Appendix A

Photometric Study

Luminaire Schedule							
Symbol	Qty	Label	Arrangement	LMF	Lum. Lumens	Lum. Watts	Part Number
	4	3M-4L	SINGLE	1.000	4270	40	XSPW-B-WM-3ME-4L-50K-UL-WH
	12	A	SINGLE	1.000	12860	86	CPY250-B-DM-F-5-UL-WH-57K
	2	K-2ME	SINGLE	1.000	14000	130	OSQ-A-NM-2ME-K-60K-UL-WH w/OSQ-DAWH
	4	K-5ME-2	2 @ 180°	1.000	14625	130	OSQ-A-NM-5ME-K-60K-UL-WH w/OSQ-DAWH
	2	K-4ME-2(90)	2 @ 90°	1.000	14000	130	OSQ-A-NM-4ME-K-60K-UL-WH w/OSQ-DAWH

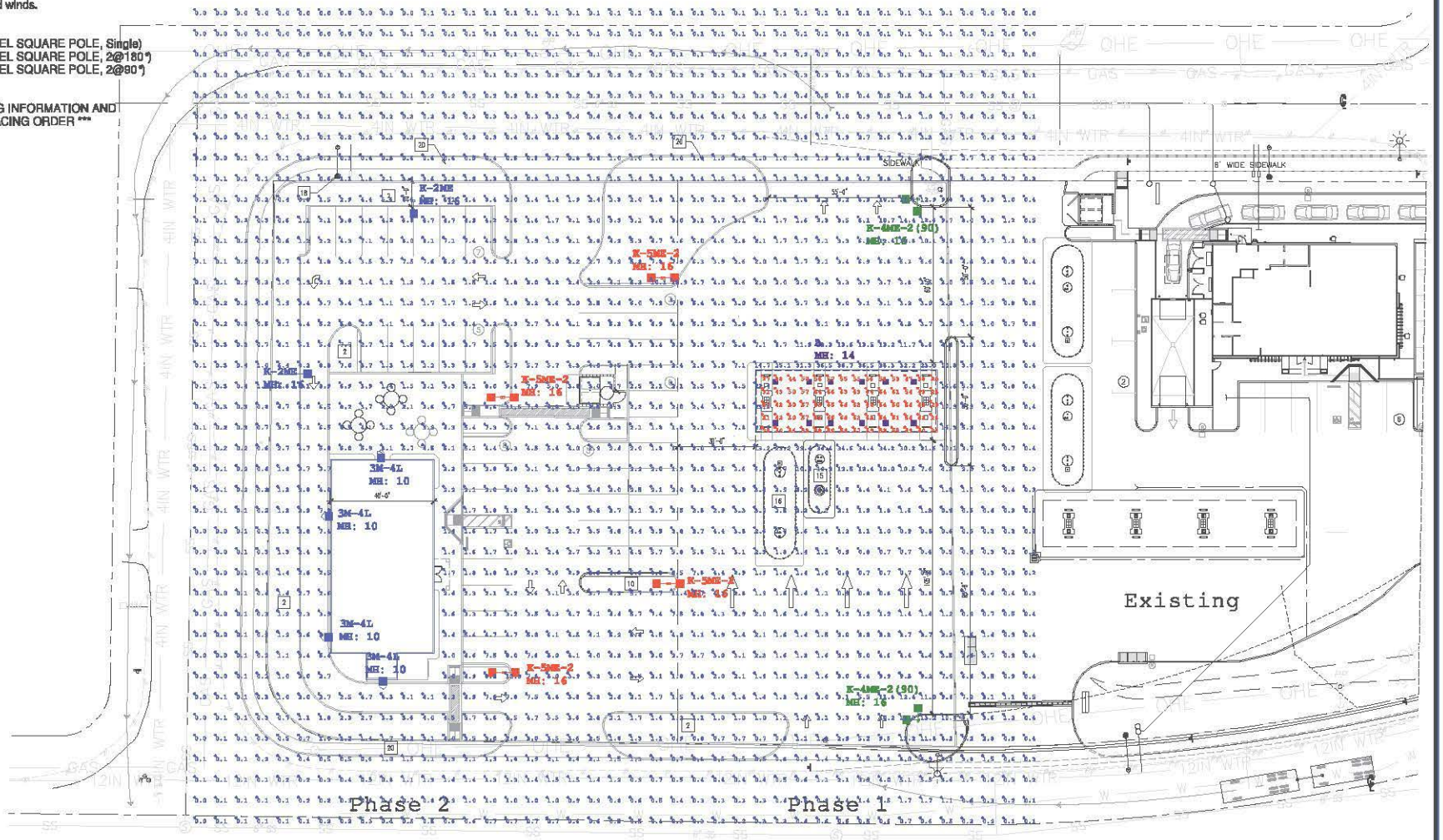
Calculation Summary; 1.00 LLF						
Label	Units	Avg	Max	Min	Avg/Min	Max/Min
All Calc Points	Fc	2.75	39.7	0.0	N.A.	N.A.
Gas Canopy	Fc	51.40	66	25	2.06	2.64

Pole Schedule: 8 Poles, 16' AFG (15' Pole + 1.0' Base)

Proposed poles meet 140MPH sustained winds.

Additional Equipment:
(2) PS4S15C1WH (15' X 4" X .125" STEEL SQUARE POLE, Single)
(4) PS4S15C2WH (15' X 4" X .125" STEEL SQUARE POLE, 2@180°)
(2) PS4S15C3WH (15' X 4" X .125" STEEL SQUARE POLE, 2@90°)
(14) - OSQ-DAWH (Direct Arm Mount)

*** CUSTOMER TO VERIFY ORDERING INFORMATION AND CATALOGUE NUMBER PRIOR TO PLACING ORDER ***



CREE LIGHTING
A COMPANY OF IDEAL INDUSTRIES, INC.
8201 Washington Ave, Racine, WI 53406 https://creelighting.com - (800) 236-8200

Illumination levels shown on this lighting design are based on project parameters provided to Cree Lighting and interpretation with luminaire test procedure conducted under laboratory conditions. Actual project conditions affecting field these design parameters may affect field results. The customer is responsible for verifying dimensional accuracy along with compliance with any applicable electrical, lighting or energy code.

Project Name: C Store AMS1-1 742 W. County Line Rd, Calimesa

SR-38634 | Footcandles calculated at grade | Filename: BM190910CACACW.AGI

Layout By: Collin Witherow

Date:9/10/2019

Scale 1" = 20'

0 40 80

Appendix B

EDR Report

PARTNER
Engineering and Science, Inc.

EXTENDED DATABASE SEARCH

Calimesa Vacant Lot
Northwest Corner of County Line Road and 7th Place
Calimesa, California 92320

Report Date: September 21, 2016
Partner Project No. 16-170530.1
Client Asset/WR/Loan No. 10004819/503643/None

Prepared for:

Citibank, N.A.
One Sansome Street, 23rd floor
San Francisco, California 94104

PARTNER
Engineering and Science, Inc.

September 21, 2016

Ms. Susan Wells
Citibank, N.A.
One Sansome Street, 23rd floor
San Francisco, California 94104

Subject: Extended Database Search
Calimesa Vacant Lot
Northwest Corner of County Line Road and 7th Place
Calimesa, California 92320
Partner Project No. 16-170530.1
Client Asset/WR/Loan No. 10004819/503643/None

Dear Ms. Wells:

Partner Engineering and Science, Inc. (Partner) is pleased to provide the results of the *Extended Database Search* (EDS) report of the abovementioned address (the "subject property").

This assessment was performed in general conformance with the scope and limitations as designed and intended to be utilized as a limited screening tool to meet the financial needs and requirements of the client.

We appreciate the opportunity to provide environmental services to you. If you have any questions concerning this report, or if we can assist you in any other matter, please contact me at (415) 992-3755.

Sincerely,

Jay Grenfell
National Client Manager

INTRODUCTION

Partner Engineering & Science, Inc. (Partner) has performed an Extended Database Search (EDS) for the property located at Northwest Corner of County Line Road and 7th Place in the City of Calimesa, Riverside County, California ("the subject property"). This review incorporates the findings of historical sources and a database search of information that is electronically compiled from standard, federal, state, county, and city databases. The databases include compilations of regulatory agency listings of potential hazardous waste sites and generators, solid waste landfills, disposal facilities, and sites with documented releases, and sites under investigation. The EDS was designed and intended to be utilized as a limited screening tool to meet the financial needs and requirements of the client.

Limitations

Any and all conclusions expressed or implied in this report are limited by the contractual Scope of Work and standard commercial methods used to perform these services. This records review has been performed in accordance with applicable guidelines that have been set forth by the ASTM E1527-13 Standard for Phase I ESA.

In preparing this report, Partner has relied solely on information that has been provided and/or derived from secondary sources and compiled data. Partner cannot and does not warrant or guarantee that the information provided by these other sources is accurate or complete. The conclusions and findings set forth in this report are strictly limited in time and scope to the date of the evaluation. No other warranties are implied or expressed. The methodologies of this records review are not intended to identify all environmental concerns which may be identified in other Environmental Site Assessments.

All reports, both verbal and written, are for the sole use and benefit of Citibank, N.A. This report has no other purpose and may not be relied upon by any other person or entity without the written consent of Partner.

HISTORICAL USE INFORMATION

The purpose of this historical review is to describe the previous uses of the subject property and adjoining properties. Partner has obtained historical use information regarding the subject property from one or more of the following sources: assessor information, city directory listings, historical aerial photographs, topographic maps, fire insurance maps, online research, and/or client-provided documentation.

A chronological listing of the historical data found is summarized in the table below:

Historical Use Information for the Subject Property

Period/Date	Source	Description/Use
N/A	Fire Insurance Maps	No Coverage
1895-1929	Topographic Maps	Undeveloped/Native land
1938-1972	Aerial Photographs, Topographic Maps	Rural residence and outbuildings
1975-2012	Aerial Photographs, Topographic Maps	Vacant land

According to aerial photographs, a structure appears on the subject property from at least 1938 until 1972. The structure is not visible on the 1975 aerial photograph, indicating it had been removed, however, a structure remains erroneously depicted on the topographic maps until 1999. Aerial photographs from 1980 through 2012 indicate trees on the property, with no structures visible. No city directory listings were found for the subject property, which is indicative that the subject property was undeveloped land, or agriculturally developed. City directory listings for adjacent properties reflected residential uses.

Copies of reviewed historical sources are not included as an attachment to this report.

MAPPED DATABASE RECORDS SEARCH

Information from standard federal, state, county, and city environmental record sources was provided by Environmental Data Resources, Inc. (EDR). Data from governmental agency lists are updated and integrated into one database, which is updated as these data are released. The information contained in this report was compiled from publicly available sources and the locations of the sites are plotted utilizing a geographic information system, which geocodes the site addresses. The accuracy of the geocoded locations is approximately +/-300 feet. A copy of the regulatory database report is included in the Appendices.

Using the ASTM definition of migration, Partner considers the migration of hazardous substances or petroleum products in any form onto the subject property during the evaluation of each site listed on the radius report, which includes solid, liquid, and vapor.

Contaminant Migration/Hydrology

Based on topographic map interpretation, groundwater in the vicinity of the subject property is inferred to flow toward the west.

Regulatory Database Details

Radius Report Data

Database	Search Radius (mile)	Subject Property	Adjacent Properties	Sites of Concern
Federal NPL or Delisted NPL Site	1.00	N	N	N
Federal CERCLIS Site	0.50	N	N	N
Federal CERCLIS-NFRAP Site	0.50	N	N	N
Federal RCRA CORRACTS Facility	1.00	N	N	N
Federal RCRA TSDF Facility	0.50	N	N	N
Federal RCRA Generators Site (LQG, SQG, CESQG)	0.25	N	N	N
Federal IC/EC Registries	0.50	N	N	N
Federal ERNS Site	Subject Property	N	N	N
State/Tribal Equivalent NPL	1.00	N	N	N

Radius Report Data				
Database	**Search Radius (mile)**	**Subject Property**	**Adjacent Properties**	**Sites of Concern**
State/Tribal Equivalent CERCLIS	1.00	N	N	N
State/Tribal Landfill/Solid Waste Disposal Site	0.50	N	N	N
State/Tribal Leaking Storage Tank Site	0.50	N	N	N
State/Tribal Registered Storage Tank Sites (UST/AST)	0.25	N	N	N
State/Tribal Voluntary Cleanup Sites (VCP)	0.50	N	N	N
State/Tribal Spills	0.50	N	N	N
Federal Brownfield Sites	0.50	N	N	N
State Brownfield Sites	0.50	N	N	N
EDR MGP	Varies	N	N	N
EDR US Hist Auto Station	Varies	N	N	N
EDR US Hist Cleaners	Varies	N	N	N

Subject Property Listings

The subject property is not identified in the regulatory database report.

Adjacent Property Listings

Based solely on the addresses, the adjacent properties are not identified in the regulatory database report.

Sites of Concern within Search Radius

No additional sites of concern are identified in the radius report.

CONCLUSIONS AND RECOMMENDATIONS

Partner's limited research for the Extended Database Search has not revealed evidence of recognized environmental conditions in connection with the subject property. Based solely on the limited resources reviewed, Partner recommends no further investigation of the subject property at this time.

SIGNATURES OF ENVIRONMENTAL PROFESSIONALS

Prepared By:

Jaki West
Environmental Scientist

Reviewed By:

Sarah Vosovic
Senior Author

REGULATORY DATABASE REPORT

PARTNER

Calimesa Vacant Lot
Northwest Corner of County Line Road & 7th Place
Calimesa, CA 92320

Inquiry Number: 4721830.2s
September 08, 2016

The EDR Radius Map™ Report with GeoCheck®

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

TABLE OF CONTENTS

Thank you for your business.
Please contact EDR at 1-800-352-0050
with any questions or comments.

EXECUTIVE SUMMARY

A search of available environmental records was conducted by Environmental Data Resources, Inc (EDR). The report was designed to assist parties seeking to meet the search requirements of EPA's Standards and Practices for All Appropriate Inquiries (40 CFR Part 312), the ASTM Standard Practice for Environmental Site Assessments (E 1527-13) or custom requirements developed for the evaluation of environmental risk associated with a parcel of real estate.

TARGET PROPERTY INFORMATION

ADDRESS

NORTHWEST CORNER OF COUNTY LINE ROAD & 7TH PLACE
CALIMESA, CA 92320

COORDINATES

Latitude (North):	34.0035460 - 34° 0' 12.76''
Longitude (West):	117.0664210 - 117° 3' 59.11''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	493866.3
UTM Y (Meters):	3762356.8
Elevation:	2369 ft. above sea level

USGS TOPOGRAPHIC MAP ASSOCIATED WITH TARGET PROPERTY

Target Property Map:	5630639 YUCAIPA, CA
Version Date:	2012
South Map:	5640934 EL CASCO, CA
Version Date:	2012

AERIAL PHOTOGRAPHY IN THIS REPORT

Portions of Photo from:	20140530
Source:	USDA

MAPPED SITES SUMMARY

Target Property Address:
NORTHWEST CORNER OF COUNTY LINE ROAD & 7TH PLACE
CALIMESA, CA 92320

Click on Map ID to see full detail.

MAP ID	SITE NAME	ADDRESS	DATABASE ACRONYMS	RELATIVE ELEVATION	DIST (ft. & mi.) DIRECTION
A1	UNOCAL #5636	665 W COUNTY LINE RO	LUST	Higher	754, 0.143, East
A2	UNOCAL SERVICE STATI	665 WEST COUNTY LINE	HIST UST, HAZNET	Higher	754, 0.143, East
A3	UNOCAL #5636	665 COUNTY LINE	LUST, HIST CORTESE	Higher	760, 0.144, East
A4	SKAT TRAK INC	654 AVE K	RCRA-SQG, FINDS, ECHO	Higher	797, 0.151, East
A5	OK SERVECE	33928 COUNTY LINE RD	HIST UST, HAZNET	Higher	951, 0.180, East
A6	SHELL	33928 COUNTY LINE RD	LUST, SWEEPS UST, San Bern. Co. Permit	Higher	951, 0.180, East
B7	FASTSTRIP FOOD STORE	13710	LUST, HIST CORTESE, San Bern. Co. Permit	Higher	1033, 0.196, ENE
B8	FASTSTRIP FOOD STORE	13710 CALIMESA BLVD	LUST, SWEEPS UST, HIST UST	Higher	1033, 0.196, ENE
C9	DINOSAUR TIRE CENTER	13715K CALIMESA BLVD	HIST UST	Higher	1184, 0.224, ENE
C10	DINOSAUR TIRES AND R	13715 CALIMESA BLVD	RCRA-SQG, FINDS, HAZNET, ECHO	Higher	1185, 0.224, ENE
C11	DINOSAUR TIRE AND RO	13715 CALIMESA BLVD	San Bern. Co. Permit	Higher	1185, 0.224, ENE
12	CALIMESA SUNSHINE S.	905 CALIMESA BLVD	LUST, SWEEPS UST, HIST CORTESE	Higher	1331, 0.252, East
13	HENRY N. WOCHHOLZ WW		Cortese, ENF	Lower	2128, 0.403, West
14	HENRY N. WOCHHOLZ WA	880 W COUNTY LINE RD	HIST CORTESE, San Bern. Co. Permit, WDS	Lower	2444, 0.463, West
15	CALIMESA ARCO #1958	1216 CALIMESA BLVD.	LUST, Notify 65	Higher	4446, 0.842, SE

EXECUTIVE SUMMARY

TARGET PROPERTY SEARCH RESULTS

The target property was not listed in any of the databases searched by EDR.

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records either on the target property or within the search radius around the target property for the following databases:

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL ---------- National Priority List
Proposed NPL ---------- Proposed National Priority List Sites
NPL LIENS ---------- Federal Superfund Liens

Federal Delisted NPL site list

Delisted NPL ---------- National Priority List Deletions

Federal CERCLIS list

FEDERAL FACILITY ---------- Federal Facility Site Information listing
SEMS ---------- Superfund Enterprise Management System

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE ---------- Superfund Enterprise Management System Archive

Federal RCRA CORRACTS facilities list

CORRACTS ---------- Corrective Action Report

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF ---------- RCRA - Treatment, Storage and Disposal

Federal RCRA generators list

RCRA-LQG ---------- RCRA - Large Quantity Generators
RCRA-CESQG ---------- RCRA - Conditionally Exempt Small Quantity Generator

Federal institutional controls / engineering controls registries

LUCIS ---------- Land Use Control Information System
US ENG CONTROLS ---------- Engineering Controls Sites List
US INST CONTROL ---------- Sites with Institutional Controls

EXECUTIVE SUMMARY

Federal ERNS list

ERNS ---------- Emergency Response Notification System

State- and tribal - equivalent NPL

RESPONSE ---------- State Response Sites

State- and tribal - equivalent CERCLIS

ENVIROSTOR ---------- EnviroStor Database

State and tribal landfill and/or solid waste disposal site lists

SWF/LF ---------- Solid Waste Information System

State and tribal leaking storage tank lists

INDIAN LUST ---------- Leaking Underground Storage Tanks on Indian Land
SLIC ---------- Statewide SLIC Cases

State and tribal registered storage tank lists

FEMA UST ---------- Underground Storage Tank Listing
UST ---------- Active UST Facilities
AST ---------- Aboveground Petroleum Storage Tank Facilities
INDIAN UST ---------- Underground Storage Tanks on Indian Land

State and tribal voluntary cleanup sites

VCP ---------- Voluntary Cleanup Program Properties
INDIAN VCP ---------- Voluntary Cleanup Priority Listing

State and tribal Brownfields sites

BROWNFIELDS ---------- Considered Brownfieds Sites Listing

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS ---------- A Listing of Brownfields Sites

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT ---------- Waste Management Unit Database
SWRCY ---------- Recycler Database
HAULERS ---------- Registered Waste Tire Haulers Listing
INDIAN ODI ---------- Report on the Status of Open Dumps on Indian Lands
DEBRIS REGION 9 ---------- Torres Martinez Reservation Illegal Dump Site Locations
ODI ---------- Open Dump Inventory

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL ---------- Delisted National Clandestine Laboratory Register

HIST Cal-Sites - Historical Calsites Database
SCH - School Property Evaluation Program
CDL - Clandestine Drug Labs
Toxic Pits - Toxic Pits Cleanup Act Sites
US CDL - National Clandestine Laboratory Register

Local Lists of Registered Storage Tanks

CA FID UST - Facility Inventory Database

Local Land Records

LIENS - Environmental Liens Listing
LIENS 2 - CERCLA Lien Information
DEED - Deed Restriction Listing

Records of Emergency Release Reports

HMIRS - Hazardous Materials Information Reporting System
CHMIRS - California Hazardous Material Incident Report System
LDS - Land Disposal Sites Listing
MCS - Military Cleanup Sites Listing
SPILLS 90 - SPILLS 90 data from FirstSearch

Other Ascertainable Records

RCRA NonGen / NLR - RCRA - Non Generators / No Longer Regulated
FUDS - Formerly Used Defense Sites
DOD - Department of Defense Sites
SCRD DRYCLEANERS - State Coalition for Remediation of Drycleaners Listing
US FIN ASSUR - Financial Assurance Information
EPA WATCH LIST - EPA WATCH LIST
2020 COR ACTION - 2020 Corrective Action Program List
TSCA - Toxic Substances Control Act
TRIS - Toxic Chemical Release Inventory System
SSTS - Section 7 Tracking Systems
ROD - Records Of Decision
RMP - Risk Management Plans
RAATS - RCRA Administrative Action Tracking System
PRP - Potentially Responsible Parties
PADS - PCB Activity Database System
ICIS - Integrated Compliance Information System
FTTS - FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
MLTS - Material Licensing Tracking System
COAL ASH DOE - Steam-Electric Plant Operation Data
COAL ASH EPA - Coal Combustion Residues Surface Impoundments List
PCB TRANSFORMER - PCB Transformer Registration Database
RADINFO - Radiation Information Database
HIST FTTS - FIFRA/TSCA Tracking System Administrative Case Listing
DOT OPS - Incident and Accident Data
CONSENT - Superfund (CERCLA) Consent Decrees
INDIAN RESERV - Indian Reservations
FUSRAP - Formerly Utilized Sites Remedial Action Program
UMTRA - Uranium Mill Tailings Sites

LEAD SMELTERS---------- Lead Smelter Sites
US AIRS---------- Aerometric Information Retrieval System Facility Subsystem
US MINES---------- Mines Master Index File
FINDS---------- Facility Index System/Facility Registry System
UXO---------- Unexploded Ordnance Sites
DOCKET HWC---------- Hazardous Waste Compliance Docket Listing
CA BOND EXP. PLAN---------- Bond Expenditure Plan
CUPA Listings---------- CUPA Resources List
DRYCLEANERS---------- Cleaner Facilities
EMI---------- Emissions Inventory Data
ENF---------- Enforcement Action Listing
Financial Assurance---------- Financial Assurance Information Listing
HAZNET---------- Facility and Manifest Data
HWP---------- EnviroStor Permitted Facilities Listing
HWT---------- Registered Hazardous Waste Transporter Database
MINES---------- Mines Site Location Listing
MWMP---------- Medical Waste Management Program Listing
NPDES---------- NPDES Permits Listing
PEST LIC---------- Pesticide Regulation Licenses Listing
PROC---------- Certified Processors Database
UIC---------- UIC Listing
WASTEWATER PITS---------- Oil Wastewater Pits Listing
WDS---------- Waste Discharge System
WIP---------- Well Investigation Program Case List
ICE---------- ICE
ECHO---------- Enforcement & Compliance History Information
FUELS PROGRAM---------- EPA Fuels Program Registered Listing

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP---------- EDR Proprietary Manufactured Gas Plants
EDR Hist Auto---------- EDR Exclusive Historic Gas Stations
EDR Hist Cleaner---------- EDR Exclusive Historic Dry Cleaners

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF---------- Recovered Government Archive Solid Waste Facilities List
RGA LUST---------- Recovered Government Archive Leaking Underground Storage Tank

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified in the following databases.

Elevations have been determined from the USGS Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified. Sites with an elevation equal to or higher than the target property have been differentiated below from sites with an elevation lower than the target property.
Page numbers and map identification numbers refer to the EDR Radius Map report where detailed data on individual sites can be reviewed.

Sites listed in ***bold italics*** are in multiple databases.

Unmappable (orphan) sites are not considered in the foregoing analysis.

EXECUTIVE SUMMARY

STANDARD ENVIRONMENTAL RECORDS

Federal RCRA generators list

RCRA-SQG: RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

A review of the RCRA-SQG list, as provided by EDR, and dated 06/21/2016 has revealed that there are 2 RCRA-SQG sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SKAT TRAK INC	***654 AVE K***	***E 1/8 - 1/4 (0.151 mi.)***	***A4***	***12***
DINOSAUR TIRES AND R	***13715 CALIMESA BLVD***	***ENE 1/8 - 1/4 (0.224 mi.)***	***C10***	***27***

State and tribal leaking storage tank lists

LUST: The Leaking Underground Storage Tank Incident Reports contain an inventory of reported leaking underground storage tank incidents. The data come from the State Water Resources Control Board Leaking Underground Storage Tank Information System.

A review of the LUST list, as provided by EDR, has revealed that there are 6 LUST sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
UNOCAL #5636	665 W COUNTY LINE RO	E 1/8 - 1/4 (0.143 mi.)	A1	8
Database: LUST, Date of Government Version: 06/13/2016 Database: RIVERSIDE CO. LUST, Date of Government Version: 04/13/2016 Status: Completed - Case Closed Facility Id: 94537 Global Id: T0606500389 Facility Status: 9				
UNOCAL #5636	***665 COUNTY LINE***	***E 1/8 - 1/4 (0.144 mi.)***	***A3***	***11***
Database: LUST REG 8, Date of Government Version: 02/14/2005 Facility Status: Case Closed Global ID: T0606500389				
SHELL	***33928 COUNTY LINE RD***	***E 1/8 - 1/4 (0.180 mi.)***	***A6***	***16***
Database: LUST, Date of Government Version: 06/13/2016 Status: Completed - Case Closed Global Id: T0607100523				
FASTSTRIP FOOD STORE	***13710***	***ENE 1/8 - 1/4 (0.196 mi.)***	***B7***	***20***
Database: LUST REG 8, Date of Government Version: 02/14/2005 Facility Status: Case Closed Global ID: T0607100440				
FASTSTRIP FOOD STORE	***13710 CALIMESA BLVD***	***ENE 1/8 - 1/4 (0.196 mi.)***	***B8***	***22***
Database: LUST, Date of Government Version: 06/13/2016 Status: Completed - Case Closed				

Global Id: T0607100440

CALIMESA SUNSHINE S.	***905 CALIMESA BLVD***	***E 1/4 - 1/2 (0.252 mi.)***	***12***	***29***

Database: LUST, Date of Government Version: 06/13/2016
Database: LUST REG 8, Date of Government Version: 02/14/2005
Database: RIVERSIDE CO. LUST, Date of Government Version: 04/13/2016
Status: Completed - Case Closed
Facility Status: Remedial action (cleanup) Underway
Facility Id: 94318
Global Id: T0606500379
Facility Status: 0
Global ID: T0606500379

ADDITIONAL ENVIRONMENTAL RECORDS

Local Lists of Registered Storage Tanks

SWEEPS UST: Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

A review of the SWEEPS UST list, as provided by EDR, and dated 06/01/1994 has revealed that there are 2 SWEEPS UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SHELL	***33928 COUNTY LINE RD***	***E 1/8 - 1/4 (0.180 mi.)***	***A6***	***16***
Status: A Tank Status: A Comp Number: 11306				
FASTSTRIP FOOD STORE	***13710 CALIMESA BLVD***	***ENE 1/8 - 1/4 (0.196 mi.)***	***B8***	***22***
Status: A Tank Status: A Comp Number: 8335				

HIST UST: Historical UST Registered Database.

A review of the HIST UST list, as provided by EDR, and dated 10/15/1990 has revealed that there are 4 HIST UST sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
UNOCAL SERVICE STATI	***665 WEST COUNTY LINE***	***E 1/8 - 1/4 (0.143 mi.)***	***A2***	***9***
OK SERVECE	***33928 COUNTY LINE RD***	***E 1/8 - 1/4 (0.180 mi.)***	***A5***	***14***
FASTSTRIP FOOD STORE Facility Id: 00000005617	***13710 CALIMESA BLVD***	***ENE 1/8 - 1/4 (0.196 mi.)***	***B8***	***22***
DINOSAUR TIRE CENTER Facility Id: 00000056227	13715K CALIMESA BLVD	ENE 1/8 - 1/4 (0.224 mi.)	C9	26

Other Ascertainable Records

Cortese: The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

A review of the Cortese list, as provided by EDR, and dated 06/27/2016 has revealed that there is 1 Cortese site within approximately 0.5 miles of the target property.

Lower Elevation	Address	Direction / Distance	Map ID	Page
HENRY N. WOCHHOLZ WW		***W 1/4 - 1/2 (0.403 mi.)***	***13***	***32***

HIST CORTESE: The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

A review of the HIST CORTESE list, as provided by EDR, and dated 04/01/2001 has revealed that there are 4 HIST CORTESE sites within approximately 0.5 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
UNOCAL #5636 Reg Id: 083302518T	***665 COUNTY LINE***	***E 1/8 - 1/4 (0.144 mi.)***	***A3***	***11***
FASTSTRIP FOOD STORE Reg Id: 083602992T	***13710***	***ENE 1/8 - 1/4 (0.196 mi.)***	***B7***	***20***
CALIMESA SUNSHINE S. Reg Id: 083302496T	***905 CALIMESA BLVD***	***E 1/4 - 1/2 (0.252 mi.)***	***12***	***29***

Lower Elevation	Address	Direction / Distance	Map ID	Page
HENRY N. WOCHHOLZ WA Reg Id: 8 362222001	***880 W COUNTY LINE RD***	***W 1/4 - 1/2 (0.463 mi.)***	***14***	***64***

San Bern. Co. Permit: San Bernardino County Fire Department Hazardous Materials Division.

A review of the San Bern. Co. Permit list, as provided by EDR, and dated 06/09/2016 has revealed that there are 3 San Bern. Co. Permit sites within approximately 0.25 miles of the target property.

Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
SHELL Facility Status: ACTIVE Facility Id: FA0001740	***33928 COUNTY LINE RD***	***E 1/8 - 1/4 (0.180 mi.)***	***A6***	***16***
FASTSTRIP FOOD STORE Facility Status: ACTIVE Facility Id: FA0003010	***13710***	***ENE 1/8 - 1/4 (0.196 mi.)***	***B7***	***20***
DINOSAUR TIRE AND RO Facility Status: ACTIVE Facility Id: FA0008940	13715 CALIMESA BLVD	ENE 1/8 - 1/4 (0.224 mi.)	C11	29

EXECUTIVE SUMMARY

Notify 65: Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

A review of the Notify 65 list, as provided by EDR, and dated 09/10/2015 has revealed that there is 1 Notify 65 site within approximately 1 mile of the target property.

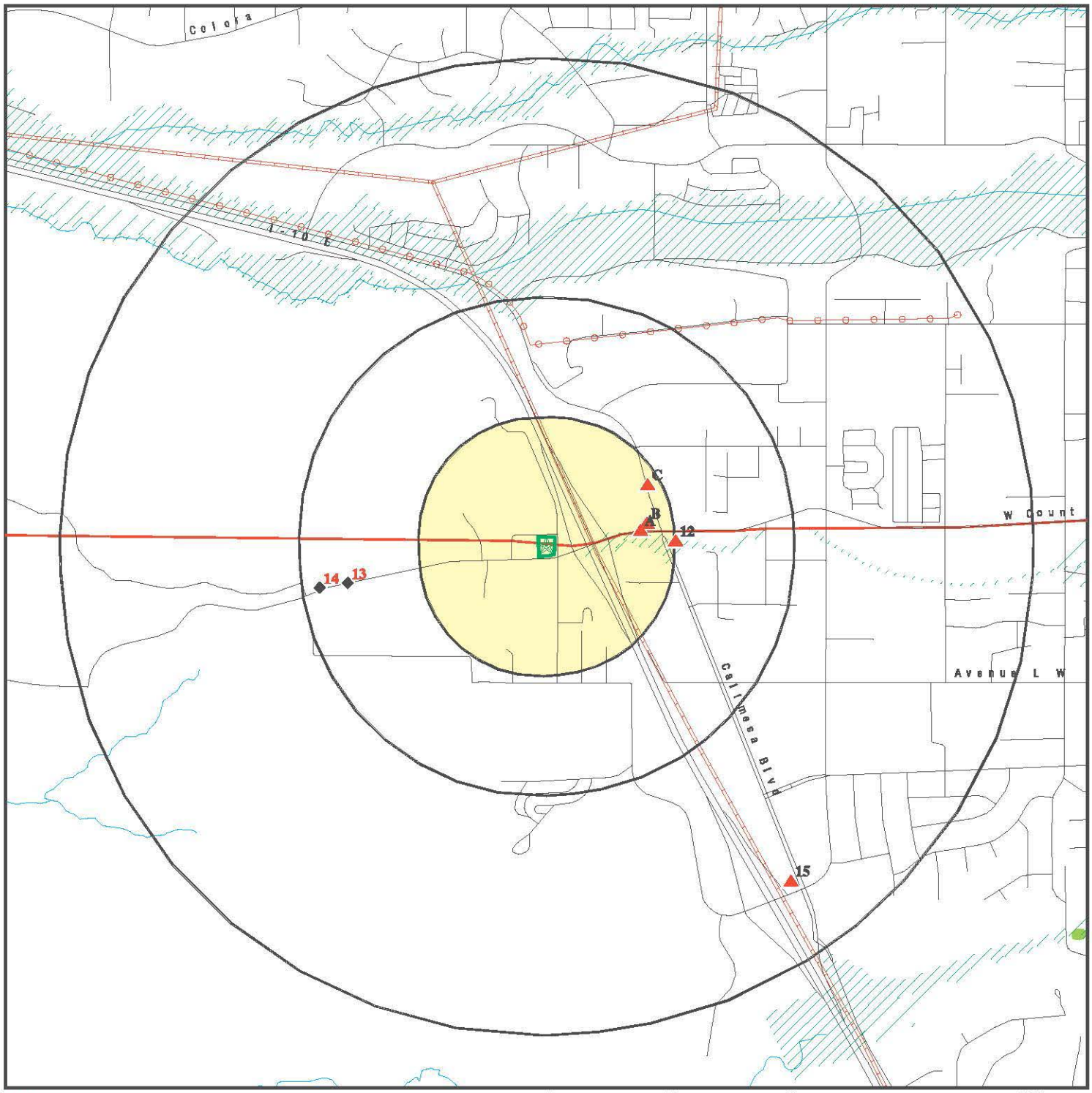
Equal/Higher Elevation	Address	Direction / Distance	Map ID	Page
CALIMESA ARCO #1958	*1216 CALIMESA BLVD.*	*SE 1/2 - 1 (0.842 mi.)*	*15*	*67*

EXECUTIVE SUMMARY

Due to poor or inadequate address information, the following sites were not mapped. Count: 10 records.

Site Name	Database(s)
CALIMESA SO CO	LUST, HIST CORTESE
	CDL
	CDL
	CDL
	CDL
	CDL
REDLANDS AIRPORT	SLIC
REDLANDS COMMUNITY DAY SCHOOL	ENVIROSTOR, SCH
FIFTH STREET/GLEN RD ELEMENTARY SC	ENVIROSTOR, SCH
YUCAIPA EARLY EDUCATION CENTER	ENVIROSTOR, SCH

OVERVIEW MAP - 4721830.2S



- Target Property
- Sites at elevations higher than or equal to the target property
- Sites at elevations lower than the target property
- Manufactured Gas Plants
- National Priority List Sites
- Dept. Defense Sites

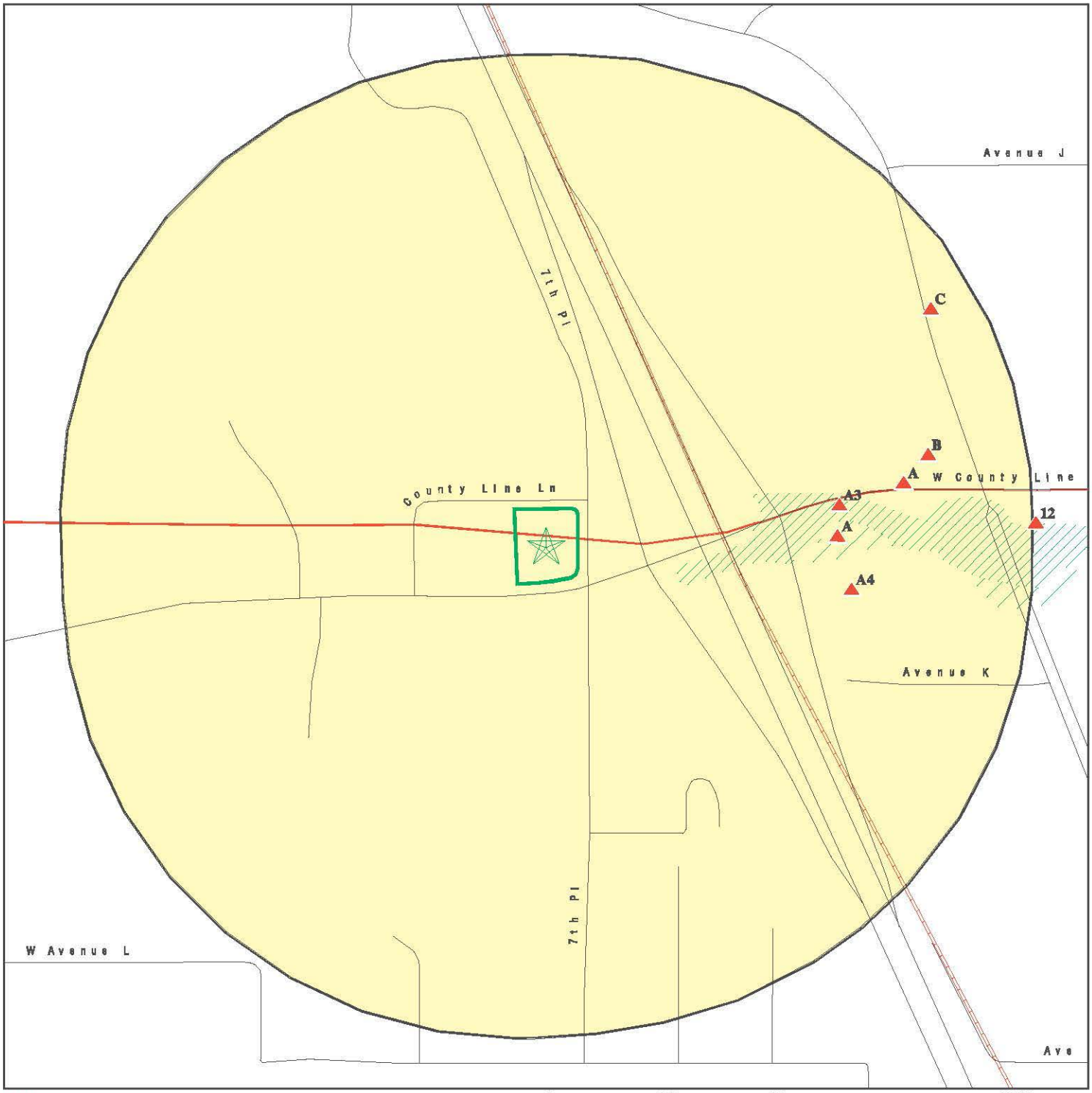
0 1/4 1/2 1 Miles

- Indian Reservations BIA
- County Boundary
- Power transmission lines
- Pipelines
- 100-year flood zone
- 500-year flood zone
- National Wetland Inventory
- State Wetlands
- Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Calimesa Vacant Lot	CLIENT:	Partner Engineering and Science, Inc.
ADDRESS:	Northwest Corner of County Line Road & 7th Place Calimesa CA 92320	CONTACT:	Brett Nielsen
LAT/LONG:	34.003546 / 117.066421	INQUIRY #:	4721830.2s
		DATE:	September 08, 2016 2:06 pm

DETAIL MAP - 4721830.2S



Target Property
Sites at elevations higher than or equal to the target property
Sites at elevations lower than the target property
Manufactured Gas Plants
Sensitive Receptors
National Priority List Sites
Dept. Defense Sites

0 1/16 1/8 1/4 Miles

Indian Reservations BIA
County Boundary
Pipelines
100-year flood zone
500-year flood zone

Areas of Concern

This report includes Interactive Map Layers to display and/or hide map information. The legend includes only those icons for the default map view.

