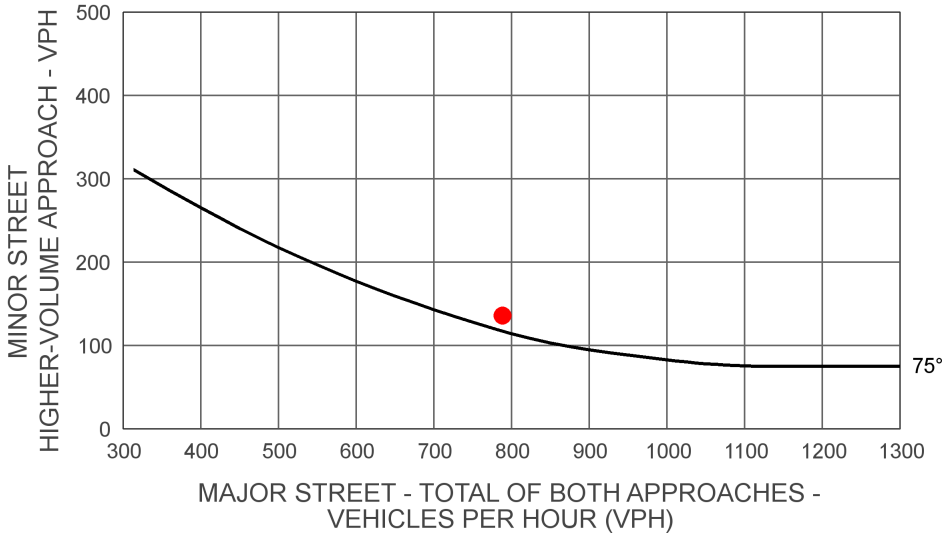


Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: PM Future+Project
Intersection #: 2



Major Total: 788
Minor High Volume: 136



Intersection 3
Rd 204 & Naranjo Blvd

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	1	198	16	29	309	10	16	3	20	1	7	9
Future Vol, veh/h	1	198	16	29	309	10	16	3	20	1	7	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	215	17	32	336	11	17	3	22	1	8	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	347	0	0	233	0	0	639	636	224	643	639	341
Stage 1	-	-	-	-	-	-	226	226	-	404	404	-
Stage 2	-	-	-	-	-	-	413	410	-	239	235	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1212	-	-	1335	-	-	389	395	815	386	394	701
Stage 1	-	-	-	-	-	-	777	717	-	623	599	-
Stage 2	-	-	-	-	-	-	616	595	-	764	710	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1212	-	-	1335	-	-	369	383	815	364	382	701
Mov Cap-2 Maneuver	-	-	-	-	-	-	369	383	-	364	382	-
Stage 1	-	-	-	-	-	-	776	716	-	622	581	-
Stage 2	-	-	-	-	-	-	581	577	-	739	709	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.6	12.6	12.5
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	515	1212	-	-	1335	-	-	501
HCM Lane V/C Ratio	0.082	0.001	-	-	0.024	-	-	0.037
HCM Control Delay (s)	12.6	8	0	-	7.8	0	-	12.5
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.3	0	-	-	0.1	-	-	0.1

Intersection	
Int Delay, s/veh	2.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	1	198	73	57	309	10	26	3	28	1	7	9
Future Vol, veh/h	1	198	73	57	309	10	26	3	28	1	7	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	215	79	62	336	11	28	3	30	1	8	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	347	0	0	295	0	0	731	728	255	739	762	341
Stage 1	-	-	-	-	-	-	257	257	-	465	465	-
Stage 2	-	-	-	-	-	-	474	471	-	274	297	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1212	-	-	1266	-	-	337	350	784	333	335	701
Stage 1	-	-	-	-	-	-	748	695	-	578	563	-
Stage 2	-	-	-	-	-	-	571	560	-	732	668	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1212	-	-	1266	-	-	311	328	784	303	314	701
Mov Cap-2 Maneuver	-	-	-	-	-	-	311	328	-	303	314	-
Stage 1	-	-	-	-	-	-	747	694	-	577	529	-
Stage 2	-	-	-	-	-	-	521	526	-	700	667	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	1.2	14.4	13.5
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	444	1212	-	-	1266	-	-	442
HCM Lane V/C Ratio	0.14	0.001	-	-	0.049	-	-	0.042
HCM Control Delay (s)	14.4	8	0	-	8	0	-	13.5
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.5	0	-	-	0.2	-	-	0.1

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	1	251	107	141	338	10	28	3	36	1	7	9
Future Vol, veh/h	1	251	107	141	338	10	28	3	36	1	7	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	273	116	153	367	11	30	3	39	1	8	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	378	0	0	389	0	0	1021	1018	331	1033	1070	373
Stage 1	-	-	-	-	-	-	333	333	-	679	679	-
Stage 2	-	-	-	-	-	-	688	685	-	354	391	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1180	-	-	1170	-	-	215	237	711	211	221	673
Stage 1	-	-	-	-	-	-	681	644	-	441	451	-
Stage 2	-	-	-	-	-	-	436	448	-	663	607	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1180	-	-	1170	-	-	179	197	711	172	184	673
Mov Cap-2 Maneuver	-	-	-	-	-	-	179	197	-	172	184	-
Stage 1	-	-	-	-	-	-	680	643	-	441	376	-
Stage 2	-	-	-	-	-	-	351	374	-	623	606	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	2.5	20.7	17.9
HCM LOS			C	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	301	1180	-	-	1170	-	-	297
HCM Lane V/C Ratio	0.242	0.001	-	-	0.131	-	-	0.062
HCM Control Delay (s)	20.7	8.1	0	-	8.5	0	-	17.9
HCM Lane LOS	C	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	0.9	0	-	-	0.5	-	-	0.2

Intersection	
Int Delay, s/veh	4.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	1	251	164	169	338	10	38	3	44	1	7	9
Future Vol, veh/h	1	251	164	169	338	10	38	3	44	1	7	9
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	273	178	184	367	11	41	3	48	1	8	10

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	378	0	0	451	0	0	1113	1110	362	1130	1193	373
Stage 1	-	-	-	-	-	-	364	364	-	740	740	-
Stage 2	-	-	-	-	-	-	749	746	-	390	453	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1180	-	-	1109	-	-	186	209	683	181	187	673
Stage 1	-	-	-	-	-	-	655	624	-	409	423	-
Stage 2	-	-	-	-	-	-	404	421	-	634	570	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1180	-	-	1109	-	-	148	165	683	139	148	673
Mov Cap-2 Maneuver	-	-	-	-	-	-	148	165	-	139	148	-
Stage 1	-	-	-	-	-	-	654	623	-	409	334	-
Stage 2	-	-	-	-	-	-	307	333	-	586	569	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	2.9	27.6	20.5
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	250	1180	-	-	1109	-	-	250
HCM Lane V/C Ratio	0.37	0.001	-	-	0.166	-	-	0.074
HCM Control Delay (s)	27.6	8.1	0	-	8.9	0	-	20.5
HCM Lane LOS	D	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	1.6	0	-	-	0.6	-	-	0.2

Intersection	
Int Delay, s/veh	3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	1	284	110	146	392	12	31	4	40	1	8	11
Future Vol, veh/h	1	284	110	146	392	12	31	4	40	1	8	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	309	120	159	426	13	34	4	43	1	9	12

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	439	0	0	428	0	0	1131	1128	368	1145	1180	433
Stage 1	-	-	-	-	-	-	371	371	-	750	750	-
Stage 2	-	-	-	-	-	-	760	757	-	395	430	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1121	-	-	1131	-	-	181	204	677	177	190	623
Stage 1	-	-	-	-	-	-	649	620	-	403	419	-
Stage 2	-	-	-	-	-	-	398	416	-	630	583	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1121	-	-	1131	-	-	146	166	677	139	155	623
Mov Cap-2 Maneuver	-	-	-	-	-	-	146	166	-	139	155	-
Stage 1	-	-	-	-	-	-	648	619	-	403	341	-
Stage 2	-	-	-	-	-	-	310	339	-	585	582	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	2.3	25.7	20
HCM LOS			D	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	254	1121	-	-	1131	-	-	262
HCM Lane V/C Ratio	0.321	0.001	-	-	0.14	-	-	0.083
HCM Control Delay (s)	25.7	8.2	0	-	8.7	0	-	20
HCM Lane LOS	D	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	1.3	0	-	-	0.5	-	-	0.3

Intersection	
Int Delay, s/veh	4.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	1	284	167	174	392	12	41	4	48	1	8	11
Future Vol, veh/h	1	284	167	174	392	12	41	4	48	1	8	11
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	309	182	189	426	13	45	4	52	1	9	12

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	439	0	0	490	0	0	1223	1219	399	1241	1303	433
Stage 1	-	-	-	-	-	-	402	402	-	811	811	-
Stage 2	-	-	-	-	-	-	821	817	-	430	492	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1121	-	-	1073	-	-	156	180	651	152	161	623
Stage 1	-	-	-	-	-	-	625	600	-	373	393	-
Stage 2	-	-	-	-	-	-	369	390	-	603	548	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1121	-	-	1073	-	-	119	138	651	112	123	623
Mov Cap-2 Maneuver	-	-	-	-	-	-	119	138	-	112	123	-
Stage 1	-	-	-	-	-	-	624	599	-	373	301	-
Stage 2	-	-	-	-	-	-	270	299	-	550	547	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	2.7	37.7	23.3
HCM LOS			E	C

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	208	1121	-	-	1073	-	-	218
HCM Lane V/C Ratio	0.486	0.001	-	-	0.176	-	-	0.1
HCM Control Delay (s)	37.7	8.2	0	-	9.1	0	-	23.3
HCM Lane LOS	E	A	A	-	A	A	-	C
HCM 95th %tile Q(veh)	2.4	0	-	-	0.6	-	-	0.3



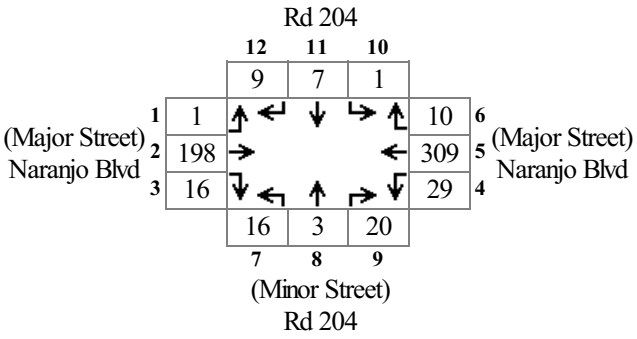
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	284	167	174	392	12	41	4	48	1	8	11
Future Volume (veh/h)	1	284	167	174	392	12	41	4	48	1	8	11
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1750	1863	1750	1750	1863	1750	1750	1863	1750	1750	1863	1750
Adj Flow Rate, veh/h	1	309	182	189	426	13	45	4	52	1	9	12
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
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	2	2	2	2	2	2
Cap, veh/h	30	752	442	308	657	20	196	31	195	37	187	231
Arrive On Green	0.68	0.68	0.68	0.68	0.68	0.68	0.25	0.25	0.25	0.25	0.25	0.25
Sat Flow, veh/h	0	1101	647	394	962	29	612	123	780	23	746	922
Grp Volume(v), veh/h	492	0	0	628	0	0	101	0	0	22	0	0
Grp Sat Flow(s),veh/h/ln	1748	0	0	1384	0	0	1514	0	0	1691	0	0
Q Serve(g_s), s	0.0	0.0	0.0	18.1	0.0	0.0	3.6	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	14.9	0.0	0.0	33.0	0.0	0.0	6.1	0.0	0.0	1.2	0.0	0.0
Prop In Lane	0.00		0.37	0.30		0.02	0.45		0.51	0.05		0.55
Lane Grp Cap(c), veh/h	1225	0	0	985	0	0	422	0	0	454	0	0
V/C Ratio(X)	0.40	0.00	0.00	0.64	0.00	0.00	0.24	0.00	0.00	0.05	0.00	0.00
Avail Cap(c_a), veh/h	1225	0	0	985	0	0	422	0	0	454	0	0
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	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	8.4	0.0	0.0	11.3	0.0	0.0	36.0	0.0	0.0	34.2	0.0	0.0
Incr Delay (d2), s/veh	1.0	0.0	0.0	3.2	0.0	0.0	1.3	0.0	0.0	0.2	0.0	0.0
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	7.4	0.0	0.0	13.1	0.0	0.0	2.9	0.0	0.0	0.6	0.0	0.0
LnGrp Delay(d),s/veh	9.4	0.0	0.0	14.4	0.0	0.0	37.3	0.0	0.0	34.4	0.0	0.0
LnGrp LOS	A			B			D			C		
Approach Vol, veh/h		492			628			101			22	
Approach Delay, s/veh		9.4			14.4			37.3			34.4	
Approach LOS		A			B			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		34.0		86.0		34.0		86.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		30.0		82.0		30.0		82.0
Max Q Clear Time (g_c+I1), s		8.1		16.9		3.2		35.0
Green Ext Time (p_c), s		0.4		5.9		0.4		5.9

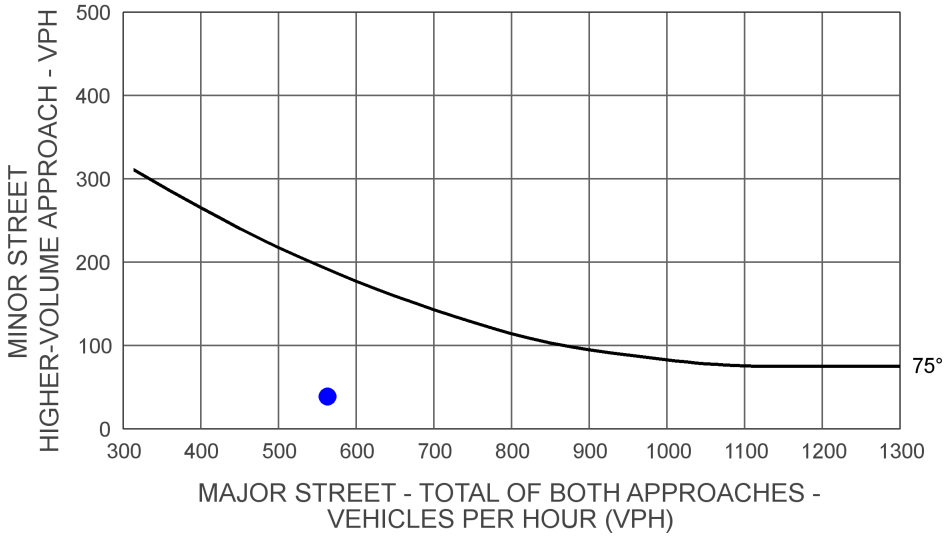
Intersection Summary	
HCM 2010 Ctrl Delay	14.6
HCM 2010 LOS	B

Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Existing
Intersection #: 3

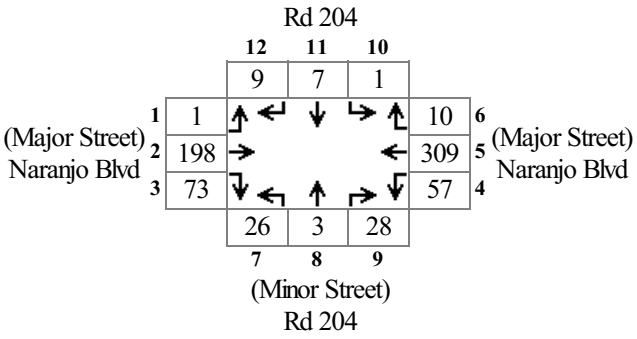


Major Total: 563
Minor High Volume: 39

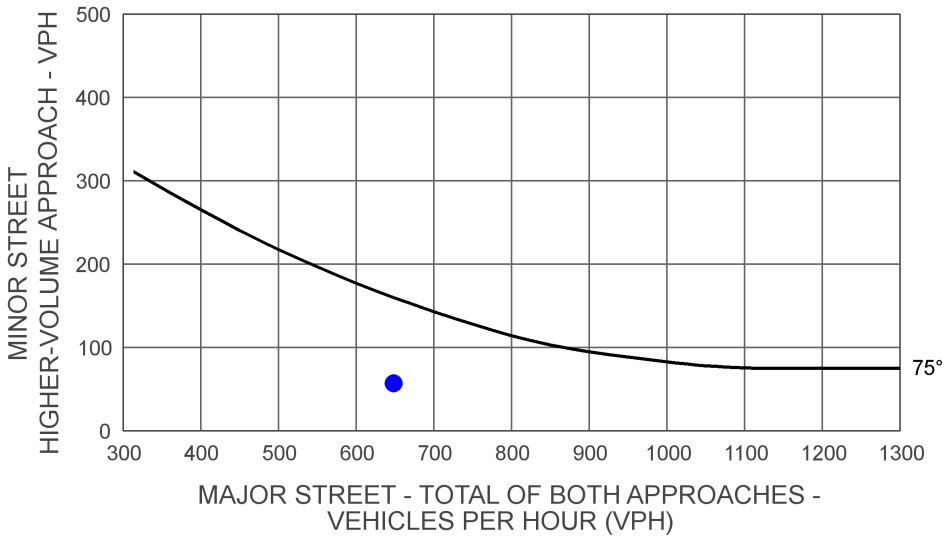


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Existing+Project
Intersection #: 3