SITE NAME:	Calimesa Vacant Lot	CLIENT:	Partner Engineering and Science, Inc.
ADDRESS:	Northwest Corner of County Line Road & 7th Place Calimesa CA 92320	CONTACT:	Brett Nielsen
LAT/LONG:	34.003546 / 117.066421	INQUIRY #:	4721830.2s
		DATE:	September 08, 2016 2:08 pm

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
STANDARD ENVIRONMENTAL RECORDS								
Federal NPL site list								
NPL	1.000		0	0	0	0	NR	0
Proposed NPL	1.000		0	0	0	0	NR	0
NPL LIENS	TP		NR	NR	NR	NR	NR	0
Federal Delisted NPL site list								
Delisted NPL	1.000		0	0	0	0	NR	0
Federal CERCLIS list								
FEDERAL FACILITY	0.500		0	0	0	NR	NR	0
SEMS	0.500		0	0	0	NR	NR	0
Federal CERCLIS NFRAP site list								
SEMS-ARCHIVE	0.500		0	0	0	NR	NR	0
Federal RCRA CORRACTS facilities list								
CORRACTS	1.000		0	0	0	0	NR	0
Federal RCRA non-CORRACTS TSD facilities list								
RCRA-TSDF	0.500		0	0	0	NR	NR	0
Federal RCRA generators list								
RCRA-LQG	0.250		0	0	NR	NR	NR	0
RCRA-SQG	0.250		0	2	NR	NR	NR	2
RCRA-CESQG	0.250		0	0	NR	NR	NR	0
Federal institutional controls / engineering controls registries								
LUCIS	0.500		0	0	0	NR	NR	0
US ENG CONTROLS	0.500		0	0	0	NR	NR	0
US INST CONTROL	0.500		0	0	0	NR	NR	0
Federal ERNS list								
ERNS	TP		NR	NR	NR	NR	NR	0
State- and tribal - equivalent NPL								
RESPONSE	1.000		0	0	0	0	NR	0
State- and tribal - equivalent CERCLIS								
ENVIROSTOR	1.000		0	0	0	0	NR	0
State and tribal landfill and/or solid waste disposal site lists								
SWF/LF	0.500		0	0	0	NR	NR	0
State and tribal leaking storage tank lists								
LUST	0.500		0	5	1	NR	NR	6

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
INDIAN LUST	0.500		0	0	0	NR	NR	0
SLIC	0.500		0	0	0	NR	NR	0
State and tribal registered storage tank lists								
FEMA UST	0.250		0	0	NR	NR	NR	0
UST	0.250		0	0	NR	NR	NR	0
AST	0.250		0	0	NR	NR	NR	0
INDIAN UST	0.250		0	0	NR	NR	NR	0
State and tribal voluntary cleanup sites								
VCP	0.500		0	0	0	NR	NR	0
INDIAN VCP	0.500		0	0	0	NR	NR	0
State and tribal Brownfields sites								
BROWNFIELDS	0.500		0	0	0	NR	NR	0
ADDITIONAL ENVIRONMENTAL RECORDS								
Local Brownfield lists								
US BROWNFIELDS	0.500		0	0	0	NR	NR	0
Local Lists of Landfill / Solid Waste Disposal Sites								
WMUDS/SWAT	0.500		0	0	0	NR	NR	0
SWRCY	0.500		0	0	0	NR	NR	0
HAULERS	TP		NR	NR	NR	NR	NR	0
INDIAN ODI	0.500		0	0	0	NR	NR	0
DEBRIS REGION 9	0.500		0	0	0	NR	NR	0
ODI	0.500		0	0	0	NR	NR	0
Local Lists of Hazardous waste / Contaminated Sites								
US HIST CDL	TP		NR	NR	NR	NR	NR	0
HIST Cal-Sites	1.000		0	0	0	0	NR	0
SCH	0.250		0	0	NR	NR	NR	0
CDL	TP		NR	NR	NR	NR	NR	0
Toxic Pits	1.000		0	0	0	0	NR	0
US CDL	TP		NR	NR	NR	NR	NR	0
Local Lists of Registered Storage Tanks								
SWEEPS UST	0.250		0	2	NR	NR	NR	2
HIST UST	0.250		0	4	NR	NR	NR	4
CA FID UST	0.250		0	0	NR	NR	NR	0
Local Land Records								
LIENS	TP		NR	NR	NR	NR	NR	0
LIENS 2	TP		NR	NR	NR	NR	NR	0
DEED	0.500		0	0	0	NR	NR	0
Records of Emergency Release Reports								
HMIRS	TP		NR	NR	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
CHMIRS	TP		NR	NR	NR	NR	NR	0
LDS	TP		NR	NR	NR	NR	NR	0
MCS	TP		NR	NR	NR	NR	NR	0
SPILLS 90	TP		NR	NR	NR	NR	NR	0
Other Ascertainable Records								
RCRA NonGen / NLR	0.250		0	0	NR	NR	NR	0
FUDS	1.000		0	0	0	0	NR	0
DOD	1.000		0	0	0	0	NR	0
SCRD DRYCLEANERS	0.500		0	0	0	NR	NR	0
US FIN ASSUR	TP		NR	NR	NR	NR	NR	0
EPA WATCH LIST	TP		NR	NR	NR	NR	NR	0
2020 COR ACTION	0.250		0	0	NR	NR	NR	0
TSCA	TP		NR	NR	NR	NR	NR	0
TRIS	TP		NR	NR	NR	NR	NR	0
SSTS	TP		NR	NR	NR	NR	NR	0
ROD	1.000		0	0	0	0	NR	0
RMP	TP		NR	NR	NR	NR	NR	0
RAATS	TP		NR	NR	NR	NR	NR	0
PRP	TP		NR	NR	NR	NR	NR	0
PADS	TP		NR	NR	NR	NR	NR	0
ICIS	TP		NR	NR	NR	NR	NR	0
FTTS	TP		NR	NR	NR	NR	NR	0
MLTS	TP		NR	NR	NR	NR	NR	0
COAL ASH DOE	TP		NR	NR	NR	NR	NR	0
COAL ASH EPA	0.500		0	0	0	NR	NR	0
PCB TRANSFORMER	TP		NR	NR	NR	NR	NR	0
RADINFO	TP		NR	NR	NR	NR	NR	0
HIST FTTS	TP		NR	NR	NR	NR	NR	0
DOT OPS	TP		NR	NR	NR	NR	NR	0
CONSENT	1.000		0	0	0	0	NR	0
INDIAN RESERV	1.000		0	0	0	0	NR	0
FUSRAP	1.000		0	0	0	0	NR	0
UMTRA	0.500		0	0	0	NR	NR	0
LEAD SMELTERS	TP		NR	NR	NR	NR	NR	0
US AIRS	TP		NR	NR	NR	NR	NR	0
US MINES	0.250		0	0	NR	NR	NR	0
FINDS	TP		NR	NR	NR	NR	NR	0
UXO	1.000		0	0	0	0	NR	0
DOCKET HWC	TP		NR	NR	NR	NR	NR	0
CA BOND EXP. PLAN	1.000		0	0	0	0	NR	0
Cortese	0.500		0	0	1	NR	NR	1
CUPA Listings	0.250		0	0	NR	NR	NR	0
DRYCLEANERS	0.250		0	0	NR	NR	NR	0
EMI	TP		NR	NR	NR	NR	NR	0
ENF	TP		NR	NR	NR	NR	NR	0
Financial Assurance	TP		NR	NR	NR	NR	NR	0
HAZNET	TP		NR	NR	NR	NR	NR	0
HIST CORTESE	0.500		0	2	2	NR	NR	4
HWP	1.000		0	0	0	0	NR	0
HWT	0.250		0	0	NR	NR	NR	0

MAP FINDINGS SUMMARY

Database	Search Distance (Miles)	Target Property	< 1/8	1/8 - 1/4	1/4 - 1/2	1/2 - 1	> 1	Total Plotted
MINES	TP		NR	NR	NR	NR	NR	0
MWMP	0.250		0	0	NR	NR	NR	0
NPDES	TP		NR	NR	NR	NR	NR	0
San Bern. Co. Permit	0.250		0	3	NR	NR	NR	3
PEST LIC	TP		NR	NR	NR	NR	NR	0
PROC	0.500		0	0	0	NR	NR	0
Notify 65	1.000		0	0	0	1	NR	1
UIC	TP		NR	NR	NR	NR	NR	0
WASTEWATER PITS	0.500		0	0	0	NR	NR	0
WDS	TP		NR	NR	NR	NR	NR	0
WIP	0.250		0	0	NR	NR	NR	0
ICE	1.000		0	0	0	0	NR	0
ECHO	TP		NR	NR	NR	NR	NR	0
FUELS PROGRAM	0.250		0	0	NR	NR	NR	0
EDR HIGH RISK HISTORICAL RECORDS								
EDR Exclusive Records								
EDR MGP	1.000		0	0	0	0	NR	0
EDR Hist Auto	0.125		0	NR	NR	NR	NR	0
EDR Hist Cleaner	0.125		0	NR	NR	NR	NR	0
EDR RECOVERED GOVERNMENT ARCHIVES								
Exclusive Recovered Govt. Archives								
RGA LF	TP		NR	NR	NR	NR	NR	0
RGA LUST	TP		NR	NR	NR	NR	NR	0
- Totals --		0	0	18	4	1	0	23

NOTES:

TP = Target Property

NR = Not Requested at this Search Distance

Sites may be listed in more than one database

A1 **UNOCAL #5636** **LUST** **U001574620**
East **665 W COUNTY LINE ROAD** **N/A**
1/8-1/4 **CALIMESA, CA 92320**
0.143 mi.
754 ft. **Site 1 of 6 in cluster A**

Relative:
Higher

Actual:
2382 ft.

LUST:

Region:	STATE
Global Id:	T0606500389
Latitude:	34.0037866139785
Longitude:	-117.061831084717
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	01/26/1995
Lead Agency:	RIVERSIDE COUNTY LOP
Case Worker:	UNK
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	083302518T
LOC Case Number:	94537
File Location:	Local Agency Warehouse
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0606500389
Contact Type:	Local Agency Caseworker
Contact Name:	UNK
Organization Name:	RIVERSIDE COUNTY LOP
Address:	3880 LEMON ST SUITE 200
City:	RIVERSIDE
Email:	Not reported
Phone Number:	Not reported

Global Id:	T0606500389
Contact Type:	Regional Board Caseworker
Contact Name:	NANCY OLSON-MARTIN
Organization Name:	SANTA ANA RWQCB (REGION 8)
Address:	3737 MAIN STREET, SUITE 500
City:	RIVERSIDE
Email:	nolson-martin@waterboards.ca.gov
Phone Number:	Not reported

Status History:

Global Id:	T0606500389
Status:	Completed - Case Closed
Status Date:	01/26/1995

Global Id:	T0606500389
Status:	Open - Case Begin Date
Status Date:	06/28/1994

Global Id:	T0606500389
Status:	Open - Site Assessment
Status Date:	06/28/1994

UNOCAL #5636 (Continued) **U001574620**

Regulatory Activities:

Global Id:	T0606500389
Action Type:	ENFORCEMENT
Date:	01/25/1995
Action:	Closure/No Further Action Letter - #Riv Co Closure
Global Id:	T0606500389
Action Type:	ENFORCEMENT
Date:	01/26/1995
Action:	Closure/No Further Action Letter
Global Id:	T0606500389
Action Type:	Other
Date:	06/28/1994
Action:	Leak Discovery
Global Id:	T0606500389
Action Type:	Other
Date:	06/28/1994
Action:	Leak Reported
Global Id:	T0606500389
Action Type:	Other
Date:	07/08/1994
Action:	Leak Stopped

RIVERSIDE CO. LUST:

Region:	RIVERSIDE
Facility ID:	94537
Employee:	Brown
Site Closed:	Yes
Case Type:	Undefined
Facility Status:	closed/action completed
Casetype Decode:	Undefined
Fstatus Decode:	Closed/Action completed

A2 **UNOCAL SERVICE STATION #5636** **HIST UST** **S113040572**
East **665 WEST COUNTY LINE ROAD** **HAZNET** **N/A**
1/8-1/4 **CALIMESA, CA 92320**
0.143 mi.
754 ft. **Site 2 of 6 in cluster A**

Relative:
Higher

Actual:
2382 ft.

HIST UST:

File Number:	0001FA79
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0001FA79.pdf
Region:	Not reported
Facility ID:	Not reported
Facility Type:	Not reported
Other Type:	Not reported
Contact Name:	Not reported
Telephone:	Not reported
Owner Name:	Not reported
Owner Address:	Not reported
Owner City,St,Zip:	Not reported
Total Tanks:	Not reported

UNOCAL SERVICE STATION #5636 (Continued) **S113040572**

Tank Num:	Not reported
Container Num:	Not reported
Year Installed:	Not reported
Tank Capacity:	Not reported
Tank Used for:	Not reported
Type of Fuel:	Not reported
Container Construction Thickness:	Not reported
Leak Detection:	Not reported

Click here for Geo Tracker PDF:

HAZNET:

envid:	S113040572
Year:	1994
GEPAID:	CAL000046576
Contact:	UNION OIL COMPANY OF CALIFORNI
Telephone:	7144286560
Mailing Name:	Not reported
Mailing Address:	PO BOX 25376
Mailing City,St,Zip:	SANTA ANA, CA 927995376
Gen County:	Not reported
TSD EPA ID:	CAT080011059
TSD County:	Not reported
Waste Category:	Waste oil and mixed oil
Disposal Method:	Recycler
Tons:	1.2510
Cat Decode:	Waste oil and mixed oil
Method Decode:	Recycler
Facility County:	Riverside

envid:	S113040572
Year:	1993
GEPAID:	CAL000046576
Contact:	UNION OIL COMPANY OF CALIFORNI
Telephone:	7144286560
Mailing Name:	Not reported
Mailing Address:	PO BOX 25376
Mailing City,St,Zip:	SANTA ANA, CA 927995376
Gen County:	Not reported
TSD EPA ID:	Not reported
TSD County:	Not reported
Waste Category:	Unspecified oil-containing waste
Disposal Method:	Recycler
Tons:	1.25099999999
Cat Decode:	Unspecified oil-containing waste
Method Decode:	Recycler
Facility County:	Riverside

envid:	S113040572
Year:	1993
GEPAID:	CAL000046576
Contact:	UNION OIL COMPANY OF CALIFORNI
Telephone:	7144286560
Mailing Name:	Not reported
Mailing Address:	PO BOX 25376
Mailing City,St,Zip:	SANTA ANA, CA 927995376
Gen County:	Not reported

UNOCAL SERVICE STATION #5636 (Continued) **S113040572**

TSD EPA ID:	CAD028409019
TSD County:	Not reported
Waste Category:	Waste oil and mixed oil
Disposal Method:	Recycler
Tons:	2.085
Cat Decode:	Waste oil and mixed oil
Method Decode:	Recycler
Facility County:	Riverside
envid:	S113040572
Year:	1993
GEPAID:	CAL000046576
Contact:	UNION OIL COMPANY OF CALIFORNI
Telephone:	7144286560
Mailing Name:	Not reported
Mailing Address:	PO BOX 25376
Mailing City,St,Zip:	SANTA ANA, CA 927995376
Gen County:	Not reported
TSD EPA ID:	CAT000646117
TSD County:	Not reported
Waste Category:	Contaminated soil from site clean-up
Disposal Method:	Treatment, Tank
Tons:	10
Cat Decode:	Contaminated soil from site clean-up
Method Decode:	Treatment, Tank
Facility County:	Riverside

A3 **UNOCAL #5636** **LUST** **S103943658**
East **665 COUNTY LINE** **HIST CORTESE** **N/A**
1/8-1/4 **CALIMESA, CA 92320**
0.144 mi.
760 ft. **Site 3 of 6 in cluster A**

Relative:
Higher

Actual:
2383 ft.

LUST REG 8:

Region:	8
County:	Riverside
Regional Board:	Santa Ana Region
Facility Status:	Case Closed
Case Number:	083302518T
Local Case Num:	Not reported
Case Type:	Soil only
Substance:	Gasoline
Qty Leaked:	Not reported
Abate Method:	Excavate and Dispose - remove contaminated soil and dispose in approved site
Cross Street:	CALIMESA
Enf Type:	CLOS
Funding:	Not reported
How Discovered:	Tank Closure
How Stopped:	Not reported
Leak Cause:	UNK
Leak Source:	Piping
Global ID:	T0606500389
How Stopped Date:	6/28/1994
Enter Date:	8/31/1994
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	6/28/1994
Discover Date:	6/28/1994

UNOCAL #5636 (Continued) **S103943658**

Enforcement Date:	Not reported
Close Date:	1/26/1995
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	Not reported
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	8/31/1994
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	34.004724
Longitude:	-117.053763
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.
MTBE Class:	*
Staff:	NOM
Staff Initials:	UNK
Lead Agency:	Local Agency
Local Agency:	33000L
Hydr Basin #:	UPPER SANTA ANA VALL
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported

Summary: Not reported

HIST CORTESE:

Region:	CORTESE
Facility County Code:	33
Reg By:	LTNKA
Reg Id:	083302518T

A4
East
1/8-1/4
0.151 mi.
797 ft.

SKAT TRAK INC **RCRA-SQG 1004678391**
654 AVE K **FINDS CAR000108472**
CALIMESA, CA 92320 **ECHO**

Site 4 of 6 in cluster A

Relative:
Higher

Actual:
2383 ft.

RCRA-SQG:

Date form received by agency:	11/05/2001
Facility name:	SKAT TRAK INC
Facility address:	654 AVE K CALIMESA, CA 92320
EPA ID:	CAR000108472
Contact:	AL MIRSMA
Contact address:	P O BOX 518 CALIMESA, CA 92320
Contact country:	US
Contact telephone:	(909) 795-2505

SKAT TRAK INC (Continued) **1004678391**

Contact email: Not reported
EPA Region: 09
Classification: Small Small Quantity Generator
Description: Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:
Owner/operator name: KEN STUART
Owner/operator address: P O BOX 518
CALIMESA, CA 92320
Owner/operator country: Not reported
Owner/operator telephone: (909) 795-2505
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Handler Activities Summary:
U.S. importer of hazardous waste: No
Mixed waste (haz. and radioactive): No
Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D039
. Waste name: TETRACHLOROETHYLENE

Violation Status: No violations found

FINDS:

Registry ID: 110012191412

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

ECHO:

SKAT TRAK INC (Continued) **1004678391**

Envid: 1004678391
Registry ID: 110012191412
DFR URL: http://echo.epa.gov/detailed_facility_report?fid=110012191412

A5 **OK SERVECE** **HIST UST S113148869**
East **33928 COUNTY LINE RD** **HAZNET N/A**
1/8-1/4 **CALIMESA, CA 92320**
0.180 mi.
951 ft. **Site 5 of 6 in cluster A**

Relative:
Higher

Actual:
2387 ft.

HIST UST:
File Number: 0001F83B
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0001F83B.pdf
Region: Not reported
Facility ID: Not reported
Facility Type: Not reported
Other Type: Not reported
Contact Name: Not reported
Telephone: Not reported
Owner Name: Not reported
Owner Address: Not reported
Owner City,St,Zip: Not reported
Total Tanks: Not reported

Tank Num: Not reported
Container Num: Not reported
Year Installed: Not reported
Tank Capacity: Not reported
Tank Used for: Not reported
Type of Fuel: Not reported
Container Construction Thickness: Not reported
Leak Detection: Not reported

Click here for Geo Tracker PDF:

HAZNET:
envid: S113148869
Year: 2012
GEPAID: CAL000322867
Contact: MICHELLE FERRARO
Telephone: 7608048460
Mailing Name: Not reported
Mailing Address: 5962 PRIESTLY DR
Mailing City,St,Zip: CARLSBAD, CA 920080000
Gen County: Riverside
TSD EPA ID: CAD008252405
TSD County: Los Angeles
Waste Category: Not reported
Disposal Method: Fuel Blending Prior To Energy Recovery At Another Site
Tons: 0.935
Cat Decode: Not reported
Method Decode: Fuel Blending Prior To Energy Recovery At Another Site
Facility County: Riverside

envid: S113148869
Year: 2012
GEPAID: CAL000322867

OK SERVECE (Continued) **S113148869**

Contact:	MICHELLE FERRARO
Telephone:	7608048460
Mailing Name:	Not reported
Mailing Address:	5962 PRIESTLY DR
Mailing City,St,Zip:	CARLSBAD, CA 920080000
Gen County:	Riverside
TSD EPA ID:	CAD981696420
TSD County:	Los Angeles
Waste Category:	Not reported
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.1
Cat Decode:	Not reported
Method Decode:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County:	Riverside

envid:	S113148869
Year:	2011
GEPAID:	CAL000322867
Contact:	W. MATTHEW GOKEY
Telephone:	7608048460
Mailing Name:	Not reported
Mailing Address:	5962 PRIESTLY DR
Mailing City,St,Zip:	CARLSBAD, CA 920080000
Gen County:	Not reported
TSD EPA ID:	CAD981696420
TSD County:	Not reported
Waste Category:	Other organic solids
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.25
Cat Decode:	Other organic solids
Method Decode:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County:	Riverside

envid:	S113148869
Year:	2010
GEPAID:	CAL000322867
Contact:	MICHELLE FERRARO
Telephone:	7608048460
Mailing Name:	Not reported
Mailing Address:	5962 PRIESTLY DR
Mailing City,St,Zip:	CARLSBAD, CA 920080000
Gen County:	Not reported
TSD EPA ID:	CAD981696420
TSD County:	Not reported
Waste Category:	Other organic solids
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	0.4
Cat Decode:	Other organic solids
Method Decode:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County:	Riverside

OK SERVECE (Continued) **S113148869**

envid:	S113148869
Year:	2009
GEPAID:	CAL000322867
Contact:	MARY JOHNSON CONTROLLER
Telephone:	7608048460
Mailing Name:	Not reported
Mailing Address:	5962 PRIESTLY DR
Mailing City,St,Zip:	CARLSBAD, CA 920080000
Gen County:	Not reported
TSD EPA ID:	CAD981696420
TSD County:	Not reported
Waste Category:	Unspecified aqueous solution
Disposal Method:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Tons:	1.155
Cat Decode:	Unspecified aqueous solution
Method Decode:	Storage, Bulking, And/Or Transfer Off Site--No Treatment/Reovery (H010-H129) Or (H131-H135)
Facility County:	Riverside

Click this hyperlink while viewing on your computer to access
3 additional CA_HAZNET: record(s) in the EDR Site Report.

A6
East
1/8-1/4
0.180 mi.
951 ft.

SHELL
33928 COUNTY LINE RD
YUCAIPA, CA 92320

LUST **U003784889**
SWEEPS UST **N/A**
San Bern. Co. Permit

Site 6 of 6 in cluster A

Relative:
Higher

Actual:
2387 ft.

LUST:

Region:	STATE
Global Id:	T0607100523
Latitude:	34.004698807
Longitude:	-117.0643474
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	12/23/2009
Lead Agency:	SAN BERNARDINO COUNTY
Case Worker:	JC
Local Agency:	SAN BERNARDINO COUNTY
RB Case Number:	083603312T
LOC Case Number:	98082
File Location:	Local Agency
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline, MTBE / TBA / Other Fuel Oxygenates
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0607100523
Contact Type:	Local Agency Caseworker
Contact Name:	JACKSON CRUTSINGER
Organization Name:	SAN BERNARDINO COUNTY
Address:	620 SOUTH E STREET
City:	SAN BERNARDINO
Email:	jcrutsinger@sbcfire.org
Phone Number:	Not reported

SHELL (Continued) **U003784889**

Global Id: T0607100523
Contact Type: Regional Board Caseworker
Contact Name: CARL BERNHARDT
Organization Name: SANTA ANA RWQCB (REGION 8)
Address: 3737 MAIN STREET, SUITE 500
City: RIVERSIDE
Email: cbernhardt@waterboards.ca.gov
Phone Number: 9517824495

Status History:
Global Id: T0607100523
Status: Completed - Case Closed
Status Date: 12/23/2009

Global Id: T0607100523
Status: Open - Case Begin Date
Status Date: 08/06/1998

Global Id: T0607100523
Status: Open - Remediation
Status Date: 08/04/2009

Global Id: T0607100523
Status: Open - Site Assessment
Status Date: 12/15/1998

Global Id: T0607100523
Status: Open - Site Assessment
Status Date: 11/16/2006

Regulatory Activities:
Global Id: T0607100523
Action Type: RESPONSE
Date: 04/30/2009
Action: Clean Up Fund - 5-Year Review Summary

Global Id: T0607100523
Action Type: RESPONSE
Date: 03/03/2008
Action: Clean Up Fund - 5-Year Review Summary

Global Id: T0607100523
Action Type: RESPONSE
Date: 10/19/2009
Action: Other Report / Document

Global Id: T0607100523
Action Type: ENFORCEMENT
Date: 05/12/2009
Action: Notification - Fee Title Owners Notice

Global Id: T0607100523
Action Type: Other
Date: 08/06/1998
Action: Leak Discovery

SHELL (Continued) **U003784889**

Global Id: T0607100523
Action Type: Other
Date: 11/19/1998
Action: Leak Reported

Global Id: T0607100523
Action Type: ENFORCEMENT
Date: 12/23/2009
Action: Closure/No Further Action Letter

Global Id: T0607100523
Action Type: REMEDIATION
Date: 05/16/2003
Action: Soil Vapor Extraction (SVE)

Global Id: T0607100523
Action Type: ENFORCEMENT
Date: 12/23/2009
Action: Closure/No Further Action Letter

Global Id: T0607100523
Action Type: RESPONSE
Date: 10/19/2009
Action: Other Report / Document

SWEEPS UST:
Status: Active
Comp Number: 11306
Number: 1
Board Of Equalization: 44-020323
Referral Date: 07-28-92
Action Date: 07-28-92
Created Date: 09-26-88
Owner Tank Id: Not reported
SWRCB Tank Id: 36-000-011306-000001
Tank Status: A
Capacity: 1
Active Date: 09-26-88
Tank Use: UNKNOWN
STG: P
Content: UNKNOWN
Number Of Tanks: 4

Status: Active
Comp Number: 11306
Number: 1
Board Of Equalization: 44-020323
Referral Date: 07-28-92
Action Date: 07-28-92
Created Date: 09-26-88
Owner Tank Id: Not reported
SWRCB Tank Id: 36-000-011306-000002
Tank Status: A
Capacity: 1
Active Date: 09-26-88
Tank Use: UNKNOWN

SHELL (Continued) **U003784889**

STG: P
Content: UNKNOWN
Number Of Tanks: Not reported

Status: Active
Comp Number: 11306
Number: 1
Board Of Equalization: 44-020323
Referral Date: 07-28-92
Action Date: 07-28-92
Created Date: 09-26-88
Owner Tank Id: Not reported
SWRCB Tank Id: 36-000-011306-000003
Tank Status: A
Capacity: 1
Active Date: 09-26-88
Tank Use: UNKNOWN
STG: P
Content: UNKNOWN
Number Of Tanks: Not reported

Status: Active
Comp Number: 11306
Number: 1
Board Of Equalization: 44-020323
Referral Date: 07-28-92
Action Date: 07-28-92
Created Date: 09-26-88
Owner Tank Id: Not reported
SWRCB Tank Id: 36-000-011306-000004
Tank Status: A
Capacity: 1
Active Date: 09-26-88
Tank Use: UNKNOWN
STG: P
Content: UNKNOWN
Number Of Tanks: Not reported

San Bern. Co. Permit:
Region: SAN BERNARDINO
Facility ID: FA0001740
Owner: THE SOCO GROUP
Permit Number: PT0002894
Permit Category: HAZMAT HANDLER - UST ONLY
Facility Status: ACTIVE
Expiration Date: 10/31/2016

Region: SAN BERNARDINO
Facility ID: FA0001740
Owner: THE SOCO GROUP
Permit Number: PT0024438
Permit Category: WASTE INCIDENTAL UST OPERATION ONLY
Facility Status: ACTIVE
Expiration Date: 10/31/2016

Region: SAN BERNARDINO
Facility ID: FA0001740

SHELL (Continued) **U003784889**

Owner: THE SOCO GROUP
Permit Number: PT0016021
Permit Category: UST OWNERSHIP/OPERATING PERMIT (PER UST)
Facility Status: ACTIVE
Expiration Date: 10/31/2016

Region: SAN BERNARDINO
Facility ID: FA0001740
Owner: THE SOCO GROUP
Permit Number: PT0011437
Permit Category: UST OWNERSHIP/OPERATING PERMIT (PER UST)
Facility Status: ACTIVE
Expiration Date: 10/31/2016

Region: SAN BERNARDINO
Facility ID: FA0001740
Owner: THE SOCO GROUP
Permit Number: PT0011436
Permit Category: UST OWNERSHIP/OPERATING PERMIT (PER UST)
Facility Status: ACTIVE
Expiration Date: 10/31/2016

B7 **FASTSTRIP FOOD STORE** **LUST** **S102610516**
ENE **13710** **HIST CORTESE** **N/A**
1/8-1/4 **YUCAIPA, CA 92320** **San Bern. Co. Permit**
0.196 mi.
1033 ft. **Site 1 of 2 in cluster B**

Relative:
Higher

Actual:
2388 ft.

LUST REG 8:

Region:	8
County:	San Bernardino
Regional Board:	Santa Ana Region
Facility Status:	Case Closed
Case Number:	083602992T
Local Case Num:	97010
Case Type:	Soil only
Substance:	Gasoline
Qty Leaked:	Not reported
Abate Method:	Not reported
Cross Street:	CALIMESA
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	Tank Closure
How Stopped:	Not reported
Leak Cause:	Not reported
Leak Source:	Not reported
Global ID:	T0607100440
How Stopped Date:	8/21/1996
Enter Date:	6/19/1997
Date Confirmation of Leak Began:	Not reported
Date Preliminary Assessment Began:	Not reported
Discover Date:	8/21/1996
Enforcement Date:	Not reported
Close Date:	12/11/2001
Date Prelim Assessment Workplan Submitted:	8/21/1996
Date Pollution Characterization Began:	Not reported
Date Remediation Plan Submitted:	Not reported
Date Remedial Action Underway:	8/27/1996

FASTSTRIP FOOD STORE (Continued) **S102610516**

Date Post Remedial Action Monitoring:	Not reported
Enter Date:	6/19/1997
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	34.005424
Longitude:	-117.0630995
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.
MTBE Class:	*
Staff:	CAB
Staff Initials:	CB5
Lead Agency:	Local Agency
Local Agency:	36000L
Hydr Basin #:	UPPER SANTA ANA VALL
Beneficial:	Not reported
Priority:	Not reported
Cleanup Fund Id:	Not reported
Work Suspended:	Not reported

Summary: Not reported

HIST CORTESE:

Region:	CORTESE
Facility County Code:	36
Reg By:	LTNKA
Reg Id:	083602992T

San Bern. Co. Permit:

Region:	SAN BERNARDINO
Facility ID:	FA0003010
Owner:	JACO HILL COMPANY
Permit Number:	PT0001922
Permit Category:	HAZMAT HANDLER - UST ONLY
Facility Status:	ACTIVE
Expiration Date:	10/31/2016

Region:	SAN BERNARDINO
Facility ID:	FA0003010
Owner:	JACO HILL COMPANY
Permit Number:	PT0012422
Permit Category:	UST OWNERSHIP/OPERATING PERMIT (PER UST)
Facility Status:	ACTIVE
Expiration Date:	10/31/2016

Region:	SAN BERNARDINO
Facility ID:	FA0003010
Owner:	JACO HILL COMPANY
Permit Number:	PT0012421
Permit Category:	UST OWNERSHIP/OPERATING PERMIT (PER UST)

FASTSTRIP FOOD STORE (Continued) **S102610516**

Facility Status: ACTIVE
Expiration Date: 10/31/2016

Region: SAN BERNARDINO
Facility ID: FA0003010
Owner: JACO HILL COMPANY
Permit Number: PT0012420
Permit Category: UST OWNERSHIP/OPERATING PERMIT (PER UST)
Facility Status: ACTIVE
Expiration Date: 10/31/2016

Region: SAN BERNARDINO
Facility ID: FA0003010
Owner: JACO HILL COMPANY
Permit Number: PT0012419
Permit Category: UST OWNERSHIP/OPERATING PERMIT (PER UST)
Facility Status: ACTIVE
Expiration Date: 10/31/2016

Region: SAN BERNARDINO
Facility ID: FA0003010
Owner: JACO HILL COMPANY
Permit Number: PT0024810
Permit Category: WASTE INCIDENTAL UST OPERATION ONLY
Facility Status: ACTIVE
Expiration Date: 10/31/2016

B8 **FASTSTRIP FOOD STORE** **LUST U001574617**
ENE **13710 CALIMESA BLVD** **SWEEPS UST N/A**
1/8-1/4 **YUCAIPA, CA 92320** **HIST UST**
0.196 mi.
1033 ft. **Site 2 of 2 in cluster B**

Relative:
Higher

Actual:
2388 ft.

LUST:
Region: STATE
Global Id: T0607100440
Latitude: 34.004282
Longitude: -117.062729
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 12/11/2001
Lead Agency: SAN BERNARDINO COUNTY
Case Worker: CB
Local Agency: SAN BERNARDINO COUNTY
RB Case Number: 083602992T
LOC Case Number: 97010
File Location: Local Agency
Potential Media Affect: Soil
Potential Contaminants of Concern: Gasoline
Site History: Not reported

Click here to access the California GeoTracker records for this facility:

Contact:
Global Id: T0607100440
Contact Type: Local Agency Caseworker
Contact Name: CURTIS BRUNDAGE
Organization Name: SAN BERNARDINO COUNTY

FASTSTRIP FOOD STORE (Continued) **U001574617**

Address: 620 S. E STREET
City: SAN BERNARDINO
Email: cbrundage@sbcfire.org
Phone Number: Not reported

Global Id: T0607100440
Contact Type: Regional Board Caseworker
Contact Name: CARL BERNHARDT
Organization Name: SANTA ANA RWQCB (REGION 8)
Address: 3737 MAIN STREET, SUITE 500
City: RIVERSIDE
Email: cbernhardt@waterboards.ca.gov
Phone Number: 9517824495

Status History:
Global Id: T0607100440
Status: Completed - Case Closed
Status Date: 12/11/2001

Global Id: T0607100440
Status: Open - Case Begin Date
Status Date: 08/21/1996

Global Id: T0607100440
Status: Open - Remediation
Status Date: 08/27/1996

Global Id: T0607100440
Status: Open - Site Assessment
Status Date: 08/21/1996

Regulatory Activities:
Global Id: T0607100440
Action Type: REMEDIATION
Date: 08/27/1996
Action: Excavation

Global Id: T0607100440
Action Type: Other
Date: 08/21/1996
Action: Leak Discovery

Global Id: T0607100440
Action Type: Other
Date: 03/19/1997
Action: Leak Reported

Global Id: T0607100440
Action Type: Other
Date: 08/21/1996
Action: Leak Stopped

SWEEPS UST:
Status: Active
Comp Number: 8335

FASTSTRIP FOOD STORE (Continued) **U001574617**

Number: 9
Board Of Equalization: 44-020048
Referral Date: 07-28-92
Action Date: 07-28-92
Created Date: 09-22-88
Owner Tank Id: Not reported
SWRCB Tank Id: 36-000-008335-000001
Tank Status: A
Capacity: 1
Active Date: 09-22-88
Tank Use: UNKNOWN
STG: P
Content: Not reported
Number Of Tanks: 4

Status: Active
Comp Number: 8335
Number: 9
Board Of Equalization: 44-020048
Referral Date: 07-28-92
Action Date: 07-28-92
Created Date: 09-22-88
Owner Tank Id: Not reported
SWRCB Tank Id: 36-000-008335-000002
Tank Status: A
Capacity: 1
Active Date: 09-22-88
Tank Use: UNKNOWN
STG: P
Content: UNKNOWN
Number Of Tanks: Not reported

Status: Active
Comp Number: 8335
Number: 9
Board Of Equalization: 44-020048
Referral Date: 07-28-92
Action Date: 07-28-92
Created Date: 09-22-88
Owner Tank Id: Not reported
SWRCB Tank Id: 36-000-008335-000003
Tank Status: A
Capacity: 1
Active Date: 09-22-88
Tank Use: UNKNOWN
STG: P
Content: UNKNOWN
Number Of Tanks: Not reported

Status: Active
Comp Number: 8335
Number: 9
Board Of Equalization: 44-020048
Referral Date: 07-28-92
Action Date: 07-28-92
Created Date: 09-22-88
Owner Tank Id: Not reported

FASTSTRIP FOOD STORE (Continued) **U001574617**

SWRCB Tank Id: 36-000-008335-000004
Tank Status: A
Capacity: 1
Active Date: 09-22-88
Tank Use: UNKNOWN
STG: P
Content: UNKNOWN
Number Of Tanks: Not reported

HIST UST:
File Number: 0001F730
URL: http://geotracker.waterboards.ca.gov/ustpdfs/pdf/0001F730.pdf
Region: STATE
Facility ID: 00000005617
Facility Type: Gas Station
Other Type: Not reported
Contact Name: SHIRLEY BINNINGER
Telephone: 8053937000
Owner Name: JACO-HILL CO. A PARTNERSHIP
Owner Address: 3101 STATE ROAD
Owner City,St,Zip: BAKERSFIELD, CA 93308
Total Tanks: 0004

Tank Num: 001
Container Num: 1
Year Installed: 1981
Tank Capacity: 00012000
Tank Used for: PRODUCT
Type of Fuel: REGULAR
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor

Tank Num: 002
Container Num: 2
Year Installed: 1981
Tank Capacity: 00012000
Tank Used for: PRODUCT
Type of Fuel: UNLEADED
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor

Tank Num: 003
Container Num: 3
Year Installed: 1981
Tank Capacity: 00012000
Tank Used for: PRODUCT
Type of Fuel: PREMIUM
Container Construction Thickness: Not reported
Leak Detection: Stock Inventor

Tank Num: 004
Container Num: 4
Year Installed: 1981
Tank Capacity: 00012000
Tank Used for: PRODUCT
Type of Fuel: DIESEL
Container Construction Thickness: Not reported

FASTSTRIP FOOD STORE (Continued) **U001574617**

Leak Detection: Stock Inventor

Click here for Geo Tracker PDF:

C9 **DINOSAUR TIRE CENTER** **HIST UST** **U001575868**
ENE **13715K CALIMESA BLVD** **N/A**
1/8-1/4 **CALIMESA, CA 92399**
0.224 mi.
1184 ft. **Site 1 of 3 in cluster C**

Relative:
Higher

Actual:
2386 ft.