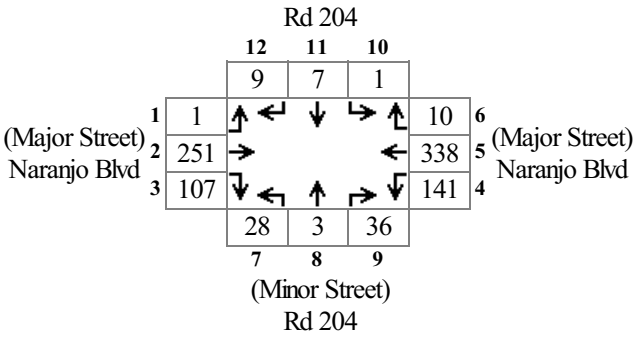


Major Total: 648
Minor High Volume: 57

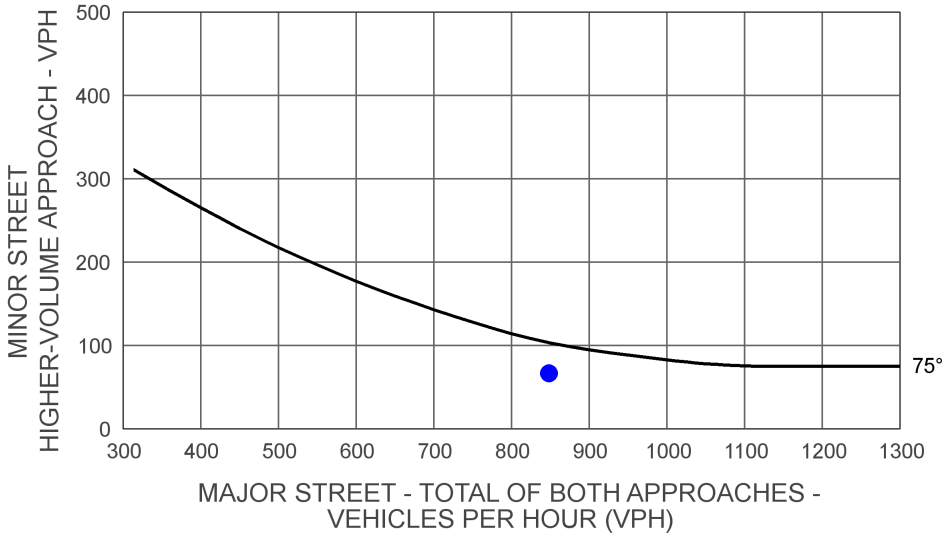


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Future
Intersection #: 3

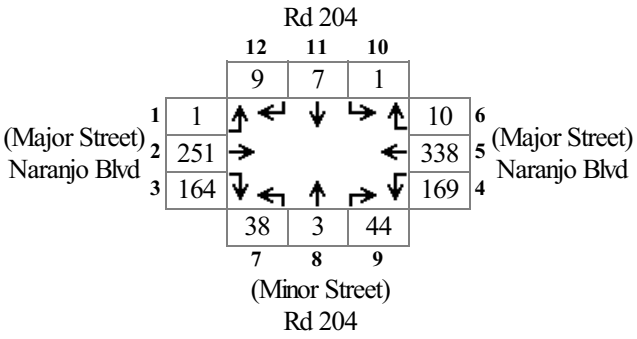


Major Total: 848
Minor High Volume: 67

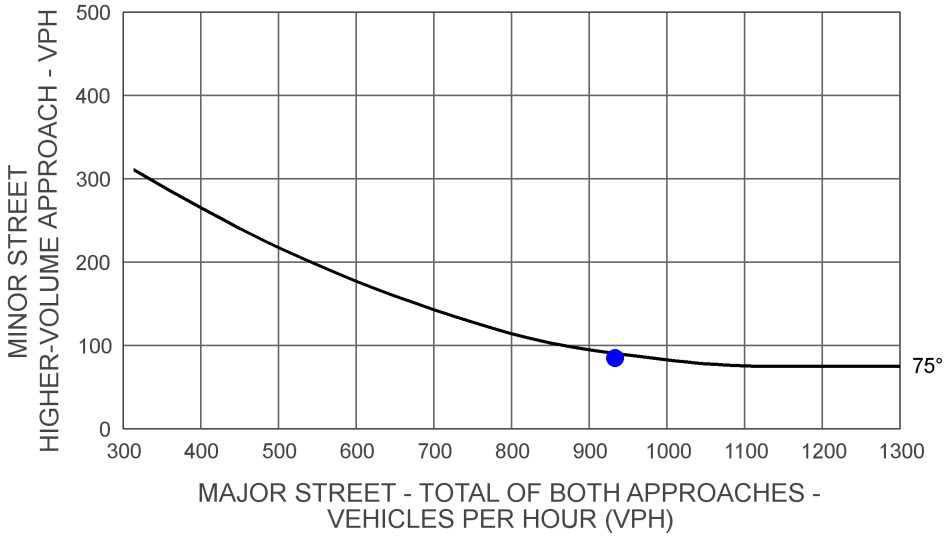


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Future+Project
Intersection #: 3

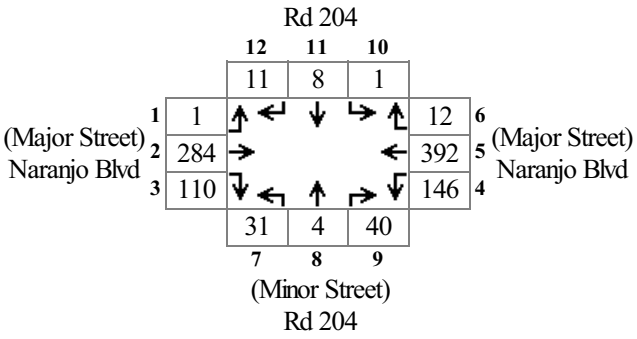


Major Total: 933
Minor High Volume: 85

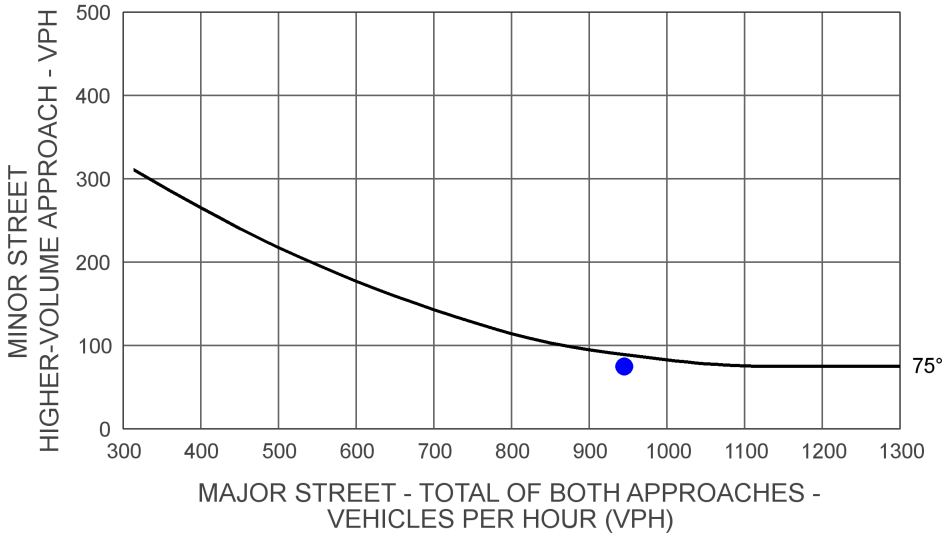


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Future
Intersection #: 3

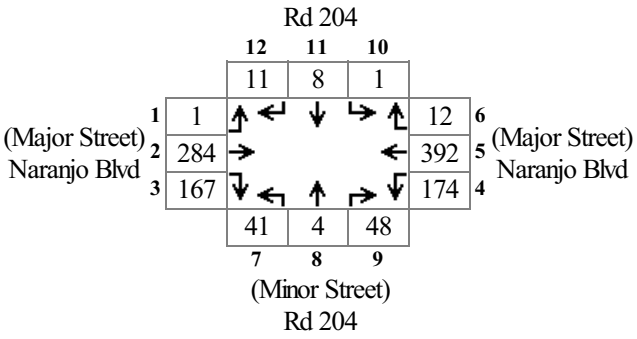


Major Total: 945
Minor High Volume: 75

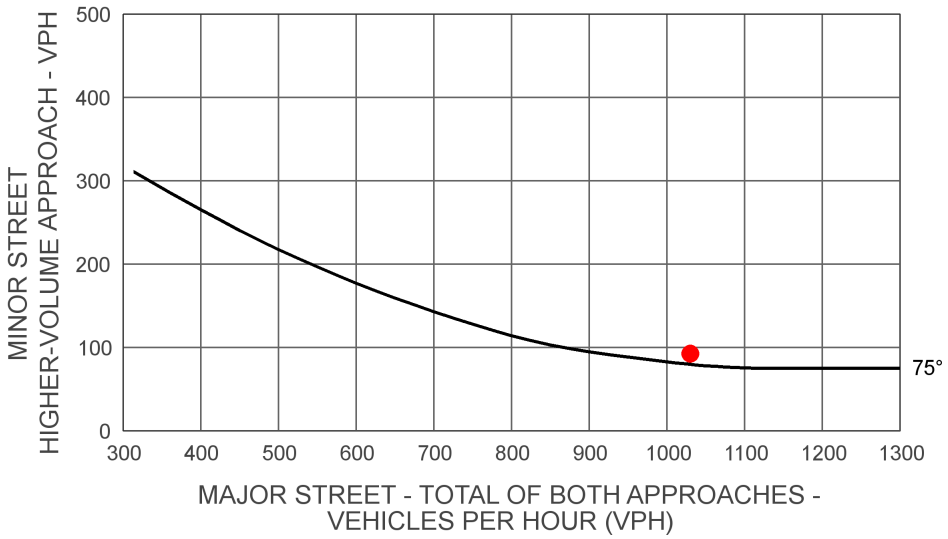


Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: AM Future+Project
Intersection #: 3



Major Total: 1030
Minor High Volume: 93



Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	1	262	5	7	226	8	12	2	28	1	1	5
Future Vol, veh/h	1	262	5	7	226	8	12	2	28	1	1	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	285	5	8	246	9	13	2	30	1	1	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	254	0	0	290	0	0	558	560	288	571	557	250
Stage 1	-	-	-	-	-	-	290	290	-	265	265	-
Stage 2	-	-	-	-	-	-	268	270	-	306	292	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1311	-	-	1272	-	-	440	437	751	432	439	789
Stage 1	-	-	-	-	-	-	718	672	-	740	689	-
Stage 2	-	-	-	-	-	-	738	686	-	704	671	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1311	-	-	1272	-	-	433	434	751	410	435	789
Mov Cap-2 Maneuver	-	-	-	-	-	-	433	434	-	410	435	-
Stage 1	-	-	-	-	-	-	717	671	-	739	684	-
Stage 2	-	-	-	-	-	-	727	681	-	673	670	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.2	11.5	10.8
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	603	1311	-	-	1272	-	-	632
HCM Lane V/C Ratio	0.076	0.001	-	-	0.006	-	-	0.012
HCM Control Delay (s)	11.5	7.7	0	-	7.8	0	-	10.8
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	4.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	1	262	13	11	226	8	89	2	98	1	1	5
Future Vol, veh/h	1	262	13	11	226	8	89	2	98	1	1	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	285	14	12	246	9	97	2	107	1	1	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	254	0	0	299	0	0	571	572	292	622	575	250
Stage 1	-	-	-	-	-	-	294	294	-	274	274	-
Stage 2	-	-	-	-	-	-	277	278	-	348	301	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1311	-	-	1262	-	-	432	430	747	399	429	789
Stage 1	-	-	-	-	-	-	714	670	-	732	683	-
Stage 2	-	-	-	-	-	-	729	680	-	668	665	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1311	-	-	1262	-	-	424	425	747	338	424	789
Mov Cap-2 Maneuver	-	-	-	-	-	-	424	425	-	338	424	-
Stage 1	-	-	-	-	-	-	713	669	-	731	675	-
Stage 2	-	-	-	-	-	-	715	673	-	570	664	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.4	15.5	11.1
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	547	1311	-	-	1262	-	-	601
HCM Lane V/C Ratio	0.376	0.001	-	-	0.009	-	-	0.013
HCM Control Delay (s)	15.5	7.7	0	-	7.9	0	-	11.1
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	1.7	0	-	-	0	-	-	0

Intersection	
Int Delay, s/veh	6.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	1	303	18	23	266	8	104	2	151	1	1	5
Future Vol, veh/h	1	303	18	23	266	8	104	2	151	1	1	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	329	20	25	289	9	113	2	164	1	1	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	298	0	0	349	0	0	688	689	339	767	694	293
Stage 1	-	-	-	-	-	-	341	341	-	343	343	-
Stage 2	-	-	-	-	-	-	347	348	-	424	351	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1263	-	-	1210	-	-	360	369	703	319	366	746
Stage 1	-	-	-	-	-	-	674	639	-	672	637	-
Stage 2	-	-	-	-	-	-	669	634	-	608	632	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1263	-	-	1210	-	-	349	359	703	239	356	746
Mov Cap-2 Maneuver	-	-	-	-	-	-	349	359	-	239	356	-
Stage 1	-	-	-	-	-	-	673	638	-	671	621	-
Stage 2	-	-	-	-	-	-	646	618	-	464	631	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.6	21.2	12.2
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	496	1263	-	-	1210	-	-	511
HCM Lane V/C Ratio	0.563	0.001	-	-	0.021	-	-	0.015
HCM Control Delay (s)	21.2	7.9	0	-	8	0	-	12.2
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	3.4	0	-	-	0.1	-	-	0

Intersection	
Int Delay, s/veh	21.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	1	303	26	27	266	8	181	2	221	1	1	5
Future Vol, veh/h	1	303	26	27	266	8	181	2	221	1	1	5
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	329	28	29	289	9	197	2	240	1	1	5

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	298	0	0	358	0	0	701	703	343	819	712	293
Stage 1	-	-	-	-	-	-	346	346	-	352	352	-
Stage 2	-	-	-	-	-	-	355	357	-	467	360	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1263	-	-	1201	-	-	353	362	700	294	358	746
Stage 1	-	-	-	-	-	-	670	635	-	665	632	-
Stage 2	-	-	-	-	-	-	662	628	-	576	626	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1263	-	-	1201	-	-	342	351	700	188	347	746
Mov Cap-2 Maneuver	-	-	-	-	-	-	342	351	-	188	347	-
Stage 1	-	-	-	-	-	-	669	634	-	664	614	-
Stage 2	-	-	-	-	-	-	637	610	-	377	625	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.7	54.3	12.8
HCM LOS			F	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	475	1263	-	-	1201	-	-	470
HCM Lane V/C Ratio	0.924	0.001	-	-	0.024	-	-	0.016
HCM Control Delay (s)	54.3	7.9	0	-	8.1	0	-	12.8
HCM Lane LOS	F	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	10.8	0	-	-	0.1	-	-	0

Intersection	
Int Delay, s/veh	7.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	1	346	19	24	305	10	106	2	156	1	1	6
Future Vol, veh/h	1	346	19	24	305	10	106	2	156	1	1	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	376	21	26	332	11	115	2	170	1	1	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	342	0	0	397	0	0	782	784	386	863	788	337
Stage 1	-	-	-	-	-	-	389	389	-	389	389	-
Stage 2	-	-	-	-	-	-	393	395	-	474	399	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1217	-	-	1162	-	-	312	325	662	275	323	705
Stage 1	-	-	-	-	-	-	635	608	-	635	608	-
Stage 2	-	-	-	-	-	-	632	605	-	571	602	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1217	-	-	1162	-	-	301	316	662	199	314	705
Mov Cap-2 Maneuver	-	-	-	-	-	-	301	316	-	199	314	-
Stage 1	-	-	-	-	-	-	634	607	-	634	591	-
Stage 2	-	-	-	-	-	-	608	588	-	423	601	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.6	26.8	12.7
HCM LOS			D	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	444	1217	-	-	1162	-	-	478
HCM Lane V/C Ratio	0.646	0.001	-	-	0.022	-	-	0.018
HCM Control Delay (s)	26.8	8	0	-	8.2	0	-	12.7
HCM Lane LOS	D	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	4.5	0	-	-	0.1	-	-	0.1

Intersection	
Int Delay, s/veh	33.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Traffic Vol, veh/h	1	346	27	28	305	10	183	2	226	1	1	6
Future Vol, veh/h	1	346	27	28	305	10	183	2	226	1	1	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
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, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	1	376	29	30	332	11	199	2	246	1	1	7

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	342	0	0	405	0	0	795	796	391	915	806	337
Stage 1	-	-	-	-	-	-	393	393	-	398	398	-
Stage 2	-	-	-	-	-	-	402	403	-	517	408	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1217	-	-	1154	-	-	305	320	658	253	316	705
Stage 1	-	-	-	-	-	-	632	606	-	628	603	-
Stage 2	-	-	-	-	-	-	625	600	-	541	597	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1217	-	-	1154	-	-	294	309	658	154	306	705
Mov Cap-2 Maneuver	-	-	-	-	-	-	294	309	-	154	306	-
Stage 1	-	-	-	-	-	-	631	605	-	627	584	-
Stage 2	-	-	-	-	-	-	598	581	-	337	596	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	0	0.7	91	13.4
HCM LOS			F	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	423	1217	-	-	1154	-	-	438
HCM Lane V/C Ratio	1.056	0.001	-	-	0.026	-	-	0.02
HCM Control Delay (s)	91	8	0	-	8.2	0	-	13.4
HCM Lane LOS	F	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	14.5	0	-	-	0.1	-	-	0.1



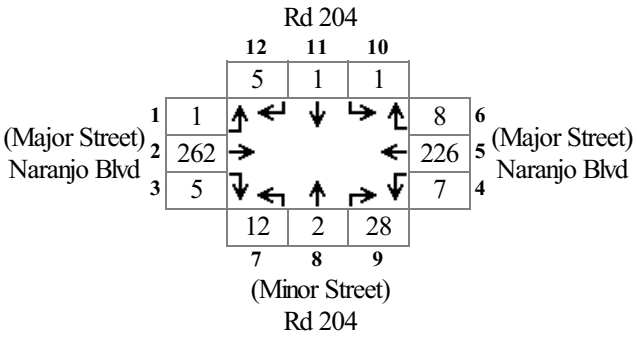
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	346	27	28	305	10	183	2	226	1	1	6
Future Volume (veh/h)	1	346	27	28	305	10	183	2	226	1	1	6
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	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
Adj Sat Flow, veh/h/ln	1750	1863	1750	1750	1863	1750	1750	1863	1750	1750	1863	1750
Adj Flow Rate, veh/h	1	376	29	30	332	11	199	2	246	1	1	7
Adj No. of Lanes	0	1	0	0	1	0	0	1	0	0	1	0
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	2	2	2	2	2	2
Cap, veh/h	40	512	39	68	495	16	447	25	507	120	138	745
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.61	0.61	0.61	0.61	0.61	0.61
Sat Flow, veh/h	1	1707	131	82	1649	53	637	41	829	123	225	1219
Grp Volume(v), veh/h	406	0	0	373	0	0	447	0	0	9	0	0
Grp Sat Flow(s),veh/h/ln	1839	0	0	1783	0	0	1507	0	0	1567	0	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	11.9	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	17.8	0.0	0.0	16.3	0.0	0.0	14.4	0.0	0.0	0.2	0.0	0.0
Prop In Lane	0.00		0.07	0.08		0.03	0.45		0.55	0.11		0.78
Lane Grp Cap(c), veh/h	592	0	0	578	0	0	979	0	0	1002	0	0
V/C Ratio(X)	0.69	0.00	0.00	0.65	0.00	0.00	0.46	0.00	0.00	0.01	0.00	0.00
Avail Cap(c_a), veh/h	592	0	0	578	0	0	979	0	0	1002	0	0
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	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	28.3	0.0	0.0	27.6	0.0	0.0	9.5	0.0	0.0	6.8	0.0	0.0
Incr Delay (d2), s/veh	6.4	0.0	0.0	5.5	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0
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	10.1	0.0	0.0	9.0	0.0	0.0	6.4	0.0	0.0	0.1	0.0	0.0
LnGrp Delay(d),s/veh	34.7	0.0	0.0	33.1	0.0	0.0	11.1	0.0	0.0	6.9	0.0	0.0
LnGrp LOS	C			C			B			A		
Approach Vol, veh/h		406			373			447			9	
Approach Delay, s/veh		34.7			33.1			11.1			6.9	
Approach LOS		C			C			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		59.0		31.0		59.0		31.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		55.0		27.0		55.0		27.0
Max Q Clear Time (g_c+I1), s		16.4		19.8		2.2		18.3
Green Ext Time (p_c), s		1.9		1.9		1.9		2.1

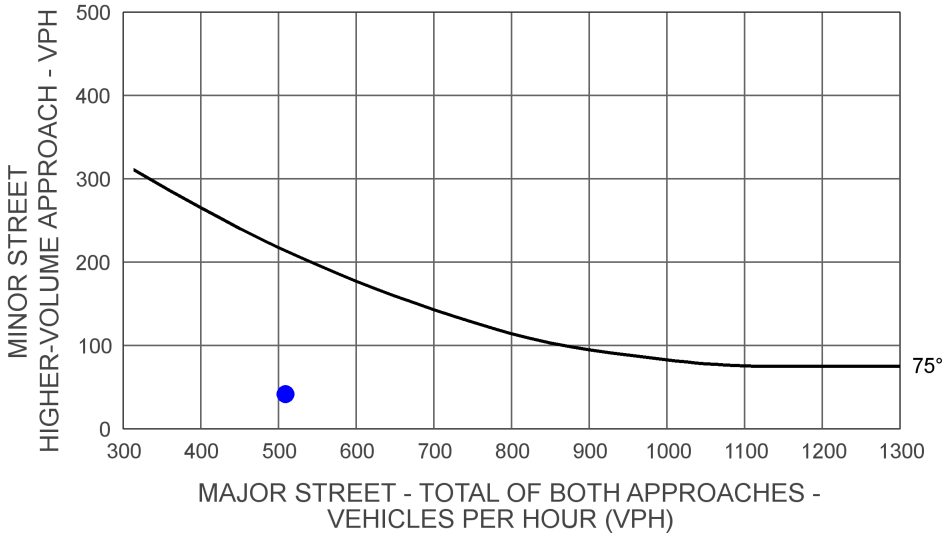
Intersection Summary	
HCM 2010 Ctrl Delay	25.5
HCM 2010 LOS	C

Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Existing
Intersection #: 3

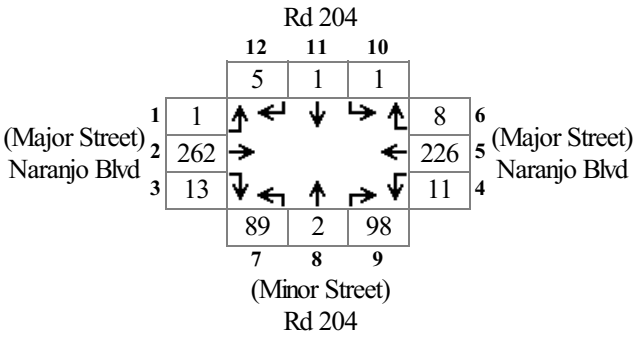


Major Total: 509
Minor High Volume: 42

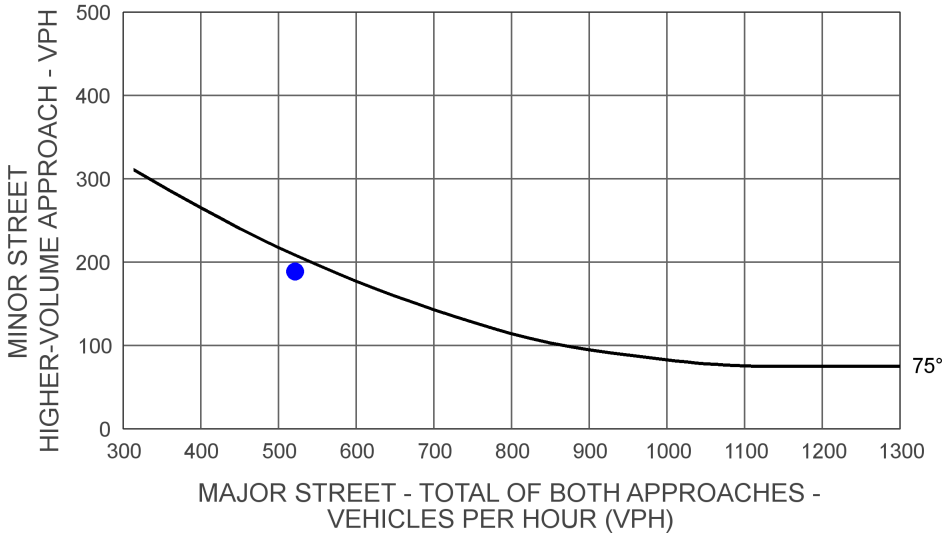


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Existing+Project
Intersection #: 3

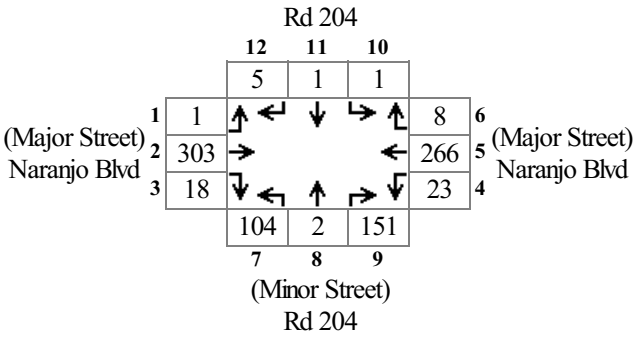


Major Total: 521
Minor High Volume: 189

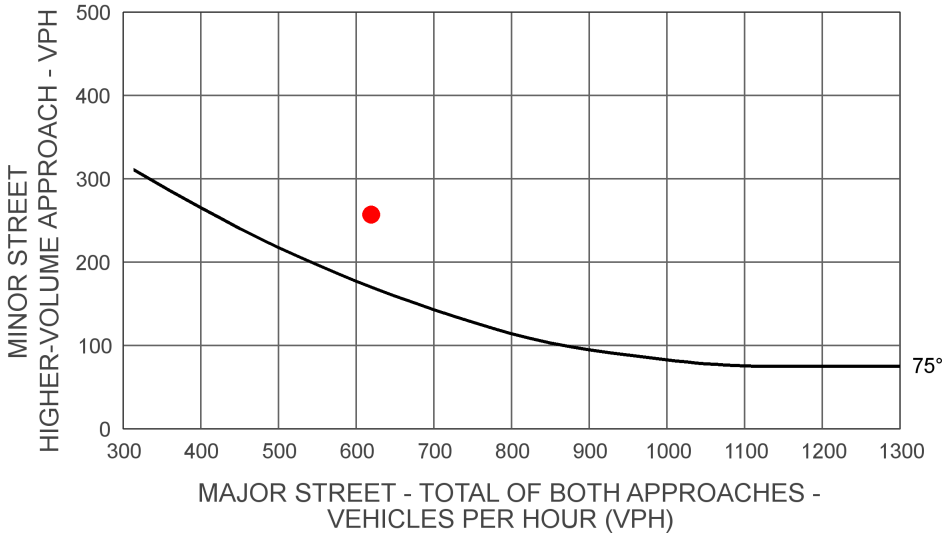


Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: PM Future
Intersection #: 3

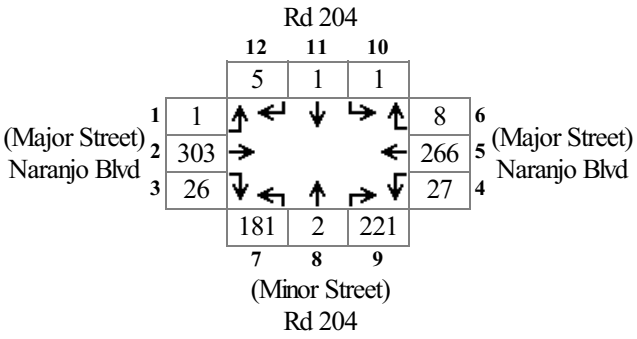


Major Total: 619
Minor High Volume: 257

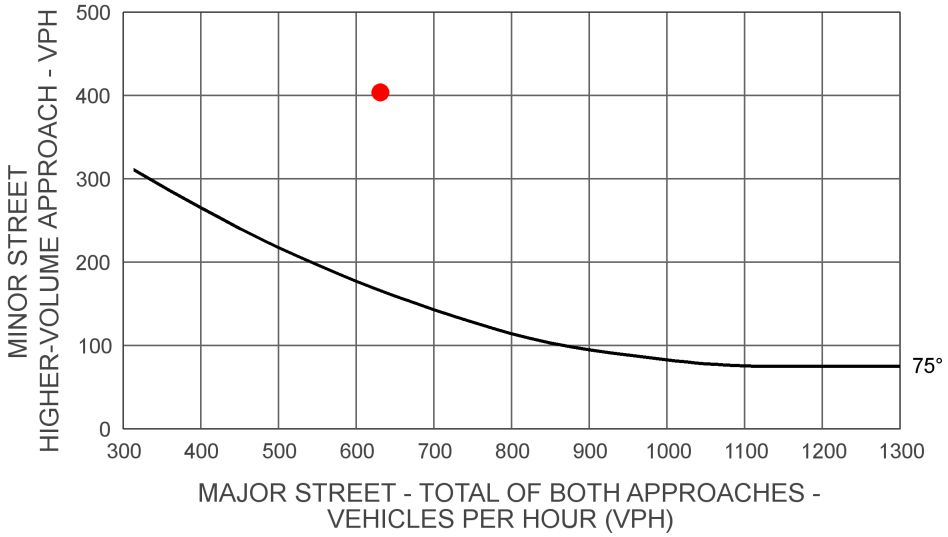


Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: PM Future+Project
Intersection #: 3

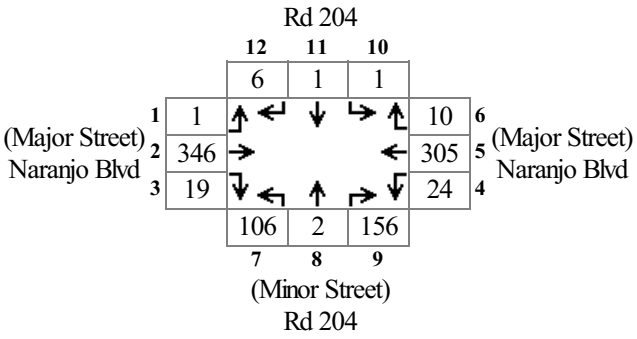


Major Total: 631
Minor High Volume: 404

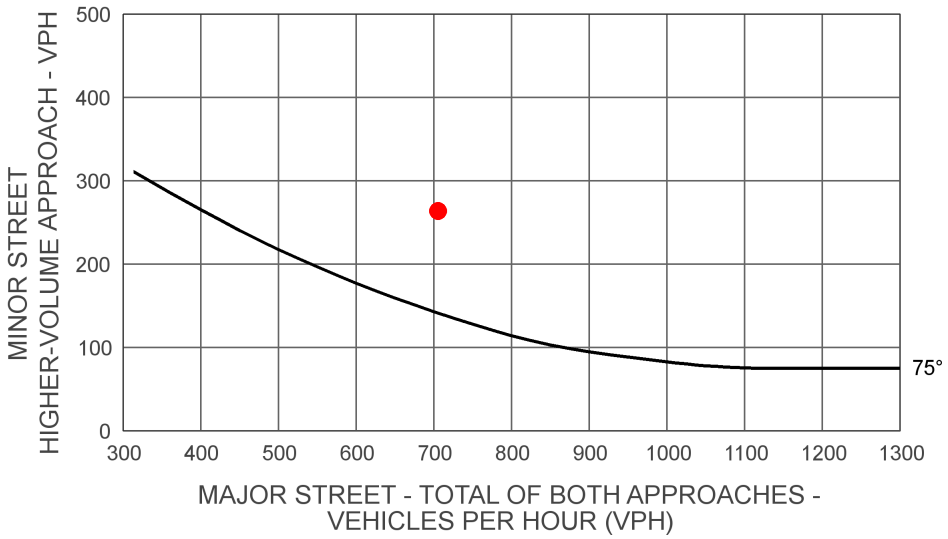


Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: PM Future
Intersection #: 3

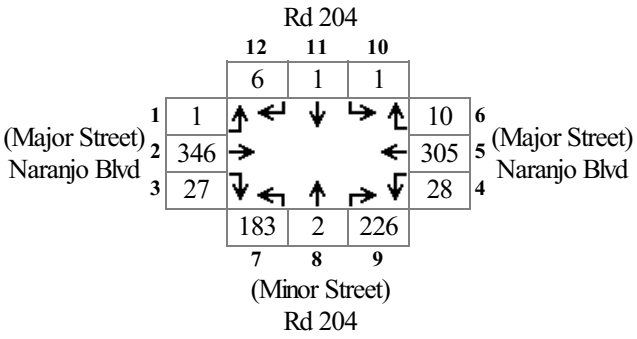


Major Total: 705
Minor High Volume: 264

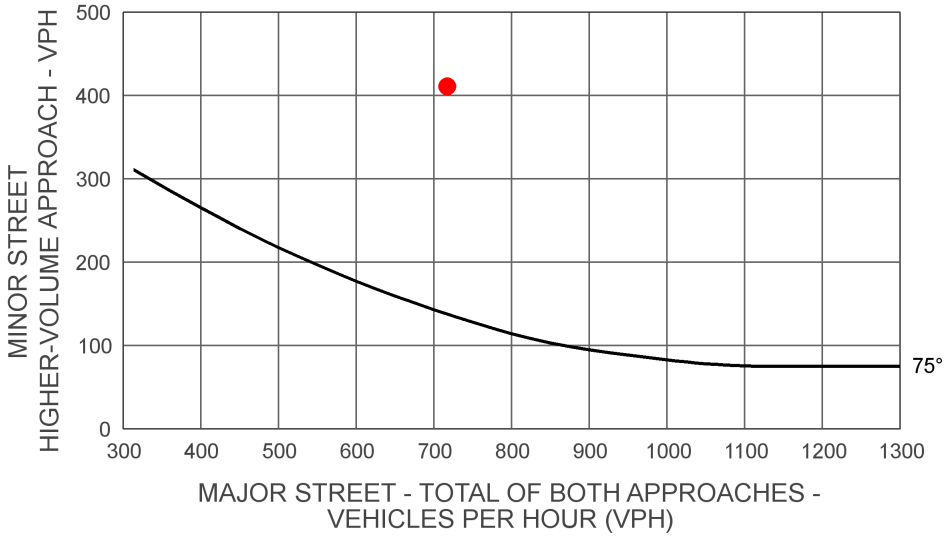


Rural Peak Hour Signal Warrant
Intersection Meets Signal Warrant

Scenario: PM Future+Project
Intersection #: 3



Major Total: 717
Minor High Volume: 411



Intersection 4
Rd 204/Blair Rd & Ropes Ave

Intersection	
Int Delay, s/veh	3.6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	28	9	21	26	14	23
Future Vol, veh/h	28	9	21	26	14	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, %	2	2	2	2	2	2
Mvmt Flow	30	10	23	28	15	25