HIST UST:

File Number:	00029B2F
URL:	http://geotracker.waterboards.ca.gov/ustpdfs/pdf/00029B2F.pdf
Region:	STATE
Facility ID:	00000056227
Facility Type:	Other
Other Type:	TIRE SALES & SERVICE
Contact Name:	RAMON A. GARDUNO
Telephone:	7147951513
Owner Name:	CALIMESA PLAZA
Owner Address:	34078 COUNTY LINE RD.
Owner City,St,Zip:	CALIMESA, CA 92320
Total Tanks:	0000
Tank Num:	001
Container Num:	1
Year Installed:	Not reported
Tank Capacity:	00000000
Tank Used for:	PRODUCT
Type of Fuel:	UNLEADED
Container Construction Thickness:	Not reported
Leak Detection:	None
Tank Num:	002
Container Num:	3
Year Installed:	Not reported
Tank Capacity:	00000000
Tank Used for:	PRODUCT
Type of Fuel:	PREMIUM
Container Construction Thickness:	Not reported
Leak Detection:	None
Tank Num:	003
Container Num:	2
Year Installed:	Not reported
Tank Capacity:	00000000
Tank Used for:	PRODUCT
Type of Fuel:	REGULAR
Container Construction Thickness:	Not reported
Leak Detection:	None

Click here for Geo Tracker PDF:

C10
ENE
1/8-1/4
0.224 mi.
1185 ft.

DINOSAUR TIRES AND RD SVC
13715 CALIMESA BLVD
YUCAIPA, CA 92399

Site 2 of 3 in cluster C

RCRA-SQG 1004676057
FINDS CAR000080374
HAZNET
ECHO

Relative:
Higher

Actual:
2386 ft.

RCRA-SQG:

Date form received by agency:	08/11/2000
Facility name:	DINOSAUR TIRES AND RD SVC
Facility address:	13715 CALIMESA BLVD YUCAIPA, CA 92399
EPA ID:	CAR000080374
Contact:	TONY GARLUZO
Contact address:	13715 CALIMESA BLVD YUCAIPA, CA 92399
Contact country:	US
Contact telephone:	(909) 795-7134
Contact email:	Not reported
EPA Region:	09
Classification:	Small Small Quantity Generator
Description:	Handler: generates more than 100 and less than 1000 kg of hazardous waste during any calendar month and accumulates less than 6000 kg of hazardous waste at any time; or generates 100 kg or less of hazardous waste during any calendar month, and accumulates more than 1000 kg of hazardous waste at any time

Owner/Operator Summary:

Owner/operator name:	DINOSAUR TIRES AND RD SVC
Owner/operator address:	13715 CALIMESA BLVD YUCAIPA, CA 92399
Owner/operator country:	Not reported
Owner/operator telephone:	(909) 795-7134
Legal status:	Private
Owner/Operator Type:	Owner
Owner/Op start date:	Not reported
Owner/Op end date:	Not reported

Handler Activities Summary:

U.S. importer of hazardous waste:	No
Mixed waste (haz. and radioactive):	No
Recycler of hazardous waste:	No
Transporter of hazardous waste:	No
Treater, storer or disposer of HW:	No
Underground injection activity:	No
On-site burner exemption:	No
Furnace exemption:	No
Used oil fuel burner:	No
Used oil processor:	No
User oil refiner:	No
Used oil fuel marketer to burner:	No
Used oil Specification marketer:	No
Used oil transfer facility:	No
Used oil transporter:	No

. Waste code:	D039
. Waste name:	TETRACHLOROETHYLENE

Violation Status: No violations found

DINOSAUR TIRES AND RD SVC (Continued) **1004676057**

FINDS:

Registry ID: 110002941979

Environmental Interest/Information System
RCRAInfo is a national information system that supports the Resource Conservation and Recovery Act (RCRA) program through the tracking of events and activities related to facilities that generate, transport, and treat, store, or dispose of hazardous waste. RCRAInfo allows RCRA program staff to track the notification, permit, compliance, and corrective action activities required under RCRA.

HAZNET:

envid:	1004676057
Year:	2001
GEPAID:	CAR000080374
Contact:	--
Telephone:	9097957134
Mailing Name:	Not reported
Mailing Address:	13715 CALIMESA BLVD
Mailing City,St,Zip:	YACAIPA, CA 923990000
Gen County:	Not reported
TSD EPA ID:	CAT000613927
TSD County:	Not reported
Waste Category:	Aqueous solution with total organic residues less than 10 percent
Disposal Method:	Transfer Station
Tons:	0.83
Cat Decode:	Aqueous solution with total organic residues less than 10 percent
Method Decode:	Transfer Station
Facility County:	00

envid:	1004676057
Year:	2000
GEPAID:	CAR000080374
Contact:	--
Telephone:	9097957134
Mailing Name:	Not reported
Mailing Address:	13715 CALIMESA BLVD
Mailing City,St,Zip:	YACAIPA, CA 923990000
Gen County:	Not reported
TSD EPA ID:	CAT000613927
TSD County:	Not reported
Waste Category:	Aqueous solution with total organic residues less than 10 percent
Disposal Method:	Transfer Station
Tons:	0.09
Cat Decode:	Aqueous solution with total organic residues less than 10 percent
Method Decode:	Transfer Station
Facility County:	00

ECHO:

Envid:	1004676057
Registry ID:	110002941979
DFR URL:	http://echo.epa.gov/detailed_facility_report?fid=110002941979

C11
ENE
1/8-1/4
0.224 mi.
1185 ft.

DINOSAUR TIRE AND ROAD SERVICE
13715 CALIMESA BLVD
YUCAIPA, CA 92399

San Bern. Co. Permit **S106544716**
N/A

Site 3 of 3 in cluster C

Relative:
Higher

Actual:
2386 ft.

San Bern. Co. Permit:

Region:	SAN BERNARDINO
Facility ID:	FA0008940
Owner:	GARDUNO, TONY & MIKE
Permit Number:	PT0015007
Permit Category:	SMALL QUANTITY GENERATOR
Facility Status:	ACTIVE
Expiration Date:	08/31/2016

Region:	SAN BERNARDINO
Facility ID:	FA0008940
Owner:	GARDUNO, TONY & MIKE
Permit Number:	PT0021920
Permit Category:	HAZARDOUS MATERIALS 1-3 CHEMICALS
Facility Status:	ACTIVE
Expiration Date:	08/31/2016

12
East
1/4-1/2
0.252 mi.
1331 ft.

CALIMESA SUNSHINE S.S.
905 CALIMESA BLVD
CALIMESA, CA 92320

LUST **S102426146**
SWEEPS UST **N/A**
HIST CORTESE

Relative:
Higher

Actual:
2395 ft.

LUST:

Region:	STATE
Global Id:	T0606500379
Latitude:	34.00371
Longitude:	-117.061739
Case Type:	LUST Cleanup Site
Status:	Completed - Case Closed
Status Date:	11/09/2004
Lead Agency:	SANTA ANA RWQCB (REGION 8)
Case Worker:	NOM
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	083302496T
LOC Case Number:	94318
File Location:	Not reported
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Not reported

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T0606500379
Contact Type:	Local Agency Caseworker
Contact Name:	UNK
Organization Name:	RIVERSIDE COUNTY LOP
Address:	3880 LEMON ST SUITE 200
City:	RIVERSIDE
Email:	Not reported
Phone Number:	Not reported

Global Id:	T0606500379

CALIMESA SUNSHINE S.S. (Continued) **S102426146**

Contact Type: Regional Board Caseworker
Contact Name: NANCY OLSON-MARTIN
Organization Name: SANTA ANA RWQCB (REGION 8)
Address: 3737 MAIN STREET, SUITE 500
City: RIVERSIDE
Email: nolson-martin@waterboards.ca.gov
Phone Number: Not reported

Status History:
Global Id: T0606500379
Status: Completed - Case Closed
Status Date: 11/09/2004

Global Id: T0606500379
Status: Open - Case Begin Date
Status Date: 12/22/1993

Global Id: T0606500379
Status: Open - Remediation
Status Date: 02/01/1996

Global Id: T0606500379
Status: Open - Remediation
Status Date: 09/21/1999

Global Id: T0606500379
Status: Open - Site Assessment
Status Date: 12/22/1993

Global Id: T0606500379
Status: Open - Site Assessment
Status Date: 06/02/1994

Regulatory Activities:
Global Id: T0606500379
Action Type: ENFORCEMENT
Date: 11/09/2004
Action: Closure/No Further Action Letter

Global Id: T0606500379
Action Type: ENFORCEMENT
Date: 11/08/2004
Action: File review - #RCDEH upload site file 1/14/2015

Global Id: T0606500379
Action Type: Other
Date: 12/22/1993
Action: Leak Discovery

Global Id: T0606500379
Action Type: Other
Date: 06/02/1994
Action: Leak Reported

Global Id: T0606500379
Action Type: ENFORCEMENT

CALIMESA SUNSHINE S.S. (Continued) **S102426146**

Date: 05/15/1997
Action: Petition Submitted for Review

LUST REG 8:

Region:	8
County:	Riverside
Regional Board:	Santa Ana Region
Facility Status:	Remedial action (cleanup) Underway
Case Number:	083302496T
Local Case Num:	94318
Case Type:	Soil only
Substance:	Gasoline
Qty Leaked:	Not reported
Abate Method:	EDVE
Cross Street:	Not reported
Enf Type:	Not reported
Funding:	Not reported
How Discovered:	OM
How Stopped:	Not reported
Leak Cause:	UNK
Leak Source:	UNK
Global ID:	T0606500379
How Stopped Date:	Not reported
Enter Date:	8/29/1994
Date Confirmation of Leak Began:	12/22/1993
Date Preliminary Assessment Began:	12/22/1993
Discover Date:	12/22/1993
Enforcement Date:	Not reported
Close Date:	Not reported
Date Prelim Assessment Workplan Submitted:	Not reported
Date Pollution Characterization Began:	6/2/1994
Date Remediation Plan Submitted:	2/1/1996
Date Remedial Action Underway:	9/21/1999
Date Post Remedial Action Monitoring:	Not reported
Enter Date:	8/29/1994
GW Qualifies:	Not reported
Soil Qualifies:	Not reported
Operator:	Not reported
Facility Contact:	Not reported
Interim:	Not reported
Oversite Program:	LUST
Latitude:	34.00376
Longitude:	-117.0621844
MTBE Date:	Not reported
Max MTBE GW:	Not reported
MTBE Concentration:	0
Max MTBE Soil:	Not reported
MTBE Fuel:	1
MTBE Tested:	Site NOT Tested for MTBE.Includes Unknown and Not Analyzed.
MTBE Class:	*
Staff:	NOM
Staff Initials:	UNK
Lead Agency:	Regional Board
Local Agency:	33000L
Hydr Basin #:	UPPER SANTA ANA VALL
Beneficial:	Not reported

CALIMESA SUNSHINE S.S. (Continued) **S102426146**

Priority: Not reported
Cleanup Fund Id: Not reported
Work Suspended: Not reported
Summary: THE SITE HAS 5 USTS: ONE 10,000 GALLON DIESEL, ONE 5,000 GALLON SUPER UNLEADED GASOLINE, ONE 3,000 GALLON AND ONE 5,000 GALLON REGULAR GASOLINE, AND ONE 300 GALLON WASTE OIL TANK.

RIVERSIDE CO. LUST:
Region: RIVERSIDE
Facility ID: 94318
Employee: Shurlow-LOP
Site Closed: Referred to Water Board
Case Type: Soil only
Facility Status: 0
Casetype Decode: Soil only is impacted
Fstatus Decode: Not reported

SWEEPS UST:
Status: Active
Comp Number: 1976
Number: 3
Board Of Equalization: 44-010457
Referral Date: 07-09-93
Action Date: 07-09-93
Created Date: 07-09-93
Owner Tank Id: Not reported
SWRCB Tank Id: Not reported
Tank Status: Not reported
Capacity: Not reported
Active Date: Not reported
Tank Use: Not reported
STG: Not reported
Content: Not reported
Number Of Tanks: Not reported

HIST CORTESE:
Region: CORTESE
Facility County Code: 33
Reg By: LTNKA
Reg Id: 083302496T

13
West
1/4-1/2
0.403 mi.
2128 ft.

HENRY N. WOCHHOLZ WWRF **Cortese** **S109445636**
ENF **N/A**
YUCAIPA, CA

Relative:
Lower

Actual:
2324 ft.

CORTESE:
Region: CORTESE
Envirostor Id: Not reported
Site/Facility Type: Not reported
Cleanup Status: Not reported
Status Date: Not reported
Site Code: Not reported
Latitude: Not reported
Longitude: Not reported

HENRY N. WOCHHOLZ WWRF (Continued) **S109445636**

Owner:	Not reported
Enf Type:	Not reported
Swat R:	Not reported
Flag:	CORTESE
Order No:	R8-2007-0012
Waste Discharge System No:	Not reported
Effective Date:	02/02/2007
Region 2:	8
WID Id:	8 362222001
Solid Waste Id No:	Not reported
Waste Management Uit Name:	Not reported

ENF:

Region:	8
Facility Id:	259161
Agency Name:	Yucaipa Valley Water District
Place Type:	Utility
Place Subtype:	Wastewater Treatment Facility
Facility Type:	Municipal/Domestic
Agency Type:	Special District
# Of Agencies:	1
Place Latitude:	34.000542
Place Longitude:	-117.101297
SIC Code 1:	4952
SIC Desc 1:	Sewerage Systems
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	4.5
Threat To Water Quality:	1
Complexity:	A
Pretreatment:	Y - POTW has EPA approved pretreatment program
Facility Waste Type:	Domestic wastewater
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	NPDMUNILRG
Program Category1:	NPDESWW
Program Category2:	NPDESWW
# Of Programs:	1
WDID:	8 362222001
Reg Measure Id:	140508
Reg Measure Type:	NPDES Permits
Region:	8
Order #:	96-004
Npdes# CA#:	CA0105619
Major-Minor:	Major
Npdes Type:	MUN

HENRY N. WOCHHOLZ WWRF (Continued) **S109445636**

Reclamation:	2 - Producer-User
Dredge Fill Fee:	Not reported
301H:	N
Application Fee Amt Received:	Not reported
Status:	Historical
Status Date:	04/18/1996
Effective Date:	04/18/1996
Expiration/Review Date:	04/01/2001
Termination Date:	05/31/2001
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	I
Fee Code:	Not reported
Direction/Voice:	Passive
Enforcement Id(EID):	237382
Region:	8
Order / Resolution Number:	R8-2001-0096
Enforcement Action Type:	Admin Civil Liability
Effective Date:	09/25/2001
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	09/18/2002
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Withdrawn
Title:	MPC R8-2001-0096
Description:	VIOLATIONS FOR THE PERIOD OF FROM JUNE 2000 TO JULY 200. WITHDRAWN AND REISSUED AS R8-2002-0067
Program:	NPDMUNILRG
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	$0.00
Initial Assessed Amount:	$0.00
Liability $ Amount:	$0.00
Project $ Amount:	$0.00
Liability $ Paid:	$0.00
Project $ Completed:	$0.00
Total $ Paid/Completed Amount:	$0.00

Region:	8
Facility Id:	259161
Agency Name:	Yucaipa Valley Water District
Place Type:	Utility
Place Subtype:	Wastewater Treatment Facility
Facility Type:	Municipal/Domestic
Agency Type:	Special District
# Of Agencies:	1
Place Latitude:	34.000542
Place Longitude:	-117.101297
SIC Code 1:	4952
SIC Desc 1:	Sewerage Systems
SIC Code 2:	Not reported

HENRY N. WOCHHOLZ WWRF (Continued) **S109445636**

SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	4.5
Threat To Water Quality:	1
Complexity:	A
Pretreatment:	Y - POTW has EPA approved pretreatment program
Facility Waste Type:	Domestic wastewater
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	NPDMUNILRG
Program Category1:	NPDESWW
Program Category2:	NPDESWW
# Of Programs:	1
WDID:	8 362222001
Reg Measure Id:	148184
Reg Measure Type:	NPDES Permits
Region:	8
Order #:	R8-2001-0009
Npdes# CA#:	CA0105619
Major-Minor:	Major
Npdes Type:	MUN
Reclamation:	2 - Producer-User
Dredge Fill Fee:	Not reported
301H:	N
Application Fee Amt Received:	Not reported
Status:	Historical
Status Date:	01/19/2012
Effective Date:	06/01/2001
Expiration/Review Date:	06/01/2006
Termination Date:	02/01/2007
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	I
Fee Code:	66 - NPDES Based on Flow
Direction/Voice:	Passive
Enforcement Id(EID):	333406
Region:	8
Order / Resolution Number:	R8-2008-0023
Enforcement Action Type:	Admin Civil Liability
Effective Date:	03/03/2008
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported

HENRY N. WOCHHOLZ WWRF (Continued) **S109445636**

Termination Date:	05/12/2008
ACL Issuance Date:	03/03/2008
EPL Issuance Date:	Not reported
Status:	Historical
Title:	MPC R8-2008-0023 for Yucaipa Valley Water Dist
Description:	For violations from July 2005 thru June 2006
Program:	NPDMUNILRG
Latest Milestone Completion Date:	2008-05-12
# Of Programs1:	1
Total Assessment Amount:	$132,000.0
Initial Assessed Amount:	$132,000.0
Liability $ Amount:	$66,000.00
Project $ Amount:	$0.00
Liability $ Paid:	$66,000.00
Project $ Completed:	$0.00
Total $ Paid/Completed Amount:	$132,000.0

Region:	8
Facility Id:	259161
Agency Name:	Yucaipa Valley Water District
Place Type:	Utility
Place Subtype:	Wastewater Treatment Facility
Facility Type:	Municipal/Domestic
Agency Type:	Special District
# Of Agencies:	1
Place Latitude:	34.000542
Place Longitude:	-117.101297
SIC Code 1:	4952
SIC Desc 1:	Sewerage Systems
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	4.5
Threat To Water Quality:	1
Complexity:	A
Pretreatment:	Y - POTW has EPA approved pretreatment program
Facility Waste Type:	Domestic wastewater
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	NPDMUNILRG
Program Category1:	NPDESWW
Program Category2:	NPDESWW
# Of Programs:	1
WDID:	8 362222001
Reg Measure Id:	148184
Reg Measure Type:	NPDES Permits
Region:	8

HENRY N. WOCHHOLZ WWRF (Continued) **S109445636**

Order #:	R8-2001-0009
Npdes# CA#:	CA0105619
Major-Minor:	Major
Npdes Type:	MUN
Reclamation:	2 - Producer-User
Dredge Fill Fee:	Not reported
301H:	N
Application Fee Amt Received:	Not reported
Status:	Historical
Status Date:	01/19/2012
Effective Date:	06/01/2001
Expiration/Review Date:	06/01/2006
Termination Date:	02/01/2007
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	I
Fee Code:	66 - NPDES Based on Flow
Direction/Voice:	Passive
Enforcement Id(EID):	333337
Region:	8
Order / Resolution Number:	R8-2007-0029
Enforcement Action Type:	Admin Civil Liability
Effective Date:	10/09/2007
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	02/04/2008
ACL Issuance Date:	10/09/2007
EPL Issuance Date:	Not reported
Status:	Historical
Title:	MPC R8-2007-0029 for Yucaipa Valley Water Dist
Description:	For violations from August 2004 thru June 2005
Program:	NPDMUNILRG
Latest Milestone Completion Date:	2008-02-11
# Of Programs1:	1
Total Assessment Amount:	$150,000.0
Initial Assessed Amount:	$150,000.0
Liability $ Amount:	$75,000.00
Project $ Amount:	$0.00
Liability $ Paid:	$75,000.00
Project $ Completed:	$0.00
Total $ Paid/Completed Amount:	$150,000.0

Region:	8
Facility Id:	259161
Agency Name:	Yucaipa Valley Water District
Place Type:	Utility
Place Subtype:	Wastewater Treatment Facility
Facility Type:	Municipal/Domestic
Agency Type:	Special District
# Of Agencies:	1
Place Latitude:	34.000542
Place Longitude:	-117.101297

HENRY N. WOCHHOLZ WWRF (Continued) **S109445636**

SIC Code 1:	4952
SIC Desc 1:	Sewerage Systems
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	4.5
Threat To Water Quality:	1
Complexity:	A
Pretreatment:	Y - POTW has EPA approved pretreatment program
Facility Waste Type:	Domestic wastewater
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	NPDMUNILRG
Program Category1:	NPDESWW
Program Category2:	NPDESWW
# Of Programs:	1
WDID:	8 362222001
Reg Measure Id:	148184
Reg Measure Type:	NPDES Permits
Region:	8
Order #:	R8-2001-0009
Npdes# CA#:	CA0105619
Major-Minor:	Major
Npdes Type:	MUN
Reclamation:	2 - Producer-User
Dredge Fill Fee:	Not reported
301H:	N
Application Fee Amt Received:	Not reported
Status:	Historical
Status Date:	01/19/2012
Effective Date:	06/01/2001
Expiration/Review Date:	06/01/2006
Termination Date:	02/01/2007
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	I
Fee Code:	66 - NPDES Based on Flow
Direction/Voice:	Passive
Enforcement Id(EID):	253514
Region:	8
Order / Resolution Number:	R8-2004-0085
Enforcement Action Type:	Admin Civil Liability

HENRY N. WOCHHOLZ WWRF (Continued) **S109445636**

Effective Date:	11/23/2004
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	04/04/2005
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	MPC R8-2004-0085 for YVWD
Description:	For violations from November 2003 through July 2004
Program:	NPDMUNILRG
Latest Milestone Completion Date:	2005-04-15
# Of Programs1:	1
Total Assessment Amount:	$132,000.0
Initial Assessed Amount:	$0.00
Liability $ Amount:	$58,500.00
Project $ Amount:	$0.00
Liability $ Paid:	$58,500.00
Project $ Completed:	$0.00
Total $ Paid/Completed Amount:	$132,000.0

Region:	8
Facility Id:	259161
Agency Name:	Yucaipa Valley Water District
Place Type:	Utility
Place Subtype:	Wastewater Treatment Facility
Facility Type:	Municipal/Domestic
Agency Type:	Special District
# Of Agencies:	1
Place Latitude:	34.000542
Place Longitude:	-117.101297
SIC Code 1:	4952
SIC Desc 1:	Sewerage Systems
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	4.5
Threat To Water Quality:	1
Complexity:	A
Pretreatment:	Y - POTW has EPA approved pretreatment program
Facility Waste Type:	Domestic wastewater
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	NPDMUNILRG
Program Category1:	NPDESWW
Program Category2:	NPDESWW
# Of Programs:	1
WDID:	8 362222001

HENRY N. WOCHHOLZ WWRF (Continued) **S109445636**

Reg Measure Id:	148184
Reg Measure Type:	NPDES Permits
Region:	8
Order #:	R8-2001-0009
Npdes# CA#:	CA0105619
Major-Minor:	Major
Npdes Type:	MUN
Reclamation:	2 - Producer-User
Dredge Fill Fee:	Not reported
301H:	N
Application Fee Amt Received:	Not reported
Status:	Historical
Status Date:	01/19/2012
Effective Date:	06/01/2001
Expiration/Review Date:	06/01/2006
Termination Date:	02/01/2007
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	I
Fee Code:	66 - NPDES Based on Flow
Direction/Voice:	Passive
Enforcement Id(EID):	250252
Region:	8
Order / Resolution Number:	R8-2004-0010
Enforcement Action Type:	Admin Civil Liability
Effective Date:	12/12/2003
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	03/01/2004
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	MPC R8-2004-0010 for YVWD
Description:	FOR 11 VIOLATIONS BETWEEN JULY 2002 AND OCTOBER 2003
Program:	NPDMUNILRG
Latest Milestone Completion Date:	2004-03-01
# Of Programs1:	1
Total Assessment Amount:	$24,000.00
Initial Assessed Amount:	$0.00
Liability $ Amount:	$24,000.00
Project $ Amount:	$0.00
Liability $ Paid:	$24,000.00
Project $ Completed:	$0.00
Total $ Paid/Completed Amount:	$24,000.00

Region:	8
Facility Id:	259161
Agency Name:	Yucaipa Valley Water District
Place Type:	Utility
Place Subtype:	Wastewater Treatment Facility
Facility Type:	Municipal/Domestic
Agency Type:	Special District

HENRY N. WOCHHOLZ WWRF (Continued) **S109445636**

# Of Agencies:	1
Place Latitude:	34.000542
Place Longitude:	-117.101297
SIC Code 1:	4952
SIC Desc 1:	Sewerage Systems
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	4.5
Threat To Water Quality:	1
Complexity:	A
Pretreatment:	Y - POTW has EPA approved pretreatment program
Facility Waste Type:	Domestic wastewater
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	NPDMUNILRG
Program Category1:	NPDESWW
Program Category2:	NPDESWW
# Of Programs:	1
WDID:	8 362222001
Reg Measure Id:	148184
Reg Measure Type:	NPDES Permits
Region:	8
Order #:	R8-2001-0009
Npdes# CA#:	CA0105619
Major-Minor:	Major
Npdes Type:	MUN
Reclamation:	2 - Producer-User
Dredge Fill Fee:	Not reported
301H:	N
Application Fee Amt Received:	Not reported
Status:	Historical
Status Date:	01/19/2012
Effective Date:	06/01/2001
Expiration/Review Date:	06/01/2006
Termination Date:	02/01/2007
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	I
Fee Code:	66 - NPDES Based on Flow
Direction/Voice:	Passive
Enforcement Id(EID):	248142

HENRY N. WOCHHOLZ WWRF (Continued) **S109445636**

Region:	8
Order / Resolution Number:	R8-2002-0026
Enforcement Action Type:	Admin Civil Liability
Effective Date:	09/18/2002
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	10/21/2002
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	MPC R8-2002-0026
Description:	For violations of TIN and Coliform from July 2001, to June 2002
Program:	NPDMUNILRG
Latest Milestone Completion Date:	2002-10-21
# Of Programs1:	1
Total Assessment Amount:	$39,000.00
Initial Assessed Amount:	$0.00
Liability $ Amount:	$39,000.00
Project $ Amount:	$0.00
Liability $ Paid:	$39,000.00
Project $ Completed:	$0.00
Total $ Paid/Completed Amount:	$39,000.00

Region:	8
Facility Id:	259161
Agency Name:	Yucaipa Valley Water District
Place Type:	Utility
Place Subtype:	Wastewater Treatment Facility
Facility Type:	Municipal/Domestic
Agency Type:	Special District
# Of Agencies:	1
Place Latitude:	34.000542
Place Longitude:	-117.101297
SIC Code 1:	4952
SIC Desc 1:	Sewerage Systems
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	4.5
Threat To Water Quality:	1
Complexity:	A
Pretreatment:	Y - POTW has EPA approved pretreatment program
Facility Waste Type:	Domestic wastewater
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	NPDMUNILRG

HENRY N. WOCHHOLZ WWRF (Continued) **S109445636**

Program Category1:	NPDESWW
Program Category2:	NPDESWW
# Of Programs:	1
WDID:	8 362222001
Reg Measure Id:	148184
Reg Measure Type:	NPDES Permits
Region:	8
Order #:	R8-2001-0009
Npdes# CA#:	CA0105619
Major-Minor:	Major
Npdes Type:	MUN
Reclamation:	2 - Producer-User
Dredge Fill Fee:	Not reported
301H:	N
Application Fee Amt Received:	Not reported
Status:	Historical
Status Date:	01/19/2012
Effective Date:	06/01/2001
Expiration/Review Date:	06/01/2006
Termination Date:	02/01/2007
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	I
Fee Code:	66 - NPDES Based on Flow
Direction/Voice:	Passive
Enforcement Id(EID):	246612
Region:	8
Order / Resolution Number:	R8-2003-0007
Enforcement Action Type:	Admin Civil Liability
Effective Date:	01/24/2003
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	03/18/2003
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	MPC R8-2003-0007
Description:	REPLACES MPC NO. 02-067
Program:	NPDMUNILRG
Latest Milestone Completion Date:	2003-03-18
# Of Programs1:	1
Total Assessment Amount:	$84,000.00
Initial Assessed Amount:	$0.00
Liability $ Amount:	$34,500.00
Project $ Amount:	$0.00
Liability $ Paid:	$34,500.00
Project $ Completed:	$0.00
Total $ Paid/Completed Amount:	$84,000.00
Region:	8
Facility Id:	259161
Agency Name:	Yucaipa Valley Water District

HENRY N. WOCHHOLZ WWRF (Continued) **S109445636**

Place Type:	Utility
Place Subtype:	Wastewater Treatment Facility
Facility Type:	Municipal/Domestic
Agency Type:	Special District
# Of Agencies:	1
Place Latitude:	34.000542
Place Longitude:	-117.101297
SIC Code 1:	4952
SIC Desc 1:	Sewerage Systems
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	4.5
Threat To Water Quality:	1
Complexity:	A
Pretreatment:	Y - POTW has EPA approved pretreatment program
Facility Waste Type:	Domestic wastewater
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	NPDMUNILRG
Program Category1:	NPDESWW
Program Category2:	NPDESWW
# Of Programs:	1
WDID:	8 362222001
Reg Measure Id:	148184
Reg Measure Type:	NPDES Permits
Region:	8
Order #:	R8-2001-0009
Npdes# CA#:	CA0105619
Major-Minor:	Major
Npdes Type:	MUN
Reclamation:	2 - Producer-User
Dredge Fill Fee:	Not reported
301H:	N
Application Fee Amt Received:	Not reported
Status:	Historical
Status Date:	01/19/2012
Effective Date:	06/01/2001
Expiration/Review Date:	06/01/2006
Termination Date:	02/01/2007
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N

HENRY N. WOCHHOLZ WWRF (Continued) **S109445636**

Individual/General:	I
Fee Code:	66 - NPDES Based on Flow
Direction/Voice:	Passive
Enforcement Id(EID):	245884
Region:	8
Order / Resolution Number:	R8-2002-0067
Enforcement Action Type:	Admin Civil Liability
Effective Date:	09/18/2002
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	01/24/2003
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Withdrawn
Title:	MPC R8-2002-0067
Description:	REPLACES MPC NO. 01-096. COMPLAINT WITHDRAWN. REISSUED AS R8-2003-0007
Program:	NPDMUNILRG
Latest Milestone Completion Date:	2003-01-03
# Of Programs1:	1
Total Assessment Amount:	$0.00
Initial Assessed Amount:	$0.00
Liability $ Amount:	$0.00
Project $ Amount:	$0.00
Liability $ Paid:	$0.00
Project $ Completed:	$0.00
Total $ Paid/Completed Amount:	$0.00

Region:	8
Facility Id:	259161
Agency Name:	Yucaipa Valley Water District
Place Type:	Utility
Place Subtype:	Wastewater Treatment Facility
Facility Type:	Municipal/Domestic
Agency Type:	Special District
# Of Agencies:	1
Place Latitude:	34.000542
Place Longitude:	-117.101297
SIC Code 1:	4952
SIC Desc 1:	Sewerage Systems
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	4.5
Threat To Water Quality:	1
Complexity:	A
Pretreatment:	Y - POTW has EPA approved pretreatment program
Facility Waste Type:	Domestic wastewater

HENRY N. WOCHHOLZ WWRF (Continued) **S109445636**

Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	NPDMUNILRG
Program Category1:	NPDESWW
Program Category2:	NPDESWW
# Of Programs:	1
WDID:	8 362222001
Reg Measure Id:	148184
Reg Measure Type:	NPDES Permits
Region:	8
Order #:	R8-2001-0009
Npdes# CA#:	CA0105619
Major-Minor:	Major
Npdes Type:	MUN
Reclamation:	2 - Producer-User
Dredge Fill Fee:	Not reported
301H:	N
Application Fee Amt Received:	Not reported
Status:	Historical
Status Date:	01/19/2012
Effective Date:	06/01/2001
Expiration/Review Date:	06/01/2006
Termination Date:	02/01/2007
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	I
Fee Code:	66 - NPDES Based on Flow
Direction/Voice:	Passive
Enforcement Id(EID):	233327
Region:	8
Order / Resolution Number:	UNKNOWN
Enforcement Action Type:	Oral Communication
Effective Date:	01/11/2001
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	01/11/2001
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Enforcement - 8 362222001
Description:	Violation of coliform was communicated with YVWD’s staff in person.
Program:	NPDMUNILRG
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	$0.00
Initial Assessed Amount:	$0.00
Liability $ Amount:	$0.00
Project $ Amount:	$0.00
Liability $ Paid:	$0.00
Project $ Completed:	$0.00

HENRY N. WOCHHOLZ WWRF (Continued) **S109445636**

Total $ Paid/Completed Amount:	$0.00
Region:	8
Facility Id:	259161
Agency Name:	Yucaipa Valley Water District
Place Type:	Utility
Place Subtype:	Wastewater Treatment Facility
Facility Type:	Municipal/Domestic
Agency Type:	Special District
# Of Agencies:	1
Place Latitude:	34.000542
Place Longitude:	-117.101297
SIC Code 1:	4952
SIC Desc 1:	Sewerage Systems
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	4.5
Threat To Water Quality:	1
Complexity:	A
Pretreatment:	Y - POTW has EPA approved pretreatment program
Facility Waste Type:	Domestic wastewater
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	NPDMUNILRG
Program Category1:	NPDESWW
Program Category2:	NPDESWW
# Of Programs:	1
WDID:	8 362222001
Reg Measure Id:	148184
Reg Measure Type:	NPDES Permits
Region:	8
Order #:	R8-2001-0009
Npdes# CA#:	CA0105619
Major-Minor:	Major
Npdes Type:	MUN
Reclamation:	2 - Producer-User
Dredge Fill Fee:	Not reported
301H:	N
Application Fee Amt Received:	Not reported
Status:	Historical
Status Date:	01/19/2012
Effective Date:	06/01/2001
Expiration/Review Date:	06/01/2006
Termination Date:	02/01/2007
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported

HENRY N. WOCHHOLZ WWRF (Continued) **S109445636**

WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	I
Fee Code:	66 - NPDES Based on Flow
Direction/Voice:	Passive
Enforcement Id(EID):	233326
Region:	8
Order / Resolution Number:	UNKNOWN
Enforcement Action Type:	Oral Communication
Effective Date:	01/11/2001
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	01/11/2001
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Enforcement - 8 362222001
Description:	Violation of TIN was communicated with YVWD's staff in person.
Program:	NPDMUNILRG
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	$0.00
Initial Assessed Amount:	$0.00
Liability $ Amount:	$0.00
Project $ Amount:	$0.00
Liability $ Paid:	$0.00
Project $ Completed:	$0.00
Total $ Paid/Completed Amount:	$0.00

Region:	8
Facility Id:	259161
Agency Name:	Yucaipa Valley Water District
Place Type:	Utility
Place Subtype:	Wastewater Treatment Facility
Facility Type:	Municipal/Domestic
Agency Type:	Special District
# Of Agencies:	1
Place Latitude:	34.000542
Place Longitude:	-117.101297
SIC Code 1:	4952
SIC Desc 1:	Sewerage Systems
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas

HENRY N. WOCHHOLZ WWRF (Continued) **S109445636**

Design Flow:	4.5
Threat To Water Quality:	1
Complexity:	A
Pretreatment:	Y - POTW has EPA approved pretreatment program
Facility Waste Type:	Domestic wastewater
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	NPDMUNILRG
Program Category1:	NPDESWW
Program Category2:	NPDESWW
# Of Programs:	1
WDID:	8 362222001
Reg Measure Id:	148184
Reg Measure Type:	NPDES Permits
Region:	8
Order #:	R8-2001-0009
Npdes# CA#:	CA0105619
Major-Minor:	Major
Npdes Type:	MUN
Reclamation:	2 - Producer-User
Dredge Fill Fee:	Not reported
301H:	N
Application Fee Amt Received:	Not reported
Status:	Historical
Status Date:	01/19/2012
Effective Date:	06/01/2001
Expiration/Review Date:	06/01/2006
Termination Date:	02/01/2007
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	I
Fee Code:	66 - NPDES Based on Flow
Direction/Voice:	Passive
Enforcement Id(EID):	233261
Region:	8
Order / Resolution Number:	R8-2000-0061
Enforcement Action Type:	Admin Civil Liability
Effective Date:	07/11/2000
Adoption/Issuance Date:	Not reported
Achieve Date:	2001-03-02
Termination Date:	12/06/2002
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	MPC R8-2000-0061
Description:	TIN, COLIFORM, AND TURBIDITY VIOLAITONS
Program:	NPDMUNILRG
Latest Milestone Completion Date:	2002-12-06
# Of Programs1:	1
Total Assessment Amount:	$114,000.0
Initial Assessed Amount:	$0.00

HENRY N. WOCHHOLZ WWRF (Continued) **S109445636**

Liability $ Amount:	$114,000.0
Project $ Amount:	$0.00
Liability $ Paid:	$114,000.0
Project $ Completed:	$0.00
Total $ Paid/Completed Amount:	$114,000.0
Region:	8
Facility Id:	259161
Agency Name:	Yucaipa Valley Water District
Place Type:	Utility
Place Subtype:	Wastewater Treatment Facility
Facility Type:	Municipal/Domestic
Agency Type:	Special District
# Of Agencies:	1
Place Latitude:	34.000542
Place Longitude:	-117.101297
SIC Code 1:	4952
SIC Desc 1:	Sewerage Systems
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	4.5
Threat To Water Quality:	1
Complexity:	A
Pretreatment:	Y - POTW has EPA approved pretreatment program
Facility Waste Type:	Domestic wastewater
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	NPDMUNILRG
Program Category1:	NPDESWW
Program Category2:	NPDESWW
# Of Programs:	1
WDID:	8 362222001
Reg Measure Id:	148184
Reg Measure Type:	NPDES Permits
Region:	8
Order #:	R8-2001-0009
Npdes# CA#:	CA0105619
Major-Minor:	Major
Npdes Type:	MUN
Reclamation:	2 - Producer-User
Dredge Fill Fee:	Not reported
301H:	N
Application Fee Amt Received:	Not reported
Status:	Historical
Status Date:	01/19/2012
Effective Date:	06/01/2001

HENRY N. WOCHHOLZ WWRF (Continued) **S109445636**

Expiration/Review Date:	06/01/2006
Termination Date:	02/01/2007
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	I
Fee Code:	66 - NPDES Based on Flow
Direction/Voice:	Passive
Enforcement Id(EID):	233016
Region:	8
Order / Resolution Number:	UNKNOWN
Enforcement Action Type:	Oral Communication
Effective Date:	06/03/1999
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	06/03/1999
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Enforcement - 8 362222001
Description:	Influent pH meter did not work. Replaced.
Program:	NPDMUNILRG
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	$0.00
Initial Assessed Amount:	$0.00
Liability $ Amount:	$0.00
Project $ Amount:	$0.00
Liability $ Paid:	$0.00
Project $ Completed:	$0.00
Total $ Paid/Completed Amount:	$0.00

Region:	8
Facility Id:	259161
Agency Name:	Yucaipa Valley Water District
Place Type:	Utility
Place Subtype:	Wastewater Treatment Facility
Facility Type:	Municipal/Domestic
Agency Type:	Special District
# Of Agencies:	1
Place Latitude:	34.000542
Place Longitude:	-117.101297
SIC Code 1:	4952
SIC Desc 1:	Sewerage Systems
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported

HENRY N. WOCHHOLZ WWRF (Continued) **S109445636**

NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	4.5
Threat To Water Quality:	1
Complexity:	A
Pretreatment:	Y - POTW has EPA approved pretreatment program
Facility Waste Type:	Domestic wastewater
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	NPDMUNILRG
Program Category1:	NPDESWW
Program Category2:	NPDESWW
# Of Programs:	1
WDID:	8 362222001
Reg Measure Id:	148184
Reg Measure Type:	NPDES Permits
Region:	8
Order #:	R8-2001-0009
Npdes# CA#:	CA0105619
Major-Minor:	Major
Npdes Type:	MUN
Reclamation:	2 - Producer-User
Dredge Fill Fee:	Not reported
301H:	N
Application Fee Amt Received:	Not reported
Status:	Historical
Status Date:	01/19/2012
Effective Date:	06/01/2001
Expiration/Review Date:	06/01/2006
Termination Date:	02/01/2007
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	I
Fee Code:	66 - NPDES Based on Flow
Direction/Voice:	Passive
Enforcement Id(EID):	233012
Region:	8
Order / Resolution Number:	99-066
Enforcement Action Type:	Cease and Desist Order
Effective Date:	11/13/1999
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	Not reported
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Enforcement - 8 362222001
Description:	The cease and desist order was issued to the District for their continued violation of the limit for Coliform. Rescinded by R8-2002-0069 on 7/19/02.

HENRY N. WOCHHOLZ WWRF (Continued) **S109445636**

Program:	NPDMUNILRG
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	$0.00
Initial Assessed Amount:	$0.00
Liability $ Amount:	$0.00
Project $ Amount:	$0.00
Liability $ Paid:	$0.00
Project $ Completed:	$0.00
Total $ Paid/Completed Amount:	$0.00
Region:	8
Facility Id:	259161
Agency Name:	Yucaipa Valley Water District
Place Type:	Utility
Place Subtype:	Wastewater Treatment Facility
Facility Type:	Municipal/Domestic
Agency Type:	Special District
# Of Agencies:	1
Place Latitude:	34.000542
Place Longitude:	-117.101297
SIC Code 1:	4952
SIC Desc 1:	Sewerage Systems
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	4.5
Threat To Water Quality:	1
Complexity:	A
Pretreatment:	Y - POTW has EPA approved pretreatment program
Facility Waste Type:	Domestic wastewater
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	NPDMUNILRG
Program Category1:	NPDESWW
Program Category2:	NPDESWW
# Of Programs:	1
WDID:	8 362222001
Reg Measure Id:	148184
Reg Measure Type:	NPDES Permits
Region:	8
Order #:	R8-2001-0009
Npdes# CA#:	CA0105619
Major-Minor:	Major
Npdes Type:	MUN
Reclamation:	2 - Producer-User
Dredge Fill Fee:	Not reported

HENRY N. WOCHHOLZ WWRF (Continued) **S109445636**

301H:	N
Application Fee Amt Received:	Not reported
Status:	Historical
Status Date:	01/19/2012
Effective Date:	06/01/2001
Expiration/Review Date:	06/01/2006
Termination Date:	02/01/2007
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	I
Fee Code:	66 - NPDES Based on Flow
Direction/Voice:	Passive
Enforcement Id(EID):	223077
Region:	8
Order / Resolution Number:	96-035
Enforcement Action Type:	Cease and Desist Order
Effective Date:	04/18/1996
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	Not reported
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Enforcement - 8 362222001
Description:	TIME SCHEDULE FOR COMPLIANCE WITH TIN LIMIT, PROVIDED YVWD PARTICIPATES IN TDS/TIN STUDY.
Program:	NPDMUNILRG
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	$0.00
Initial Assessed Amount:	$0.00
Liability $ Amount:	$0.00
Project $ Amount:	$0.00
Liability $ Paid:	$0.00
Project $ Completed:	$0.00
Total $ Paid/Completed Amount:	$0.00

Region:	8
Facility Id:	259161
Agency Name:	Yucaipa Valley Water District
Place Type:	Utility
Place Subtype:	Wastewater Treatment Facility
Facility Type:	Municipal/Domestic
Agency Type:	Special District
# Of Agencies:	1
Place Latitude:	34.000542
Place Longitude:	-117.101297
SIC Code 1:	4952
SIC Desc 1:	Sewerage Systems
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported

HENRY N. WOCHHOLZ WWRF (Continued) **S109445636**

SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	4.5
Threat To Water Quality:	1
Complexity:	A
Pretreatment:	Y - POTW has EPA approved pretreatment program
Facility Waste Type:	Domestic wastewater
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	NPDMUNILRG
Program Category1:	NPDESWW
Program Category2:	NPDESWW
# Of Programs:	1
WDID:	8 362222001
Reg Measure Id:	148184
Reg Measure Type:	NPDES Permits
Region:	8
Order #:	R8-2001-0009
Npdes# CA#:	CA0105619
Major-Minor:	Major
Npdes Type:	MUN
Reclamation:	2 - Producer-User
Dredge Fill Fee:	Not reported
301H:	N
Application Fee Amt Received:	Not reported
Status:	Historical
Status Date:	01/19/2012
Effective Date:	06/01/2001
Expiration/Review Date:	06/01/2006
Termination Date:	02/01/2007
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	I
Fee Code:	66 - NPDES Based on Flow
Direction/Voice:	Passive
Enforcement Id(EID):	222743
Region:	8
Order / Resolution Number:	96-086
Enforcement Action Type:	Admin Civil Liability
Effective Date:	11/19/1996
Adoption/Issuance Date:	Not reported
Achieve Date:	1996-12-03
Termination Date:	Not reported
ACL Issuance Date:	Not reported

HENRY N. WOCHHOLZ WWRF (Continued) **S109445636**

EPL Issuance Date:	Not reported
Status:	Historical
Title:	ACLC 96-086
Description:	13385-INADEQUATELY DISINFECTED DISCHARGES NOT REPORTED. $75,000 SUSPENDED PROVIDED YCWD FULLY IMPLEMENT WORKPLAN FOR COLIFORM COMPLIANCE AND RELATED PROCESS OPTIMIZATION
Program:	NPDMUNILRG
Latest Milestone Completion Date:	1996-12-03
# Of Programs1:	1
Total Assessment Amount:	$30,000.00
Initial Assessed Amount:	$0.00
Liability $ Amount:	$30,000.00
Project $ Amount:	$0.00
Liability $ Paid:	$30,000.00
Project $ Completed:	$0.00
Total $ Paid/Completed Amount:	$30,000.00

Region:	8
Facility Id:	259161
Agency Name:	Yucaipa Valley Water District
Place Type:	Utility
Place Subtype:	Wastewater Treatment Facility
Facility Type:	Municipal/Domestic
Agency Type:	Special District
# Of Agencies:	1
Place Latitude:	34.000542
Place Longitude:	-117.101297
SIC Code 1:	4952
SIC Desc 1:	Sewerage Systems
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	4.5
Threat To Water Quality:	1
Complexity:	A
Pretreatment:	Y - POTW has EPA approved pretreatment program
Facility Waste Type:	Domestic wastewater
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	NPDMUNILRG
Program Category1:	NPDESWW
Program Category2:	NPDESWW
# Of Programs:	1
WDID:	8 362222001
Reg Measure Id:	148184
Reg Measure Type:	NPDES Permits
Region:	8

HENRY N. WOCHHOLZ WWRF (Continued) **S109445636**

Order #:	R8-2001-0009
Npdes# CA#:	CA0105619
Major-Minor:	Major
Npdes Type:	MUN
Reclamation:	2 - Producer-User
Dredge Fill Fee:	Not reported
301H:	N
Application Fee Amt Received:	Not reported
Status:	Historical
Status Date:	01/19/2012
Effective Date:	06/01/2001
Expiration/Review Date:	06/01/2006
Termination Date:	02/01/2007
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	I
Fee Code:	66 - NPDES Based on Flow
Direction/Voice:	Passive
Enforcement Id(EID):	222742
Region:	8
Order / Resolution Number:	96-087
Enforcement Action Type:	Cease and Desist Order
Effective Date:	12/13/1996
Adoption/Issuance Date:	Not reported
Achieve Date:	1998-01-01
Termination Date:	Not reported
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Enforcement - 8 362222001
Description:	TOTAL COLIFORM VIOLATIONS - Rescinded by CDO 99-66
Program:	NPDMUNILRG
Latest Milestone Completion Date:	1998-01-01
# Of Programs1:	1
Total Assessment Amount:	$0.00
Initial Assessed Amount:	$0.00
Liability $ Amount:	$0.00
Project $ Amount:	$0.00
Liability $ Paid:	$0.00
Project $ Completed:	$0.00
Total $ Paid/Completed Amount:	$0.00

Region:	8
Facility Id:	259161
Agency Name:	Yucaipa Valley Water District
Place Type:	Utility
Place Subtype:	Wastewater Treatment Facility
Facility Type:	Municipal/Domestic
Agency Type:	Special District
# Of Agencies:	1
Place Latitude:	34.000542
Place Longitude:	-117.101297

HENRY N. WOCHHOLZ WWRF (Continued) **S109445636**

SIC Code 1:	4952
SIC Desc 1:	Sewerage Systems
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	4.5
Threat To Water Quality:	1
Complexity:	A
Pretreatment:	Y - POTW has EPA approved pretreatment program
Facility Waste Type:	Domestic wastewater
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	NPDMUNILRG
Program Category1:	NPDESWW
Program Category2:	NPDESWW
# Of Programs:	1
WDID:	8 362222001
Reg Measure Id:	148184
Reg Measure Type:	NPDES Permits
Region:	8
Order #:	R8-2001-0009
Npdes# CA#:	CA0105619
Major-Minor:	Major
Npdes Type:	MUN
Reclamation:	2 - Producer-User
Dredge Fill Fee:	Not reported
301H:	N
Application Fee Amt Received:	Not reported
Status:	Historical
Status Date:	01/19/2012
Effective Date:	06/01/2001
Expiration/Review Date:	06/01/2006
Termination Date:	02/01/2007
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	I
Fee Code:	66 - NPDES Based on Flow
Direction/Voice:	Passive
Enforcement Id(EID):	221950
Region:	8
Order / Resolution Number:	99-047
Enforcement Action Type:	Cease and Desist Order

HENRY N. WOCHHOLZ WWRF (Continued) **S109445636**

Effective Date:	06/25/1999
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	Not reported
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Historical
Title:	Enforcement - 8 362222001
Description:	AMENDING TIN TIME SCHEDULE
Program:	NPDMUNILRG
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	$0.00
Initial Assessed Amount:	$0.00
Liability $ Amount:	$0.00
Project $ Amount:	$0.00
Liability $ Paid:	$0.00
Project $ Completed:	$0.00
Total $ Paid/Completed Amount:	$0.00

Region:	8
Facility Id:	259161
Agency Name:	Yucaipa Valley Water District
Place Type:	Utility
Place Subtype:	Wastewater Treatment Facility
Facility Type:	Municipal/Domestic
Agency Type:	Special District
# Of Agencies:	1
Place Latitude:	34.000542
Place Longitude:	-117.101297
SIC Code 1:	4952
SIC Desc 1:	Sewerage Systems
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	6.7
Threat To Water Quality:	1
Complexity:	A
Pretreatment:	Y - POTW has EPA approved pretreatment program
Facility Waste Type:	Domestic wastewater
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	NPDMUNILRG
Program Category1:	NPDESWW
Program Category2:	NPDESWW
# Of Programs:	1
WDID:	8 362222001

HENRY N. WOCHHOLZ WWRF (Continued) **S109445636**

Reg Measure Id:	327013
Reg Measure Type:	NPDES Permits
Region:	8
Order #:	R8-2007-0012
Npdes# CA#:	CA0105619
Major-Minor:	Major
Npdes Type:	MUN
Reclamation:	2 - Producer-User
Dredge Fill Fee:	Not reported
301H:	N
Application Fee Amt Received:	Not reported
Status:	Historical
Status Date:	11/13/2015
Effective Date:	02/02/2007
Expiration/Review Date:	02/02/2012
Termination Date:	10/31/2015
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	I
Fee Code:	66 - NPDES Based on Flow
Direction/Voice:	Passive
Enforcement Id(EID):	377403
Region:	8
Order / Resolution Number:	R8-2011-0028
Enforcement Action Type:	Admin Civil Liability
Effective Date:	10/31/2011
Adoption/Issuance Date:	10/31/2011
Achieve Date:	Not reported
Termination Date:	06/30/2013
ACL Issuance Date:	Not reported
EPL Issuance Date:	08/03/2011
Status:	Historical
Title:	ACL R8-2011-0028 for Yucaipa Valley Water Dist
Description:	For violations from December 2007 thru May 2010
Program:	NPDMUNILRG
Latest Milestone Completion Date:	2013-06-30
# Of Programs1:	1
Total Assessment Amount:	$22,414.00
Initial Assessed Amount:	$42,000.00
Liability $ Amount:	$22,414.00
Project $ Amount:	$0.00
Liability $ Paid:	$22,414.00
Project $ Completed:	$0.00
Total $ Paid/Completed Amount:	$22,414.00

Region:	8
Facility Id:	259161
Agency Name:	Yucaipa Valley Water District
Place Type:	Utility
Place Subtype:	Wastewater Treatment Facility
Facility Type:	Municipal/Domestic
Agency Type:	Special District

HENRY N. WOCHHOLZ WWRF (Continued) **S109445636**

# Of Agencies:	1
Place Latitude:	34.000542
Place Longitude:	-117.101297
SIC Code 1:	4952
SIC Desc 1:	Sewerage Systems
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	6.7
Threat To Water Quality:	1
Complexity:	A
Pretreatment:	Y - POTW has EPA approved pretreatment program
Facility Waste Type:	Domestic wastewater
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	NPDMUNILRG
Program Category1:	NPDESWW
Program Category2:	NPDESWW
# Of Programs:	1
WDID:	8 362222001
Reg Measure Id:	327013
Reg Measure Type:	NPDES Permits
Region:	8
Order #:	R8-2007-0012
Npdes# CA#:	CA0105619
Major-Minor:	Major
Npdes Type:	MUN
Reclamation:	2 - Producer-User
Dredge Fill Fee:	Not reported
301H:	N
Application Fee Amt Received:	Not reported
Status:	Historical
Status Date:	11/13/2015
Effective Date:	02/02/2007
Expiration/Review Date:	02/02/2012
Termination Date:	10/31/2015
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	I
Fee Code:	66 - NPDES Based on Flow
Direction/Voice:	Passive
Enforcement Id(EID):	333759

HENRY N. WOCHHOLZ WWRF (Continued) **S109445636**

Region:	8
Order / Resolution Number:	R8-2008-0088
Enforcement Action Type:	Admin Civil Liability
Effective Date:	09/17/2008
Adoption/Issuance Date:	Not reported
Achieve Date:	Not reported
Termination Date:	10/19/2008
ACL Issuance Date:	09/17/2008
EPL Issuance Date:	Not reported
Status:	Historical
Title:	MPC R8-2008-0088 for Yucaipa Valley Water Dist
Description:	For violations from July 2006 thru November 2007
Program:	NPDMUNILRG
Latest Milestone Completion Date:	2008-10-19
# Of Programs1:	1
Total Assessment Amount:	$207,000.0
Initial Assessed Amount:	$207,000.0
Liability $ Amount:	$103,500.0
Project $ Amount:	$0.00
Liability $ Paid:	$103,500.0
Project $ Completed:	$0.00
Total $ Paid/Completed Amount:	$207,000.0

Region:	8
Facility Id:	259161
Agency Name:	Yucaipa Valley Water District
Place Type:	Utility
Place Subtype:	Wastewater Treatment Facility
Facility Type:	Municipal/Domestic
Agency Type:	Special District
# Of Agencies:	1
Place Latitude:	34.000542
Place Longitude:	-117.101297
SIC Code 1:	4952
SIC Desc 1:	Sewerage Systems
SIC Code 2:	Not reported
SIC Desc 2:	Not reported
SIC Code 3:	Not reported
SIC Desc 3:	Not reported
NAICS Code 1:	Not reported
NAICS Desc 1:	Not reported
NAICS Code 2:	Not reported
NAICS Desc 2:	Not reported
NAICS Code 3:	Not reported
NAICS Desc 3:	Not reported
# Of Places:	1
Source Of Facility:	Reg Meas
Design Flow:	6.7
Threat To Water Quality:	1
Complexity:	A
Pretreatment:	Y - POTW has EPA approved pretreatment program
Facility Waste Type:	Domestic wastewater
Facility Waste Type 2:	Not reported
Facility Waste Type 3:	Not reported
Facility Waste Type 4:	Not reported
Program:	NPDMUNILRG
Program Category1:	NPDESWW

HENRY N. WOCHHOLZ WWRF (Continued) **S109445636**

Program Category2:	NPDESWW
# Of Programs:	1
WDID:	8 362222001
Reg Measure Id:	327013
Reg Measure Type:	NPDES Permits
Region:	8
Order #:	R8-2007-0012
Npdes# CA#:	CA0105619
Major-Minor:	Major
Npdes Type:	MUN
Reclamation:	2 - Producer-User
Dredge Fill Fee:	Not reported
301H:	N
Application Fee Amt Received:	Not reported
Status:	Historical
Status Date:	11/13/2015
Effective Date:	02/02/2007
Expiration/Review Date:	02/02/2012
Termination Date:	10/31/2015
WDR Review - Amend:	Not reported
WDR Review - Revise/Renew:	Not reported
WDR Review - Rescind:	Not reported
WDR Review - No Action Required:	Not reported
WDR Review - Pending:	Not reported
WDR Review - Planned:	Not reported
Status Enrollee:	N
Individual/General:	I
Fee Code:	66 - NPDES Based on Flow
Direction/Voice:	Passive
Enforcement Id(EID):	327019
Region:	8
Order / Resolution Number:	R8-2007-0010
Enforcement Action Type:	Cease and Desist Order
Effective Date:	02/02/2007
Adoption/Issuance Date:	02/02/2007
Achieve Date:	Not reported
Termination Date:	Not reported
ACL Issuance Date:	Not reported
EPL Issuance Date:	Not reported
Status:	Active
Title:	CDO R8-2007-0010 for Yucaipa Valley Water District
Description:	Time schedule to achieve compliance with TIN, turbidity, and coliform limits.
Program:	NPDMUNILRG
Latest Milestone Completion Date:	Not reported
# Of Programs1:	1
Total Assessment Amount:	$0.00
Initial Assessed Amount:	$0.00
Liability $ Amount:	$0.00
Project $ Amount:	$0.00
Liability $ Paid:	$0.00
Project $ Completed:	$0.00
Total $ Paid/Completed Amount:	$0.00

14
West
1/4-1/2
0.463 mi.
2444 ft.

HENRY N. WOCHHOLZ WASTEWATER T F
880 W COUNTY LINE RD
YUCAIPA, CA 92399

HIST CORTESE
San Bern. Co. Permit
WDS

S105027555
N/A

Relative:
Lower

Actual:
2307 ft.

HIST CORTESE:
Region: CORTESE
Facility County Code: 36
Reg By: WBC&D
Reg Id: 8 362222001

San Bern. Co. Permit:
Region: SAN BERNARDINO
Facility ID: FA0002138
Owner: YUCAIPA VALLEY WATER DISTRICT
Permit Number: PT0004270
Permit Category: SMALL QUANTITY GENERATOR
Facility Status: ACTIVE
Expiration Date: 10/31/2016

Region: SAN BERNARDINO
Facility ID: FA0002138
Owner: YUCAIPA VALLEY WATER DISTRICT
Permit Number: PT0004275
Permit Category: EPCRA FACILITY
Facility Status: INACTIVE
Expiration Date: 10/31/2013

Region: SAN BERNARDINO
Facility ID: FA0002138
Owner: YUCAIPA VALLEY WATER DISTRICT
Permit Number: PT0018706
Permit Category: RISK MANAGEMENT PLAN - LEVEL III
Facility Status: INACTIVE
Expiration Date: 10/31/2010

Region: SAN BERNARDINO
Facility ID: FA0002138
Owner: YUCAIPA VALLEY WATER DISTRICT
Permit Number: PT0004268
Permit Category: HAZARDOUS MATERIALS 11-30 CHEMICALS
Facility Status: ACTIVE
Expiration Date: 10/31/2016

Region: SAN BERNARDINO
Facility ID: FA0002138
Owner: YUCAIPA VALLEY WATER DISTRICT
Permit Number: PT0010886
Permit Category: UST OWNERSHIP/OPERATING PERMIT (PER UST)
Facility Status: INACTIVE
Expiration Date: 10/31/2004

Region: SAN BERNARDINO
Facility ID: FA0002138
Owner: YUCAIPA VALLEY WATER DISTRICT
Permit Number: PT0010885
Permit Category: UST OWNERSHIP/OPERATING PERMIT (PER UST)
Facility Status: INACTIVE

HENRY N. WOCHHOLZ WASTEWATER T F (Continued) **S105027555**

Expiration Date: 10/31/2011

Region: SAN BERNARDINO
Facility ID: FA0002138
Owner: YUCAIPA VALLEY WATER DISTRICT
Permit Number: PT0018707
Permit Category: RISK MANAGEMENT PLAN - LEVEL II
Facility Status: INACTIVE
Expiration Date: 10/31/2009

Region: SAN BERNARDINO
Facility ID: FA0002138
Owner: YUCAIPA VALLEY WATER DISTRICT
Permit Number: PT0004269
Permit Category: CALARP FACILITY PERMIT
Facility Status: INACTIVE
Expiration Date: 10/31/2010

Region: SAN BERNARDINO
Facility ID: FA0002138
Owner: YUCAIPA VALLEY WATER DISTRICT
Permit Number: PT0004274
Permit Category: RISK MANAGEMENT PLAN - LEVEL III
Facility Status: INACTIVE
Expiration Date: 10/31/2010

Region: SAN BERNARDINO
Facility ID: FA0002138
Owner: YUCAIPA VALLEY WATER DISTRICT
Permit Number: PT0022859
Permit Category: APSA 1,320-10,000 GAL FAC CAPACITY
Facility Status: ACTIVE
Expiration Date: 10/31/2016

WDS:
Facility ID: Santa Ana River 362222001
Facility Type: Municipal/Domestic - Facility that treats sewage or a mixture of predominantly sewage and other waste from districts, municipalities, communities, hospitals, schools, and publicly or privately owned systems (excluding individual subsurface leaching systems disposing of less than 1,000 gallons per day).
Facility Status: Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.
NPDES Number: CA0105619 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board
Subregion: 8
Facility Telephone: 9097952491
Facility Contact: MATT HARWARD
Agency Name: YUCAIPA VALLEY WATER DISTRICT
Agency Address: PO BOX 730
Agency City,St,Zip: YUCAIPA 923990730
Agency Contact: JOSEPH B. ZOBA
Agency Telephone: 9097975119
Agency Type: Special District (Includes districts established under general acts, sanitary districts, water districts irrigation districts, etc.)
SIC Code: 4952
SIC Code 2: Not reported

HENRY N. WOCHHOLZ WASTEWATER T F (Continued) **S105027555**

Primary Waste Type:	Nonhazardous Solid Wastes/Influent or Solid Wastes that contain nonhazardous putrescible and non putrescible solid, semisolid, and liquid wastes (E.G., garbage, trash, refuse, paper, demolition and construction wastes, manure, vegetable or animal solid and semisolid waste).
Primary Waste:	DOMEST
Waste Type2:	Not reported
Waste2:	Domestic Sewage
Primary Waste Type:	Nonhazardous Solid Wastes/Influent or Solid Wastes that contain nonhazardous putrescible and non putrescible solid, semisolid, and liquid wastes (E.G., garbage, trash, refuse, paper, demolition and construction wastes, manure, vegetable or animal solid and semisolid waste).
Secondary Waste:	Not reported
Secondary Waste Type:	Not reported
Design Flow:	5
Baseline Flow:	3
Reclamation:	Producer-User: Reclamation requirements that have been issued to a producer of reclaimed water who also uses the product.
POTW:	POTW has a local pretreatment program that has been approved by the U.S. EPA (or the regional board if the state is delegated the Federal Pretreatment Program) as being in conformance with federal prtreatment regulations [40CFR Part 403].
Treat To Water:	Major Threat to Water Quality. A violation could render unusable a ground water or surface water resource used as a significant drink water supply, require closure of an area used for contact recreation, result in long-term deleterious effects on shell fish spawning or growth areas of aquatic resources, or directly expose the public to toxic substances.
Complexity:	Category A - Any major NPDES facility, any non-NPDES facility (particularly those with toxic wastes) that would be a major if discharge was made to surface or ground waters, or any Class I disposal site. Includes any small-volume complex facility (particularly those with toxicwastes) with numerous discharge points, leak detection systems or ground water monitoring wells.
Facility ID:	Santa Ana River 362222P01
Facility Type:	Municipal/Domestic - Facility that treats sewage or a mixture of predominantly sewage and other waste from districts, municipalities, communities, hospitals, schools, and publicly or privately owned systems (excluding individual subsurface leaching systems disposing of less than 1,000 gallons per day).
Facility Status:	Active - Any facility with a continuous or seasonal discharge that is under Waste Discharge Requirements.
NPDES Number:	CA0105619 The 1st 2 characters designate the state. The remaining 7 are assigned by the Regional Board
Subregion:	8
Facility Telephone:	9097952491
Facility Contact:	MATT HARWARD
Agency Name:	YUCAIPA VALLEY WATER DISTRICT
Agency Address:	PO BOX 730
Agency City,St,Zip:	YUCAIPA 923990730
Agency Contact:	JOSEPH B. ZOBA
Agency Telephone:	9097975119
Agency Type:	Special District (Includes districts established under general acts, sanitary districts, water districts irrigation districts, etc.)
SIC Code:	0

HENRY N. WOCHHOLZ WASTEWATER T F (Continued) **S105027555**

SIC Code 2:	Not reported
Primary Waste Type:	Not reported
Primary Waste:	Not reported
Waste Type2:	Not reported
Waste2:	Not reported
Primary Waste Type:	Not reported
Secondary Waste:	Not reported
Secondary Waste Type:	Not reported
Design Flow:	0
Baseline Flow:	0
Reclamation:	Not reported
POTW:	Not reported
Treat To Water:	Major Threat to Water Quality. A violation could render unusable a ground water or surface water resource used as a significant drink water supply, require closure of an area used for contact recreation, result in long-term deleterious effects on shell fish spawning or growth areas of aquatic resources, or directly expose the public to toxic substances.
Complexity:	Category A - Any major NPDES facility, any non-NPDES facility (particularly those with toxic wastes) that would be a major if discharge was made to surface or ground waters, or any Class I disposal site. Includes any small-volume complex facility (particularly those with toxicwastes) with numerous discharge points, leak detection systems or ground water monitoring wells.

15
SE
1/2-1
0.842 mi.
4446 ft.

CALIMESA ARCO #1958
1216 CALIMESA BLVD.
CALIMESA, CA 92320

LUST **S100178801**
Notify 65 **N/A**

Relative:
Higher

Actual:
2407 ft.

LUST:

Region:	STATE
Global Id:	T10000001842
Latitude:	33.993451
Longitude:	-117.057683
Case Type:	LUST Cleanup Site
Status:	Open - Site Assessment
Status Date:	02/17/2010
Lead Agency:	RIVERSIDE COUNTY LOP
Case Worker:	LS
Local Agency:	RIVERSIDE COUNTY LOP
RB Case Number:	Not reported
LOC Case Number:	201032797
File Location:	Local Agency
Potential Media Affect:	Soil
Potential Contaminants of Concern:	Gasoline
Site History:	Soil samples were taken December 22, 2009 during tank and piping removal activities. Up to 29 ppm TPHg, 990 ppb 1,2,4-TMB, 280 ppb 1,3,5-TMB, 770 ppb benzene, 410 ppb ethylbenzene, 2640 ppb total xylenes, 2200 ppb toluene, and 86000 ppb ethanol was detected under the piping. A total of 10.65 tons of impacted soil was removed from the site on March 11, 2010 in the vicinity of PD2-2. Soil samples taken at the bottom of the excavation at 7 had 1930 ppm TPHg, 29.2 ppm benzene, 503 ppm toluene, 721 ppm xylenes, 2.89 ppm MTBE, 19.1 ppm naphthalene, 260 ppm 1,2,4-TMB, 84.6 ppm 1,3,5-TMB, 22.4 ppm n-butylbenzene, 13.6 ppm isopropylbenzene, 5.2 ppm sec-butylbenzene and 6.3 ppm 4-isopropyltoluene. The pit was excavated deeper and soil

CALIMESA ARCO #1958 (Continued) **S100178801**

samples were taken from the bottom at 10.5. Sample results showed 0.134 ppm TPHg, 0.075 ppm benzene, 0.659 ppm toluene, 9.06 ppm xylenes, 0.336 ppm MTBE, 3.69 ppm naphthalene, 11.1 ppm 1,2,4-TMB, 3.2 ppm 1,3,5-TMB, 1.89 ppm n-butylbenzene, 0.232 ppm isopropylbenzene, 0.23 ppm sec-butylbenzene and 0.32 ppm 4-isopropyltoluene

Click here to access the California GeoTracker records for this facility:

Contact:

Global Id:	T10000001842
Contact Type:	Local Agency Caseworker
Contact Name:	LINDA SHURLOW
Organization Name:	RIVERSIDE COUNTY LOP
Address:	47950 Arabia Street, Suite A
City:	Indio
Email:	lshurlow@rivcocha.org
Phone Number:	7608637570

Status History:

Global Id:	T10000001842
Status:	Open - Case Begin Date
Status Date:	12/21/2009
Global Id:	T10000001842
Status:	Open - Site Assessment
Status Date:	02/17/2010

Regulatory Activities:

Global Id:	T10000001842
Action Type:	Other
Date:	12/21/2009
Action:	Leak Stopped
Global Id:	T10000001842
Action Type:	RESPONSE
Date:	07/15/2014
Action:	Monitoring Report - Quarterly
Global Id:	T10000001842
Action Type:	RESPONSE
Date:	07/15/2011
Action:	Monitoring Report - Quarterly
Global Id:	T10000001842
Action Type:	RESPONSE
Date:	10/15/2011
Action:	Monitoring Report - Quarterly
Global Id:	T10000001842
Action Type:	RESPONSE
Date:	01/15/2012
Action:	Monitoring Report - Quarterly
Global Id:	T10000001842
Action Type:	RESPONSE
Date:	04/15/2013

CALIMESA ARCO #1958 (Continued) **S100178801**

Action: Monitoring Report - Quarterly

Global Id: T10000001842
Action Type: RESPONSE
Date: 01/15/2015
Action: Monitoring Report - Quarterly

Global Id: T10000001842
Action Type: ENFORCEMENT
Date: 06/01/2010
Action: Staff Letter - #rcdeh 060110

Global Id: T10000001842
Action Type: RESPONSE
Date: 04/24/2010
Action: Preliminary Site Assessment Workplan

Global Id: T10000001842
Action Type: RESPONSE
Date: 04/30/2010
Action: Site Assessment Report

Global Id: T10000001842
Action Type: RESPONSE
Date: 04/15/2010
Action: Monitoring Report - Quarterly

Global Id: T10000001842
Action Type: RESPONSE
Date: 07/15/2010
Action: Monitoring Report - Quarterly

Global Id: T10000001842
Action Type: RESPONSE
Date: 10/15/2010
Action: Monitoring Report - Quarterly

Global Id: T10000001842
Action Type: RESPONSE
Date: 01/15/2011
Action: Monitoring Report - Quarterly

Global Id: T10000001842
Action Type: RESPONSE
Date: 04/15/2011
Action: Monitoring Report - Quarterly

Global Id: T10000001842
Action Type: RESPONSE
Date: 07/15/2013
Action: Monitoring Report - Quarterly

Global Id: T10000001842
Action Type: RESPONSE
Date: 07/30/2010
Action: Preliminary Site Assessment Workplan - Addendum - Regulator Responded

CALIMESA ARCO #1958 (Continued) **S100178801**

Global Id: T10000001842
Action Type: ENFORCEMENT
Date: 03/23/2016
Action: File review - #RCDEH site summary

Global Id: T10000001842
Action Type: RESPONSE
Date: 10/15/2013
Action: Monitoring Report - Quarterly

Global Id: T10000001842
Action Type: RESPONSE
Date: 01/15/2014
Action: Monitoring Report - Quarterly

Global Id: T10000001842
Action Type: RESPONSE
Date: 04/15/2014
Action: Monitoring Report - Quarterly

Global Id: T10000001842
Action Type: ENFORCEMENT
Date: 04/05/2011
Action: Staff Letter - #RCDEH 040511

Global Id: T10000001842
Action Type: RESPONSE
Date: 07/15/2012
Action: Monitoring Report - Quarterly

Global Id: T10000001842
Action Type: RESPONSE
Date: 04/15/2012
Action: Monitoring Report - Quarterly

Global Id: T10000001842
Action Type: Other
Date: 02/17/2010
Action: Leak Discovery

Global Id: T10000001842
Action Type: RESPONSE
Date: 10/15/2014
Action: Monitoring Report - Quarterly

Global Id: T10000001842
Action Type: Other
Date: 02/17/2010
Action: Leak Reported

Global Id: T10000001842
Action Type: ENFORCEMENT
Date: 02/26/2016
Action: File review - #RCDEH uploaded site file 2/26/2016

Global Id: T10000001842
Action Type: RESPONSE

CALIMESA ARCO #1958 (Continued) **S100178801**

Date: 10/15/2012
Action: Monitoring Report - Quarterly

Global Id: T10000001842
Action Type: RESPONSE
Date: 01/15/2013
Action: Monitoring Report - Quarterly

Global Id: T10000001842
Action Type: RESPONSE
Date: 06/26/2015
Action: Preliminary Site Assessment Report

Global Id: T10000001842
Action Type: ENFORCEMENT
Date: 02/17/2010
Action: Notice of Responsibility - #RCDEH 021710

Global Id: T10000001842
Action Type: ENFORCEMENT
Date: 02/17/2010
Action: Notice of Reimbursement - #RCDEH 021710

Global Id: T10000001842
Action Type: ENFORCEMENT
Date: 02/17/2010
Action: Staff Letter - #RCDEH 021710

Global Id: T10000001842
Action Type: ENFORCEMENT
Date: 02/17/2010
Action: Notification - Proposition 65 - #RCDEH 021710

Global Id: T10000001842
Action Type: ENFORCEMENT
Date: 02/17/2010
Action: Unauthorized Release Form - #RCDEH 021710

Global Id: T10000001842
Action Type: ENFORCEMENT
Date: 03/09/2010
Action: Staff Letter - #RCDEH 030910

Region: STATE
Global Id: T0606500105
Latitude: 33.9933490947651
Longitude: -117.057568150787
Case Type: LUST Cleanup Site
Status: Completed - Case Closed
Status Date: 08/26/2008
Lead Agency: RIVERSIDE COUNTY LOP
Case Worker: LS
Local Agency: RIVERSIDE COUNTY LOP
RB Case Number: 083301053T
LOC Case Number: 89624
File Location: Local Agency

CALIMESA ARCO #1958 (Continued) **S100178801**

Potential Media Affect: Soil
Potential Contaminants of Concern: Gasoline
Site History: PREVIOUSLY CLOSED 6/14/89. REOPENED and closed again 8/26/2008. USTs replaced - new site opened 2-17-2010.