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	92	37	0	0	51	0
Stage 1	37	-	-	-	-	-
Stage 2	55	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	908	1035	-	-	1555	-
Stage 1	985	-	-	-	-	-
Stage 2	968	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	899	1035	-	-	1555	-
Mov Cap-2 Maneuver	899	-	-	-	-	-
Stage 1	985	-	-	-	-	-
Stage 2	958	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.1	0	2.8
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	929	1555	-
HCM Lane V/C Ratio	-	-	0.043	0.01	-
HCM Control Delay (s)	-	-	9.1	7.3	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	6

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	28	94	21	26	18	23
Future Vol, veh/h	28	94	21	26	18	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, %	2	2	2	2	2	2
Mvmt Flow	30	102	23	28	20	25

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	101	37	0	0	51	0
Stage 1	37	-	-	-	-	-
Stage 2	64	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	898	1035	-	-	1555	-
Stage 1	985	-	-	-	-	-
Stage 2	959	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	886	1035	-	-	1555	-
Mov Cap-2 Maneuver	886	-	-	-	-	-
Stage 1	985	-	-	-	-	-
Stage 2	947	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.2	0	3.2
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	997	1555	-
HCM Lane V/C Ratio	-	-	0.133	0.013	-
HCM Control Delay (s)	-	-	9.2	7.3	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0	-

Intersection	
Int Delay, s/veh	6.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	30	37	21	40	217	23
Future Vol, veh/h	30	37	21	40	217	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, %	2	2	2	2	2	2
Mvmt Flow	33	40	23	43	236	25

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	542	45	0	0	66	0
Stage 1	45	-	-	-	-	-
Stage 2	497	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	501	1025	-	-	1536	-
Stage 1	977	-	-	-	-	-
Stage 2	611	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	423	1025	-	-	1536	-
Mov Cap-2 Maneuver	423	-	-	-	-	-
Stage 1	977	-	-	-	-	-
Stage 2	516	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.5	0	7
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	626	1536	-
HCM Lane V/C Ratio	-	-	0.116	0.154	-
HCM Control Delay (s)	-	-	11.5	7.8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.4	0.5	-

Intersection	
Int Delay, s/veh	7.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	30	122	21	40	221	23
Future Vol, veh/h	30	122	21	40	221	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, %	2	2	2	2	2	2
Mvmt Flow	33	133	23	43	240	25

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	550	45	0	0	66	0
Stage 1	45	-	-	-	-	-
Stage 2	505	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	496	1025	-	-	1536	-
Stage 1	977	-	-	-	-	-
Stage 2	606	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	418	1025	-	-	1536	-
Mov Cap-2 Maneuver	418	-	-	-	-	-
Stage 1	977	-	-	-	-	-
Stage 2	510	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.7	0	7
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	797	1536	-
HCM Lane V/C Ratio	-	-	0.207	0.156	-
HCM Control Delay (s)	-	-	10.7	7.8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.8	0.6	-

Intersection	
Int Delay, s/veh	6.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	35	39	25	45	220	27
Future Vol, veh/h	35	39	25	45	220	27
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, %	2	2	2	2	2	2
Mvmt Flow	38	42	27	49	239	29

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	560	52	0	0	76	0
Stage 1	52	-	-	-	-	-
Stage 2	508	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	489	1016	-	-	1523	-
Stage 1	970	-	-	-	-	-
Stage 2	604	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	411	1016	-	-	1523	-
Mov Cap-2 Maneuver	411	-	-	-	-	-
Stage 1	970	-	-	-	-	-
Stage 2	507	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.9	0	7
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	599	1523	-
HCM Lane V/C Ratio	-	-	0.134	0.157	-
HCM Control Delay (s)	-	-	11.9	7.8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.5	0.6	-

Intersection	
Int Delay, s/veh	7.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	35	124	25	45	224	27
Future Vol, veh/h	35	124	25	45	224	27
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, %	2	2	2	2	2	2
Mvmt Flow	38	135	27	49	243	29

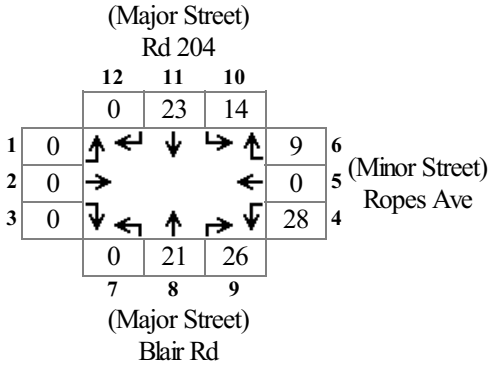
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	568	52	0	0	76	0
Stage 1	52	-	-	-	-	-
Stage 2	516	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	484	1016	-	-	1523	-
Stage 1	970	-	-	-	-	-
Stage 2	599	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	406	1016	-	-	1523	-
Mov Cap-2 Maneuver	406	-	-	-	-	-
Stage 1	970	-	-	-	-	-
Stage 2	502	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	11.1	0	7
HCM LOS	B		

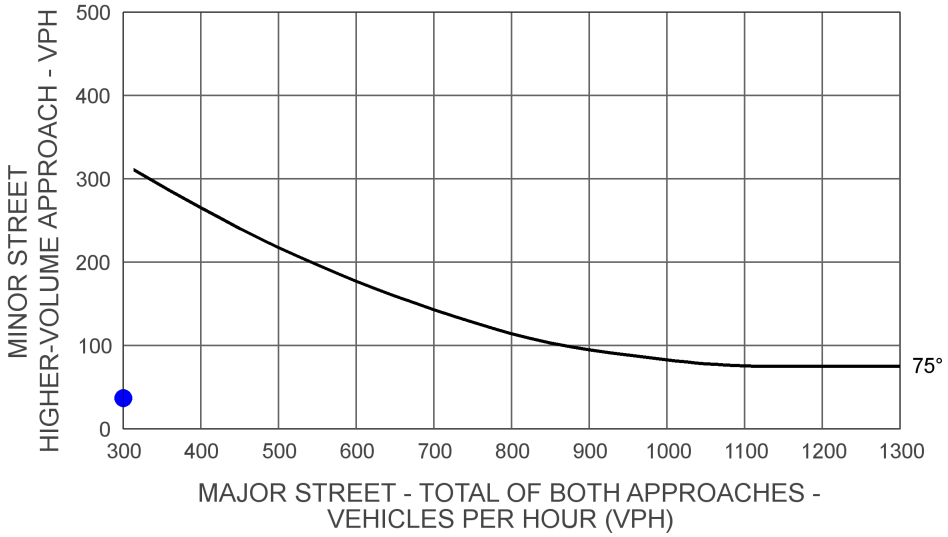
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	763	1523	-
HCM Lane V/C Ratio	-	-	0.227	0.16	-
HCM Control Delay (s)	-	-	11.1	7.8	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	0.9	0.6	-

Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Existing
Intersection #: 4

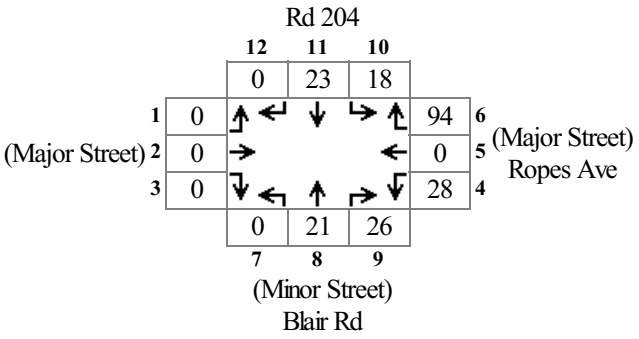


Major Total: 84
Minor High Volume: 37

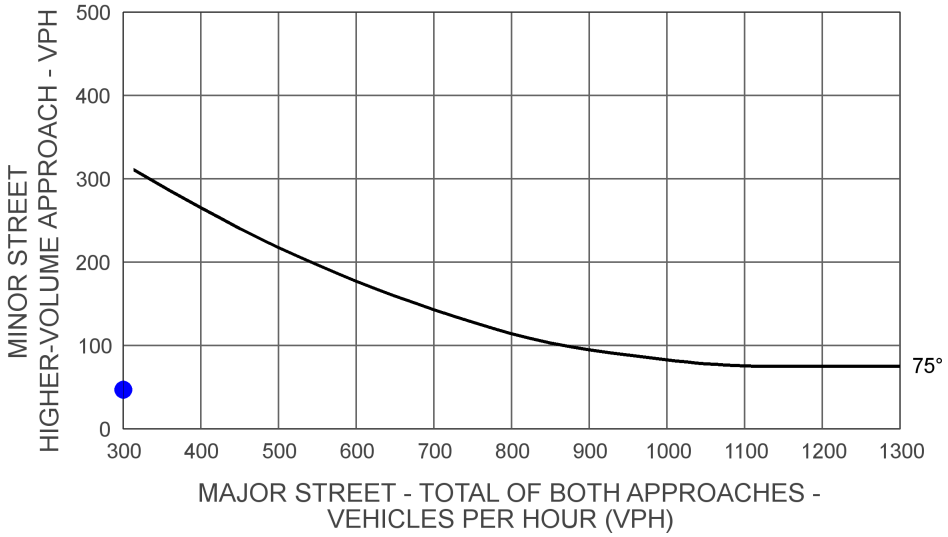


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Existing+Project
Intersection #: 4

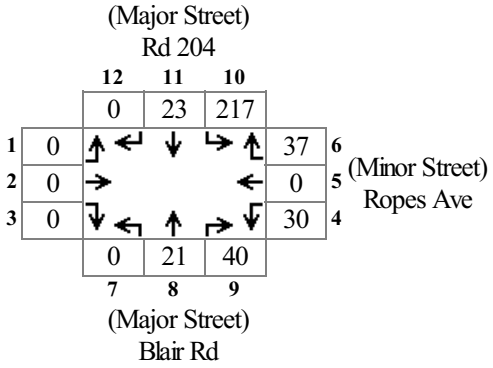


Major Total: 122
Minor High Volume: 47

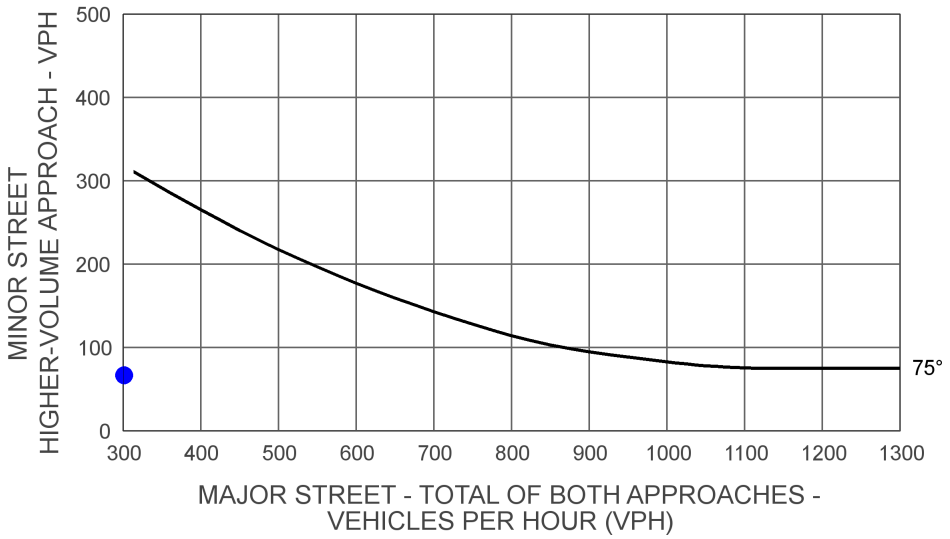


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Future
Intersection #: 4

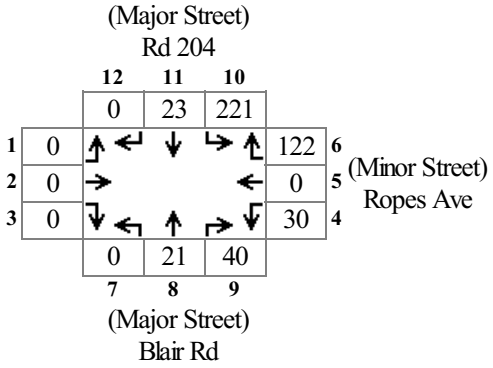


Major Total: 301
Minor High Volume: 67

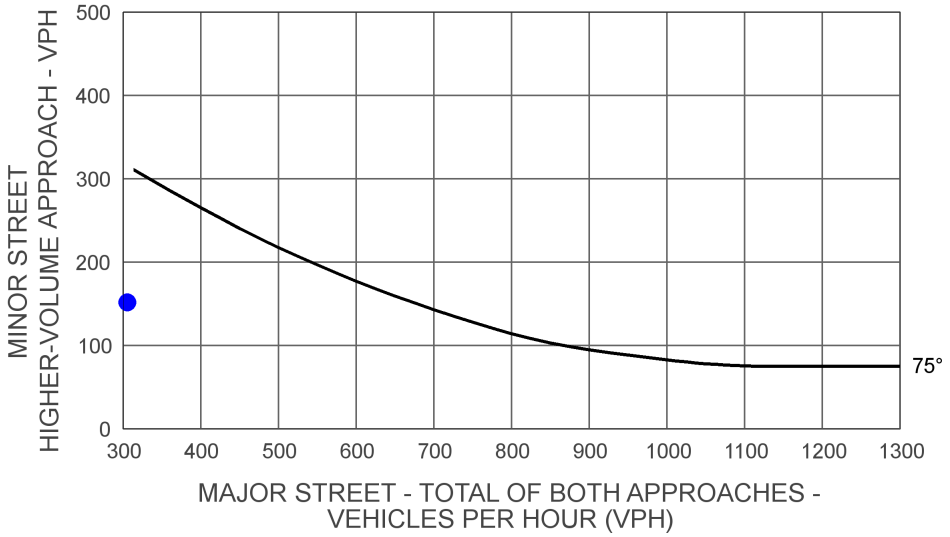


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Future+Project
Intersection #: 4