Click here to access the California GeoTracker records for this facility:

Contact:
Global Id: T0606500105
Contact Type: Local Agency Caseworker
Contact Name: LINDA SHURLOW
Organization Name: RIVERSIDE COUNTY LOP
Address: 47950 Arabia Street, Suite A
City: Indio
Email: lshurlow@rivcocha.org
Phone Number: 7608637570

Global Id: T0606500105
Contact Type: Regional Board Caseworker
Contact Name: VALERIE JAHN-BULL
Organization Name: SANTA ANA RWQCB (REGION 8)
Address: 3737 MAIN STREET, SUITE 500
City: RIVERSIDE
Email: vjahn-bull@waterboards.ca.gov
Phone Number: 9517824903

Status History:
Global Id: T0606500105
Status: Completed - Case Closed
Status Date: 08/26/2008

Global Id: T0606500105
Status: Open - Case Begin Date
Status Date: 09/25/1988

Global Id: T0606500105
Status: Open - Remediation
Status Date: 09/25/1988

Global Id: T0606500105
Status: Open - Remediation
Status Date: 10/13/2005

Global Id: T0606500105
Status: Open - Remediation
Status Date: 01/17/2007

Global Id: T0606500105
Status: Open - Remediation
Status Date: 05/18/2007

Global Id: T0606500105
Status: Open - Remediation
Status Date: 07/31/2007

Global Id: T0606500105
Status: Open - Site Assessment

CALIMESA ARCO #1958 (Continued) **S100178801**

Status Date: 05/24/1989

Global Id: T0606500105
Status: Open - Site Assessment
Status Date: 02/11/1992

Regulatory Activities:
Global Id: T0606500105
Action Type: ENFORCEMENT
Date: 05/18/2007
Action: File review

Global Id: T0606500105
Action Type: ENFORCEMENT
Date: 02/22/2008
Action: Staff Letter - #022208

Global Id: T0606500105
Action Type: ENFORCEMENT
Date: 01/17/2008
Action: File review

Global Id: T0606500105
Action Type: RESPONSE
Date: 11/01/2007
Action: Other Workplan

Global Id: T0606500105
Action Type: ENFORCEMENT
Date: 09/11/2007
Action: Staff Letter - #091107

Global Id: T0606500105
Action Type: RESPONSE
Date: 11/17/2006
Action: Other Report / Document

Global Id: T0606500105
Action Type: RESPONSE
Date: 04/15/2007
Action: Remedial Progress Report

Global Id: T0606500105
Action Type: Other
Date: 05/24/1989
Action: Leak Discovery

Global Id: T0606500105
Action Type: Other
Date: 09/25/1988
Action: Leak Reported

Global Id: T0606500105
Action Type: REMEDIATION
Date: 10/13/2005
Action: Soil Vapor Extraction (SVE)

CALIMESA ARCO #1958 (Continued) **S100178801**

Global Id: T0606500105
Action Type: RESPONSE
Date: 07/15/2007
Action: Remedial Progress Report

Global Id: T0606500105
Action Type: RESPONSE
Date: 10/15/2007
Action: Remedial Progress Report

Global Id: T0606500105
Action Type: ENFORCEMENT
Date: 08/26/2008
Action: Closure/No Further Action Letter - #Riv Co Closure

Global Id: T0606500105
Action Type: ENFORCEMENT
Date: 08/17/2006
Action: Staff Letter - #081706

Global Id: T0606500105
Action Type: RESPONSE
Date: 05/22/2008
Action: Unknown

Global Id: T0606500105
Action Type: ENFORCEMENT
Date: 07/31/2007
Action: File review

Global Id: T0606500105
Action Type: ENFORCEMENT
Date: 01/28/2008
Action: File review

Global Id: T0606500105
Action Type: Other
Date: 05/24/1989
Action: Leak Stopped

Global Id: T0606500105
Action Type: ENFORCEMENT
Date: 10/29/2007
Action: Staff Letter - #10/29/07

Global Id: T0606500105
Action Type: RESPONSE
Date: 12/29/2007
Action: Other Report / Document

RIVERSIDE CO. LUST:
Region: RIVERSIDE
Facility ID: 89624
Employee: Shurlow-LOP
Site Closed: Yes
Case Type: Soil only

CALIMESA ARCO #1958 (Continued) **S100178801**

Facility Status: closed/action completed
Casetype Decode: Soil only is impacted
Fstatus Decode: Closed/Action completed

Region: RIVERSIDE
Facility ID: 201032797
Employee: Shurlow-LOP
Site Closed: Not Closed
Case Type: Soil only
Facility Status: preliminary assessment
Casetype Decode: Soil only is impacted
Fstatus Decode: Preliminary Assessment

NOTIFY 65:
Date Reported: Not reported
Staff Initials: Not reported
Board File Number: Not reported
Facility Type: Not reported
Discharge Date: Not reported
Issue Date: Not reported
Incident Description: Not reported

Date Reported: Not reported
Staff Initials: Not reported
Board File Number: Not reported
Facility Type: Not reported
Discharge Date: Not reported
Issue Date: Not reported
Incident Description: Not reported

Count: 10 records. ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
CALIMESA	S107539494		NE CORNER OF SANDLEWOOD & CALI	92320	CDL
REDLANDS	S106153062	REDLANDS COMMUNITY DAY SCHOOL	ALABAMA STREET/WEST PARK AVENU	92373	ENVIROSTOR, SCH
REDLANDS	S108985931	REDLANDS AIRPORT	N/A		SLIC
RIVERSIDE COUNTY	S107541240		WINEVILLE, SW CORNER OF GAGELE		CDL
YUCAIPA	S107736319	FIFTH STREET/GLEN RD ELEMENTARY SC	5TH STREET/OAK GLEN ROAD	92399	ENVIROSTOR, SCH
YUCAIPA	S107539606		NW CORNER OF YUCAIPA BLVE & I-		CDL
YUCAIPA	S107531543		24078 COUNTY LINE RD	92399	CDL
YUCAIPA	S105628847	YUCAIPA EARLY EDUCATION CENTER	COUNTY LINE ROAD/FIFTH STREET	92399	ENVIROSTOR, SCH
YUCAIPA	S102037863	CALIMESA SO CO	33928 COUNTY LINE ROAD	92399	LUST, HIST CORTESE
YUCAIPA	S107540227		PARK N RIDE/NW CORNER YUCAIPA	92399	CDL

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

STANDARD ENVIRONMENTAL RECORDS

Federal NPL site list

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 04/05/2016
Date Made Active in Reports: 04/15/2016
Number of Days to Update: 10

Source: EPA
Telephone: N/A
Last EDR Contact: 07/07/2016
Next Scheduled EDR Contact: 10/17/2016
Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)
Telephone: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 3
Telephone 215-814-5418

EPA Region 4
Telephone 404-562-8033

EPA Region 5
Telephone 312-886-6686

EPA Region 6
Telephone: 214-655-6659

EPA Region 7
Telephone: 913-551-7247

EPA Region 8
Telephone: 303-312-6774

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 04/05/2016
Date Made Active in Reports: 04/15/2016
Number of Days to Update: 10

Source: EPA
Telephone: N/A
Last EDR Contact: 07/07/2016
Next Scheduled EDR Contact: 10/17/2016
Data Release Frequency: Quarterly

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: 202-564-4267
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Federal Delisted NPL site list

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 04/05/2016
Date Made Active in Reports: 04/15/2016
Number of Days to Update: 10

Source: EPA
Telephone: N/A
Last EDR Contact: 07/07/2016
Next Scheduled EDR Contact: 10/17/2016
Data Release Frequency: Quarterly

Federal CERCLIS list

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 11/13/2015
Date Data Arrived at EDR: 01/06/2016
Date Made Active in Reports: 05/20/2016
Number of Days to Update: 135

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 07/06/2016
Next Scheduled EDR Contact: 10/17/2016
Data Release Frequency: Varies

SEMS: Superfund Enterprise Management System

SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 04/05/2016
Date Made Active in Reports: 04/15/2016
Number of Days to Update: 10

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 07/22/2016
Next Scheduled EDR Contact: 10/31/2016
Data Release Frequency: Quarterly

Federal CERCLIS NFRAP site list

SEMS-ARCHIVE: Superfund Enterprise Management System Archive

SEMS-ARCHIVE (Superfund Enterprise Management System Archive) tracks sites that have no further interest under the Federal Superfund Program based on available information. The list was formerly known as the CERCLIS-NFRAP, renamed to SEMS ARCHIVE by the EPA in 2015. EPA may perform a minimal level of assessment work at a site while it is archived if site conditions change and/or new information becomes available. Archived sites have been removed and archived from the inventory of SEMS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list the site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. The decision does not necessarily mean that there is no hazard associated with a given site; it only means that. based upon available information, the location is not judged to be potential NPL site.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 04/05/2016
Date Made Active in Reports: 04/15/2016
Number of Days to Update: 10

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 07/22/2016
Next Scheduled EDR Contact: 10/31/2016
Data Release Frequency: Quarterly

Federal RCRA CORRACTS facilities list

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 06/27/2016
Date Data Arrived at EDR: 06/30/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 64

Source: EPA
Telephone: 800-424-9346
Last EDR Contact: 06/30/2016
Next Scheduled EDR Contact: 10/10/2016
Data Release Frequency: Quarterly

Federal RCRA non-CORRACTS TSD facilities list

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Transporters are individuals or entities that move hazardous waste from the generator offsite to a facility that can recycle, treat, store, or dispose of the waste. TSDFs treat, store, or dispose of the waste.

Date of Government Version: 06/21/2016
Date Data Arrived at EDR: 06/30/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 64

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 06/30/2016
Next Scheduled EDR Contact: 10/17/2016
Data Release Frequency: Quarterly

Federal RCRA generators list

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/21/2016
Date Data Arrived at EDR: 06/30/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 64

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 06/30/2016
Next Scheduled EDR Contact: 10/17/2016
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 06/21/2016
Date Data Arrived at EDR: 06/30/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 64

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 06/30/2016
Next Scheduled EDR Contact: 10/17/2016
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/21/2016
Date Data Arrived at EDR: 06/30/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 64

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 06/30/2016
Next Scheduled EDR Contact: 10/17/2016
Data Release Frequency: Varies

Federal institutional controls / engineering controls registries

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/28/2015
Date Data Arrived at EDR: 05/29/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 13

Source: Department of the Navy
Telephone: 843-820-7326
Last EDR Contact: 08/12/2016
Next Scheduled EDR Contact: 11/28/2016
Data Release Frequency: Varies

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 05/09/2016
Date Data Arrived at EDR: 06/01/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 93

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 08/31/2016
Next Scheduled EDR Contact: 12/12/2016
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 05/09/2016
Date Data Arrived at EDR: 06/01/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 93

Source: Environmental Protection Agency
Telephone: 703-603-0695
Last EDR Contact: 08/31/2016
Next Scheduled EDR Contact: 12/12/2016
Data Release Frequency: Varies

Federal ERNS list

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 03/28/2016
Date Data Arrived at EDR: 03/30/2016
Date Made Active in Reports: 05/20/2016
Number of Days to Update: 51

Source: National Response Center, United States Coast Guard
Telephone: 202-267-2180
Last EDR Contact: 06/28/2016
Next Scheduled EDR Contact: 10/10/2016
Data Release Frequency: Annually

State- and tribal - equivalent NPL

RESPONSE: State Response Sites

Identifies confirmed release sites where DTSC is involved in remediation, either in a lead or oversight capacity. These confirmed release sites are generally high-priority and high potential risk.

Date of Government Version: 05/02/2016
Date Data Arrived at EDR: 05/04/2016
Date Made Active in Reports: 06/21/2016
Number of Days to Update: 48

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/02/2016
Next Scheduled EDR Contact: 11/14/2016
Data Release Frequency: Quarterly

State- and tribal - equivalent CERCLIS

ENVIROSTOR: EnviroStor Database

The Department of Toxic Substances Control's (DTSC's) Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifes sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List (NPL)); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

Date of Government Version: 05/02/2016
Date Data Arrived at EDR: 05/04/2016
Date Made Active in Reports: 06/21/2016
Number of Days to Update: 48

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/02/2016
Next Scheduled EDR Contact: 11/14/2016
Data Release Frequency: Quarterly

State and tribal landfill and/or solid waste disposal site lists

SWF/LF (SWIS): Solid Waste Information System

Active, Closed and Inactive Landfills. SWF/LF records typically contain an inve ntory of solid waste disposal facilities or landfills. These may be active or i nactive facilities or open dumps that failed to meet RCRA Section 4004 criteria for solid waste landfills or disposal sites.

Date of Government Version: 05/16/2016
Date Data Arrived at EDR: 05/18/2016
Date Made Active in Reports: 06/21/2016
Number of Days to Update: 34

Source: Department of Resources Recycling and Recovery
Telephone: 916-341-6320
Last EDR Contact: 08/16/2016
Next Scheduled EDR Contact: 11/28/2016
Data Release Frequency: Quarterly

State and tribal leaking storage tank lists

LUST REG 5: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Alameda, Alpine, Amador, Butte, Colusa, Contra Costa, Calveras, El Dorado, Fresno, Glenn, Kern, Kings, Lake, Lassen, Madera, Mariposa, Merced, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Yolo, Yuba counties.

Date of Government Version: 07/01/2008
Date Data Arrived at EDR: 07/22/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 9

Source: California Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-4834
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: No Update Planned

LUST REG 9: Leaking Underground Storage Tank Report

Orange, Riverside, San Diego counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 03/01/2001
Date Data Arrived at EDR: 04/23/2001
Date Made Active in Reports: 05/21/2001
Number of Days to Update: 28

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-637-5595
Last EDR Contact: 09/26/2011
Next Scheduled EDR Contact: 01/09/2012
Data Release Frequency: No Update Planned

LUST REG 8: Leaking Underground Storage Tanks

California Regional Water Quality Control Board Santa Ana Region (8). For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/14/2005
Date Data Arrived at EDR: 02/15/2005
Date Made Active in Reports: 03/28/2005
Number of Days to Update: 41

Source: California Regional Water Quality Control Board Santa Ana Region (8)
Telephone: 909-782-4496
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Varies

LUST REG 7: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Imperial, Riverside, San Diego, Santa Barbara counties.

Date of Government Version: 02/26/2004
Date Data Arrived at EDR: 02/26/2004
Date Made Active in Reports: 03/24/2004
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Colorado River Basin Region (7)
Telephone: 760-776-8943
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

LUST REG 6V: Leaking Underground Storage Tank Case Listing

Leaking Underground Storage Tank locations. Inyo, Kern, Los Angeles, Mono, San Bernardino counties.

Date of Government Version: 06/07/2005
Date Data Arrived at EDR: 06/07/2005
Date Made Active in Reports: 06/29/2005
Number of Days to Update: 22

Source: California Regional Water Quality Control Board Victorville Branch Office (6)
Telephone: 760-241-7365
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST REG 6L: Leaking Underground Storage Tank Case Listing

For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/09/2003
Date Data Arrived at EDR: 09/10/2003
Date Made Active in Reports: 10/07/2003
Number of Days to Update: 27

Source: California Regional Water Quality Control Board Lahontan Region (6)
Telephone: 530-542-5572
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: No Update Planned

LUST: Geotracker's Leaking Underground Fuel Tank Report

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state. For more information on a particular leaking underground storage tank sites, please contact the appropriate regulatory agency.

Date of Government Version: 06/13/2016
Date Data Arrived at EDR: 06/14/2016
Date Made Active in Reports: 08/09/2016
Number of Days to Update: 56

Source: State Water Resources Control Board
Telephone: see region list
Last EDR Contact: 06/14/2016
Next Scheduled EDR Contact: 09/26/2016
Data Release Frequency: Quarterly

LUST REG 4: Underground Storage Tank Leak List

Los Angeles, Ventura counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6710
Last EDR Contact: 09/06/2011
Next Scheduled EDR Contact: 12/19/2011
Data Release Frequency: No Update Planned

LUST REG 3: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank locations. Monterey, San Benito, San Luis Obispo, Santa Barbara, Santa Cruz counties.

Date of Government Version: 05/19/2003
Date Data Arrived at EDR: 05/19/2003
Date Made Active in Reports: 06/02/2003
Number of Days to Update: 14

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-542-4786
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: No Update Planned

LUST REG 2: Fuel Leak List

Leaking Underground Storage Tank locations. Alameda, Contra Costa, Marin, Napa, San Francisco, San Mateo, Santa Clara, Solano, Sonoma counties.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: California Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-622-2433
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

LUST REG 1: Active Toxic Site Investigation

Del Norte, Humboldt, Lake, Mendocino, Modoc, Siskiyou, Sonoma, Trinity counties. For more current information, please refer to the State Water Resources Control Board's LUST database.

Date of Government Version: 02/01/2001
Date Data Arrived at EDR: 02/28/2001
Date Made Active in Reports: 03/29/2001
Number of Days to Update: 29

Source: California Regional Water Quality Control Board North Coast (1)
Telephone: 707-570-3769
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 12/11/2015
Date Data Arrived at EDR: 02/19/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 105

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land

LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 10/09/2015
Date Data Arrived at EDR: 02/12/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 112

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Varies

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 10/13/2015
Date Data Arrived at EDR: 10/23/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 118
Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Quarterly

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 02/25/2016
Date Data Arrived at EDR: 04/27/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 37
Source: Environmental Protection Agency
Telephone: 415-972-3372
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Quarterly

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 01/07/2016
Date Data Arrived at EDR: 01/08/2016
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 41
Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Quarterly

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/27/2015
Date Data Arrived at EDR: 10/29/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 67
Source: EPA Region 1
Telephone: 617-918-1313
Last EDR Contact: 07/29/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 02/17/2016
Date Data Arrived at EDR: 04/27/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 37
Source: EPA, Region 5
Telephone: 312-886-7439
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Varies

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 02/05/2016
Date Data Arrived at EDR: 04/29/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 35
Source: EPA Region 4
Telephone: 404-562-8677
Last EDR Contact: 07/26/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Semi-Annually

SLIC: Statewide SLIC Cases
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 06/13/2016
Date Data Arrived at EDR: 06/14/2016
Date Made Active in Reports: 08/09/2016
Number of Days to Update: 56
Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/14/2016
Next Scheduled EDR Contact: 09/26/2016
Data Release Frequency: Varies

SLIC REG 1: Active Toxic Site Investigations
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2003
Date Data Arrived at EDR: 04/07/2003
Date Made Active in Reports: 04/25/2003
Number of Days to Update: 18

Source: California Regional Water Quality Control Board, North Coast Region (1)
Telephone: 707-576-2220
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 2: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/30/2004
Date Data Arrived at EDR: 10/20/2004
Date Made Active in Reports: 11/19/2004
Number of Days to Update: 30

Source: Regional Water Quality Control Board San Francisco Bay Region (2)
Telephone: 510-286-0457
Last EDR Contact: 09/19/2011
Next Scheduled EDR Contact: 01/02/2012
Data Release Frequency: Quarterly

SLIC REG 3: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/18/2006
Date Data Arrived at EDR: 05/18/2006
Date Made Active in Reports: 06/15/2006
Number of Days to Update: 28

Source: California Regional Water Quality Control Board Central Coast Region (3)
Telephone: 805-549-3147
Last EDR Contact: 07/18/2011
Next Scheduled EDR Contact: 10/31/2011
Data Release Frequency: Semi-Annually

SLIC REG 4: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/17/2004
Date Data Arrived at EDR: 11/18/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 47

Source: Region Water Quality Control Board Los Angeles Region (4)
Telephone: 213-576-6600
Last EDR Contact: 07/01/2011
Next Scheduled EDR Contact: 10/17/2011
Data Release Frequency: Varies

SLIC REG 5: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/01/2005
Date Data Arrived at EDR: 04/05/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 16

Source: Regional Water Quality Control Board Central Valley Region (5)
Telephone: 916-464-3291
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 6V: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 05/24/2005
Date Data Arrived at EDR: 05/25/2005
Date Made Active in Reports: 06/16/2005
Number of Days to Update: 22

Source: Regional Water Quality Control Board, Victorville Branch
Telephone: 619-241-6583
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: Semi-Annually

SLIC REG 6L: SLIC Sites
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/07/2004
Date Data Arrived at EDR: 09/07/2004
Date Made Active in Reports: 10/12/2004
Number of Days to Update: 35

Source: California Regional Water Quality Control Board, Lahontan Region
Telephone: 530-542-5574
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

SLIC REG 7: SLIC List
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 11/24/2004
Date Data Arrived at EDR: 11/29/2004
Date Made Active in Reports: 01/04/2005
Number of Days to Update: 36

Source: California Regional Quality Control Board, Colorado River Basin Region
Telephone: 760-346-7491
Last EDR Contact: 08/01/2011
Next Scheduled EDR Contact: 11/14/2011
Data Release Frequency: No Update Planned

SLIC REG 8: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 04/03/2008
Date Data Arrived at EDR: 04/03/2008
Date Made Active in Reports: 04/14/2008
Number of Days to Update: 11

Source: California Region Water Quality Control Board Santa Ana Region (8)
Telephone: 951-782-3298
Last EDR Contact: 09/12/2011
Next Scheduled EDR Contact: 12/26/2011
Data Release Frequency: Semi-Annually

SLIC REG 9: Spills, Leaks, Investigation & Cleanup Cost Recovery Listing
The SLIC (Spills, Leaks, Investigations and Cleanup) program is designed to protect and restore water quality from spills, leaks, and similar discharges.

Date of Government Version: 09/10/2007
Date Data Arrived at EDR: 09/11/2007
Date Made Active in Reports: 09/28/2007
Number of Days to Update: 17

Source: California Regional Water Quality Control Board San Diego Region (9)
Telephone: 858-467-2980
Last EDR Contact: 08/08/2011
Next Scheduled EDR Contact: 11/21/2011
Data Release Frequency: Annually

State and tribal registered storage tank lists

FEMA UST: Underground Storage Tank Listing
A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 55

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 07/07/2016
Next Scheduled EDR Contact: 10/24/2016
Data Release Frequency: Varies

UST: Active UST Facilities
Active UST facilities gathered from the local regulatory agencies

Date of Government Version: 06/13/2016
Date Data Arrived at EDR: 06/14/2016
Date Made Active in Reports: 08/08/2016
Number of Days to Update: 55

Source: SWRCB
Telephone: 916-341-5851
Last EDR Contact: 06/14/2016
Next Scheduled EDR Contact: 09/26/2016
Data Release Frequency: Semi-Annually

AST: Aboveground Petroleum Storage Tank Facilities
A listing of aboveground storage tank petroleum storage tank locations.

Date of Government Version: 08/01/2009
Date Data Arrived at EDR: 09/10/2009
Date Made Active in Reports: 10/01/2009
Number of Days to Update: 21

Source: California Environmental Protection Agency
Telephone: 916-327-5092
Last EDR Contact: 07/07/2016
Next Scheduled EDR Contact: 10/10/2016
Data Release Frequency: Quarterly

INDIAN UST R10: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 01/07/2016
Date Data Arrived at EDR: 01/08/2016
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 41

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Quarterly

INDIAN UST R9: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 02/25/2016
Date Data Arrived at EDR: 04/27/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 37

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Quarterly

INDIAN UST R8: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 01/26/2016
Date Data Arrived at EDR: 02/05/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 119

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Quarterly

INDIAN UST R7: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 09/23/2014
Date Data Arrived at EDR: 11/25/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 65

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Varies

INDIAN UST R1: Underground Storage Tanks on Indian Land
The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/20/2015
Date Data Arrived at EDR: 10/29/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 67

Source: EPA, Region 1
Telephone: 617-918-1313
Last EDR Contact: 07/29/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Varies

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 02/05/2016
Date Data Arrived at EDR: 04/29/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 35

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 07/26/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Semi-Annually

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 11/05/2015
Date Data Arrived at EDR: 11/13/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 52

Source: EPA Region 5
Telephone: 312-886-6136
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 12/03/2015
Date Data Arrived at EDR: 02/04/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 120

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Semi-Annually

State and tribal voluntary cleanup sites

INDIAN VCP R7: Voluntary Cleanup Priority Lisitng

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 07/01/2016
Next Scheduled EDR Contact: 10/10/2016
Data Release Frequency: Varies

VCP: Voluntary Cleanup Program Properties

Contains low threat level properties with either confirmed or unconfirmed releases and the project proponents have request that DTSC oversee investigation and/or cleanup activities and have agreed to provide coverage for DTSC's costs.

Date of Government Version: 05/02/2016
Date Data Arrived at EDR: 05/04/2016
Date Made Active in Reports: 06/21/2016
Number of Days to Update: 48

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/02/2016
Next Scheduled EDR Contact: 11/14/2016
Data Release Frequency: Quarterly

State and tribal Brownfields sites

BROWNFIELDS: Considered Brownfieds Sites Listing
A listing of sites the SWRCB considers to be Brownfields since these are sites have come to them through the MOA Process.

Date of Government Version: 02/29/2016
Date Data Arrived at EDR: 03/07/2016
Date Made Active in Reports: 05/04/2016
Number of Days to Update: 58

Source: State Water Resources Control Board
Telephone: 916-323-7905
Last EDR Contact: 06/15/2016
Next Scheduled EDR Contact: 09/19/2016
Data Release Frequency: Varies

ADDITIONAL ENVIRONMENTAL RECORDS

Local Brownfield lists

US BROWNFIELDS: A Listing of Brownfields Sites
Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 06/21/2016
Date Data Arrived at EDR: 06/22/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 72

Source: Environmental Protection Agency
Telephone: 202-566-2777
Last EDR Contact: 06/22/2016
Next Scheduled EDR Contact: 10/03/2016
Data Release Frequency: Semi-Annually

Local Lists of Landfill / Solid Waste Disposal Sites

WMUDS/SWAT: Waste Management Unit Database
Waste Management Unit Database System. WMUDS is used by the State Water Resources Control Board staff and the Regional Water Quality Control Boards for program tracking and inventory of waste management units. WMUDS is composed of the following databases: Facility Information, Scheduled Inspections Information, Waste Management Unit Information, SWAT Program Information, SWAT Report Summary Information, SWAT Report Summary Data, Chapter 15 (formerly Subchapter 15) Information, Chapter 15 Monitoring Parameters, TPCA Program Information, RCRA Program Information, Closure Information, and Interested Parties Information.

Date of Government Version: 04/01/2000
Date Data Arrived at EDR: 04/10/2000
Date Made Active in Reports: 05/10/2000
Number of Days to Update: 30

Source: State Water Resources Control Board
Telephone: 916-227-4448
Last EDR Contact: 08/03/2016
Next Scheduled EDR Contact: 11/21/2016
Data Release Frequency: No Update Planned

SWRCY: Recycler Database
A listing of recycling facilities in California.

Date of Government Version: 06/13/2016
Date Data Arrived at EDR: 06/14/2016
Date Made Active in Reports: 08/09/2016
Number of Days to Update: 56

Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 06/14/2016
Next Scheduled EDR Contact: 09/26/2016
Data Release Frequency: Quarterly

HAULERS: Registered Waste Tire Haulers Listing
A listing of registered waste tire haulers.

Date of Government Version: 06/16/2016
Date Data Arrived at EDR: 06/16/2016
Date Made Active in Reports: 08/09/2016
Number of Days to Update: 54

Source: Integrated Waste Management Board
Telephone: 916-341-6422
Last EDR Contact: 08/10/2016
Next Scheduled EDR Contact: 11/28/2016
Data Release Frequency: Varies

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: 703-308-8245
Last EDR Contact: 08/05/2016
Next Scheduled EDR Contact: 11/14/2016
Data Release Frequency: Varies

ODI: Open Dump Inventory
An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: 800-424-9346
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations
A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: 415-947-4219
Last EDR Contact: 07/20/2016
Next Scheduled EDR Contact: 10/07/2016
Data Release Frequency: No Update Planned

Local Lists of Hazardous waste / Contaminated Sites

US HIST CDL: National Clandestine Laboratory Register
A listing of clandestine drug lab locations that have been removed from the DEAs National Clandestine Laboratory Register.

Date of Government Version: 05/04/2016
Date Data Arrived at EDR: 06/03/2016
Date Made Active in Reports: 07/13/2016
Number of Days to Update: 40

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 05/31/2016
Next Scheduled EDR Contact: 06/13/2016
Data Release Frequency: No Update Planned

HIST CAL-SITES: Calsites Database
The Calsites database contains potential or confirmed hazardous substance release properties. In 1996, California EPA reevaluated and significantly reduced the number of sites in the Calsites database. No longer updated by the state agency. It has been replaced by ENVIROSTOR.

Date of Government Version: 08/08/2005
Date Data Arrived at EDR: 08/03/2006
Date Made Active in Reports: 08/24/2006
Number of Days to Update: 21

Source: Department of Toxic Substance Control
Telephone: 916-323-3400
Last EDR Contact: 02/23/2009
Next Scheduled EDR Contact: 05/25/2009
Data Release Frequency: No Update Planned

SCH: School Property Evaluation Program
This category contains proposed and existing school sites that are being evaluated by DTSC for possible hazardous materials contamination. In some cases, these properties may be listed in the CalSites category depending on the level of threat to public health and safety or the environment they pose.

Date of Government Version: 05/02/2016
Date Data Arrived at EDR: 05/04/2016
Date Made Active in Reports: 06/21/2016
Number of Days to Update: 48

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/02/2016
Next Scheduled EDR Contact: 11/14/2016
Data Release Frequency: Quarterly

CDL: Clandestine Drug Labs

A listing of drug lab locations. Listing of a location in this database does not indicate that any illegal drug lab materials were or were not present there, and does not constitute a determination that the location either requires or does not require additional cleanup work.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 05/10/2016
Date Made Active in Reports: 06/17/2016
Number of Days to Update: 38

Source: Department of Toxic Substances Control
Telephone: 916-255-6504
Last EDR Contact: 08/15/2016
Next Scheduled EDR Contact: 10/24/2016
Data Release Frequency: Varies

TOXIC PITS: Toxic Pits Cleanup Act Sites

Toxic PITS Cleanup Act Sites. TOXIC PITS identifies sites suspected of containing hazardous substances where cleanup has not yet been completed.

Date of Government Version: 07/01/1995
Date Data Arrived at EDR: 08/30/1995
Date Made Active in Reports: 09/26/1995
Number of Days to Update: 27

Source: State Water Resources Control Board
Telephone: 916-227-4364
Last EDR Contact: 01/26/2009
Next Scheduled EDR Contact: 04/27/2009
Data Release Frequency: No Update Planned

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 05/04/2016
Date Data Arrived at EDR: 06/03/2016
Date Made Active in Reports: 07/13/2016
Number of Days to Update: 40

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 08/31/2016
Next Scheduled EDR Contact: 12/12/2016
Data Release Frequency: Quarterly

Local Lists of Registered Storage Tanks

SWEEPS UST: SWEEPS UST Listing

Statewide Environmental Evaluation and Planning System. This underground storage tank listing was updated and maintained by a company contacted by the SWRCB in the early 1990's. The listing is no longer updated or maintained. The local agency is the contact for more information on a site on the SWEEPS list.

Date of Government Version: 06/01/1994
Date Data Arrived at EDR: 07/07/2005
Date Made Active in Reports: 08/11/2005
Number of Days to Update: 35

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/03/2005
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

UST MENDOCINO: Mendocino County UST Database

A listing of underground storage tank locations in Mendocino County.

Date of Government Version: 06/07/2016
Date Data Arrived at EDR: 06/09/2016
Date Made Active in Reports: 06/23/2016
Number of Days to Update: 14

Source: Department of Public Health
Telephone: 707-463-4466
Last EDR Contact: 08/24/2016
Next Scheduled EDR Contact: 12/12/2016
Data Release Frequency: Annually

HIST UST: Hazardous Substance Storage Container Database

The Hazardous Substance Storage Container Database is a historical listing of UST sites. Refer to local/county source for current data.

Date of Government Version: 10/15/1990
Date Data Arrived at EDR: 01/25/1991
Date Made Active in Reports: 02/12/1991
Number of Days to Update: 18

Source: State Water Resources Control Board
Telephone: 916-341-5851
Last EDR Contact: 07/26/2001
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CA FID UST: Facility Inventory Database

The Facility Inventory Database (FID) contains a historical listing of active and inactive underground storage tank locations from the State Water Resource Control Board. Refer to local/county source for current data.

Date of Government Version: 10/31/1994
Date Data Arrived at EDR: 09/05/1995
Date Made Active in Reports: 09/29/1995
Number of Days to Update: 24

Source: California Environmental Protection Agency
Telephone: 916-341-5851
Last EDR Contact: 12/28/1998
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Local Land Records

LIENS: Environmental Liens Listing

A listing of property locations with environmental liens for California where DTSC is a lien holder.

Date of Government Version: 06/02/2016
Date Data Arrived at EDR: 06/07/2016
Date Made Active in Reports: 07/20/2016
Number of Days to Update: 43

Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 09/02/2016
Next Scheduled EDR Contact: 12/19/2016
Data Release Frequency: Varies

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/18/2014
Date Data Arrived at EDR: 03/18/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 37

Source: Environmental Protection Agency
Telephone: 202-564-6023
Last EDR Contact: 07/29/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Varies

DEED: Deed Restriction Listing

Site Mitigation and Brownfields Reuse Program Facility Sites with Deed Restrictions & Hazardous Waste Management Program Facility Sites with Deed / Land Use Restriction. The DTSC Site Mitigation and Brownfields Reuse Program (SMBRP) list includes sites cleaned up under the program's oversight and generally does not include current or former hazardous waste facilities that required a hazardous waste facility permit. The list represents deed restrictions that are active. Some sites have multiple deed restrictions. The DTSC Hazardous Waste Management Program (HWMP) has developed a list of current or former hazardous waste facilities that have a recorded land use restriction at the local county recorder's office. The land use restrictions on this list were required by the DTSC HWMP as a result of the presence of hazardous substances that remain on site after the facility (or part of the facility) has been closed or cleaned up. The types of land use restriction include deed notice, deed restriction, or a land use restriction that binds current and future owners.

Date of Government Version: 06/06/2016
Date Data Arrived at EDR: 06/07/2016
Date Made Active in Reports: 07/20/2016
Number of Days to Update: 43

Source: DTSC and SWRCB
Telephone: 916-323-3400
Last EDR Contact: 09/07/2016
Next Scheduled EDR Contact: 12/19/2016
Data Release Frequency: Semi-Annually

Records of Emergency Release Reports

HMIRS: Hazardous Materials Information Reporting System
Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 06/24/2015
Date Data Arrived at EDR: 06/26/2015
Date Made Active in Reports: 09/02/2015
Number of Days to Update: 68

Source: U.S. Department of Transportation
Telephone: 202-366-4555
Last EDR Contact: 06/28/2016
Next Scheduled EDR Contact: 10/10/2016
Data Release Frequency: Annually

CHMIRS: California Hazardous Material Incident Report System
California Hazardous Material Incident Reporting System. CHMIRS contains information on reported hazardous material incidents (accidental releases or spills).

Date of Government Version: 04/11/2016
Date Data Arrived at EDR: 04/27/2016
Date Made Active in Reports: 06/17/2016
Number of Days to Update: 51

Source: Office of Emergency Services
Telephone: 916-845-8400
Last EDR Contact: 07/26/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Varies

LDS: Land Disposal Sites Listing
The Land Disposal program regulates of waste discharge to land for treatment, storage and disposal in waste management units.

Date of Government Version: 06/13/2016
Date Data Arrived at EDR: 06/14/2016
Date Made Active in Reports: 08/09/2016
Number of Days to Update: 56

Source: State Water Qualilty Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/14/2016
Next Scheduled EDR Contact: 09/26/2016
Data Release Frequency: Quarterly

MCS: Military Cleanup Sites Listing
The State Water Resources Control Board and nine Regional Water Quality Control Boards partner with the Department of Defense (DoD) through the Defense and State Memorandum of Agreement (DSMOA) to oversee the investigation and remediation of water quality issues at military facilities.

Date of Government Version: 06/13/2016
Date Data Arrived at EDR: 06/14/2016
Date Made Active in Reports: 08/09/2016
Number of Days to Update: 56

Source: State Water Resources Control Board
Telephone: 866-480-1028
Last EDR Contact: 06/14/2016
Next Scheduled EDR Contact: 09/26/2016
Data Release Frequency: Quarterly

SPILLS 90: SPILLS90 data from FirstSearch
Spills 90 includes those spill and release records available exclusively from FirstSearch databases. Typically, they may include chemical, oil and/or hazardous substance spills recorded after 1990. Duplicate records that are already included in EDR incident and release records are not included in Spills 90.

Date of Government Version: 06/06/2012
Date Data Arrived at EDR: 01/03/2013
Date Made Active in Reports: 02/22/2013
Number of Days to Update: 50

Source: FirstSearch
Telephone: N/A
Last EDR Contact: 01/03/2013
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

Other Ascertainable Records

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated
RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 06/21/2016
Date Data Arrived at EDR: 06/30/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 64

Source: Environmental Protection Agency
Telephone: (415) 495-8895
Last EDR Contact: 06/30/2016
Next Scheduled EDR Contact: 10/17/2016
Data Release Frequency: Varies

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015
Date Data Arrived at EDR: 07/08/2015
Date Made Active in Reports: 10/13/2015
Number of Days to Update: 97

Source: U.S. Army Corps of Engineers
Telephone: 202-528-4285
Last EDR Contact: 06/10/2016
Next Scheduled EDR Contact: 09/19/2016
Data Release Frequency: Varies

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: 888-275-8747
Last EDR Contact: 07/15/2016
Next Scheduled EDR Contact: 10/24/2016
Data Release Frequency: Semi-Annually

FEDLAND: Federal and Indian Lands

Federally and Indian administrated lands of the United States. Lands included are administrated by: Army Corps of Engineers, Bureau of Reclamation, National Wild and Scenic River, National Wildlife Refuge, Public Domain Land, Wilderness, Wilderness Study Area, Wildlife Management Area, Bureau of Indian Affairs, Bureau of Land Management, Department of Justice, Forest Service, Fish and Wildlife Service, National Park Service.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 02/06/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 339

Source: U.S. Geological Survey
Telephone: 888-275-8747
Last EDR Contact: 07/15/2016
Next Scheduled EDR Contact: 10/24/2016
Data Release Frequency: N/A

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011
Date Data Arrived at EDR: 03/09/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 54

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 08/15/2016
Next Scheduled EDR Contact: 11/28/2016
Data Release Frequency: Varies

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 05/08/2016
Date Data Arrived at EDR: 05/18/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 107

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 08/17/2016
Next Scheduled EDR Contact: 11/28/2016
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: 617-520-3000
Last EDR Contact: 08/08/2016
Next Scheduled EDR Contact: 11/21/2016
Data Release Frequency: Quarterly

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: 703-308-4044
Last EDR Contact: 09/06/2016
Next Scheduled EDR Contact: 11/21/2016
Data Release Frequency: Varies

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2012
Date Data Arrived at EDR: 01/15/2015
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 14

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 06/24/2016
Next Scheduled EDR Contact: 10/03/2016
Data Release Frequency: Every 4 Years

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 11/24/2015
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 133

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 08/26/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Annually

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: 202-564-4203
Last EDR Contact: 07/25/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Annually

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 11/25/2013
Date Data Arrived at EDR: 12/12/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 74

Source: EPA
Telephone: 703-416-0223
Last EDR Contact: 06/07/2016
Next Scheduled EDR Contact: 09/19/2016
Data Release Frequency: Annually

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 05/01/2016
Date Data Arrived at EDR: 05/26/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 99

Source: Environmental Protection Agency
Telephone: 202-564-8600
Last EDR Contact: 07/25/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Varies

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995
Date Data Arrived at EDR: 07/03/1995
Date Made Active in Reports: 08/07/1995
Number of Days to Update: 35

Source: EPA
Telephone: 202-564-4104
Last EDR Contact: 06/02/2008
Next Scheduled EDR Contact: 09/01/2008
Data Release Frequency: No Update Planned

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 10/17/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 3

Source: EPA
Telephone: 202-564-6023
Last EDR Contact: 08/12/2016
Next Scheduled EDR Contact: 11/21/2016
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 01/20/2016
Date Data Arrived at EDR: 04/28/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 127

Source: EPA
Telephone: 202-566-0500
Last EDR Contact: 07/15/2016
Next Scheduled EDR Contact: 10/24/2016
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 01/23/2015
Date Data Arrived at EDR: 02/06/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 31

Source: Environmental Protection Agency
Telephone: 202-564-5088
Last EDR Contact: 07/07/2016
Next Scheduled EDR Contact: 10/24/2016
Data Release Frequency: Quarterly

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 08/17/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 08/17/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Quarterly

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 03/18/2016
Date Made Active in Reports: 04/15/2016
Number of Days to Update: 28

Source: Nuclear Regulatory Commission
Telephone: 301-415-7169
Last EDR Contact: 09/05/2016
Next Scheduled EDR Contact: 11/21/2016
Data Release Frequency: Quarterly

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 06/09/2016
Next Scheduled EDR Contact: 09/19/2016
Data Release Frequency: Varies

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014
Date Data Arrived at EDR: 09/10/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 09/06/2016
Next Scheduled EDR Contact: 12/19/2016
Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database
The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011
Date Data Arrived at EDR: 10/19/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 83
Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 07/29/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Varies

RADINFO: Radiation Information Database
The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/07/2015
Date Data Arrived at EDR: 07/09/2015
Date Made Active in Reports: 09/16/2015
Number of Days to Update: 69
Source: Environmental Protection Agency
Telephone: 202-343-9775
Last EDR Contact: 07/07/2016
Next Scheduled EDR Contact: 10/17/2016
Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing
A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing
A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40
Source: Environmental Protection Agency
Telephone: 202-564-2501
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

DOT OPS: Incident and Accident Data
Department of Transporation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42
Source: Department of Transporation, Office of Pipeline Safety
Telephone: 202-366-4595
Last EDR Contact: 08/02/2016
Next Scheduled EDR Contact: 11/14/2016
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees
Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 04/06/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 149

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 07/15/2016
Next Scheduled EDR Contact: 10/10/2016
Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 02/24/2015
Date Made Active in Reports: 09/30/2015
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: 800-424-9346
Last EDR Contact: 08/26/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Biennially

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 34

Source: USGS
Telephone: 202-208-3710
Last EDR Contact: 07/15/2016
Next Scheduled EDR Contact: 10/24/2016
Data Release Frequency: Semi-Annually

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 03/11/2016
Date Data Arrived at EDR: 03/15/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 80

Source: Department of Energy
Telephone: 202-586-3559
Last EDR Contact: 07/26/2016
Next Scheduled EDR Contact: 11/21/2016
Data Release Frequency: Varies

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 10/07/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 146

Source: Department of Energy
Telephone: 505-845-0011
Last EDR Contact: 08/23/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Varies

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 03/07/2016
Date Data Arrived at EDR: 04/07/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 148

Source: Environmental Protection Agency
Telephone: 703-603-8787
Last EDR Contact: 07/08/2016
Next Scheduled EDR Contact: 10/17/2016
Data Release Frequency: Varies

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/20/2015
Date Data Arrived at EDR: 10/27/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 69

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 06/22/2016
Next Scheduled EDR Contact: 10/10/2016
Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/20/2015
Date Data Arrived at EDR: 10/27/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 69

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 06/22/2016
Next Scheduled EDR Contact: 10/10/2016
Data Release Frequency: Annually

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 02/09/2016
Date Data Arrived at EDR: 03/02/2016
Date Made Active in Reports: 04/15/2016
Number of Days to Update: 44

Source: Department of Labor, Mine Safety and Health Administration
Telephone: 303-231-5959
Last EDR Contact: 09/01/2016
Next Scheduled EDR Contact: 12/12/2016
Data Release Frequency: Semi-Annually

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005
Date Data Arrived at EDR: 02/29/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 49

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 09/02/2016
Next Scheduled EDR Contact: 12/12/2016
Data Release Frequency: Varies

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 09/02/2016
Next Scheduled EDR Contact: 12/12/2016
Data Release Frequency: Varies

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 07/20/2015
Date Data Arrived at EDR: 09/09/2015
Date Made Active in Reports: 11/03/2015
Number of Days to Update: 55

Source: EPA
Telephone: (415) 947-8000
Last EDR Contact: 09/07/2016
Next Scheduled EDR Contact: 12/19/2016
Data Release Frequency: Quarterly

DOCKET HWC: Hazardous Waste Compliance Docket Listing

A complete list of the Federal Agency Hazardous Waste Compliance Docket Facilities.

Date of Government Version: 06/02/2016
Date Data Arrived at EDR: 06/03/2016
Date Made Active in Reports: 09/02/2016
Number of Days to Update: 91

Source: Environmental Protection Agency
Telephone: 202-564-0527
Last EDR Contact: 08/24/2016
Next Scheduled EDR Contact: 12/12/2016
Data Release Frequency: Varies

UXO: Unexploded Ordnance Sites

A listing of unexploded ordnance site locations

Date of Government Version: 10/25/2015
Date Data Arrived at EDR: 01/29/2016
Date Made Active in Reports: 04/05/2016
Number of Days to Update: 67

Source: Department of Defense
Telephone: 571-373-0407
Last EDR Contact: 06/20/2016
Next Scheduled EDR Contact: 10/03/2016
Data Release Frequency: Varies

CA BOND EXP. PLAN: Bond Expenditure Plan

Department of Health Services developed a site-specific expenditure plan as the basis for an appropriation of Hazardous Substance Cleanup Bond Act funds. It is not updated.

Date of Government Version: 01/01/1989
Date Data Arrived at EDR: 07/27/1994
Date Made Active in Reports: 08/02/1994
Number of Days to Update: 6

Source: Department of Health Services
Telephone: 916-255-2118
Last EDR Contact: 05/31/1994
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

CORTESE: "Cortese" Hazardous Waste & Substances Sites List

The sites for the list are designated by the State Water Resource Control Board (LUST), the Integrated Waste Board (SWF/LS), and the Department of Toxic Substances Control (Cal-Sites).

Date of Government Version: 06/27/2016
Date Data Arrived at EDR: 06/28/2016
Date Made Active in Reports: 08/18/2016
Number of Days to Update: 51

Source: CAL EPA/Office of Emergency Information
Telephone: 916-323-3400
Last EDR Contact: 06/28/2016
Next Scheduled EDR Contact: 10/10/2016
Data Release Frequency: Quarterly

DRYCLEANERS: Cleaner Facilities

A list of drycleaner related facilities that have EPA ID numbers. These are facilities with certain SIC codes: power laundries, family and commercial; garment pressing and cleaner's agents; linen supply; coin-operated laundries and cleaning; drycleaning plants, except rugs; carpet and upholster cleaning; industrial launderers; laundry and garment services.

Date of Government Version: 06/02/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 08/18/2016
Number of Days to Update: 37

Source: Department of Toxic Substance Control
Telephone: 916-327-4498
Last EDR Contact: 09/02/2016
Next Scheduled EDR Contact: 12/19/2016
Data Release Frequency: Annually

EMI: Emissions Inventory Data
Toxics and criteria pollutant emissions data collected by the ARB and local air pollution agencies.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 06/22/2016
Date Made Active in Reports: 08/09/2016
Number of Days to Update: 48
Source: California Air Resources Board
Telephone: 916-322-2990
Last EDR Contact: 06/22/2016
Next Scheduled EDR Contact: 10/03/2016
Data Release Frequency: Varies

ENF: Enforcement Action Listing
A listing of Water Board Enforcement Actions. Formal is everything except Oral/Verbal Communication, Notice of Violation, Expedited Payment Letter, and Staff Enforcement Letter.

Date of Government Version: 05/25/2016
Date Data Arrived at EDR: 05/27/2016
Date Made Active in Reports: 07/20/2016
Number of Days to Update: 54
Source: State Water Resoruces Control Board
Telephone: 916-445-9379
Last EDR Contact: 08/22/2016
Next Scheduled EDR Contact: 10/07/2016
Data Release Frequency: Varies

Financial Assurance 1: Financial Assurance Information Listing
Financial Assurance information

Date of Government Version: 04/25/2016
Date Data Arrived at EDR: 04/29/2016
Date Made Active in Reports: 06/21/2016
Number of Days to Update: 53
Source: Department of Toxic Substances Control
Telephone: 916-255-3628
Last EDR Contact: 07/20/2016
Next Scheduled EDR Contact: 10/07/2016
Data Release Frequency: Varies

Financial Assurance 2: Financial Assurance Information Listing
A listing of financial assurance information for solid waste facilities. Financial assurance is intended to ensure that resources are available to pay for the cost of closure, post-closure care, and corrective measures if the owner or operator of a regulated facility is unable or unwilling to pay.

Date of Government Version: 05/25/2016
Date Data Arrived at EDR: 06/01/2016
Date Made Active in Reports: 07/20/2016
Number of Days to Update: 49
Source: California Integrated Waste Management Board
Telephone: 916-341-6066
Last EDR Contact: 08/10/2016
Next Scheduled EDR Contact: 11/28/2016
Data Release Frequency: Varies

HAZNET: Facility and Manifest Data
Facility and Manifest Data. The data is extracted from the copies of hazardous waste manifests received each year by the DTSC. The annual volume of manifests is typically 700,000 - 1,000,000 annually, representing approximately 350,000 - 500,000 shipments. Data are from the manifests submitted without correction, and therefore many contain some invalid values for data elements such as generator ID, TSD ID, waste category, and disposal method. This database begins with calendar year 1993.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 10/14/2015
Date Made Active in Reports: 12/11/2015
Number of Days to Update: 58
Source: California Environmental Protection Agency
Telephone: 916-255-1136
Last EDR Contact: 07/15/2016
Next Scheduled EDR Contact: 10/24/2016
Data Release Frequency: Annually

HIST CORTESE: Hazardous Waste & Substance Site List
The sites for the list are designated by the State Water Resource Control Board [LUST], the Integrated Waste Board [SWF/LS], and the Department of Toxic Substances Control [CALSITES]. This listing is no longer updated by the state agency.

Date of Government Version: 04/01/2001
Date Data Arrived at EDR: 01/22/2009
Date Made Active in Reports: 04/08/2009
Number of Days to Update: 76
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 01/22/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

HWP: EnviroStor Permitted Facilities Listing
Detailed information on permitted hazardous waste facilities and corrective action ("cleanups") tracked in EnviroStor.

Date of Government Version: 05/23/2016
Date Data Arrived at EDR: 05/25/2016
Date Made Active in Reports: 07/20/2016
Number of Days to Update: 56
Source: Department of Toxic Substances Control
Telephone: 916-323-3400
Last EDR Contact: 08/23/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Quarterly

HWT: Registered Hazardous Waste Transporter Database
A listing of hazardous waste transporters. In California, unless specifically exempted, it is unlawful for any person to transport hazardous wastes unless the person holds a valid registration issued by DTSC. A hazardous waste transporter registration is valid for one year and is assigned a unique registration number.

Date of Government Version: 07/11/2016
Date Data Arrived at EDR: 07/13/2016
Date Made Active in Reports: 08/18/2016
Number of Days to Update: 36
Source: Department of Toxic Substances Control
Telephone: 916-440-7145
Last EDR Contact: 07/13/2016
Next Scheduled EDR Contact: 10/24/2016
Data Release Frequency: Quarterly

MINES: Mines Site Location Listing
A listing of mine site locations from the Office of Mine Reclamation.

Date of Government Version: 06/13/2016
Date Data Arrived at EDR: 06/14/2016
Date Made Active in Reports: 08/09/2016
Number of Days to Update: 56
Source: Department of Conservation
Telephone: 916-322-1080
Last EDR Contact: 06/14/2016
Next Scheduled EDR Contact: 09/26/2016
Data Release Frequency: Varies

MWMP: Medical Waste Management Program Listing
The Medical Waste Management Program (MWMP) ensures the proper handling and disposal of medical waste by permitting and inspecting medical waste Offsite Treatment Facilities (PDF) and Transfer Stations (PDF) throughout the state. MWMP also oversees all Medical Waste Transporters.

Date of Government Version: 05/25/2016
Date Data Arrived at EDR: 06/07/2016
Date Made Active in Reports: 07/20/2016
Number of Days to Update: 43
Source: Department of Public Health
Telephone: 916-558-1784
Last EDR Contact: 09/07/2016
Next Scheduled EDR Contact: 12/19/2016
Data Release Frequency: Varies

NPDES: NPDES Permits Listing
A listing of NPDES permits, including stormwater.

Date of Government Version: 05/16/2016
Date Data Arrived at EDR: 05/18/2016
Date Made Active in Reports: 06/23/2016
Number of Days to Update: 36
Source: State Water Resources Control Board
Telephone: 916-445-9379
Last EDR Contact: 08/16/2016
Next Scheduled EDR Contact: 11/28/2016
Data Release Frequency: Quarterly

PEST LIC: Pesticide Regulation Licenses Listing
A listing of licenses and certificates issued by the Department of Pesticide Regulation. The DPR issues licenses and/or certificates to: Persons and businesses that apply or sell pesticides; Pest control dealers and brokers; Persons who advise on agricultural pesticide applications.

Date of Government Version: 06/06/2016
Date Data Arrived at EDR: 06/07/2016
Date Made Active in Reports: 07/20/2016
Number of Days to Update: 43
Source: Department of Pesticide Regulation
Telephone: 916-445-4038
Last EDR Contact: 09/07/2016
Next Scheduled EDR Contact: 12/19/2016
Data Release Frequency: Quarterly

PROC: Certified Processors Database
A listing of certified processors.

Date of Government Version: 06/13/2016
Date Data Arrived at EDR: 06/14/2016
Date Made Active in Reports: 08/09/2016
Number of Days to Update: 56
Source: Department of Conservation
Telephone: 916-323-3836
Last EDR Contact: 06/14/2016
Next Scheduled EDR Contact: 09/26/2016
Data Release Frequency: Quarterly

NOTIFY 65: Proposition 65 Records
Listings of all Proposition 65 incidents reported to counties by the State Water Resources Control Board and the Regional Water Quality Control Board. This database is no longer updated by the reporting agency.

Date of Government Version: 09/10/2015
Date Data Arrived at EDR: 01/05/2016
Date Made Active in Reports: 02/12/2016
Number of Days to Update: 38
Source: State Water Resources Control Board
Telephone: 916-445-3846
Last EDR Contact: 06/30/2016
Next Scheduled EDR Contact: 10/03/2016
Data Release Frequency: No Update Planned

UIC: UIC Listing
A listing of wells identified as underground injection wells, in the California Oil and Gas Wells database.

Date of Government Version: 02/12/2016
Date Data Arrived at EDR: 03/16/2016
Date Made Active in Reports: 06/13/2016
Number of Days to Update: 89
Source: Deaprtment of Conservation
Telephone: 916-445-2408
Last EDR Contact: 06/16/2016
Next Scheduled EDR Contact: 09/26/2016
Data Release Frequency: Varies

WASTEWATER PITS: Oil Wastewater Pits Listing
Water officials discovered that oil producers have been dumping chemical-laden wastewater into hundreds of unlined pits that are operating without proper permits. Inspections completed by the Central Valley Regional Water Quality Control Board revealed the existence of previously unidentified waste sites. The water board?s review found that more than one-third of the region?s active disposal pits are operating without permission.

Date of Government Version: 04/15/2015
Date Data Arrived at EDR: 04/17/2015
Date Made Active in Reports: 06/23/2015
Number of Days to Update: 67
Source: RWQCB, Central Valley Region
Telephone: 559-445-5577
Last EDR Contact: 07/15/2016
Next Scheduled EDR Contact: 10/24/2016
Data Release Frequency: Varies

WDS: Waste Discharge System
Sites which have been issued waste discharge requirements.

Date of Government Version: 06/19/2007
Date Data Arrived at EDR: 06/20/2007
Date Made Active in Reports: 06/29/2007
Number of Days to Update: 9
Source: State Water Resources Control Board
Telephone: 916-341-5227
Last EDR Contact: 08/17/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Quarterly

WIP: Well Investigation Program Case List
Well Investigation Program case in the San Gabriel and San Fernando Valley area.

Date of Government Version: 07/03/2009
Date Data Arrived at EDR: 07/21/2009
Date Made Active in Reports: 08/03/2009
Number of Days to Update: 13
Source: Los Angeles Water Quality Control Board
Telephone: 213-576-6726
Last EDR Contact: 06/24/2016
Next Scheduled EDR Contact: 10/10/2016
Data Release Frequency: Varies

ICE: ICE
Contains data pertaining to the Permitted Facilities with Inspections / Enforcements sites tracked in Envirostor.

Date of Government Version: 05/23/2016
Date Data Arrived at EDR: 05/25/2016
Date Made Active in Reports: 07/20/2016
Number of Days to Update: 56

Source: Department of Toxic Subsances Control
Telephone: 877-786-9427
Last EDR Contact: 08/23/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Quarterly

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 09/20/2015
Date Data Arrived at EDR: 09/23/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 103

Source: Environmental Protection Agency
Telephone: 202-564-2280
Last EDR Contact: 06/22/2016
Next Scheduled EDR Contact: 10/03/2016
Data Release Frequency: Quarterly

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

Date of Government Version: 05/24/2016
Date Data Arrived at EDR: 05/25/2016
Date Made Active in Reports: 07/13/2016
Number of Days to Update: 49

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 08/23/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Quarterly

EDR HIGH RISK HISTORICAL RECORDS

EDR Exclusive Records

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR RECOVERED GOVERNMENT ARCHIVES

Exclusive Recovered Govt. Archives

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Resources Recycling and Recovery in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/13/2014
Number of Days to Update: 196

Source: Department of Resources Recycling and Recovery
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the State Water Resources Control Board in California.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 12/30/2013
Number of Days to Update: 182

Source: State Water Resources Control Board
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

COUNTY RECORDS

ALAMEDA COUNTY:

Contaminated Sites

A listing of contaminated sites overseen by the Toxic Release Program (oil and groundwater contamination from chemical releases and spills) and the Leaking Underground Storage Tank Program (soil and ground water contamination from leaking petroleum USTs).

Date of Government Version: 07/07/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 08/18/2016
Number of Days to Update: 37

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 07/07/2016
Next Scheduled EDR Contact: 10/24/2016
Data Release Frequency: Semi-Annually

Underground Tanks

Underground storage tank sites located in Alameda county.

Date of Government Version: 07/07/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 08/08/2016
Number of Days to Update: 27

Source: Alameda County Environmental Health Services
Telephone: 510-567-6700
Last EDR Contact: 07/07/2016
Next Scheduled EDR Contact: 10/24/2016
Data Release Frequency: Semi-Annually

AMADOR COUNTY:

CUPA Facility List
Cupa Facility List

Date of Government Version: 06/06/2016
Date Data Arrived at EDR: 06/09/2016
Date Made Active in Reports: 06/21/2016
Number of Days to Update: 12

Source: Amador County Environmental Health
Telephone: 209-223-6439
Last EDR Contact: 09/02/2016
Next Scheduled EDR Contact: 12/19/2016
Data Release Frequency: Varies

BUTTE COUNTY:

CUPA Facility Listing
Cupa facility list.

Date of Government Version: 06/02/2016
Date Data Arrived at EDR: 06/03/2016
Date Made Active in Reports: 06/21/2016
Number of Days to Update: 18

Source: Public Health Department
Telephone: 530-538-7149
Last EDR Contact: 07/07/2016
Next Scheduled EDR Contact: 10/24/2016
Data Release Frequency: No Update Planned

CALVERAS COUNTY:

CUPA Facility Listing
Cupa Facility Listing

Date of Government Version: 04/29/2016
Date Data Arrived at EDR: 05/03/2016
Date Made Active in Reports: 06/17/2016
Number of Days to Update: 45

Source: Calveras County Environmental Health
Telephone: 209-754-6399
Last EDR Contact: 06/27/2016
Next Scheduled EDR Contact: 10/10/2016
Data Release Frequency: Quarterly

COLUSA COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 05/25/2016
Date Data Arrived at EDR: 05/26/2016
Date Made Active in Reports: 06/17/2016
Number of Days to Update: 22

Source: Health & Human Services
Telephone: 530-458-0396
Last EDR Contact: 09/06/2016
Next Scheduled EDR Contact: 11/21/2016
Data Release Frequency: Varies

CONTRA COSTA COUNTY:

Site List
List includes sites from the underground tank, hazardous waste generator and business plan/2185 programs.

Date of Government Version: 05/24/2016
Date Data Arrived at EDR: 05/26/2016
Date Made Active in Reports: 07/20/2016
Number of Days to Update: 55

Source: Contra Costa Health Services Department
Telephone: 925-646-2286
Last EDR Contact: 08/01/2016
Next Scheduled EDR Contact: 11/14/2016
Data Release Frequency: Semi-Annually

DEL NORTE COUNTY:

CUPA Facility List
Cupa Facility list

Date of Government Version: 04/08/2016
Date Data Arrived at EDR: 05/03/2016
Date Made Active in Reports: 06/22/2016
Number of Days to Update: 50

Source: Del Norte County Environmental Health Division
Telephone: 707-465-0426
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/14/2016
Data Release Frequency: Varies

EL DORADO COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 05/24/2016
Date Data Arrived at EDR: 05/26/2016
Date Made Active in Reports: 08/09/2016
Number of Days to Update: 75

Source: El Dorado County Environmental Management Department
Telephone: 530-621-6623
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/14/2016
Data Release Frequency: Varies

FRESNO COUNTY:

CUPA Resources List
Certified Unified Program Agency. CUPA's are responsible for implementing a unified hazardous materials and hazardous waste management regulatory program. The agency provides oversight of businesses that deal with hazardous materials, operate underground storage tanks or aboveground storage tanks.

Date of Government Version: 07/13/2016
Date Data Arrived at EDR: 07/19/2016
Date Made Active in Reports: 08/09/2016
Number of Days to Update: 21

Source: Dept. of Community Health
Telephone: 559-445-3271
Last EDR Contact: 07/13/2016
Next Scheduled EDR Contact: 10/17/2016
Data Release Frequency: Semi-Annually

HUMBOLDT COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 07/06/2016
Date Data Arrived at EDR: 07/08/2016
Date Made Active in Reports: 08/18/2016
Number of Days to Update: 41

Source: Humboldt County Environmental Health
Telephone: N/A
Last EDR Contact: 08/22/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Varies

IMPERIAL COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 04/26/2016
Date Data Arrived at EDR: 04/28/2016
Date Made Active in Reports: 06/17/2016
Number of Days to Update: 50

Source: San Diego Border Field Office
Telephone: 760-339-2777
Last EDR Contact: 07/20/2016
Next Scheduled EDR Contact: 10/07/2016
Data Release Frequency: Varies

INYO COUNTY:

CUPA Facility List
Cupa facility list.

Date of Government Version: 09/10/2013
Date Data Arrived at EDR: 09/11/2013
Date Made Active in Reports: 10/14/2013
Number of Days to Update: 33

Source: Inyo County Environmental Health Services
Telephone: 760-878-0238
Last EDR Contact: 08/17/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Varies

KERN COUNTY:

Underground Storage Tank Sites & Tank Listing
Kern County Sites and Tanks Listing.

Date of Government Version: 05/16/2016
Date Data Arrived at EDR: 05/20/2016
Date Made Active in Reports: 08/08/2016
Number of Days to Update: 80

Source: Kern County Environment Health Services Department
Telephone: 661-862-8700
Last EDR Contact: 08/03/2016
Next Scheduled EDR Contact: 11/21/2016
Data Release Frequency: Quarterly

KINGS COUNTY:

CUPA Facility List
A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 05/25/2016
Date Data Arrived at EDR: 05/27/2016
Date Made Active in Reports: 06/22/2016
Number of Days to Update: 26

Source: Kings County Department of Public Health
Telephone: 559-584-1411
Last EDR Contact: 09/02/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Varies

LAKE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 04/26/2016
Date Data Arrived at EDR: 04/27/2016
Date Made Active in Reports: 06/17/2016
Number of Days to Update: 51

Source: Lake County Environmental Health
Telephone: 707-263-1164
Last EDR Contact: 08/19/2016
Next Scheduled EDR Contact: 10/31/2016
Data Release Frequency: Varies

LOS ANGELES COUNTY:

San Gabriel Valley Areas of Concern
San Gabriel Valley areas where VOC contamination is at or above the MCL as designated by region 9 EPA office.

Date of Government Version: 03/30/2009
Date Data Arrived at EDR: 03/31/2009
Date Made Active in Reports: 10/23/2009
Number of Days to Update: 206

Source: EPA Region 9
Telephone: 415-972-3178
Last EDR Contact: 06/15/2016
Next Scheduled EDR Contact: 07/04/2016
Data Release Frequency: No Update Planned

HMS: Street Number List
Industrial Waste and Underground Storage Tank Sites.

Date of Government Version: 07/05/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 08/18/2016
Number of Days to Update: 37

Source: Department of Public Works
Telephone: 626-458-3517
Last EDR Contact: 07/07/2016
Next Scheduled EDR Contact: 10/24/2016
Data Release Frequency: Semi-Annually

List of Solid Waste Facilities
Solid Waste Facilities in Los Angeles County.

Date of Government Version: 04/18/2016
Date Data Arrived at EDR: 04/20/2016
Date Made Active in Reports: 06/01/2016
Number of Days to Update: 42

Source: La County Department of Public Works
Telephone: 818-458-5185
Last EDR Contact: 07/19/2016
Next Scheduled EDR Contact: 10/31/2016
Data Release Frequency: Varies

City of Los Angeles Landfills
Landfills owned and maintained by the City of Los Angeles.

Date of Government Version: 01/01/2016
Date Data Arrived at EDR: 01/26/2016
Date Made Active in Reports: 03/22/2016
Number of Days to Update: 56

Source: Engineering & Construction Division
Telephone: 213-473-7869
Last EDR Contact: 07/18/2016
Next Scheduled EDR Contact: 10/31/2016
Data Release Frequency: Varies

Site Mitigation List
Industrial sites that have had some sort of spill or complaint.

Date of Government Version: 03/29/2016
Date Data Arrived at EDR: 04/06/2016
Date Made Active in Reports: 06/13/2016
Number of Days to Update: 68

Source: Community Health Services
Telephone: 323-890-7806
Last EDR Contact: 07/13/2016
Next Scheduled EDR Contact: 10/31/2016
Data Release Frequency: Annually

City of El Segundo Underground Storage Tank
Underground storage tank sites located in El Segundo city.

Date of Government Version: 03/30/2015
Date Data Arrived at EDR: 04/02/2015
Date Made Active in Reports: 04/13/2015
Number of Days to Update: 11

Source: City of El Segundo Fire Department
Telephone: 310-524-2236
Last EDR Contact: 07/13/2016
Next Scheduled EDR Contact: 10/31/2016
Data Release Frequency: Semi-Annually

City of Long Beach Underground Storage Tank
Underground storage tank sites located in the city of Long Beach.

Date of Government Version: 11/04/2015
Date Data Arrived at EDR: 11/13/2015
Date Made Active in Reports: 12/17/2015
Number of Days to Update: 34

Source: City of Long Beach Fire Department
Telephone: 562-570-2563
Last EDR Contact: 07/25/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Annually

City of Torrance Underground Storage Tank
Underground storage tank sites located in the city of Torrance.

Date of Government Version: 06/23/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 08/09/2016
Number of Days to Update: 28

Source: City of Torrance Fire Department
Telephone: 310-618-2973
Last EDR Contact: 07/07/2016
Next Scheduled EDR Contact: 10/24/2016
Data Release Frequency: Semi-Annually

MADERA COUNTY:

CUPA Facility List

A listing of sites included in the county's Certified Unified Program Agency database. California's Secretary for Environmental Protection established the unified hazardous materials and hazardous waste regulatory program as required by chapter 6.11 of the California Health and Safety Code. The Unified Program consolidates the administration, permits, inspections, and enforcement activities.

Date of Government Version: 06/02/2016
Date Data Arrived at EDR: 06/03/2016
Date Made Active in Reports: 08/09/2016
Number of Days to Update: 67

Source: Madera County Environmental Health
Telephone: 559-675-7823
Last EDR Contact: 08/17/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Varies

MARIN COUNTY:

Underground Storage Tank Sites

Currently permitted USTs in Marin County.

Date of Government Version: 04/07/2016
Date Data Arrived at EDR: 04/26/2016
Date Made Active in Reports: 06/01/2016
Number of Days to Update: 36

Source: Public Works Department Waste Management
Telephone: 415-499-6647
Last EDR Contact: 06/30/2016
Next Scheduled EDR Contact: 10/17/2016
Data Release Frequency: Semi-Annually

MERCED COUNTY:

CUPA Facility List

CUPA facility list.

Date of Government Version: 06/15/2016
Date Data Arrived at EDR: 06/20/2016
Date Made Active in Reports: 08/18/2016
Number of Days to Update: 59

Source: Merced County Environmental Health
Telephone: 209-381-1094
Last EDR Contact: 08/17/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Varies

MONO COUNTY:

CUPA Facility List

CUPA Facility List

Date of Government Version: 05/25/2016
Date Data Arrived at EDR: 06/01/2016
Date Made Active in Reports: 06/22/2016
Number of Days to Update: 21

Source: Mono County Health Department
Telephone: 760-932-5580
Last EDR Contact: 08/24/2016
Next Scheduled EDR Contact: 12/12/2016
Data Release Frequency: Varies

MONTEREY COUNTY:

CUPA Facility Listing

CUPA Program listing from the Environmental Health Division.

Date of Government Version: 06/24/2016
Date Data Arrived at EDR: 06/27/2016
Date Made Active in Reports: 08/09/2016
Number of Days to Update: 43

Source: Monterey County Health Department
Telephone: 831-796-1297
Last EDR Contact: 08/22/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Varies

NAPA COUNTY:

Sites With Reported Contamination
A listing of leaking underground storage tank sites located in Napa county.

Date of Government Version: 12/05/2011
Date Data Arrived at EDR: 12/06/2011
Date Made Active in Reports: 02/07/2012
Number of Days to Update: 63

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 08/24/2016
Next Scheduled EDR Contact: 12/12/2016
Data Release Frequency: No Update Planned

Closed and Operating Underground Storage Tank Sites
Underground storage tank sites located in Napa county.

Date of Government Version: 01/15/2008
Date Data Arrived at EDR: 01/16/2008
Date Made Active in Reports: 02/08/2008
Number of Days to Update: 23

Source: Napa County Department of Environmental Management
Telephone: 707-253-4269
Last EDR Contact: 08/24/2016
Next Scheduled EDR Contact: 12/12/2016
Data Release Frequency: No Update Planned

NEVADA COUNTY:

CUPA Facility List
CUPA facility list.

Date of Government Version: 04/18/2016
Date Data Arrived at EDR: 05/06/2016
Date Made Active in Reports: 06/17/2016
Number of Days to Update: 42

Source: Community Development Agency
Telephone: 530-265-1467
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/14/2016
Data Release Frequency: Varies

ORANGE COUNTY:

List of Industrial Site Cleanups
Petroleum and non-petroleum spills.

Date of Government Version: 05/01/2016
Date Data Arrived at EDR: 05/17/2016
Date Made Active in Reports: 06/21/2016
Number of Days to Update: 35

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 08/08/2016
Next Scheduled EDR Contact: 11/21/2016
Data Release Frequency: Annually

List of Underground Storage Tank Cleanups
Orange County Underground Storage Tank Cleanups (LUST).

Date of Government Version: 05/01/2016
Date Data Arrived at EDR: 05/17/2016
Date Made Active in Reports: 06/21/2016
Number of Days to Update: 35

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 08/08/2016
Next Scheduled EDR Contact: 11/21/2016
Data Release Frequency: Quarterly

List of Underground Storage Tank Facilities
Orange County Underground Storage Tank Facilities (UST).

Date of Government Version: 05/01/2016
Date Data Arrived at EDR: 05/11/2016
Date Made Active in Reports: 06/01/2016
Number of Days to Update: 21

Source: Health Care Agency
Telephone: 714-834-3446
Last EDR Contact: 08/09/2016
Next Scheduled EDR Contact: 11/21/2016
Data Release Frequency: Quarterly

PLACER COUNTY:

Master List of Facilities
List includes aboveground tanks, underground tanks and cleanup sites.

Date of Government Version: 06/16/2016
Date Data Arrived at EDR: 06/20/2016
Date Made Active in Reports: 08/09/2016
Number of Days to Update: 50

Source: Placer County Health and Human Services
Telephone: 530-745-2363
Last EDR Contact: 09/02/2016
Next Scheduled EDR Contact: 12/19/2016
Data Release Frequency: Semi-Annually

RIVERSIDE COUNTY:

Listing of Underground Tank Cleanup Sites
Riverside County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 04/13/2016
Date Data Arrived at EDR: 04/15/2016
Date Made Active in Reports: 05/09/2016
Number of Days to Update: 24

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 06/20/2016
Next Scheduled EDR Contact: 10/03/2016
Data Release Frequency: Quarterly

Underground Storage Tank Tank List
Underground storage tank sites located in Riverside county.

Date of Government Version: 07/13/2016
Date Data Arrived at EDR: 07/18/2016
Date Made Active in Reports: 08/08/2016
Number of Days to Update: 21

Source: Department of Environmental Health
Telephone: 951-358-5055
Last EDR Contact: 06/20/2016
Next Scheduled EDR Contact: 10/03/2016
Data Release Frequency: Quarterly

SACRAMENTO COUNTY:

Toxic Site Clean-Up List
List of sites where unauthorized releases of potentially hazardous materials have occurred.

Date of Government Version: 05/02/2016
Date Data Arrived at EDR: 07/06/2016
Date Made Active in Reports: 08/18/2016
Number of Days to Update: 43

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 07/06/2016
Next Scheduled EDR Contact: 10/17/2016
Data Release Frequency: Quarterly

Master Hazardous Materials Facility List
Any business that has hazardous materials on site - hazardous material storage sites, underground storage tanks, waste generators.

Date of Government Version: 05/02/2016
Date Data Arrived at EDR: 07/06/2016
Date Made Active in Reports: 08/18/2016
Number of Days to Update: 43

Source: Sacramento County Environmental Management
Telephone: 916-875-8406
Last EDR Contact: 07/05/2016
Next Scheduled EDR Contact: 10/17/2016
Data Release Frequency: Quarterly

SAN BERNARDINO COUNTY:

Hazardous Material Permits
This listing includes underground storage tanks, medical waste handlers/generators, hazardous materials handlers, hazardous waste generators, and waste oil generators/handlers.

Date of Government Version: 06/09/2016
Date Data Arrived at EDR: 06/10/2016
Date Made Active in Reports: 07/20/2016
Number of Days to Update: 40

Source: San Bernardino County Fire Department Hazardous Materials Division
Telephone: 909-387-3041
Last EDR Contact: 08/08/2016
Next Scheduled EDR Contact: 11/21/2016
Data Release Frequency: Quarterly

SAN DIEGO COUNTY:

Hazardous Materials Management Division Database

The database includes: HE58 - This report contains the business name, site address, business phone number, establishment 'H' permit number, type of permit, and the business status. HE17 - In addition to providing the same information provided in the HE58 listing, HE17 provides inspection dates, violations received by the establishment, hazardous waste generated, the quantity, method of storage, treatment/disposal of waste and the hauler, and information on underground storage tanks. Unauthorized Release List - Includes a summary of environmental contamination cases in San Diego County (underground tank cases, non-tank cases, groundwater contamination, and soil contamination are included.)

Date of Government Version: 09/23/2013
Date Data Arrived at EDR: 09/24/2013
Date Made Active in Reports: 10/17/2013
Number of Days to Update: 23

Source: Hazardous Materials Management Division
Telephone: 619-338-2268
Last EDR Contact: 06/02/2016
Next Scheduled EDR Contact: 09/19/2016
Data Release Frequency: Quarterly

Solid Waste Facilities

San Diego County Solid Waste Facilities.

Date of Government Version: 10/31/2015
Date Data Arrived at EDR: 11/07/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 58

Source: Department of Health Services
Telephone: 619-338-2209
Last EDR Contact: 07/20/2016
Next Scheduled EDR Contact: 10/07/2016
Data Release Frequency: Varies

Environmental Case Listing

The listing contains all underground tank release cases and projects pertaining to properties contaminated with hazardous substances that are actively under review by the Site Assessment and Mitigation Program.

Date of Government Version: 03/23/2010
Date Data Arrived at EDR: 06/15/2010
Date Made Active in Reports: 07/09/2010
Number of Days to Update: 24

Source: San Diego County Department of Environmental Health
Telephone: 619-338-2371
Last EDR Contact: 09/02/2016
Next Scheduled EDR Contact: 12/19/2016
Data Release Frequency: No Update Planned

SAN FRANCISCO COUNTY:

Local Oversite Facilities

A listing of leaking underground storage tank sites located in San Francisco county.