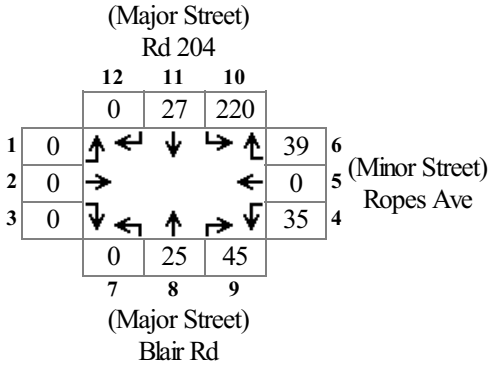


Major Total: 305
Minor High Volume: 152

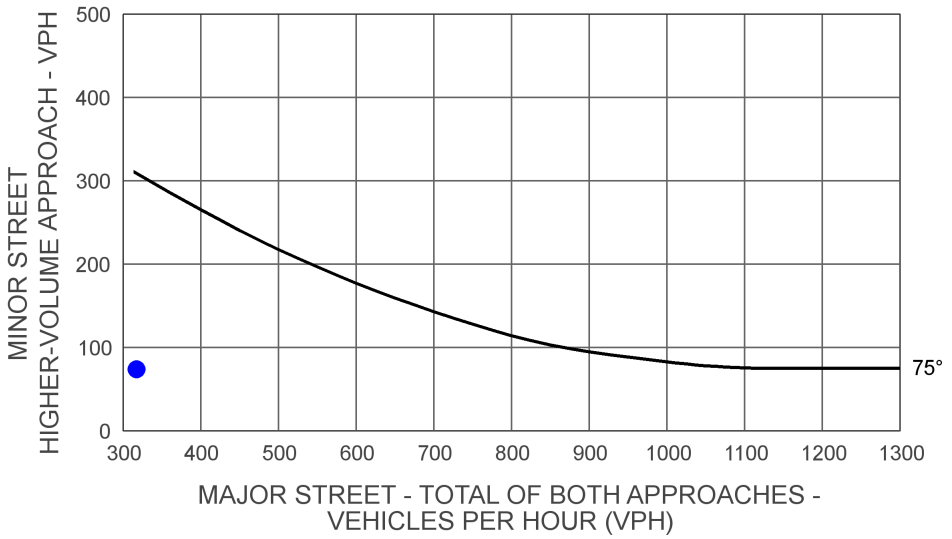


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Future
Intersection #: 4

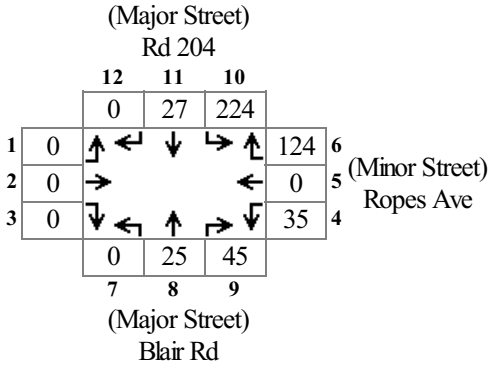


Major Total: 317
Minor High Volume: 74

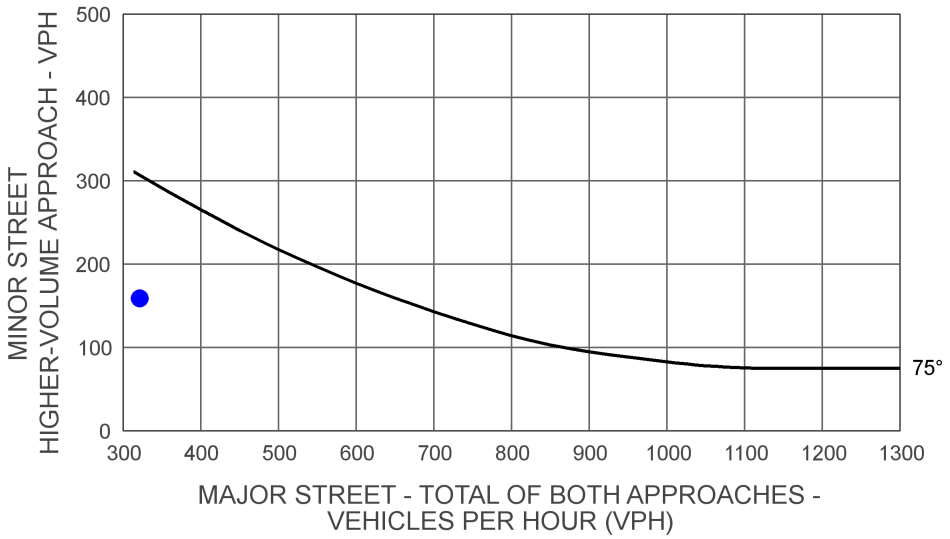


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Future+Project
Intersection #: 4



Major Total: 321
Minor High Volume: 159



Intersection	
Int Delay, s/veh	3.5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	21	9	21	21	8	13
Future Vol, veh/h	21	9	21	21	8	13
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, %	2	2	2	2	2	2
Mvmt Flow	23	10	23	23	9	14

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	66	34	0	0	46	0
Stage 1	34	-	-	-	-	-
Stage 2	32	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	939	1039	-	-	1562	-
Stage 1	988	-	-	-	-	-
Stage 2	991	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	933	1039	-	-	1562	-
Mov Cap-2 Maneuver	933	-	-	-	-	-
Stage 1	988	-	-	-	-	-
Stage 2	985	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	8.9	0	2.8
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	962	1562	-
HCM Lane V/C Ratio	-	-	0.034	0.006	-
HCM Control Delay (s)	-	-	8.9	7.3	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.1	0	-

Intersection	
Int Delay, s/veh	5

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	21	21	21	21	40	13
Future Vol, veh/h	21	21	21	21	40	13
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, %	2	2	2	2	2	2
Mvmt Flow	23	23	23	23	43	14

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	135	34	0	0	46	0
Stage 1	34	-	-	-	-	-
Stage 2	101	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	859	1039	-	-	1562	-
Stage 1	988	-	-	-	-	-
Stage 2	923	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	835	1039	-	-	1562	-
Mov Cap-2 Maneuver	835	-	-	-	-	-
Stage 1	988	-	-	-	-	-
Stage 2	897	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	9.1	0	5.6
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	926	1562	-
HCM Lane V/C Ratio	-	-	0.049	0.028	-
HCM Control Delay (s)	-	-	9.1	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0.1	-

Intersection	
Int Delay, s/veh	8.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	40	224	21	23	37	13
Future Vol, veh/h	40	224	21	23	37	13
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, %	2	2	2	2	2	2
Mvmt Flow	43	243	23	25	40	14

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	130	35	0	0	48	0
Stage 1	35	-	-	-	-	-
Stage 2	95	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	864	1038	-	-	1559	-
Stage 1	987	-	-	-	-	-
Stage 2	929	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	842	1038	-	-	1559	-
Mov Cap-2 Maneuver	842	-	-	-	-	-
Stage 1	987	-	-	-	-	-
Stage 2	905	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10	0	5.5
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	1003	1559	-
HCM Lane V/C Ratio	-	-	0.286	0.026	-
HCM Control Delay (s)	-	-	10	7.4	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	1.2	0.1	-

Intersection	
Int Delay, s/veh	8.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	40	236	21	23	69	13
Future Vol, veh/h	40	236	21	23	69	13
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, %	2	2	2	2	2	2
Mvmt Flow	43	257	23	25	75	14

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	199	35	0	0	48	0
Stage 1	35	-	-	-	-	-
Stage 2	164	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	790	1038	-	-	1559	-
Stage 1	987	-	-	-	-	-
Stage 2	865	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	752	1038	-	-	1559	-
Mov Cap-2 Maneuver	752	-	-	-	-	-
Stage 1	987	-	-	-	-	-
Stage 2	823	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.3	0	6.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	984	1559	-
HCM Lane V/C Ratio	-	-	0.305	0.048	-
HCM Control Delay (s)	-	-	10.3	7.4	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	1.3	0.2	-

Intersection	
Int Delay, s/veh	8.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	44	226	25	27	39	16
Future Vol, veh/h	44	226	25	27	39	16
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, %	2	2	2	2	2	2
Mvmt Flow	48	246	27	29	42	17

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	144	42	0	0	57	0
Stage 1	42	-	-	-	-	-
Stage 2	102	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	849	1029	-	-	1547	-
Stage 1	980	-	-	-	-	-
Stage 2	922	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	826	1029	-	-	1547	-
Mov Cap-2 Maneuver	826	-	-	-	-	-
Stage 1	980	-	-	-	-	-
Stage 2	897	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.2	0	5.2
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	989	1547	-
HCM Lane V/C Ratio	-	-	0.297	0.027	-
HCM Control Delay (s)	-	-	10.2	7.4	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	1.2	0.1	-

Intersection	
Int Delay, s/veh	8.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Traffic Vol, veh/h	44	238	25	27	71	16
Future Vol, veh/h	44	238	25	27	71	16
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, %	2	2	2	2	2	2
Mvmt Flow	48	259	27	29	77	17

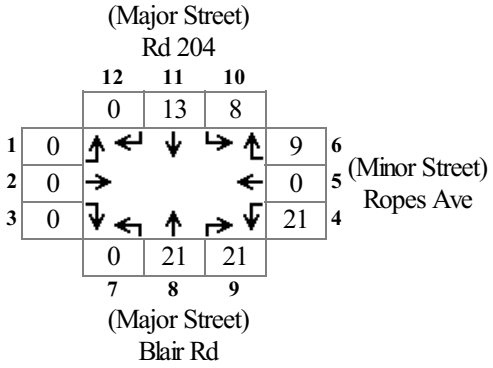
Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	214	42	0	0	57	0
Stage 1	42	-	-	-	-	-
Stage 2	172	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	774	1029	-	-	1547	-
Stage 1	980	-	-	-	-	-
Stage 2	858	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	735	1029	-	-	1547	-
Mov Cap-2 Maneuver	735	-	-	-	-	-
Stage 1	980	-	-	-	-	-
Stage 2	815	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s	10.4	0	6.1
HCM LOS	B		

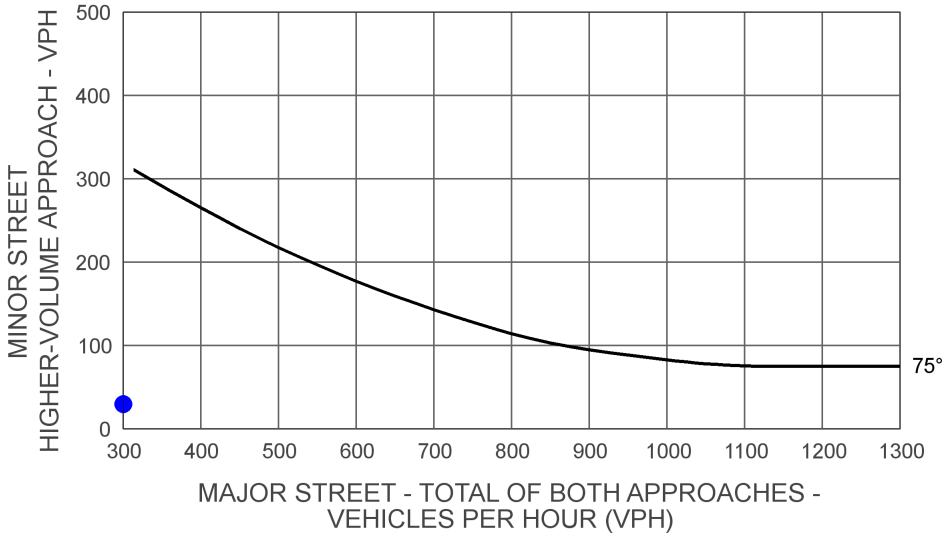
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	969	1547	-
HCM Lane V/C Ratio	-	-	0.316	0.05	-
HCM Control Delay (s)	-	-	10.4	7.4	0
HCM Lane LOS	-	-	B	A	A
HCM 95th %tile Q(veh)	-	-	1.4	0.2	-

Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Existing
Intersection #: 4

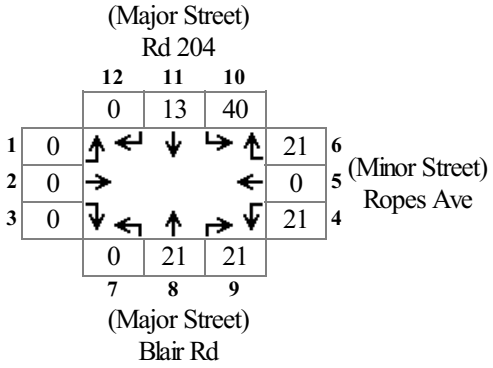


Major Total: 63
Minor High Volume: 30

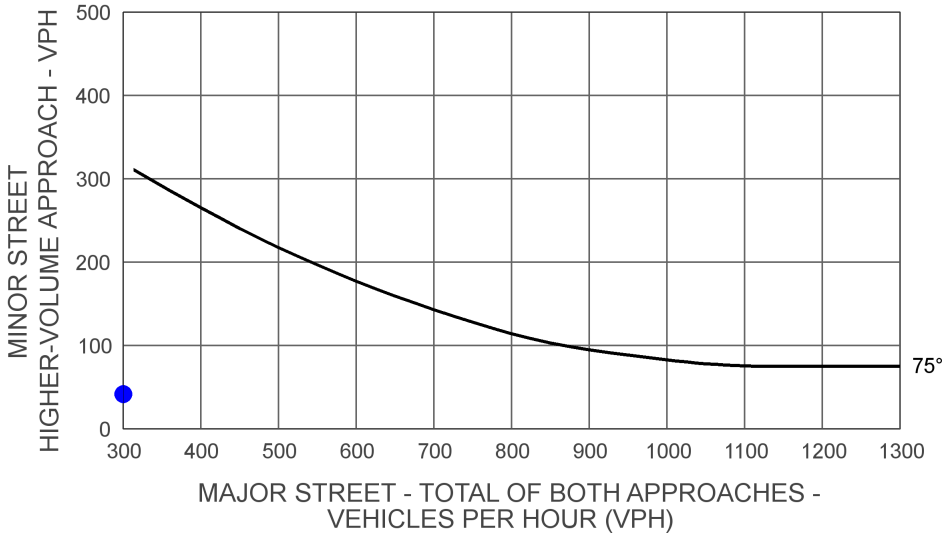


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Existing+Project
Intersection #: 4

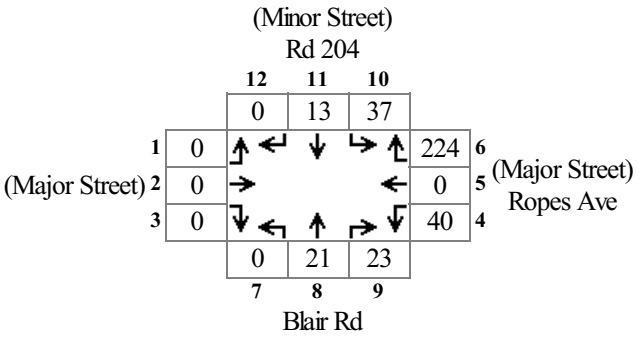


Major Total: 95
Minor High Volume: 42

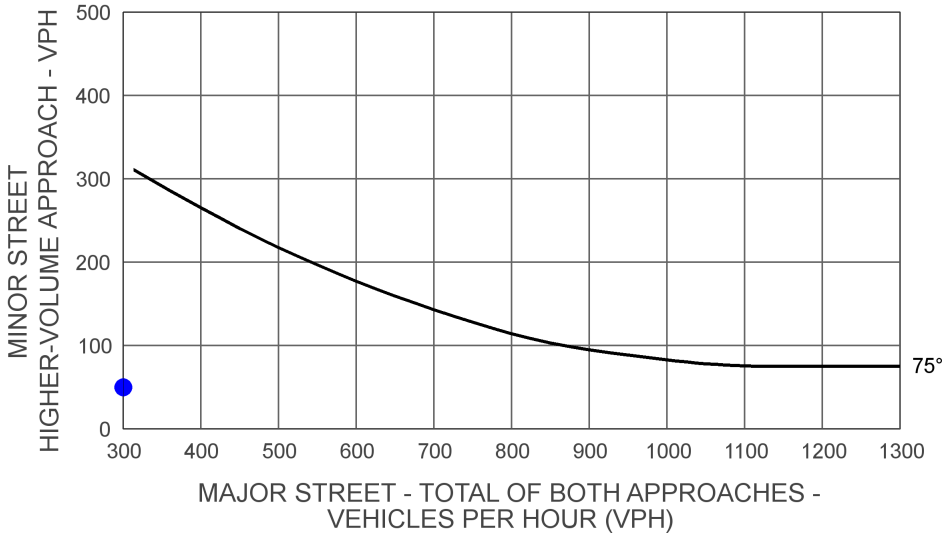


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Future
Intersection #: 4

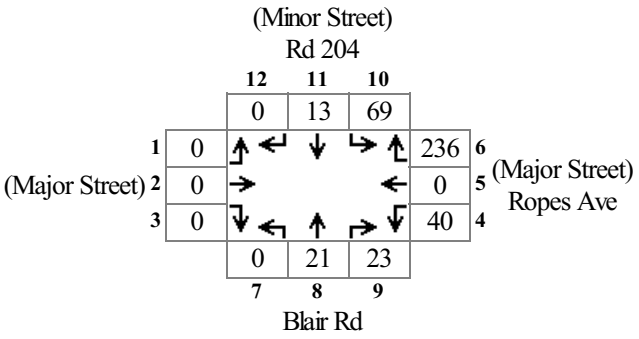


Major Total: 264
Minor High Volume: 50

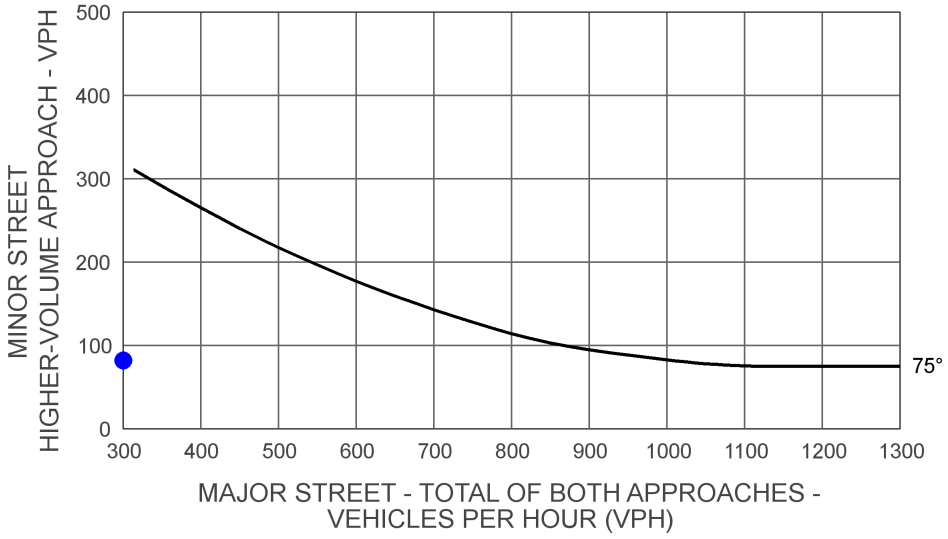


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Future+Project
Intersection #: 4