Date of Government Version: 09/19/2008
Date Data Arrived at EDR: 09/19/2008
Date Made Active in Reports: 09/29/2008
Number of Days to Update: 10

Source: Department Of Public Health San Francisco County
Telephone: 415-252-3920
Last EDR Contact: 08/03/2016
Next Scheduled EDR Contact: 11/21/2016
Data Release Frequency: Quarterly

Underground Storage Tank Information

Underground storage tank sites located in San Francisco county.

Date of Government Version: 11/29/2010
Date Data Arrived at EDR: 03/10/2011
Date Made Active in Reports: 03/15/2011
Number of Days to Update: 5

Source: Department of Public Health
Telephone: 415-252-3920
Last EDR Contact: 08/03/2016
Next Scheduled EDR Contact: 11/21/2016
Data Release Frequency: Quarterly

SAN JOAQUIN COUNTY:

San Joaquin Co. UST
A listing of underground storage tank locations in San Joaquin county.

Date of Government Version: 06/16/2016
Date Data Arrived at EDR: 06/20/2016
Date Made Active in Reports: 08/08/2016
Number of Days to Update: 49

Source: Environmental Health Department
Telephone: N/A
Last EDR Contact: 06/15/2016
Next Scheduled EDR Contact: 10/03/2016
Data Release Frequency: Semi-Annually

SAN LUIS OBISPO COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 05/23/2016
Date Data Arrived at EDR: 05/24/2016
Date Made Active in Reports: 06/21/2016
Number of Days to Update: 28

Source: San Luis Obispo County Public Health Department
Telephone: 805-781-5596
Last EDR Contact: 08/17/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Varies

SAN MATEO COUNTY:

Business Inventory
List includes Hazardous Materials Business Plan, hazardous waste generators, and underground storage tanks.

Date of Government Version: 06/02/2016
Date Data Arrived at EDR: 06/07/2016
Date Made Active in Reports: 06/22/2016
Number of Days to Update: 15

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 05/27/2016
Next Scheduled EDR Contact: 09/26/2016
Data Release Frequency: Annually

Fuel Leak List
A listing of leaking underground storage tank sites located in San Mateo county.

Date of Government Version: 06/09/2016
Date Data Arrived at EDR: 06/13/2016
Date Made Active in Reports: 08/09/2016
Number of Days to Update: 57

Source: San Mateo County Environmental Health Services Division
Telephone: 650-363-1921
Last EDR Contact: 06/08/2016
Next Scheduled EDR Contact: 09/26/2016
Data Release Frequency: Semi-Annually

SANTA BARBARA COUNTY:

CUPA Facility Listing
CUPA Program Listing from the Environmental Health Services division.

Date of Government Version: 09/08/2011
Date Data Arrived at EDR: 09/09/2011
Date Made Active in Reports: 10/07/2011
Number of Days to Update: 28

Source: Santa Barbara County Public Health Department
Telephone: 805-686-8167
Last EDR Contact: 08/17/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Varies

SANTA CLARA COUNTY:

Cupa Facility List
Cupa facility list

Date of Government Version: 05/25/2016
Date Data Arrived at EDR: 05/26/2016
Date Made Active in Reports: 06/22/2016
Number of Days to Update: 27

Source: Department of Environmental Health
Telephone: 408-918-1973
Last EDR Contact: 08/17/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Varies

HIST LUST - Fuel Leak Site Activity Report
A listing of open and closed leaking underground storage tanks. This listing is no longer updated by the county. Leaking underground storage tanks are now handled by the Department of Environmental Health.

Date of Government Version: 03/29/2005
Date Data Arrived at EDR: 03/30/2005
Date Made Active in Reports: 04/21/2005
Number of Days to Update: 22

Source: Santa Clara Valley Water District
Telephone: 408-265-2600
Last EDR Contact: 03/23/2009
Next Scheduled EDR Contact: 06/22/2009
Data Release Frequency: No Update Planned

LOP Listing
A listing of leaking underground storage tanks located in Santa Clara county.

Date of Government Version: 03/03/2014
Date Data Arrived at EDR: 03/05/2014
Date Made Active in Reports: 03/18/2014
Number of Days to Update: 13

Source: Department of Environmental Health
Telephone: 408-918-3417
Last EDR Contact: 08/24/2016
Next Scheduled EDR Contact: 12/12/2016
Data Release Frequency: Annually

Hazardous Material Facilities
Hazardous material facilities, including underground storage tank sites.

Date of Government Version: 05/26/2016
Date Data Arrived at EDR: 06/01/2016
Date Made Active in Reports: 07/20/2016
Number of Days to Update: 49

Source: City of San Jose Fire Department
Telephone: 408-535-7694
Last EDR Contact: 08/03/2016
Next Scheduled EDR Contact: 11/21/2016
Data Release Frequency: Annually

SANTA CRUZ COUNTY:

CUPA Facility List
CUPA facility listing.

Date of Government Version: 05/31/2016
Date Data Arrived at EDR: 06/02/2016
Date Made Active in Reports: 06/21/2016
Number of Days to Update: 19

Source: Santa Cruz County Environmental Health
Telephone: 831-464-2761
Last EDR Contact: 08/17/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Varies

SHASTA COUNTY:

CUPA Facility List
Cupa Facility List.

Date of Government Version: 06/14/2016
Date Data Arrived at EDR: 06/16/2016
Date Made Active in Reports: 08/09/2016
Number of Days to Update: 54

Source: Shasta County Department of Resource Management
Telephone: 530-225-5789
Last EDR Contact: 08/22/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Varies

SOLANO COUNTY:

Leaking Underground Storage Tanks
A listing of leaking underground storage tank sites located in Solano county.

Date of Government Version: 06/09/2016
Date Data Arrived at EDR: 06/13/2016
Date Made Active in Reports: 08/09/2016
Number of Days to Update: 57

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 06/08/2016
Next Scheduled EDR Contact: 09/26/2016
Data Release Frequency: Quarterly

Underground Storage Tanks
Underground storage tank sites located in Solano county.

Date of Government Version: 06/09/2016
Date Data Arrived at EDR: 06/14/2016
Date Made Active in Reports: 08/08/2016
Number of Days to Update: 55

Source: Solano County Department of Environmental Management
Telephone: 707-784-6770
Last EDR Contact: 06/08/2016
Next Scheduled EDR Contact: 09/26/2016
Data Release Frequency: Quarterly

SONOMA COUNTY:

Cupa Facility List
Cupa Facility list

Date of Government Version: 07/10/2016
Date Data Arrived at EDR: 07/12/2016
Date Made Active in Reports: 08/09/2016
Number of Days to Update: 28

Source: County of Sonoma Fire & Emergency Services Department
Telephone: 707-565-1174
Last EDR Contact: 07/07/2016
Next Scheduled EDR Contact: 10/10/2016
Data Release Frequency: Varies

Leaking Underground Storage Tank Sites
A listing of leaking underground storage tank sites located in Sonoma county.

Date of Government Version: 07/01/2016
Date Data Arrived at EDR: 07/05/2016
Date Made Active in Reports: 08/18/2016
Number of Days to Update: 44

Source: Department of Health Services
Telephone: 707-565-6565
Last EDR Contact: 06/24/2016
Next Scheduled EDR Contact: 10/10/2016
Data Release Frequency: Quarterly

SUTTER COUNTY:

Underground Storage Tanks
Underground storage tank sites located in Sutter county.

Date of Government Version: 06/02/2016
Date Data Arrived at EDR: 06/07/2016
Date Made Active in Reports: 06/23/2016
Number of Days to Update: 16

Source: Sutter County Department of Agriculture
Telephone: 530-822-7500
Last EDR Contact: 09/02/2016
Next Scheduled EDR Contact: 12/19/2016
Data Release Frequency: Semi-Annually

TUOLUMNE COUNTY:

CUPA Facility List
Cupa facility list

Date of Government Version: 05/03/2016
Date Data Arrived at EDR: 05/10/2016
Date Made Active in Reports: 06/17/2016
Number of Days to Update: 38

Source: Divison of Environmental Health
Telephone: 209-533-5633
Last EDR Contact: 08/03/2016
Next Scheduled EDR Contact: 10/07/2016
Data Release Frequency: Varies

VENTURA COUNTY:

Business Plan, Hazardous Waste Producers, and Operating Underground Tanks

The BWT list indicates by site address whether the Environmental Health Division has Business Plan (B), Waste Producer (W), and/or Underground Tank (T) information.

Date of Government Version: 03/28/2016
Date Data Arrived at EDR: 04/29/2016
Date Made Active in Reports: 06/17/2016
Number of Days to Update: 49

Source: Ventura County Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 07/25/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Quarterly

Inventory of Illegal Abandoned and Inactive Sites

Ventura County Inventory of Closed, Illegal Abandoned, and Inactive Sites.

Date of Government Version: 12/01/2011
Date Data Arrived at EDR: 12/01/2011
Date Made Active in Reports: 01/19/2012
Number of Days to Update: 49

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 06/28/2016
Next Scheduled EDR Contact: 10/17/2016
Data Release Frequency: Annually

Listing of Underground Tank Cleanup Sites

Ventura County Underground Storage Tank Cleanup Sites (LUST).

Date of Government Version: 05/29/2008
Date Data Arrived at EDR: 06/24/2008
Date Made Active in Reports: 07/31/2008
Number of Days to Update: 37

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 08/10/2016
Next Scheduled EDR Contact: 11/28/2016
Data Release Frequency: Quarterly

Medical Waste Program List

To protect public health and safety and the environment from potential exposure to disease causing agents, the Environmental Health Division Medical Waste Program regulates the generation, handling, storage, treatment and disposal of medical waste throughout the County.

Date of Government Version: 03/28/2016
Date Data Arrived at EDR: 04/29/2016
Date Made Active in Reports: 06/22/2016
Number of Days to Update: 54

Source: Ventura County Resource Management Agency
Telephone: 805-654-2813
Last EDR Contact: 07/25/2016
Next Scheduled EDR Contact: 11/07/2016
Data Release Frequency: Quarterly

Underground Tank Closed Sites List

Ventura County Operating Underground Storage Tank Sites (UST)/Underground Tank Closed Sites List.

Date of Government Version: 05/26/2016
Date Data Arrived at EDR: 06/16/2016
Date Made Active in Reports: 08/09/2016
Number of Days to Update: 54

Source: Environmental Health Division
Telephone: 805-654-2813
Last EDR Contact: 06/16/2016
Next Scheduled EDR Contact: 09/26/2016
Data Release Frequency: Quarterly

YOLO COUNTY:

Underground Storage Tank Comprehensive Facility Report

Underground storage tank sites located in Yolo county.

Date of Government Version: 06/30/2016
Date Data Arrived at EDR: 07/05/2016
Date Made Active in Reports: 08/09/2016
Number of Days to Update: 35

Source: Yolo County Department of Health
Telephone: 530-666-8646
Last EDR Contact: 06/30/2016
Next Scheduled EDR Contact: 10/17/2016
Data Release Frequency: Annually

YUBA COUNTY:

CUPA Facility List
CUPA facility listing for Yuba County.

Date of Government Version: 04/29/2016
Date Data Arrived at EDR: 05/03/2016
Date Made Active in Reports: 06/17/2016
Number of Days to Update: 45

Source: Yuba County Environmental Health Department
Telephone: 530-749-7523
Last EDR Contact: 07/27/2016
Next Scheduled EDR Contact: 11/14/2016
Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

CT MANIFEST: Hazardous Waste Manifest Data
Facility and manifest data. Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a tsd facility.

Date of Government Version: 07/30/2013
Date Data Arrived at EDR: 08/19/2013
Date Made Active in Reports: 10/03/2013
Number of Days to Update: 45

Source: Department of Energy & Environmental Protection
Telephone: 860-424-3375
Last EDR Contact: 08/10/2016
Next Scheduled EDR Contact: 11/28/2016
Data Release Frequency: No Update Planned

NJ MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 07/17/2015
Date Made Active in Reports: 08/12/2015
Number of Days to Update: 26

Source: Department of Environmental Protection
Telephone: N/A
Last EDR Contact: 07/11/2016
Next Scheduled EDR Contact: 10/24/2016
Data Release Frequency: Annually

NY MANIFEST: Facility and Manifest Data
Manifest is a document that lists and tracks hazardous waste from the generator through transporters to a TSD facility.

Date of Government Version: 05/01/2016
Date Data Arrived at EDR: 05/06/2016
Date Made Active in Reports: 06/17/2016
Number of Days to Update: 42

Source: Department of Environmental Conservation
Telephone: 518-402-8651
Last EDR Contact: 08/03/2016
Next Scheduled EDR Contact: 11/14/2016
Data Release Frequency: Annually

PA MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 07/24/2015
Date Made Active in Reports: 08/18/2015
Number of Days to Update: 25

Source: Department of Environmental Protection
Telephone: 717-783-8990
Last EDR Contact: 07/18/2016
Next Scheduled EDR Contact: 10/31/2016
Data Release Frequency: Annually

RI MANIFEST: Manifest information
Hazardous waste manifest information

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 06/19/2015
Date Made Active in Reports: 07/15/2015
Number of Days to Update: 26

Source: Department of Environmental Management
Telephone: 401-222-2797
Last EDR Contact: 08/22/2016
Next Scheduled EDR Contact: 12/05/2016
Data Release Frequency: Annually

WI MANIFEST: Manifest Information
Hazardous waste manifest information.

Date of Government Version: 12/31/2015
Date Data Arrived at EDR: 04/14/2016
Date Made Active in Reports: 06/03/2016
Number of Days to Update: 50

Source: Department of Natural Resources
Telephone: N/A
Last EDR Contact: 06/13/2016
Next Scheduled EDR Contact: 09/26/2016
Data Release Frequency: Annually

Oil/Gas Pipelines
Source: PennWell Corporation
Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data
Source: PennWell Corporation
This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:
Source: American Hospital Association, Inc.
Telephone: 312-280-5991
The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing
Source: Centers for Medicare & Medicaid Services
Telephone: 410-786-3000
A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes
Source: National Institutes of Health
Telephone: 301-594-6248
Information on Medicare and Medicaid certified nursing homes in the United States.

Public Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools
Source: National Center for Education Statistics
Telephone: 202-502-7300
The National Center for Education Statistics' primary database on private school locations in the United States.

Daycare Centers: Licensed Facilities
Source: Department of Social Services
Telephone: 916-657-4041

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish & Game
Telephone: 916-445-0411

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

STREET AND ADDRESS INFORMATION

GEOCHECK ®- PHYSICAL SETTING SOURCE ADDENDUM

TARGET PROPERTY ADDRESS

CALIMESA VACANT LOT
NORTHWEST CORNER OF COUNTY LINE ROAD & 7TH PLACE
CALIMESA, CA 92320

TARGET PROPERTY COORDINATES

Latitude (North):	34.003546 - 34° 0' 12.77''
Longitude (West):	117.066421 - 117° 3' 59.12''
Universal Tranverse Mercator:	Zone 11
UTM X (Meters):	493866.3
UTM Y (Meters):	3762356.8
Elevation:	2369 ft. above sea level

USGS TOPOGRAPHIC MAP

Target Property Map:	5630639 YUCAIPA, CA
Version Date:	2012
South Map:	5640934 EL CASCO, CA
Version Date:	2012

EDR's GeoCheck Physical Setting Source Addendum is provided to assist the environmental professional in forming an opinion about the impact of potential contaminant migration.

Assessment of the impact of contaminant migration generally has two principal investigative components:

1. Groundwater flow direction, and
2. Groundwater flow velocity.

Groundwater flow direction may be impacted by surface topography, hydrology, hydrogeology, characteristics of the soil, and nearby wells. Groundwater flow velocity is generally impacted by the nature of the geologic strata.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW DIRECTION INFORMATION

Groundwater flow direction for a particular site is best determined by a qualified environmental professional using site-specific well data. If such data is not reasonably ascertainable, it may be necessary to rely on other sources of information, such as surface topographic information, hydrologic information, hydrogeologic data collected on nearby properties, and regional groundwater flow information (from deep aquifers).

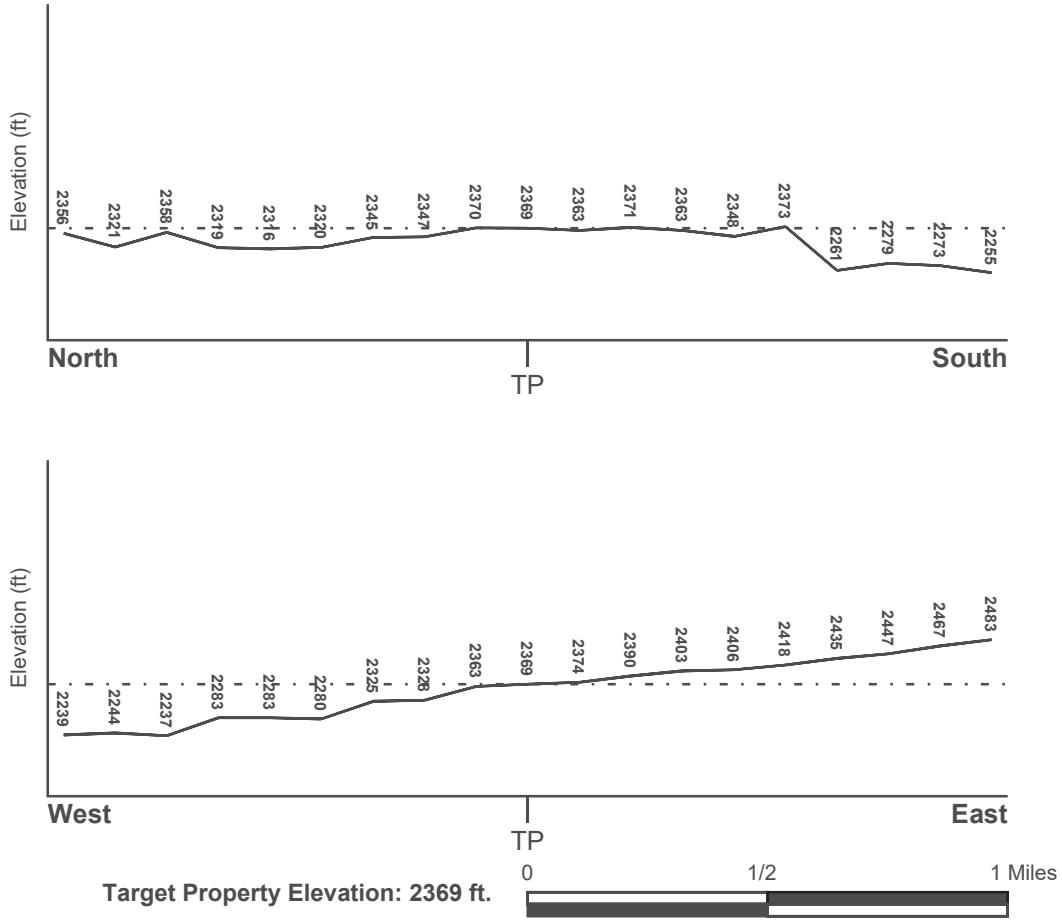
TOPOGRAPHIC INFORMATION

Surface topography may be indicative of the direction of surficial groundwater flow. This information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

TARGET PROPERTY TOPOGRAPHY

General Topographic Gradient: General South

SURROUNDING TOPOGRAPHY: ELEVATION PROFILES



Source: Topography has been determined from the USGS 7.5' Digital Elevation Model and should be evaluated on a relative (not an absolute) basis. Relative elevation information between sites of close proximity should be field verified.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

HYDROLOGIC INFORMATION

Surface water can act as a hydrologic barrier to groundwater flow. Such hydrologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Refer to the Physical Setting Source Map following this summary for hydrologic information (major waterways and bodies of water).

FEMA FLOOD ZONE

Target Property County	FEMA Flood Electronic Data
RIVERSIDE, CA	YES - refer to the Overview Map and Detail Map

Flood Plain Panel at Target Property: 06065C - FEMA DFIRM Flood data

Additional Panels in search area: 06071C - FEMA DFIRM Flood data

NATIONAL WETLAND INVENTORY

NWI Quad at Target Property	NWI Electronic Data Coverage
NOT AVAILABLE	YES - refer to the Overview Map and Detail Map

HYDROGEOLOGIC INFORMATION

Hydrogeologic information obtained by installation of wells on a specific site can often be an indicator of groundwater flow direction in the immediate area. Such hydrogeologic information can be used to assist the environmental professional in forming an opinion about the impact of nearby contaminated properties or, should contamination exist on the target property, what downgradient sites might be impacted.

Site-Specific Hydrogeological Data*:

Search Radius: 1.25 miles
Status: Not found

AQUIFLOW®

Search Radius: 1.000 Mile.

EDR has developed the AQUIFLOW Information System to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted by environmental professionals to regulatory authorities at select sites and has extracted the date of the report, groundwater flow direction as determined hydrogeologically, and the depth to water table.

MAP ID	LOCATION FROM TP	GENERAL DIRECTION GROUNDWATER FLOW
B11	1/4 - 1/2 Mile ENE	Not Reported

For additional site information, refer to Physical Setting Source Map Findings.

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

GROUNDWATER FLOW VELOCITY INFORMATION

Groundwater flow velocity information for a particular site is best determined by a qualified environmental professional using site specific geologic and soil strata data. If such data are not reasonably ascertainable, it may be necessary to rely on other sources of information, including geologic age identification, rock stratigraphic unit and soil characteristics data collected on nearby properties and regional soil information. In general, contaminant plumes move more quickly through sandy-gravelly types of soils than silty-clayey types of soils.

GEOLOGIC INFORMATION IN GENERAL AREA OF TARGET PROPERTY

Geologic information can be used by the environmental professional in forming an opinion about the relative speed at which contaminant migration may be occurring.

ROCK STRATIGRAPHIC UNIT

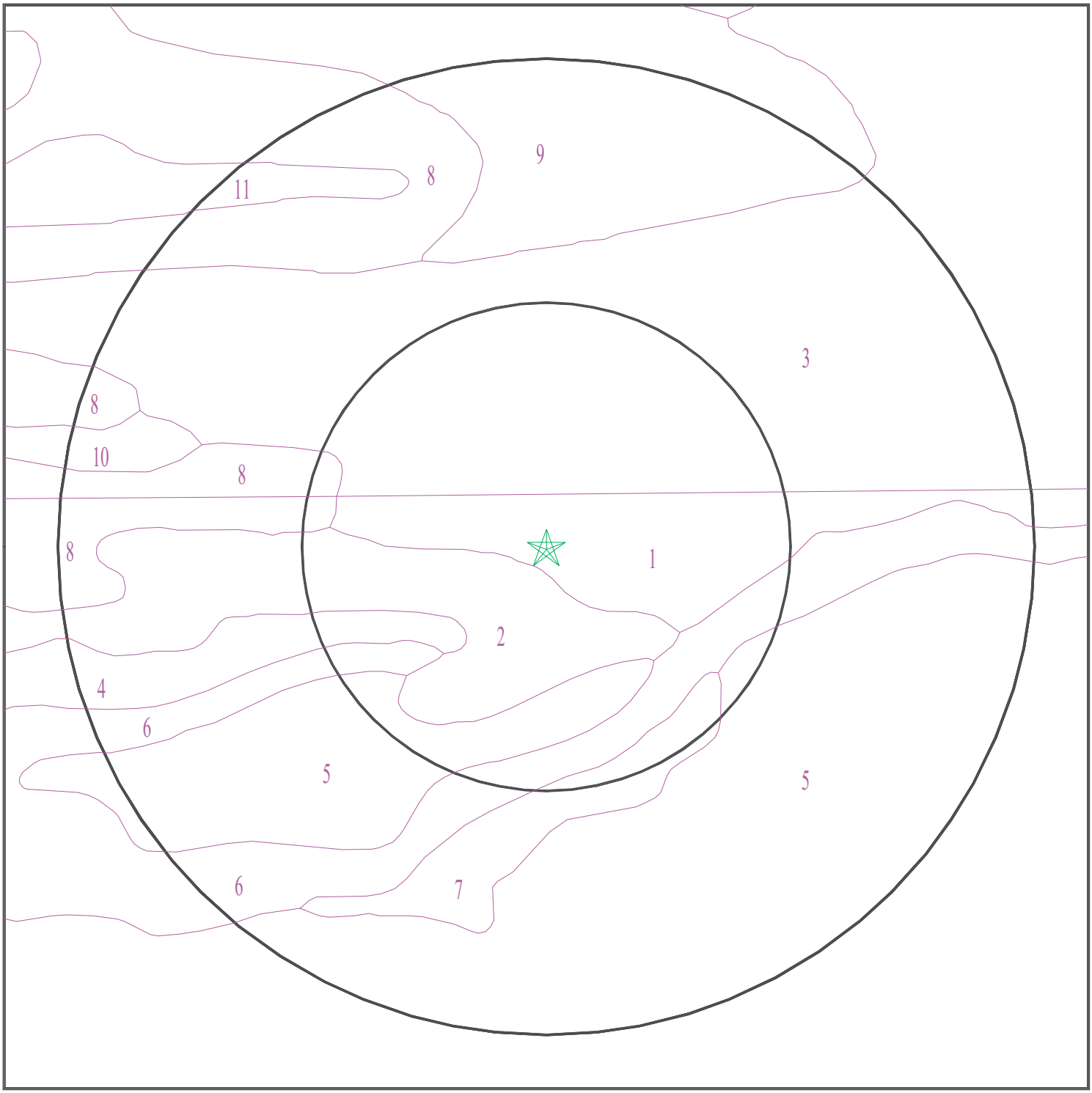
Era:	Cenozoic
System:	Quaternary
Series:	Quaternary
Code:	Q *(decoded above as Era, System & Series)*

GEOLOGIC AGE IDENTIFICATION

Category: Stratifed Sequence

Geologic Age and Rock Stratigraphic Unit Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - a digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

SSURGO SOIL MAP - 4721830.2s



Target Property
SSURGO Soil
Water

0 1/16 1/8 1/4 Miles

N

SITE NAME:	Calimesa Vacant Lot	CLIENT:	Partner Engineering and Science, Inc.
ADDRESS:	Northwest Corner of County Line Road & 7th Place Calimesa CA 92320	CONTACT:	Brett Nielsen
LAT/LONG:	34.003546 / 117.066421	INQUIRY #:	4721830.2s
		DATE:	September 08, 2016 2:10 pm

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

DOMINANT SOIL COMPOSITION IN GENERAL AREA OF TARGET PROPERTY

The U.S. Department of Agriculture's (USDA) Soil Conservation Service (SCS) leads the National Cooperative Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. The following information is based on Soil Conservation Service SSURGO data.

Soil Map ID: 1

Soil Component Name: RAMONA

Soil Surface Texture: sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	14 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 7.3 Min: 5.6
2	14 inches	22 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 7.3 Min: 6.1
3	22 inches	68 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 4 Min: 1.4	Max: 7.3 Min: 6.1

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
4	68 inches	74 inches	gravelly sandy loam	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 4 Min: 1.4	Max: 8.4 Min: 6.6

Soil Map ID: 2

Soil Component Name: PLACENTIA

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Moderately well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	18 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 7.8 Min: 5.6
2	18 inches	38 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 0.42 Min: 0.01	Max: 8.4 Min: 6.6

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
3	38 inches	57 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 0.42 Min: 0.01	Max: 8.4 Min: 7.4
4	57 inches	59 inches	gravelly sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Silty Gravel	Max: 1.4 Min: 0.42	Max: 8.4 Min: 7.9

Soil Map ID: 3

Soil Component Name: RAMONA

Soil Surface Texture: sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	22 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 6.3 Min: 5.6

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
2	22 inches	31 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 7.8 Min: 6.6
3	31 inches	53 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 4 Min: 1.4	Max: 7.8 Min: 6.6
4	53 inches	59 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 7.8 Min: 6.6

Soil Map ID: 4

Soil Component Name: PLACENTIA

Soil Surface Texture: fine sandy loam

Hydrologic Group: Class D - Very slow infiltration rates. Soils are clayey, have a high water table, or are shallow to an impervious layer.

Soil Drainage Class: Moderately well drained

Hydric Status: Partially hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	18 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 7.8 Min: 5.6
2	18 inches	38 inches	clay	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit 50% or more), Fat Clay.	Max: 0.42 Min: 0.01	Max: 8.4 Min: 6.6
3	38 inches	57 inches	clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Clayey Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay	Max: 0.42 Min: 0.01	Max: 8.4 Min: 7.4
4	57 inches	59 inches	gravelly sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Gravels, Gravels with fines, Silty Gravel	Max: 1.4 Min: 0.42	Max: 8.4 Min: 7.9

Soil Map ID: 5

Soil Component Name: RAMONA

Soil Surface Texture: very fine sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	14 inches	very fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 7.3 Min: 5.6
2	14 inches	22 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 7.3 Min: 6.1
3	22 inches	68 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 4 Min: 1.4	Max: 7.3 Min: 6.1
4	68 inches	74 inches	gravelly sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 4 Min: 1.4	Max: 8.4 Min: 6.6

Soil Map ID: 6

Soil Component Name: SAN TIMOTEO

Soil Surface Texture: loam

Hydrologic Group: Class C - Slow infiltration rates. Soils with layers impeding downward movement of water, or soils with moderately fine or fine textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	9 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 42 Min: 14	Max: 8.4 Min: 7.4
2	9 inches	22 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 42 Min: 14	Max: 8.4 Min: 7.9
3	22 inches	27 inches	weathered bedrock	Not reported	Not reported	Max: 4 Min: 1.4	Max: Min:

Soil Map ID: 7

Soil Component Name: RAMONA

Soil Surface Texture: sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	14 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 7.3 Min: 5.6

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
2	14 inches	22 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 7.3 Min: 6.1
3	22 inches	68 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand.	Max: 4 Min: 1.4	Max: 7.3 Min: 6.1
4	68 inches	74 inches	gravelly sandy loam	Granular materials (35 pct. or less passing No. 200), Stone Fragments, Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 4 Min: 1.4	Max: 8.4 Min: 6.6

Soil Map ID: 8

Soil Component Name: Saugus

Soil Surface Texture: sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Low

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	7 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 14 Min: 4	Max: 7.3 Min: 6.1
2	7 inches	40 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 14 Min: 4	Max: 7.3 Min: 6.1
3	40 inches	44 inches	weathered bedrock	Not reported	Not reported	Max: 4 Min: 1.4	Max: Min:

Soil Map ID: 9

Soil Component Name: RAMONA

Soil Surface Texture: sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	22 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 6.5 Min: 5.6
2	22 inches	31 inches	loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), Lean Clay. FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 4 Min: 1.4	Max: 7.8 Min: 6.6
3	31 inches	53 inches	sandy clay loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Clayey sand. COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 4 Min: 1.4	Max: 7.3 Min: 6.1
4	53 inches	59 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 7.8 Min: 6.6

Soil Map ID: 10

Soil Component Name: SAN EMIGDIO

Soil Surface Texture: sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: High

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	7 inches	sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 8.4 Min: 7.4
2	7 inches	59 inches	fine sandy loam	Silt-Clay Materials (more than 35 pct. passing No. 200), Silty Soils.	FINE-GRAINED SOILS, Silts and Clays (liquid limit less than 50%), silt.	Max: 42 Min: 14	Max: 8.4 Min: 7.9

Soil Map ID: 11

Soil Component Name: Hanford

Soil Surface Texture: sandy loam

Hydrologic Group: Class B - Moderate infiltration rates. Deep and moderately deep, moderately well and well drained soils with moderately coarse textures.

Soil Drainage Class: Well drained

Hydric Status: Not hydric

Corrosion Potential - Uncoated Steel: Moderate

Depth to Bedrock Min: > 0 inches

Depth to Watertable Min: > 0 inches

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

Soil Layer Information							
	Boundary			Classification		Saturated hydraulic conductivity micro m/sec	Soil Reaction (pH)
Layer	Upper	Lower	Soil Texture Class	AASHTO Group	Unified Soil		
1	0 inches	11 inches	sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 7.8 Min: 6.1
2	11 inches	59 inches	fine sandy loam	Granular materials (35 pct. or less passing No. 200), Silty, or Clayey Gravel and Sand.	COARSE-GRAINED SOILS, Sands, Sands with fines, Silty Sand.	Max: 42 Min: 14	Max: 7.8 Min: 5.6

LOCAL / REGIONAL WATER AGENCY RECORDS

EDR Local/Regional Water Agency records provide water well information to assist the environmental professional in assessing sources that may impact ground water flow direction, and in forming an opinion about the impact of contaminant migration on nearby drinking water wells.

WELL SEARCH DISTANCE INFORMATION

DATABASE	SEARCH DISTANCE (miles)
Federal USGS	1.000
Federal FRDS PWS	Nearest PWS within 0.001 miles
State Database	1.000

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
1	USGS40000139712	0 - 1/8 Mile South
A3	USGS40000139717	1/8 - 1/4 Mile West
B4	USGS40000139722	1/8 - 1/4 Mile East
D13	USGS40000139694	1/4 - 1/2 Mile SSE
14	USGS40000139753	1/4 - 1/2 Mile NNE
15	USGS40000139699	1/4 - 1/2 Mile WSW
F18	USGS40000139680	1/4 - 1/2 Mile SSW
F19	USGS40000139678	1/4 - 1/2 Mile SSW
22	USGS40000139762	1/2 - 1 Mile NW

GEOCHECK® - PHYSICAL SETTING SOURCE SUMMARY

FEDERAL USGS WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
G23	USGS40000139618	1/2 - 1 Mile SE
24	USGS40000139810	1/2 - 1 Mile North
J32	USGS40000139765	1/2 - 1 Mile ENE
33	USGS40000139809	1/2 - 1 Mile NNE

FEDERAL FRDS PUBLIC WATER SUPPLY SYSTEM INFORMATION

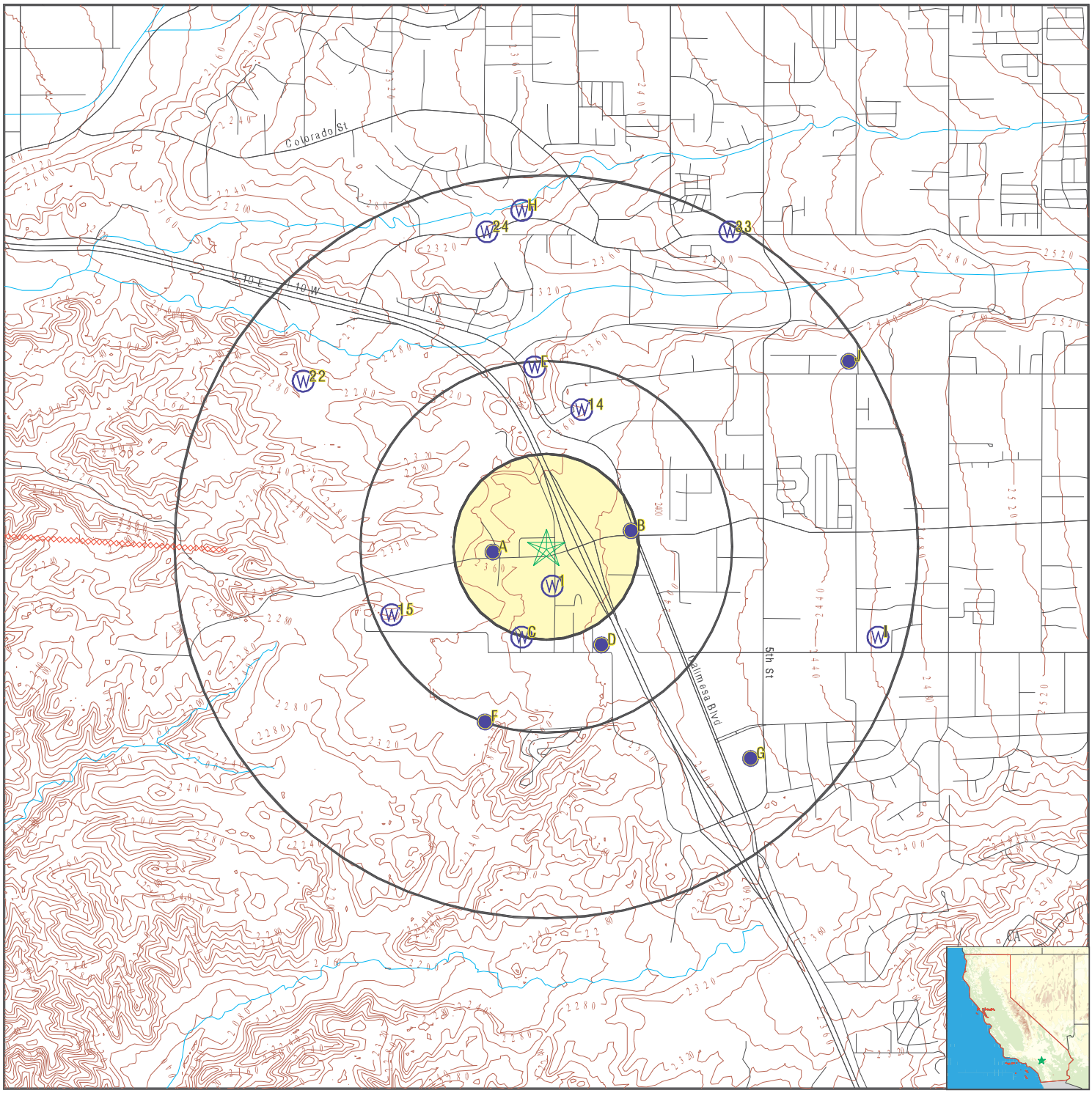
MAP ID	WELL ID	LOCATION FROM TP
No PWS System Found		

Note: PWS System location is not always the same as well location.