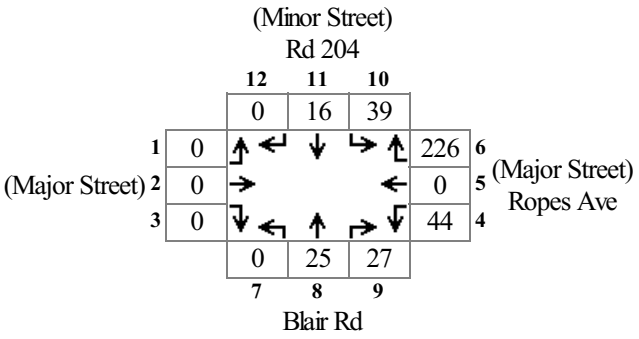


Major Total: 276
Minor High Volume: 82

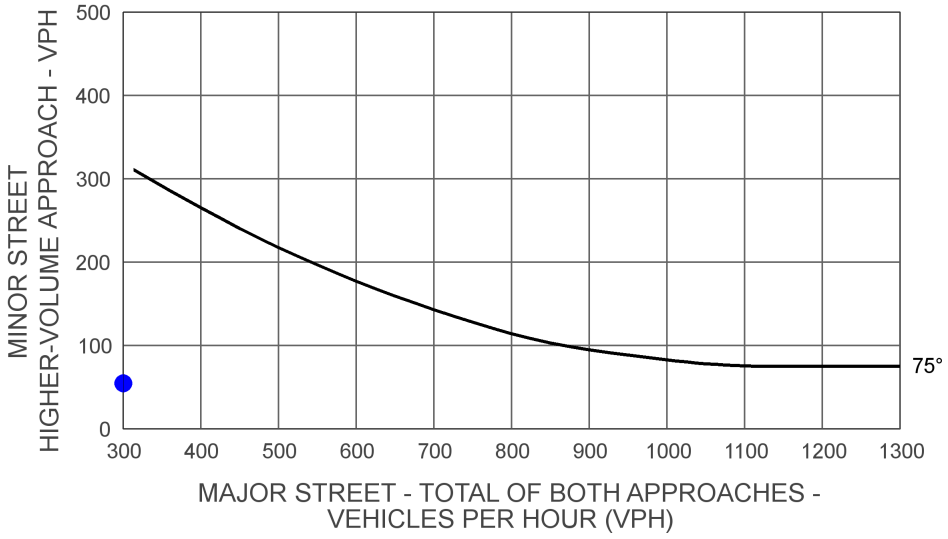


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Future
Intersection #: 4

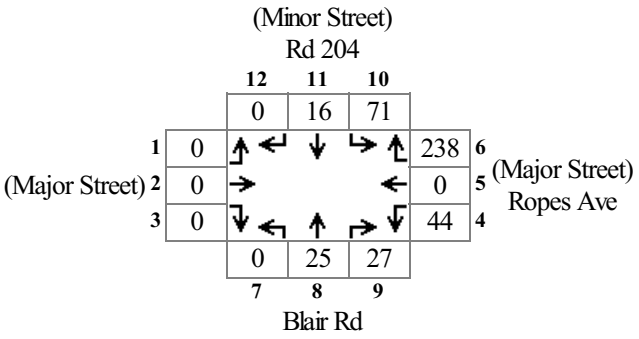


Major Total: 270
Minor High Volume: 55

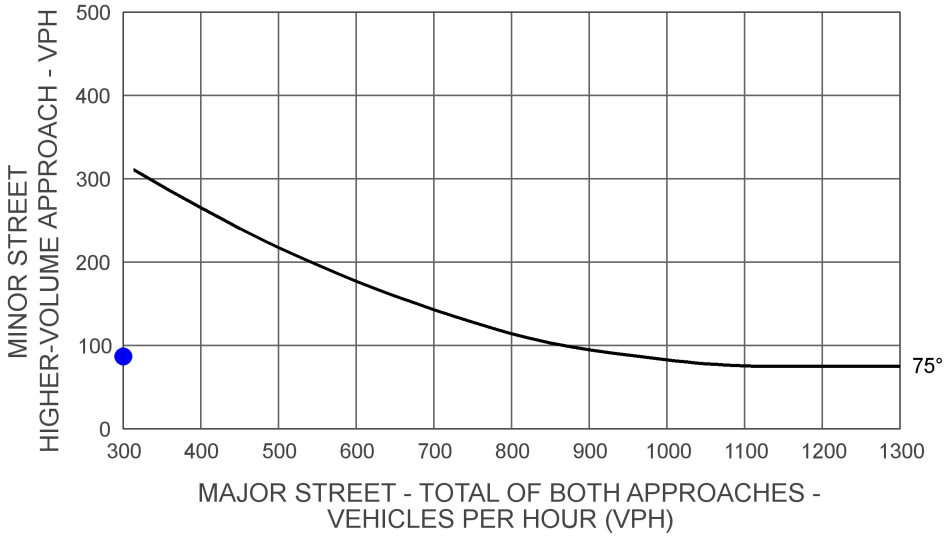


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Future+Project
Intersection #: 4



Major Total: 282
Minor High Volume: 87



Intersection 5
Valencia Blvd & Ropes Ave

Intersection	
Int Delay, s/veh	1.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Traffic Vol, veh/h	30	13	9	183	173	16
Future Vol, veh/h	30	13	9	183	173	16
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, %	2	2	2	2	2	2
Mvmt Flow	33	14	10	199	188	17

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	415	197	205	0	-	0
Stage 1	197	-	-	-	-	-
Stage 2	218	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	594	844	1366	-	-	-
Stage 1	836	-	-	-	-	-
Stage 2	818	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	589	844	1366	-	-	-
Mov Cap-2 Maneuver	589	-	-	-	-	-
Stage 1	836	-	-	-	-	-
Stage 2	811	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11	0.4	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1366	-	648	-	-
HCM Lane V/C Ratio	0.007	-	0.072	-	-
HCM Control Delay (s)	7.7	0	11	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection	
Int Delay, s/veh	2.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Traffic Vol, veh/h	30	17	94	190	177	16
Future Vol, veh/h	30	17	94	190	177	16
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, %	2	2	2	2	2	2
Mvmt Flow	33	18	102	207	192	17

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	612	201	210	0	-	0
Stage 1	201	-	-	-	-	-
Stage 2	411	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	456	840	1361	-	-	-
Stage 1	833	-	-	-	-	-
Stage 2	669	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	417	840	1361	-	-	-
Mov Cap-2 Maneuver	417	-	-	-	-	-
Stage 1	833	-	-	-	-	-
Stage 2	612	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.8	2.6	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1361	-	510	-	-
HCM Lane V/C Ratio	0.075	-	0.1	-	-
HCM Control Delay (s)	7.9	0	12.8	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.2	-	0.3	-	-

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Traffic Vol, veh/h	31	16	37	200	178	23
Future Vol, veh/h	31	16	37	200	178	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, %	2	2	2	2	2	2
Mvmt Flow	34	17	40	217	193	25

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	504	206	218	0	-	0
Stage 1	206	-	-	-	-	-
Stage 2	298	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	528	835	1352	-	-	-
Stage 1	829	-	-	-	-	-
Stage 2	753	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	510	835	1352	-	-	-
Mov Cap-2 Maneuver	510	-	-	-	-	-
Stage 1	829	-	-	-	-	-
Stage 2	727	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.7	1.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1352	-	588	-	-
HCM Lane V/C Ratio	0.03	-	0.087	-	-
HCM Control Delay (s)	7.7	0	11.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.3	-	-

Intersection	
Int Delay, s/veh	2.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Traffic Vol, veh/h	31	20	122	207	182	23
Future Vol, veh/h	31	20	122	207	182	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, %	2	2	2	2	2	2
Mvmt Flow	34	22	133	225	198	25

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	700	210	223	0	-	0
Stage 1	210	-	-	-	-	-
Stage 2	490	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	405	830	1346	-	-	-
Stage 1	825	-	-	-	-	-
Stage 2	616	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	359	830	1346	-	-	-
Mov Cap-2 Maneuver	359	-	-	-	-	-
Stage 1	825	-	-	-	-	-
Stage 2	546	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	13.9	3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1346	-	462	-	-
HCM Lane V/C Ratio	0.099	-	0.12	-	-
HCM Control Delay (s)	8	0	13.9	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.3	-	0.4	-	-

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Traffic Vol, veh/h	34	17	39	232	211	26
Future Vol, veh/h	34	17	39	232	211	26
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, %	2	2	2	2	2	2
Mvmt Flow	37	18	42	252	229	28

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	580	243	258	0	-	0
Stage 1	243	-	-	-	-	-
Stage 2	337	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	477	796	1307	-	-	-
Stage 1	797	-	-	-	-	-
Stage 2	723	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	459	796	1307	-	-	-
Mov Cap-2 Maneuver	459	-	-	-	-	-
Stage 1	797	-	-	-	-	-
Stage 2	696	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.5	1.1	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1307	-	534	-	-
HCM Lane V/C Ratio	0.032	-	0.104	-	-
HCM Control Delay (s)	7.8	0	12.5	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.3	-	-

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Traffic Vol, veh/h	34	21	124	239	215	26
Future Vol, veh/h	34	21	124	239	215	26
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, %	2	2	2	2	2	2
Mvmt Flow	37	23	135	260	234	28

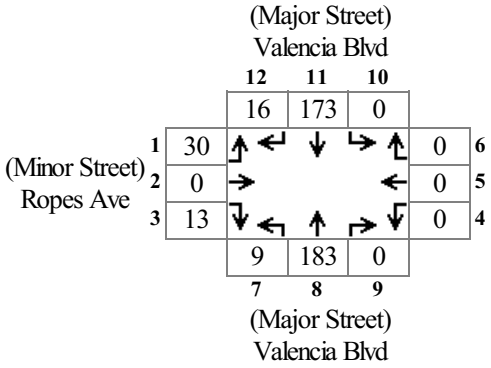
Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	777	248	262	0	-	0
Stage 1	248	-	-	-	-	-
Stage 2	529	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	365	791	1302	-	-	-
Stage 1	793	-	-	-	-	-
Stage 2	591	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	321	791	1302	-	-	-
Mov Cap-2 Maneuver	321	-	-	-	-	-
Stage 1	793	-	-	-	-	-
Stage 2	519	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	15.1	2.8	0
HCM LOS	C		

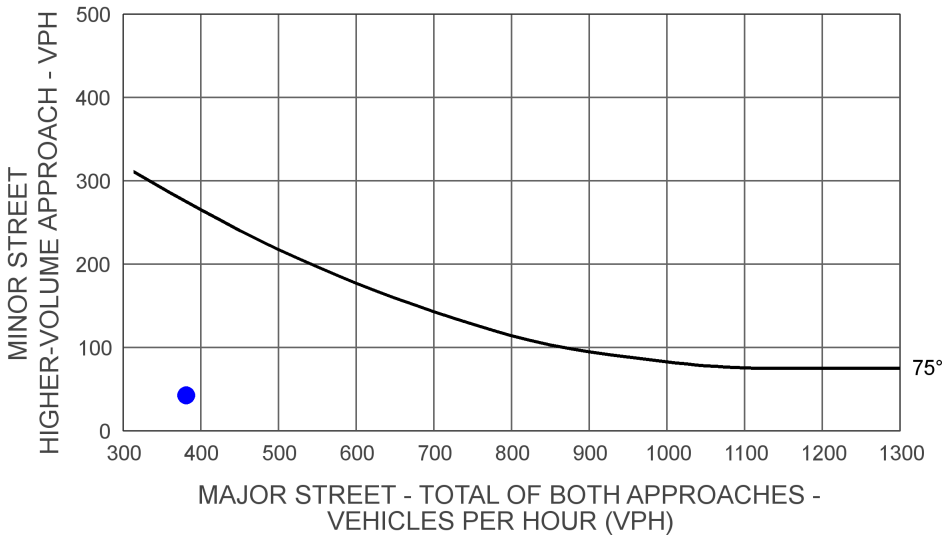
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1302	-	415	-	-
HCM Lane V/C Ratio	0.104	-	0.144	-	-
HCM Control Delay (s)	8.1	0	15.1	-	-
HCM Lane LOS	A	A	C	-	-
HCM 95th %tile Q(veh)	0.3	-	0.5	-	-

Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Existing
Intersection #: 5

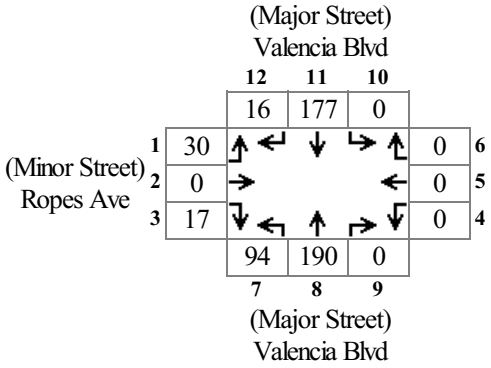


Major Total: 381
Minor High Volume: 43

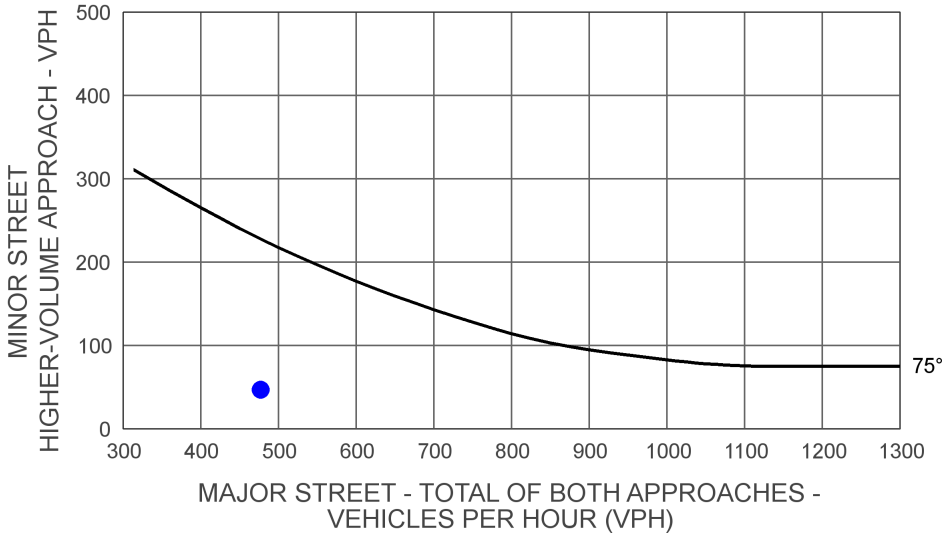


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Existing+Project
Intersection #: 5

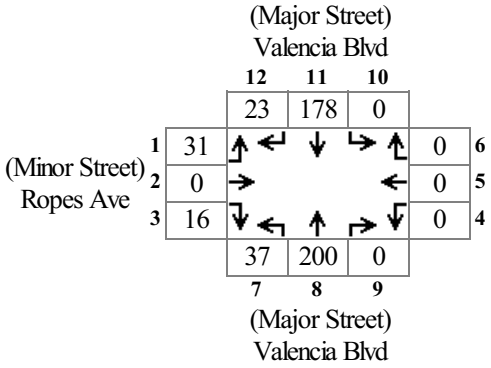


Major Total: 477
Minor High Volume: 47

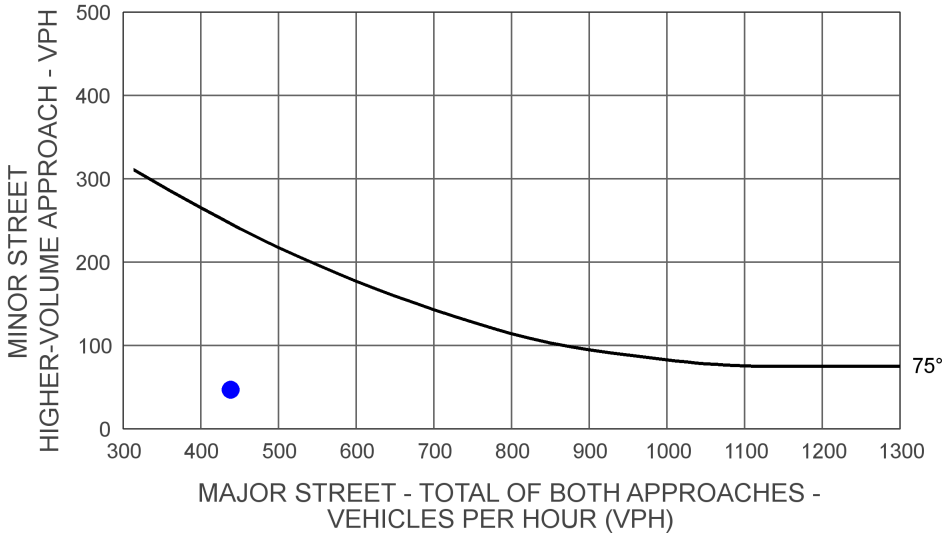


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Future
Intersection #: 5

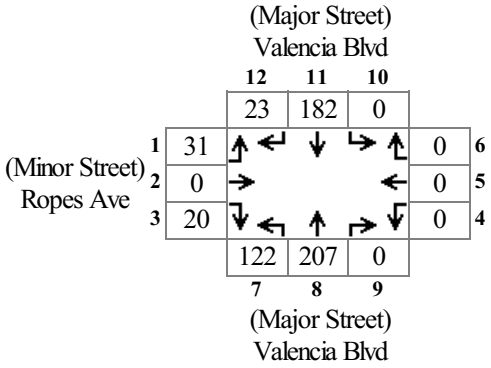


Major Total: 438
Minor High Volume: 47

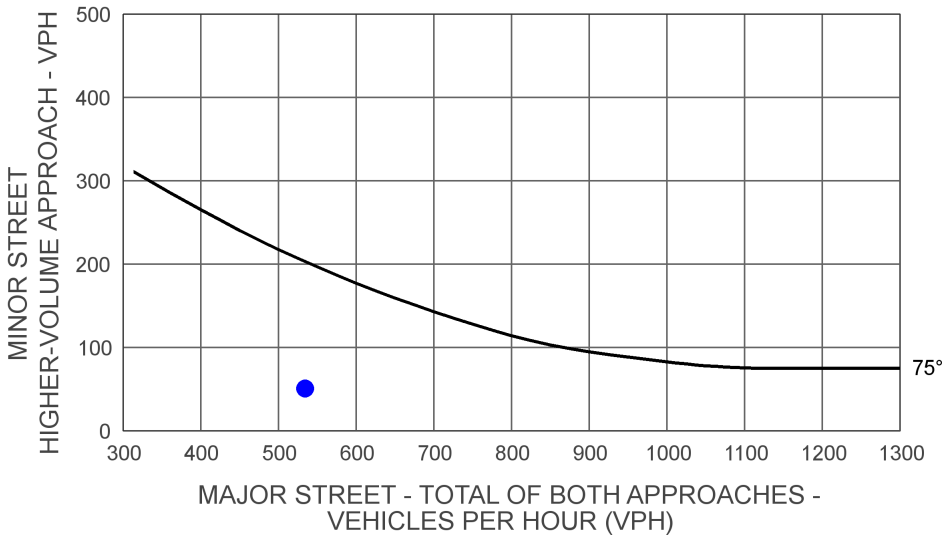


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Future+Project
Intersection #: 5

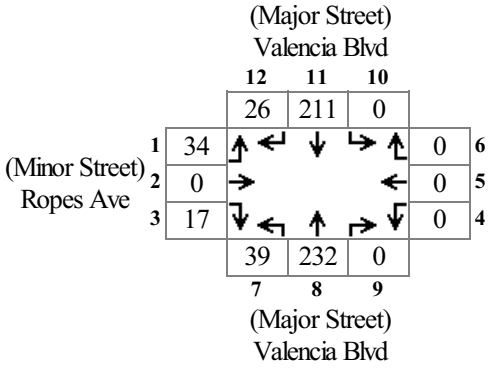


Major Total: 534
Minor High Volume: 51

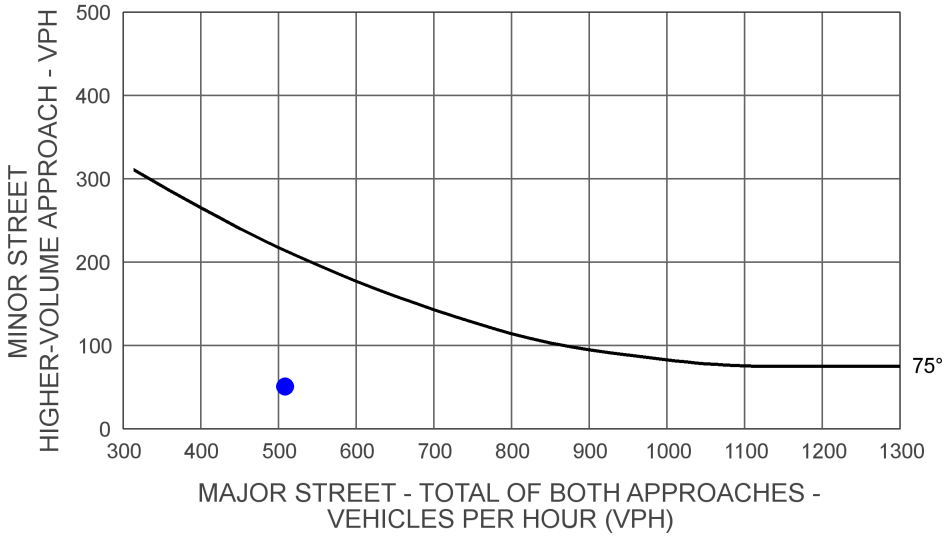


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Future
Intersection #: 5

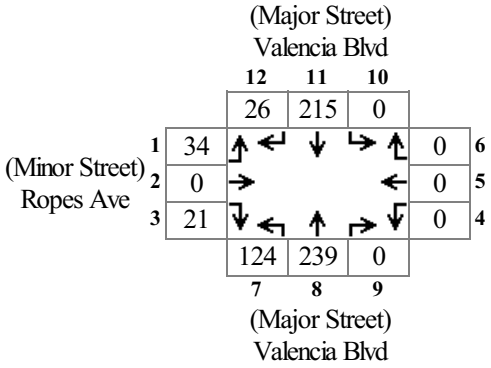


Major Total: 508
Minor High Volume: 51

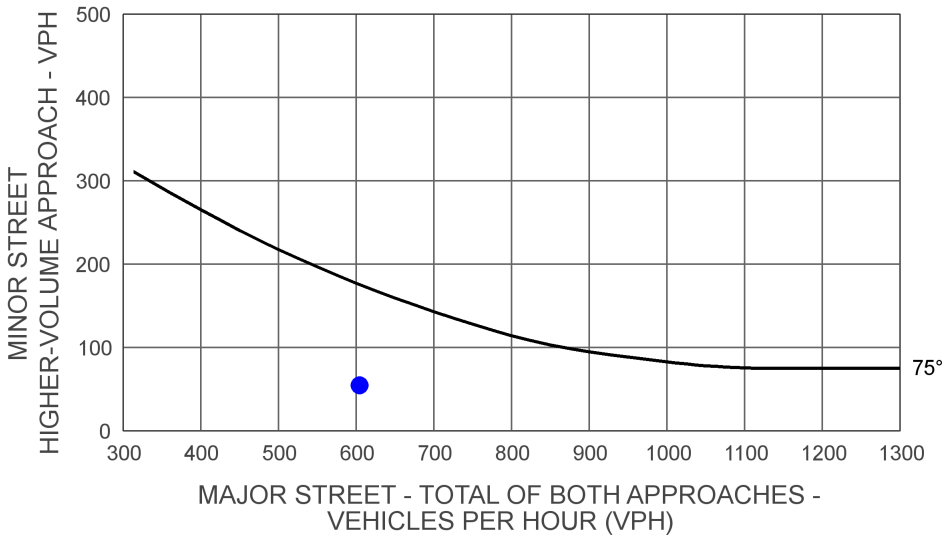


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: AM Future+Project
Intersection #: 5



Major Total: 604
Minor High Volume: 55



Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Traffic Vol, veh/h	31	10	5	191	157	25
Future Vol, veh/h	31	10	5	191	157	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, %	2	2	2	2	2	2
Mvmt Flow	34	11	5	208	171	27

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	402	184	198	0	-	0
Stage 1	184	-	-	-	-	-
Stage 2	218	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	604	858	1375	-	-	-
Stage 1	848	-	-	-	-	-
Stage 2	818	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	602	858	1375	-	-	-
Mov Cap-2 Maneuver	602	-	-	-	-	-
Stage 1	848	-	-	-	-	-
Stage 2	815	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1375	-	649	-	-
HCM Lane V/C Ratio	0.004	-	0.069	-	-
HCM Control Delay (s)	7.6	0	11	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Traffic Vol, veh/h	31	42	17	192	194	25
Future Vol, veh/h	31	42	17	192	194	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, %	2	2	2	2	2	2
Mvmt Flow	34	46	18	209	211	27

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	470	224	238	0	-	0
Stage 1	224	-	-	-	-	-
Stage 2	246	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	552	815	1329	-	-	-
Stage 1	813	-	-	-	-	-
Stage 2	795	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	544	815	1329	-	-	-
Mov Cap-2 Maneuver	544	-	-	-	-	-
Stage 1	813	-	-	-	-	-
Stage 2	783	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.1	0.6	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1329	-	673	-	-
HCM Lane V/C Ratio	0.014	-	0.118	-	-
HCM Control Delay (s)	7.7	0	11.1	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.4	-	-

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Traffic Vol, veh/h	38	34	9	196	177	26
Future Vol, veh/h	38	34	9	196	177	26
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, %	2	2	2	2	2	2
Mvmt Flow	41	37	10	213	192	28

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	440	207	221	0	-	0
Stage 1	207	-	-	-	-	-
Stage 2	233	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	574	833	1348	-	-	-
Stage 1	828	-	-	-	-	-
Stage 2	806	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	569	833	1348	-	-	-
Mov Cap-2 Maneuver	569	-	-	-	-	-
Stage 1	828	-	-	-	-	-
Stage 2	800	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.1	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1348	-	669	-	-
HCM Lane V/C Ratio	0.007	-	0.117	-	-
HCM Control Delay (s)	7.7	0	11.1	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.4	-	-

Intersection	
Int Delay, s/veh	2.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Traffic Vol, veh/h	38	66	21	197	214	26
Future Vol, veh/h	38	66	21	197	214	26
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, %	2	2	2	2	2	2
Mvmt Flow	41	72	23	214	233	28

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	507	247	261	0	-	0
Stage 1	247	-	-	-	-	-
Stage 2	260	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	525	792	1303	-	-	-
Stage 1	794	-	-	-	-	-
Stage 2	783	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	515	792	1303	-	-	-
Mov Cap-2 Maneuver	515	-	-	-	-	-
Stage 1	794	-	-	-	-	-
Stage 2	767	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.6	0.8	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1303	-	662	-	-
HCM Lane V/C Ratio	0.018	-	0.171	-	-
HCM Control Delay (s)	7.8	0	11.6	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.6	-	-

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Traffic Vol, veh/h	41	35	10	229	207	31
Future Vol, veh/h	41	35	10	229	207	31
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, %	2	2	2	2	2	2
Mvmt Flow	45	38	11	249	225	34

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	513	242	259	0	-	0
Stage 1	242	-	-	-	-	-
Stage 2	271	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	521	797	1306	-	-	-
Stage 1	798	-	-	-	-	-
Stage 2	775	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	516	797	1306	-	-	-
Mov Cap-2 Maneuver	516	-	-	-	-	-
Stage 1	798	-	-	-	-	-
Stage 2	767	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	11.7	0.3	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1306	-	616	-	-
HCM Lane V/C Ratio	0.008	-	0.134	-	-
HCM Control Delay (s)	7.8	0	11.7	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.5	-	-

Intersection	
Int Delay, s/veh	2.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Traffic Vol, veh/h	41	67	22	230	244	31
Future Vol, veh/h	41	67	22	230	244	31
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, %	2	2	2	2	2	2
Mvmt Flow	45	73	24	250	265	34

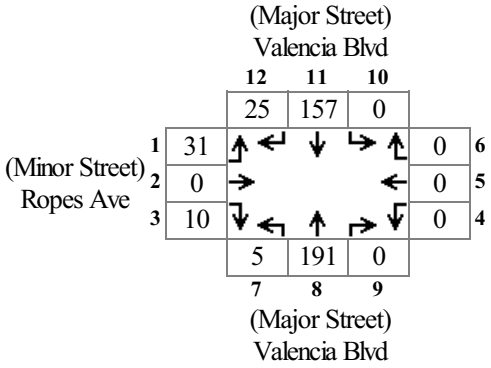
Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	580	282	299	0	-	0
Stage 1	282	-	-	-	-	-
Stage 2	298	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	477	757	1262	-	-	-
Stage 1	766	-	-	-	-	-
Stage 2	753	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	467	757	1262	-	-	-
Mov Cap-2 Maneuver	467	-	-	-	-	-
Stage 1	766	-	-	-	-	-
Stage 2	736	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	12.3	0.7	0
HCM LOS	B		

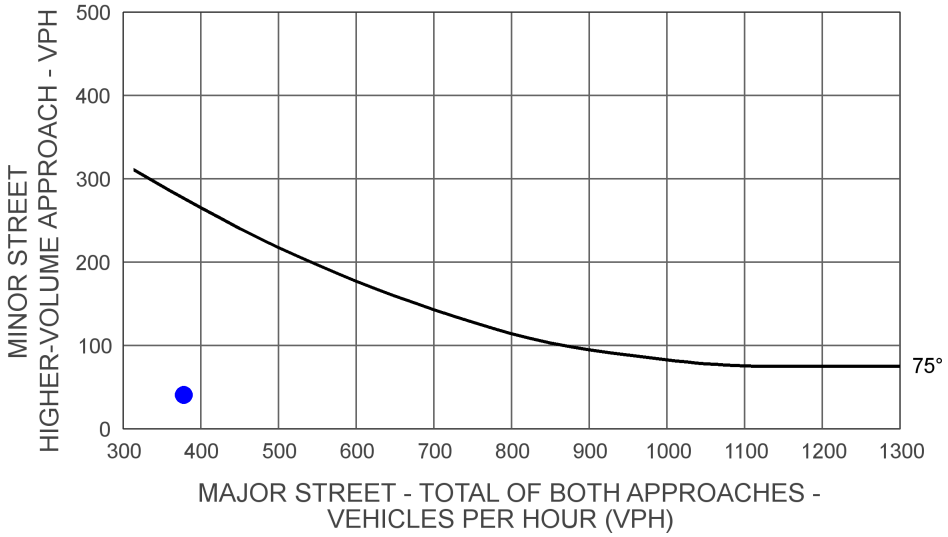
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1262	-	613	-	-
HCM Lane V/C Ratio	0.019	-	0.192	-	-
HCM Control Delay (s)	7.9	0	12.3	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0.1	-	0.7	-	-

Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Existing
Intersection #: 5

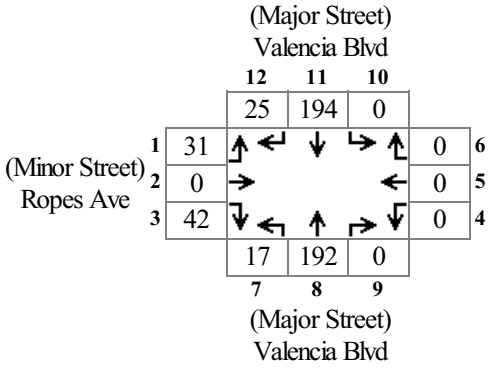


Major Total: 378
Minor High Volume: 41

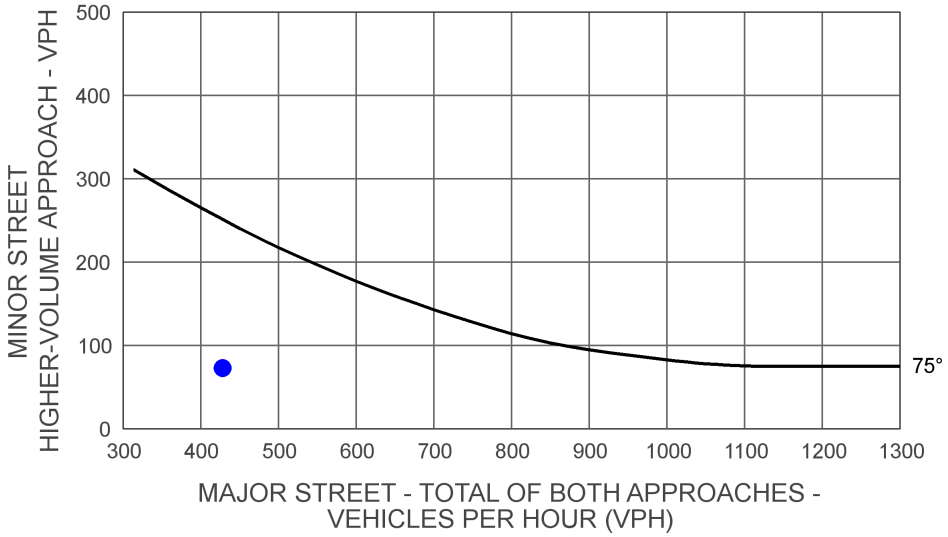


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Existing+Project
Intersection #: 5

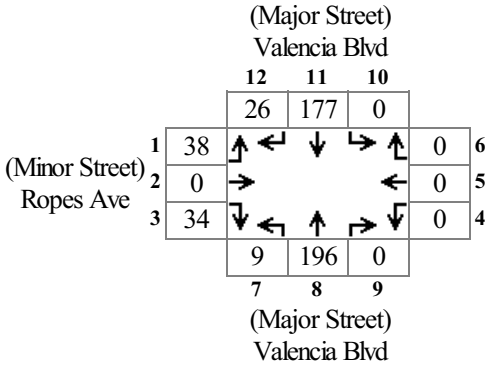


Major Total: 428
Minor High Volume: 73

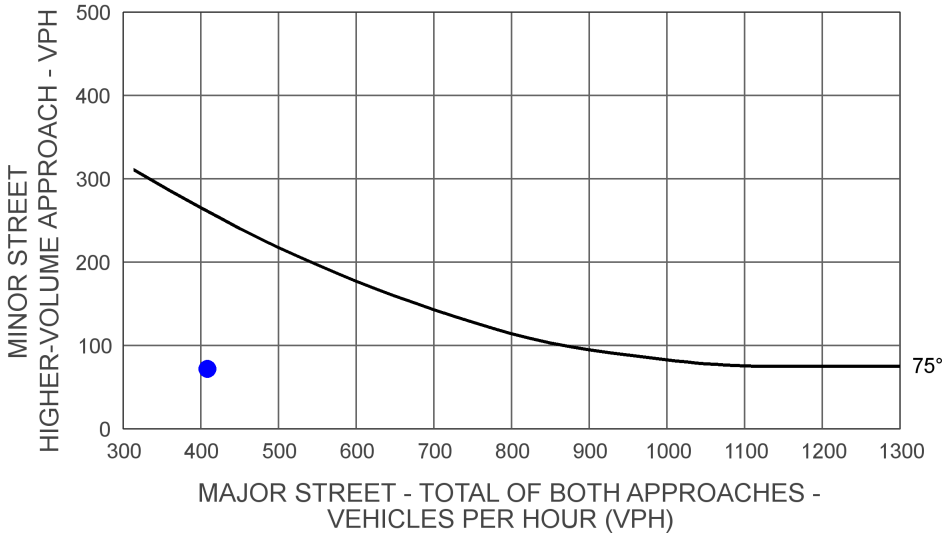


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Future
Intersection #: 5

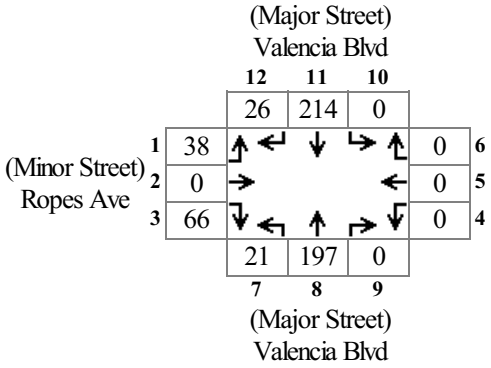


Major Total: 408
Minor High Volume: 72

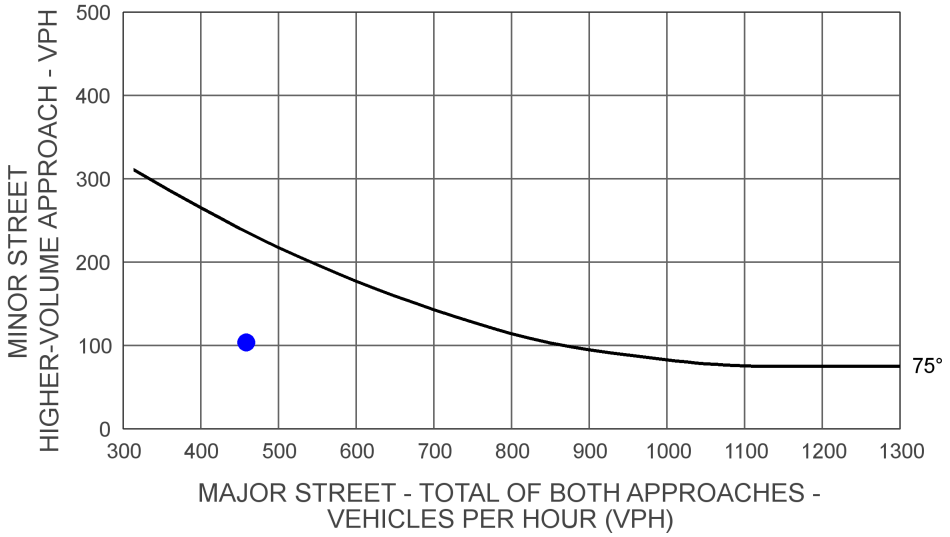


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Future+Project
Intersection #: 5

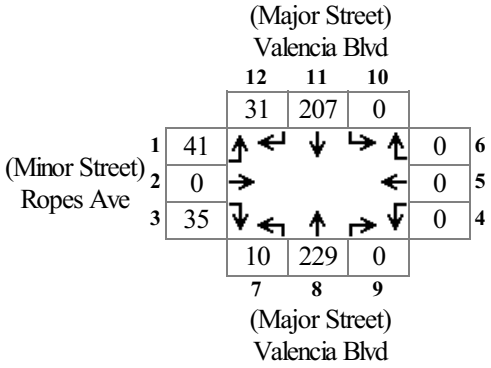


Major Total: 458
Minor High Volume: 104

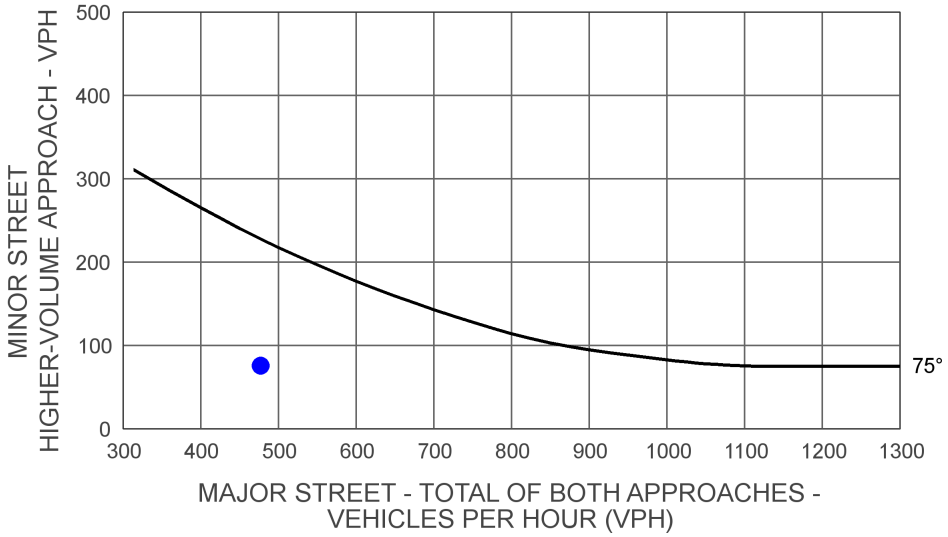


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Future
Intersection #: 5

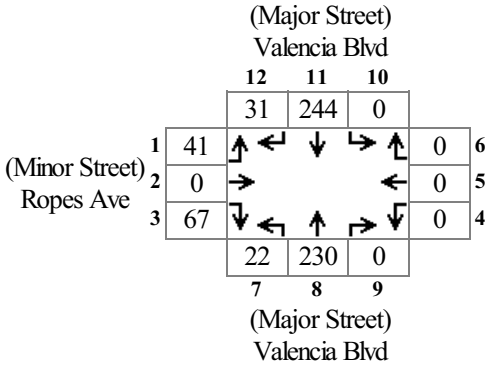


Major Total: 477
Minor High Volume: 76

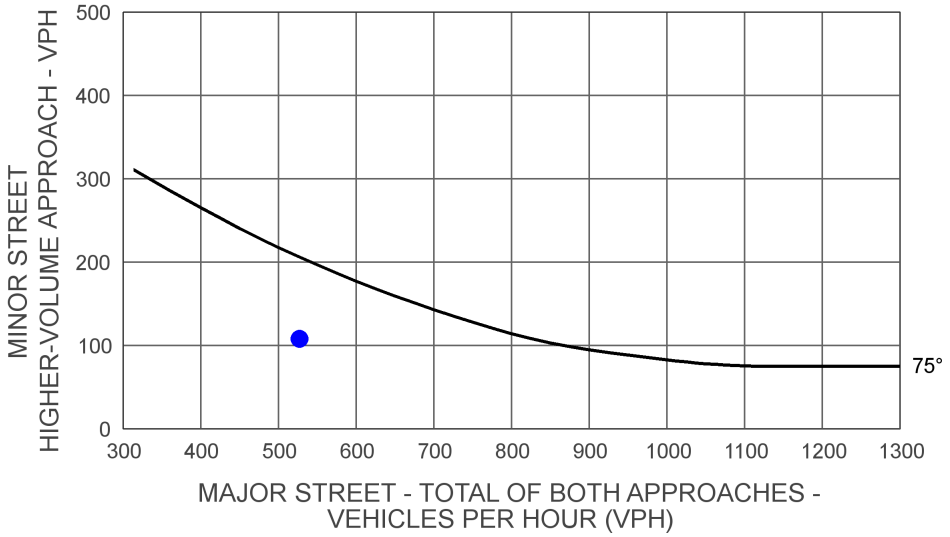


Rural Peak Hour Signal Warrant
Intersection Does Not Meet Signal Warrant

Scenario: PM Future+Project
Intersection #: 5



Major Total: 527
Minor High Volume: 108



Vehicle Turn Movement Data

Location ID: 1
North/South: Millwood Drive
East/West: Naranjo Boulevard (SR 216)

Date: 9/4/2019
City: Woodlake, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Lanes:	R	T	L	R	T	L	R	T	L	R	T	L	
7:30	1	21	0	0	11	62	36	4	0	0	17	0	152
7:45	0	8	1	1	11	41	45	7	1	1	13	0	129
8:00	3	18	0	0	12	48	15	5	0	0	10	0	111
8:15	2	15	0	4	19	37	17	9	0	0	7	1	111
Total Volume:	6	62	1	5	53	188	113	25	1	1	47	1	503
Approach %	9%	90%	1%	2%	22%	76%	81%	18%	1%	2%	96%	2%	

Peak Hr Begin:	7:30												
PHV	6	62	1	5	53	188	113	25	1	1	47	1	503
PHF	0.784			0.842			0.656			0.721			0.827

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Lanes:	R	T	L	R	T	L	R	T	L	R	T	L	
16:30	1	8	0	1	20	38	42	15	0	1	14	1	141
16:45	1	12	0	1	8	39	39	21	0	0	9	0	130
17:00	0	7	0	0	9	43	36	11	0	0	9	1	116
17:15	0	8	0	0	15	38	38	21	0	0	11	0	131
Total Volume:	2	35	0	2	52	158	155	68	0	1	43	2	518
Approach %	5%	95%	0%	1%	25%	75%	70%	30%	0%	2%	93%	4%	

Location ID: 2
North/South: Rd 196
East/West: Naranjo Boulevard (SR 216)

Date: 9/4/2019
City: Woodlake, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Lanes:	R	T	L	R	T	L	R	T	L	R	T	L	
7:30	0	16	0	0	71	23	20	4	1	2	51	0	188
7:45	0	2	0	1	51	25	18	11	2	7	54	0	171
8:00	0	4	1	0	57	18	8	2	3	2	22	0	117
8:15	0	7	0	0	54	24	7	6	6	4	22	0	130
Total Volume:	0	29	1	1	233	90	53	23	12	15	149	0	606
Approach %	0%	97%	3%	0%	72%	28%	60%	26%	14%	9%	91%	0%	

Peak Hr Begin:	7:30												
PHV	0	29	1	1	233	90	53	23	12	15	149	0	606
PHF	0.469			0.862			0.710			0.672			0.806

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Lanes:	R	T	L	R	T	L	R	T	L	R	T	L	
16:30	0	5	1	0	53	17	19	6	6	2	49	0	158
16:45	0	3	1	0	46	9	19	8	3	4	53	0	146
17:00	0	4	0	0	49	13	17	4	3	2	46	0	138
17:15	0	6	0	0	49	14	21	11	4	3	44	0	152
Total Volume:	0	18	2	0	197	53	76	29	16	11	192	0	594
Approach %	0%	90%	10%	0%	79%	21%	63%	24%	13%	5%	95%	0%	

Location ID: 3
North/South: Rd 204
East/West: Naranjo Boulevard (SR 216)

Date: 9/4/2019
City: Woodlake, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Lanes:	R	T	L	R	T	L	R	T	L	R	T	L	
7:30	1	4	1	2	95	8	6	1	0	2	75	0	195
7:45	6	1	0	3	75	11	5	1	2	6	73	0	183
8:00	0	1	0	2	71	7	6	0	5	5	25	0	122
8:15	2	1	0	3	68	3	3	1	9	3	25	1	119
Total Volume:	9	7	1	10	309	29	20	3	16	16	198	1	619
Approach %	53%	41%	6%	3%	89%	8%	51%	8%	41%	7%	92%	0%	

Peak Hr Begin:	7:30												
PHV	9	7	1	10	309	29	20	3	16	16	198	1	619
PHF	0.607			0.829			0.750			0.680			0.794

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Lanes:	R	T	L	R	T	L	R	T	L	R	T	L	
16:30	0	0	0	3	63	1	7	1	4	2	63	1	145
16:45	3	0	1	0	47	4	4	1	4	1	69	0	134
17:00	1	1	0	3	54	1	9	0	2	2	67	0	140
17:15	1	0	0	2	62	1	8	0	2	0	63	0	139
Total Volume:	5	1	1	8	226	7	28	2	12	5	262	1	558
Approach %	71%	14%	14%	3%	94%	3%	67%	5%	29%	2%	98%	0%	

Location ID: 4
North/South: Valencia Boulevard (State Route 245)
East/West: Naranjo Boulevard (SR 216)

Date: 9/4/2019
City: Woodlake, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Lanes:	R	T	L	R	T	L	R	T	L	R	T	L	
7:30	20	23	13	12	57	16	25	47	15	6	26	15	275
7:45	20	28	18	14	62	26	26	45	15	18	41	15	328
8:00	17	33	17	11	26	22	12	24	7	9	16	11	205
8:15	18	17	5	8	24	16	7	23	10	3	17	12	160
Total Volume:	75	101	53	45	169	80	70	139	47	36	100	53	968
Approach %	33%	44%	23%	15%	57%	27%	27%	54%	18%	19%	53%	28%	

Peak Hr Begin:	7:30												
PHV	75	101	53	45	169	80	70	139	47	36	100	53	968
PHF	0.854			0.721			0.736			0.639			0.738

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Lanes:	R	T	L	R	T	L	R	T	L	R	T	L	
16:30	21	22	8	11	27	18	21	54	13	10	25	34	264
16:45	18	14	14	12	33	16	18	35	8	12	33	25	238
17:00	12	31	11	3	27	14	7	33	7	9	24	31	209
17:15	23	33	13	10	32	14	16	47	10	16	28	28	270
Total Volume:	74	100	46	36	119	62	62	169	38	47	110	118	981
Approach %	34%	45%	21%	17%	55%	29%	23%	63%	14%	17%	40%	43%	

Location ID: 5
North/South: Rd 204
East/West: Ropes Avenue

Date: 9/4/2019
City: Woodlake, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Lanes:	R	T	L	R	T	L	R	T	L	R	T	L	
7:30	0	9	2	1	0	9	4	7	0	0	0	0	32
7:45	0	7	5	1	0	3	8	5	0	0	0	0	29
8:00	0	5	3	2	0	9	9	7	0	0	0	0	35
8:15	0	2	4	5	0	7	5	2	0	0	0	0	25
Total Volume:	0	23	14	9	0	28	26	21	0	0	0	0	121
Approach %	0%	62%	38%	24%	0%	76%	55%	45%	0%	0%	0%	0%	

Peak Hr Begin:	7:30												
PHV	0	23	14	9	0	28	26	21	0	0	0	0	121
PHF	0.771			0.771			0.734			0.000			0.864

	Southbound			*Westbound*			*Northbound*			*Eastbound*			
	1	2	3	4	5	6	7	8	9	10	11	12	Totals:
Lanes:	R	T	L	R	T	L	R	T	L	R	T	L	
16:30	0	9	4	1	0	4	5	4	0	0	0	0	27
16:45	0	1	2	1	0	5	4	5	0	0	0	0	18
17:00	0	3	1	4	0	9	4	7	0	0	0	0	28
17:15	0	0	1	3	0	3	8	5	0	0	0	0	20
Total Volume:	0	13	8	9	0	21	21	21	0	0	0	0	93
Approach %	0%	62%	38%	30%	0%	70%	50%	50%	0%	0%	0%	0%	

Location ID: 6
North/South: Valencia Boulevard (State Route 245)
East/West: Ropes Avenue

Date: 9/4/2019
City: Woodlake, CA

	Southbound			*Westbound*			*Northbound*			*Eastbound*			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Lanes:	R	T	L	R	T	L	R	T	L	R	T	L	
7:30	3	40	0	0	0	0	0	48	1	3	0	11	106
7:45	6	47	0	0	0	0	0	63	1	2	0	12	131
8:00	4	54	0	0	0	0	0	33	3	2	0	4	100
8:15	3	32	0	0	0	0	0	39	4	6	0	3	87
Total Volume:	16	173	0	0	0	0	0	183	9	13	0	30	424
Approach %	8%	92%	0%	0%	0%	0%	0%	95%	5%	30%	0%	70%	

Peak Hr Begin:	7:30												
PHV	16	173	0	0	0	0	0	183	9	13	0	30	424
PHF	0.815			0.000			0.750			0.768			0.809

	Southbound			*Westbound*			*Northbound*			*Eastbound*			Totals:
	1	2	3	4	5	6	7	8	9	10	11	12	
Lanes:	R	T	L	R	T	L	R	T	L	R	T	L	
16:30	7	44	0	0	0	0	0	56	1	6	0	7	121
16:45	6	29	0	0	0	0	0	54	1	1	0	8	99
17:00	7	43	0	0	0	0	0	32	2	2	0	10	96
17:15	5	41	0	0	0	0	0	49	1	1	0	6	103
Total Volume:	25	157	0	0	0	0	0	191	5	10	0	31	419
Approach %	14%	86%	0%	0%	0%	0%	0%	97%	3%	24%	0%	76%	