STATE DATABASE WELL INFORMATION

MAP ID	WELL ID	LOCATION FROM TP
A2	2422	0 - 1/8 Mile West
C5	2415	1/4 - 1/2 Mile SSW
C6	2414	1/4 - 1/2 Mile SSW
C7	2413	1/4 - 1/2 Mile SSW
C8	2421	1/4 - 1/2 Mile SSW
C9	2420	1/4 - 1/2 Mile SSW
C10	2417	1/4 - 1/2 Mile SSW
D12	CADW60000018778	1/4 - 1/2 Mile SSE
E16	18705	1/4 - 1/2 Mile North
E17	2408	1/4 - 1/2 Mile North
F20	CADW60000018777	1/2 - 1 Mile SSW
G21	CADW60000031441	1/2 - 1 Mile SE
H25	2387	1/2 - 1 Mile North
H26	2386	1/2 - 1 Mile North
H27	2407	1/2 - 1 Mile North
H28	2403	1/2 - 1 Mile North
I29	2412	1/2 - 1 Mile ESE
I30	2416	1/2 - 1 Mile ESE
J31	CADW60000018776	1/2 - 1 Mile ENE

PHYSICAL SETTING SOURCE MAP - 4721830.2s



- County Boundary
- Major Roads
- Contour Lines
- Earthquake Fault Lines
- Earthquake epicenter, Richter 5 or greater
- Water Wells
- Public Water Supply Wells
- Cluster of Multiple Icons
- Groundwater Flow Direction
- GI Indeterminate Groundwater Flow at Location
- GV Groundwater Flow Varies at Location
- HD Closest Hydrogeological Data
- Oil, gas or related wells

SITE NAME:	Calimesa Vacant Lot	CLIENT:	Partner Engineering and Science, Inc.
ADDRESS:	Northwest Corner of County Line Road & 7th Place Calimesa CA 92320	CONTACT:	Brett Nielsen
LAT/LONG:	34.003546 / 117.066421	INQUIRY #:	4721830.2s
		DATE:	September 08, 2016 2:09 pm

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

1
South
0 - 1/8 Mile
Lower

FED USGS **USGS40000139712**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-340007117035501		
Monloc name:	002S002W14D001S		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18070203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	34.0020167
Longitude:	-117.066136	Sourcemap scale:	24000
Horiz Acc measure:	.01	Horiz Acc measure units:	seconds
Horiz Collection method:	Differentially corrected Global Positioning System (DGPS)		
Horiz coord refsys:	NAD83	Vert measure val:	2359.76
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Differential Global Positioning System (GPS)r		
Vert coord refsys:	NAVD88	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	194605	Welldepth:	400
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

A2
West
0 - 1/8 Mile
Lower

CA WELLS **2422**

Water System Information:

Prime Station Code:	02S/02W-15A04 S	User ID:	WAT
FRDS Number:	3310017008	County:	Riverside
District Number:	14	Station Type:	WELL/AMBNT
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	340012.0 1170403.0	Precision:	100 Feet (one Second)
Source Name:	WELL 09		
System Number:	3310017		
System Name:	South Mesa WC		
Organization That Operates System:			
	P O BOX 458		
	CALIMESA, CA 92320		
Pop Served:	7200	Connections:	2539
Area Served:	SOUTH MESA-CALIMESA		
Sample Collected:	12-JAN-11	Findings:	1.3 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		

Sample Collected:	06-JUN-11	Findings:	2.1 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	15-JUN-11	Findings:	2. MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	11-JUL-11	Findings:	14. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12-SEP-11	Findings:	2.3 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	30-SEP-11	Findings:	2.2 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	19-DEC-11	Findings:	2. MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	09-MAR-12	Findings:	1.9 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	19-JUN-12	Findings:	2. MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	09-JUL-12	Findings:	13. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	19-SEP-12	Findings:	1.6 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	10-DEC-12	Findings:	1.2 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	18-MAR-13	Findings:	1.2 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	03-APR-13	Findings:	22.778 C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	03-APR-13	Findings:	550. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03-APR-13	Findings:	8.2
Chemical:	PH, FIELD		
Sample Collected:	03-APR-13	Findings:	7.9
Chemical:	PH, LABORATORY		
Sample Collected:	03-APR-13	Findings:	190. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	03-APR-13	Findings:	240. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	03-APR-13	Findings:	180. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	03-APR-13	Findings:	49. MG/L
Chemical:	CALCIUM		
Sample Collected:	03-APR-13	Findings:	14. MG/L
Chemical:	MAGNESIUM		
Sample Collected:	03-APR-13	Findings:	48. MG/L
Chemical:	SODIUM		

Sample Collected:	03-APR-13	Findings:	1.5 MG/L
Chemical:	POTASSIUM		
Sample Collected:	03-APR-13	Findings:	29. MG/L
Chemical:	CHLORIDE		
Sample Collected:	03-APR-13	Findings:	1.5 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	03-APR-13	Findings:	8.2 UG/L
Chemical:	VANADIUM		
Sample Collected:	03-APR-13	Findings:	310. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03-APR-13	Findings:	1.36
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	03-APR-13	Findings:	0.79
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	03-APR-13	Findings:	19. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-APR-13	Findings:	0.3 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	03-APR-13	Findings:	12.58
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		
Sample Collected:	03-APR-13	Findings:	4300. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	11-JUN-13	Findings:	2.1 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	15-JUL-13	Findings:	15. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-SEP-13	Findings:	1.9 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	20-DEC-13	Findings:	1.8 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	11-MAR-14	Findings:	. 2.1 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	09-JUN-14	Findings:	. 2.3 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	14-JUL-14	Findings:	. 12. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-SEP-14	Findings:	. 2.3 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	29-OCT-14	Findings:	. 1.4 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	24-NOV-14	Findings:	. 2. MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	08-DEC-14	Findings:	. 5.1 UG/L
Chemical:	CHROMIUM, HEXAVALENT		

Sample Collected:	15-DEC-14	Findings:	. 1.2 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	12-JAN-15	Findings:	. 1.2 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	10-FEB-15	Findings:	. 1.1 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	10-MAR-15	Findings:	. 1.2 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	06-APR-15	Findings:	. 1.1 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	13-MAY-15	Findings:	. 1.2 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	11-JUN-15	Findings:	. 1.1 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		

A3
West
1/8 - 1/4 Mile
Lower

FED USGS **USGS40000139717**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-340012117040701		
Monloc name:	002S002W15A003S		
Monloc type:	Well		
Monloc desc:	ROCKWELL GPS FOR LAT/LONG., NAD27		
Huc code:	18070203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	34.0033484
Longitude:	-117.0694758	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	2360
Vert measure units:	feet	Vertacc measure val:	20
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

B4
East
1/8 - 1/4 Mile
Higher

FED USGS **USGS40000139722**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-340014117034301		
Monloc name:	002S002W14C001S		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18070203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	34.0038972
Longitude:	-117.0627167	Sourcemap scale:	24000
Horiz Acc measure:	.01	Horiz Acc measure units:	seconds
Horiz Collection method:	Differentially corrected Global Positioning System (DGPS)		
Horiz coord refsys:	NAD83	Vert measure val:	2395.68
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Differential Global Positioning System (GPS)r		
Vert coord refsys:	NAVD88	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19200400	Welldepth:	363
Welldepth units:	ft	Wellholedepth:	443
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 302

Date	Feet below Surface	Feet to Sealevel
1999-04-01	262	
1998-11-01	231.5	
1998-06-01	231.4	
1994-11-01	220	
1994-05-02	247	
1993-10-07	247	
1991-11-11	242	
1991-08-14	238	
1991-05-01	238	
1990-11-01	235	
1990-08-09	238	
1989-12-01	210	
1989-07-31	235	
1989-05-09	230	
1988-08-24	230	
1988-06-17	228	
1988-05-15	223	
1987-06-16	225	
1986-12-16	234	
1986-02-10	246	
1985-12-20	240	
1985-06-25	265	
1983-12-28	258	
1983-04-22	245	
1983-02-08	262	
1982-12-07	245	
1982-10-25	306	
1982-08-23	288	
1982-07-20	255	
1981-08-20	304	
1981-05-01	300	

Date	Feet below Surface	Feet to Sealevel
1999-04-01	262	
1998-11-01	231.5	
1998-06-01	231.4	
1994-11-01	220	
1994-05-02	247	
1993-10-07	247	
1991-11-11	242	
1991-08-14	238	
1991-05-01	238	
1990-11-01	235	
1990-08-09	238	
1989-12-01	210	
1989-07-31	235	
1989-05-09	230	
1988-08-24	230	
1988-06-17	228	
1988-05-15	223	
1987-06-16	225	
1986-12-16	234	
1986-02-10	246	
1985-12-20	240	
1985-06-25	265	
1983-12-28	258	
1983-04-22	245	
1983-02-08	262	
1982-12-07	245	
1982-10-25	306	
1982-08-23	288	
1982-07-20	255	
1981-08-20	304	
1981-05-01	300	

Ground-water levels, continued.

Date	Feet below Surface	Feet to Sealevel
1981-04-15	276	
1981-04-01	276	
1981-03-15	277	
1981-03-02	277	
1981-02-15	277	
1981-01-02	306	
1980-12-01	308	
1980-11-15	310	
1980-11-13	282	
1980-06-17	304	
1980-04-15	278	
1979-12-15	282	
1979-10-18	308	
1979-07-15	306	
1979-04-01	242	
1979-01-01	284	
1978-10-15	283	
1977-05-23	282	
1977-04-19	282	
1974-05-08	277	
1974-04-05	288.6	
1974-03-06	293.7	
1974-02-07	286.2	
1974-01-10	287.2	
1973-12-06	288.8	
1973-11-07	290	
1973-04-06	270	
1972-12-12	283	
1971-12-27	282	
1970-04-07	282	
1969-11-05	285	
1969-05-02	281	
1969-01-08	287	
1967-11-27	287	
1967-05-10	280	
1967-01-05	286	
1966-04-10	280	
1965-12-15	284	
1965-04-01	288	
1964-11-25	283	
1964-04-08	280	
1963-11-29	285	
1963-04-18	273.5	
1960-03-31	242.8	
1956-08-09	263	
1955-03-30	243.8	
1955-03-17	234.80	
Note: A nearby site that taps the same aquifer was being pumped.		
1955-03-17	234.80	
Note: A nearby site that taps the same aquifer was being pumped.		
1954-04-08	227.2	
1953-04-20	223.3	
1953-04-11	223.3	
1952-11-29	230.6	
1952-11-26	230.6	

Date	Feet below Surface	Feet to Sealevel
1981-04-15	276	
1981-04-01	276	
1981-03-15	277	
1981-03-02	277	
1981-02-15	277	
1981-01-02	306	
1980-12-01	308	
1980-11-15	310	
1980-11-13	282	
1980-06-17	304	
1980-04-15	278	
1979-12-15	282	
1979-10-18	308	
1979-07-15	306	
1979-04-01	242	
1979-01-01	284	
1978-10-15	283	
1977-05-23	282	
1977-04-19	282	
1974-05-08	277	
1974-04-05	288.6	
1974-03-06	293.7	
1974-02-07	286.2	
1974-01-10	287.2	
1973-12-06	288.8	
1973-11-07	290	
1973-04-06	270	
1972-12-12	283	
1971-12-27	282	
1970-04-07	282	
1969-11-05	285	
1969-05-02	281	
1969-01-08	287	
1967-11-27	287	
1967-05-10	280	
1967-01-05	286	
1966-04-10	280	
1965-12-15	284	
1965-04-01	288	
1964-11-25	283	
1964-04-08	280	
1963-11-29	285	
1963-04-18	273.5	
1960-03-31	242.8	
1956-08-09	263	
1955-03-30	243.8	
1954-04-08	227.2	
1953-04-20	223.3	
1953-04-11	223.3	
1952-11-29	230.6	
1952-11-26	230.6	

Ground-water levels, continued.

Date	Feet below Surface	Feet to Sealevel
1952-04-11	216	
1952-04-05	216	
1951-11-12	227	
1951-11-06	226.9	
1951-04-08	211.9	
1950-11-03	226.4	
1950-10-03	226.5	
1950-04-04	300	
1950-03-29	200.9	
1949-10-03	224.2	
1949-10-01	224.3	
1949-04-06	200	
1948-10-12	222	
1947-12-05	210.9	
1947-04-05	190	
1946-04-03	184.5	
1945-11-05	198.6	
1945-04-03	178.7	
1944-11-09	194.1	
1944-04-05	172.6	
1943-04-01	168.6	
1942-04-04	162.6	
1941-10-03	175.4	
1941-04-03	165.2	
1940-04-03	162.6	
1939-10-04	170.2	
1939-04-04	162.2	
1938-04-02	161.8	
1937-10-12	170.6	
1937-10-04	172.2	
1937-04-03	159.7	
1936-10-12	169.3	
1936-04-01	157.8	
1935-10-10	165.2	
1935-04-10	158	
1934-10-13	169.9	
1933-11-01	162.8	
1933-04-12	156	
1932-10-10	167	
1932-04-13	154.8	
1932-03-09	156.1	
1932-02-10	157	
1931-11-09	162	
1931-05-07	157	
1931-04-04	155.6	
1931-03-06	156.5	
1931-02-07	157.7	
1931-01-09	159.2	
1930-04-30	153.4	
1930-04-09	153.8	
1930-02-18	156.3	
1929-12-01	161	
1929-04-19	151	
1929-02-08	154.6	
1929-01-07	156.7	

Date	Feet below Surface	Feet to Sealevel
1952-04-11	216	
1952-04-05	216	
1951-11-12	227	
1951-11-06	226.9	
1951-04-08	211.9	
1950-11-03	226.4	
1950-10-03	226.5	
1950-04-04	300	
1950-03-29	200.9	
1949-10-03	224.2	
1949-10-01	224.3	
1949-04-06	200	
1948-10-12	222	
1947-12-05	210.9	
1947-04-05	190	
1946-04-03	184.5	
1945-11-05	198.6	
1945-04-03	178.7	
1944-11-09	194.1	
1944-04-05	172.6	
1943-04-01	168.6	
1942-04-04	162.6	
1941-10-03	175.4	
1941-04-03	165.2	
1940-04-03	162.6	
1939-10-04	170.2	
1939-04-04	162.2	
1938-04-02	161.8	
1937-10-12	170.6	
1937-10-04	172.2	
1937-04-03	159.7	
1936-10-12	169.3	
1936-04-01	157.8	
1935-10-10	165.2	
1935-04-10	158	
1934-10-13	169.9	
1933-11-01	162.8	
1933-04-12	156	
1932-10-10	167	
1932-04-13	154.8	
1932-03-09	156.1	
1932-02-10	157	
1931-11-09	162	
1931-05-07	157	
1931-04-04	155.6	
1931-03-06	156.5	
1931-02-07	157.7	
1931-01-09	159.2	
1930-04-30	153.4	
1930-04-09	153.8	
1930-02-18	156.3	
1929-12-01	161	
1929-04-19	151	
1929-02-08	154.6	
1929-01-07	156.7	

Ground-water levels, continued.

Date	Feet below Surface	Feet to Sealevel
1928-12-06	159.9	
1928-11-02	164.9	
1928-10-06	173.2	
1928-09-29	178.8	
1928-04-25	147	
1928-02-03	148.8	
1927-12-31	151.1	
1927-10-07	164	
1927-05-01	140.8	
1927-04-02	141.7	
1927-03-01	143	
1927-01-31	144.2	
1926-12-03	147.6	

Date	Feet below Surface	Feet to Sealevel
1928-12-06	159.9	
1928-11-02	164.9	
1928-10-06	173.2	
1928-09-29	178.8	
1928-04-25	147	
1928-02-03	148.8	
1927-12-31	151.1	
1927-10-07	164	
1927-05-01	140.8	
1927-04-02	141.7	
1927-03-01	143	
1927-01-31	144.2	
1926-12-03	147.6	

C5
SSW **CA WELLS** **2415**
1/4 - 1/2 Mile
Lower

Water System Information:

Prime Station Code:	02S/02W-14F02 S	User ID:	WAT
FRDS Number:	3310017012	County:	Riverside
District Number:	14	Station Type:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Water Type:	Well/Groundwater	Well Status:	Abandoned
Source Lat/Long:	340000.0 1170400.0	Precision:	Undefined
Source Name:	WELL 15 - ABANDONED		
System Number:	3310017		
System Name:	South Mesa WC		
Organization That Operates System:			
	P O BOX 458		
	CALIMESA, CA 92320		
Pop Served:	7200	Connections:	2539
Area Served:	SOUTH MESA-CALIMESA		

C6
SSW **CA WELLS** **2414**
1/4 - 1/2 Mile
Lower

Water System Information:

Prime Station Code:	02S/02W-14D01 S	User ID:	WAT
FRDS Number:	3310017013	County:	Riverside
District Number:	14	Station Type:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	340000.0 1170400.0	Precision:	Undefined
Source Name:	WELL 16		
System Number:	3310017		
System Name:	South Mesa WC		
Organization That Operates System:			
	P O BOX 458		
	CALIMESA, CA 92320		
Pop Served:	7200	Connections:	2539
Area Served:	SOUTH MESA-CALIMESA		

Sample Collected:	10-JAN-11	Findings:	29. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07-MAR-11	Findings:	30. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06-JUN-11	Findings:	30. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12-SEP-11	Findings:	30. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	19-DEC-11	Findings:	30. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12-MAR-12	Findings:	29. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	21-JUN-12	Findings:	24. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10-SEP-12	Findings:	30. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10-DEC-12	Findings:	32. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	13-MAR-13	Findings:	32. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-APR-13	Findings:	22.222 C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	03-APR-13	Findings:	580. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03-APR-13	Findings:	8.1
Chemical:	PH, FIELD		
Sample Collected:	03-APR-13	Findings:	7.8
Chemical:	PH, LABORATORY		
Sample Collected:	03-APR-13	Findings:	210. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	03-APR-13	Findings:	250. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	03-APR-13	Findings:	220. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	03-APR-13	Findings:	58. MG/L
Chemical:	CALCIUM		
Sample Collected:	03-APR-13	Findings:	17. MG/L
Chemical:	MAGNESIUM		
Sample Collected:	03-APR-13	Findings:	42. MG/L
Chemical:	SODIUM		
Sample Collected:	03-APR-13	Findings:	1.5 MG/L
Chemical:	POTASSIUM		
Sample Collected:	03-APR-13	Findings:	35. MG/L
Chemical:	CHLORIDE		

Sample Collected:	03-APR-13	Findings:	0.98 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	03-APR-13	Findings:	6.4 UG/L
Chemical:	VANADIUM		
Sample Collected:	03-APR-13	Findings:	0.13 MG/L
Chemical:	FOAMING AGENTS (MBAS)		
Sample Collected:	03-APR-13	Findings:	330. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03-APR-13	Findings:	1.36
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	03-APR-13	Findings:	0.79
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	03-APR-13	Findings:	32. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-APR-13	Findings:	12.58
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		
Sample Collected:	03-APR-13	Findings:	7100. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	11-JUN-13	Findings:	34. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-SEP-13	Findings:	34. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02-DEC-13	Findings:	36. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-MAR-14	Findings:	. 33. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02-JUN-14	Findings:	. 34. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-SEP-14	Findings:	. 34. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	01-DEC-14	Findings:	. 35. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-DEC-14	Findings:	. 6.6 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	04-MAR-15	Findings:	. 35. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-JUN-15	Findings:	. 36. MG/L
Chemical:	NITRATE (AS NO3)		

C7
SSW
1/4 - 1/2 Mile
Lower

CA WELLS **2413**

Water System Information:

Prime Station Code:	02S/02W-14C01 S	User ID:	WAT
FRDS Number:	3310017009	County:	Riverside
District Number:	14	Station Type:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Water Type:	Well/Groundwater	Well Status:	Inactive Untreated
Source Lat/Long:	340000.0 1170400.0	Precision:	Undefined
Source Name:	WELL 11 - INACTIVE		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

System Number: 3310017
System Name: South Mesa WC
Organization That Operates System:
P O BOX 458
CALIMESA, CA 92320
Pop Served: 7200 Connections: 2539
Area Served: SOUTH MESA-CALIMESA

Sample Collected:	10-JAN-11	Findings:	25. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07-MAR-11	Findings:	26. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06-JUN-11	Findings:	26. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12-SEP-11	Findings:	26. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	19-DEC-11	Findings:	26. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12-MAR-12	Findings:	25. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	21-JUN-12	Findings:	20. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10-SEP-12	Findings:	27. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10-DEC-12	Findings:	30. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	13-MAR-13	Findings:	31. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-APR-13	Findings:	21.667 C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	03-APR-13	Findings:	560. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03-APR-13	Findings:	8.2
Chemical:	PH, FIELD		
Sample Collected:	03-APR-13	Findings:	7.9
Chemical:	PH, LABORATORY		
Sample Collected:	03-APR-13	Findings:	200. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	03-APR-13	Findings:	240. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	03-APR-13	Findings:	210. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	03-APR-13	Findings:	55. MG/L
Chemical:	CALCIUM		
Sample Collected:	03-APR-13	Findings:	17. MG/L
Chemical:	MAGNESIUM		

Sample Collected:	03-APR-13	Findings:	44. MG/L
Chemical:	SODIUM		
Sample Collected:	03-APR-13	Findings:	1.6 MG/L
Chemical:	POTASSIUM		
Sample Collected:	03-APR-13	Findings:	28. MG/L
Chemical:	CHLORIDE		
Sample Collected:	03-APR-13	Findings:	1.1 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	03-APR-13	Findings:	7.2 UG/L
Chemical:	VANADIUM		
Sample Collected:	03-APR-13	Findings:	0.13 MG/L
Chemical:	FOAMING AGENTS (MBAS)		
Sample Collected:	03-APR-13	Findings:	330. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03-APR-13	Findings:	1.41
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	03-APR-13	Findings:	0.83
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	03-APR-13	Findings:	27. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-APR-13	Findings:	0.1 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	03-APR-13	Findings:	12.63
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		
Sample Collected:	03-APR-13	Findings:	6200. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	11-JUN-13	Findings:	27. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-SEP-13	Findings:	29. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02-DEC-13	Findings:	32. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-MAR-14	Findings:	. 30. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-SEP-14	Findings:	. 36. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	01-DEC-14	Findings:	. 31. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-DEC-14	Findings:	. 5. UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	04-MAR-15	Findings:	. 31. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-JUN-15	Findings:	. 32. MG/L
Chemical:	NITRATE (AS NO3)		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

C8
SSW
1/4 - 1/2 Mile
Lower | **CA WELLS** | **2421**

Water System Information:

Prime Station Code:	02S/02W-15A03 S	User ID:	WAT
FRDS Number:	3310017006	County:	Riverside
District Number:	14	Station Type:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	340000.0 1170400.0	Precision:	Undefined
Source Name:	WELL 07		
System Number:	3310017		
System Name:	South Mesa WC		
Organization That Operates System:			
	P O BOX 458		
	CALIMESA, CA 92320		
Pop Served:	7200	Connections:	2539
Area Served:	SOUTH MESA-CALIMESA		
Sample Collected:	03-APR-13	Findings:	12. UG/L
Chemical:	VANADIUM		
Sample Collected:	03-APR-13	Findings:	300. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03-APR-13	Findings:	1.65
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	03-APR-13	Findings:	1.08
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	03-APR-13	Findings:	14. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-APR-13	Findings:	12.87
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		
Sample Collected:	03-APR-13	Findings:	3100. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	15-JUL-13	Findings:	12. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	14-JUL-14	Findings:	. 22. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-DEC-14	Findings:	. 5.2 UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	11-JUL-11	Findings:	11. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-JUL-12	Findings:	11. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-APR-13	Findings:	22.222 C
Chemical:	SOURCE TEMPERATURE C		

Sample Collected:	03-APR-13	Findings:	550. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03-APR-13	Findings:	8.5
Chemical:	PH, FIELD		
Sample Collected:	03-APR-13	Findings:	7.9
Chemical:	PH, LABORATORY		
Sample Collected:	03-APR-13	Findings:	190. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	03-APR-13	Findings:	240. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	03-APR-13	Findings:	180. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	03-APR-13	Findings:	48. MG/L
Chemical:	CALCIUM		
Sample Collected:	03-APR-13	Findings:	15. MG/L
Chemical:	MAGNESIUM		
Sample Collected:	03-APR-13	Findings:	50. MG/L
Chemical:	SODIUM		
Sample Collected:	03-APR-13	Findings:	1.6 MG/L
Chemical:	POTASSIUM		
Sample Collected:	03-APR-13	Findings:	30. MG/L
Chemical:	CHLORIDE		
Sample Collected:	03-APR-13	Findings:	1.1 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		

C9
SSW **CA WELLS** **2420**
1/4 - 1/2 Mile
Lower

Water System Information:

Prime Station Code:	02S/02W-15A01 S	User ID:	WAT
FRDS Number:	3310017007	County:	Riverside
District Number:	14	Station Type:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Water Type:	Well/Groundwater	Well Status:	Abandoned
Source Lat/Long:	340000.0 1170400.0	Precision:	Undefined
Source Name:	WELL 08 - ABANDONED		
System Number:	3310017		
System Name:	South Mesa WC		
Organization That Operates System:			
	P O BOX 458 CALIMESA, CA 92320		
Pop Served:	7200	Connections:	2539
Area Served:	SOUTH MESA-CALIMESA		

C10
SSW **CA WELLS** **2417**
1/4 - 1/2 Mile
Lower

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Water System Information:

Prime Station Code:	02S/02W-14M01 S	User ID:	WAT
FRDS Number:	3310017004	County:	Riverside
District Number:	14	Station Type:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	340000.0 1170400.0	Precision:	Undefined
Source Name:	WELL 05		
System Number:	3310017		
System Name:	South Mesa WC		
Organization That Operates System:			
	P O BOX 458		
	CALIMESA, CA 92320		
Pop Served:	7200	Connections:	2539
Area Served:	SOUTH MESA-CALIMESA		
Sample Collected:	11-JUL-11	Findings:	4.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12-MAR-12	Findings:	4.1 UG/L
Chemical:	ARSENIC		
Sample Collected:	03-APR-13	Findings:	21.111 C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	03-APR-13	Findings:	350. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03-APR-13	Findings:	8.2
Chemical:	PH, FIELD		
Sample Collected:	03-APR-13	Findings:	8.3
Chemical:	PH, LABORATORY		
Sample Collected:	03-APR-13	Findings:	120. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	03-APR-13	Findings:	140. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	03-APR-13	Findings:	56. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	03-APR-13	Findings:	17. MG/L
Chemical:	CALCIUM		
Sample Collected:	03-APR-13	Findings:	3.4 MG/L
Chemical:	MAGNESIUM		
Sample Collected:	03-APR-13	Findings:	52. MG/L
Chemical:	SODIUM		
Sample Collected:	03-APR-13	Findings:	1. MG/L
Chemical:	POTASSIUM		
Sample Collected:	03-APR-13	Findings:	25. MG/L
Chemical:	CHLORIDE		
Sample Collected:	03-APR-13	Findings:	0.68 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	03-APR-13	Findings:	62. UG/L
Chemical:	VANADIUM		

Sample Collected:	03-APR-13	Findings:	190. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03-APR-13	Findings:	0.7
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	03-APR-13	Findings:	0.11
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	03-APR-13	Findings:	5.8 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-APR-13	Findings:	11.9
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		
Sample Collected:	03-APR-13	Findings:	1300. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	23-MAY-13	Findings:	5.5 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	15-JUL-13	Findings:	5.7 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	14-JUL-14	Findings:	. 4.9 MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-DEC-14	Findings:	. 3.6 UG/L
Chemical:	CHROMIUM, HEXAVALENT		

B11
ENE
1/4 - 1/2 Mile
Higher

Site ID:	083302496T
Groundwater Flow:	Not Reported
Shallow Water Depth:	168’
Deep Water Depth:	322’
Average Water Depth:	Not Reported
Date:	06/02/1994

AQUIFLOW **66387**

D12
SSE
1/4 - 1/2 Mile
Higher

CA WELLS **CADW60000018778**

Objectid:	18778
Latitude:	33.9997
Longitude:	-117.0643
Site code:	339997N1170643W001
State well numbe:	02S02W14F001S
Local well name:	’’
Well use id:	6
Well use descrip:	Unknown
County id:	33
County name:	Riverside
Basin code:	’8-2.08’
Basin desc:	San Timoteo
Dwr region id:	80238
Dwr region:	Southern Region Office
Site id:	CADW60000018778

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

D13
SSE **FED USGS** **USGS40000139694**
1/4 - 1/2 Mile
Higher

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-335959117034501		
Monloc name:	002S002W14F001S		
Monloc type:	Well		
Monloc desc:	ROCKWELL GPS FOR LAT/LONG., NAD27		
Huc code:	18070203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	33.9997374
Longitude:	-117.0633643	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	2385.63
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Level or other surveying method		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	1927	Welldepth:	0
Welldepth units:	ft	Wellholedepth:	360
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 4

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1999-10-25					
Note: The well was destroyed (no water level is recorded).					
1999-10-25					
Note: The well was destroyed (no water level is recorded).					
1998-06-02	263.5		1998-06-02	263.5	

14
NNE **FED USGS** **USGS40000139753**
1/4 - 1/2 Mile
Lower

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-340032117035001		
Monloc name:	002S002W11M001S		
Monloc type:	Well		
Monloc desc:	ROCKWELL GPS FOR LAT/LONG., NAD27		
Huc code:	18070203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	34.0089038
Longitude:	-117.0647535	Sourcemap scale:	24000

Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	2345
Vert measure units:	feet	Vertacc measure val:	20
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

15
WSW **FED USGS** **USGS40000139699**
1/4 - 1/2 Mile
Lower

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-340003117042101		
Monloc name:	002S002W15A004S		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18070203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	34.0008889
Longitude:	-117.0736639	Sourcemap scale:	24000
Horiz Acc measure:	.01	Horiz Acc measure units:	seconds
Horiz Collection method:	Differentially corrected Global Positioning System (DGPS)		
Horiz coord refsys:	NAD83	Vert measure val:	2333.94
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Differential Global Positioning System (GPS)r		
Vert coord refsys:	NAVD88	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

E16
North **CA WELLS** **18705**
1/4 - 1/2 Mile
Lower

Water System Information:

Prime Station Code:	3600391-001	User ID:	36C
FRDS Number:	3600391001	County:	San Beernardino
District Number:	66	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	340038.0 1170358.0	Precision:	100 Feet (one Second)
Source Name:	WELL 01		

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

System Number: 3600391
System Name: HILLCREST MOBILE EST, INC.
Organization That Operates System:
3360 CALIMESA BLVD
YUCAIPA, CA 92399
Pop Served: 900 Connections: 180
Area Served: Not Reported

Sample Collected:	27-SEP-12	Findings:	35. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	24-JUN-13	Findings:	20. C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	24-JUN-13	Findings:	530. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	24-JUN-13	Findings:	8.1
Chemical:	PH, LABORATORY		
Sample Collected:	24-JUN-13	Findings:	180. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	24-JUN-13	Findings:	220. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	24-JUN-13	Findings:	170. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	24-JUN-13	Findings:	50. MG/L
Chemical:	CALCIUM		
Sample Collected:	24-JUN-13	Findings:	11. MG/L
Chemical:	MAGNESIUM		
Sample Collected:	24-JUN-13	Findings:	43. MG/L
Chemical:	SODIUM		
Sample Collected:	24-JUN-13	Findings:	1.8 MG/L
Chemical:	POTASSIUM		
Sample Collected:	24-JUN-13	Findings:	20. MG/L
Chemical:	CHLORIDE		
Sample Collected:	24-JUN-13	Findings:	0.87 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	24-JUN-13	Findings:	7.5 UG/L
Chemical:	VANADIUM		
Sample Collected:	24-JUN-13	Findings:	1.5 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	24-JUN-13	Findings:	0.17 MG/L
Chemical:	FOAMING AGENTS (MBAS)		
Sample Collected:	24-JUN-13	Findings:	330. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	24-JUN-13	Findings:	1.23
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	24-JUN-13	Findings:	0.63
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		

Sample Collected:	24-JUN-13	Findings:	35. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	24-JUN-13	Findings:	0.2 NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	24-JUN-13	Findings:	12.45
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		
Sample Collected:	24-JUN-13	Findings:	7900. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	24-JUN-13	Findings:	1.5 PCI/L
Chemical:	GROSS ALPHA MDA95		
Sample Collected:	23-JUL-14	Findings:	. 20. C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	23-JUL-14	Findings:	. 25. UNITS
Chemical:	COLOR		
Sample Collected:	23-JUL-14	Findings:	. 570. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	23-JUL-14	Findings:	. 7.6
Chemical:	PH, LABORATORY		
Sample Collected:	23-JUL-14	Findings:	. 180. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	23-JUL-14	Findings:	. 220. MG/L
Chemical:	BICARBONATE ALKALINITY		
Sample Collected:	23-JUL-14	Findings:	. 190. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	23-JUL-14	Findings:	. 57. MG/L
Chemical:	CALCIUM		
Sample Collected:	23-JUL-14	Findings:	. 12. MG/L
Chemical:	MAGNESIUM		
Sample Collected:	23-JUL-14	Findings:	. 47. MG/L
Chemical:	SODIUM		
Sample Collected:	23-JUL-14	Findings:	. 1.9 MG/L
Chemical:	POTASSIUM		
Sample Collected:	23-JUL-14	Findings:	. 21. MG/L
Chemical:	CHLORIDE		
Sample Collected:	23-JUL-14	Findings:	. 0.85 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	23-JUL-14	Findings:	. 4. UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	23-JUL-14	Findings:	. 950. UG/L
Chemical:	IRON		
Sample Collected:	23-JUL-14	Findings:	. 14. UG/L
Chemical:	LEAD		
Sample Collected:	23-JUL-14	Findings:	. 340. UG/L
Chemical:	MANGANESE		

Sample Collected:	23-JUL-14	Findings:	. 11. UG/L
Chemical:	VANADIUM		
Sample Collected:	23-JUL-14	Findings:	. 1100. UG/L
Chemical:	ZINC		
Sample Collected:	23-JUL-14	Findings:	. 86. UG/L
Chemical:	ALUMINUM		
Sample Collected:	23-JUL-14	Findings:	. 1.9 PCI/L
Chemical:	GROSS ALPHA COUNTING ERROR		
Sample Collected:	23-JUL-14	Findings:	. 1.8 UG/L
Chemical:	CHLOROFORM (THM)		
Sample Collected:	23-JUL-14	Findings:	. 360. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	23-JUL-14	Findings:	. 0.82
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	23-JUL-14	Findings:	. 0.22
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	23-JUL-14	Findings:	. 44. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	23-JUL-14	Findings:	. 25. NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	23-JUL-14	Findings:	. 1.8 UG/L
Chemical:	TOTAL TRIHALOMETHANES		
Sample Collected:	23-JUL-14	Findings:	. 12.04
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		
Sample Collected:	23-JUL-14	Findings:	. 10000. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	23-JUL-14	Findings:	. 1.9 PCI/L
Chemical:	GROSS ALPHA MDA95		
Sample Collected:	01-OCT-14	Findings:	. 15. UNITS
Chemical:	COLOR		
Sample Collected:	01-OCT-14	Findings:	. 3000. UG/L
Chemical:	IRON		
Sample Collected:	01-OCT-14	Findings:	. 74. UG/L
Chemical:	MANGANESE		
Sample Collected:	01-OCT-14	Findings:	. 18. NTU
Chemical:	TURBIDITY, LABORATORY		
Sample Collected:	15-OCT-14	Findings:	. 510. UG/L
Chemical:	IRON		
Sample Collected:	15-OCT-14	Findings:	. 22. UG/L
Chemical:	MANGANESE		

E17
North
1/4 - 1/2 Mile
Lower

CA WELLS **2408**

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS

Water System Information:

Prime Station Code:	02S/02W-11M01 S	User ID:	WAT
FRDS Number:	3310017010	County:	Riverside
District Number:	14	Station Type:	WELL/AMBNT/MUN/INTAKE
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	340038.0 1170358.0	Precision:	100 Feet (one Second)
Source Name:	WELL 12		
System Number:	3310017		
System Name:	South Mesa WC		
Organization That Operates System:			
	P O BOX 458		
	CALIMESA, CA 92320		
Pop Served:	7200	Connections:	2539
Area Served:	SOUTH MESA-CALIMESA		
Sample Collected:	10-JAN-11	Findings:	26. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	07-MAR-11	Findings:	21. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	06-JUN-11	Findings:	21. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12-SEP-11	Findings:	20. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	19-DEC-11	Findings:	27. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	12-MAR-12	Findings:	25. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	21-JUN-12	Findings:	20. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10-SEP-12	Findings:	21. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	10-DEC-12	Findings:	29. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	13-MAR-13	Findings:	28. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-APR-13	Findings:	22.222 C
Chemical:	SOURCE TEMPERATURE C		
Sample Collected:	03-APR-13	Findings:	550. US
Chemical:	SPECIFIC CONDUCTANCE		
Sample Collected:	03-APR-13	Findings:	8.2
Chemical:	PH, FIELD		
Sample Collected:	03-APR-13	Findings:	7.8
Chemical:	PH, LABORATORY		
Sample Collected:	03-APR-13	Findings:	180. MG/L
Chemical:	ALKALINITY (TOTAL) AS CACO3		
Sample Collected:	03-APR-13	Findings:	220. MG/L
Chemical:	BICARBONATE ALKALINITY		

Sample Collected:	03-APR-13	Findings:	170. MG/L
Chemical:	HARDNESS (TOTAL) AS CACO3		
Sample Collected:	03-APR-13	Findings:	49. MG/L
Chemical:	CALCIUM		
Sample Collected:	03-APR-13	Findings:	13. MG/L
Chemical:	MAGNESIUM		
Sample Collected:	03-APR-13	Findings:	49. MG/L
Chemical:	SODIUM		
Sample Collected:	03-APR-13	Findings:	1.6 MG/L
Chemical:	POTASSIUM		
Sample Collected:	03-APR-13	Findings:	28. MG/L
Chemical:	CHLORIDE		
Sample Collected:	03-APR-13	Findings:	1.1 MG/L
Chemical:	FLUORIDE (F) (NATURAL-SOURCE)		
Sample Collected:	03-APR-13	Findings:	7.6 UG/L
Chemical:	VANADIUM		
Sample Collected:	03-APR-13	Findings:	0.12 MG/L
Chemical:	FOAMING AGENTS (MBAS)		
Sample Collected:	03-APR-13	Findings:	320. MG/L
Chemical:	TOTAL DISSOLVED SOLIDS		
Sample Collected:	03-APR-13	Findings:	1.33
Chemical:	LANGELIER INDEX @ 60 C		
Sample Collected:	03-APR-13	Findings:	0.76
Chemical:	LANGELIER INDEX AT SOURCE TEMP.		
Sample Collected:	03-APR-13	Findings:	29. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-APR-13	Findings:	12.55
Chemical:	AGGRSSIVE INDEX (CORROSIVITY)		
Sample Collected:	03-APR-13	Findings:	6500. UG/L
Chemical:	NITRATE + NITRITE (AS N)		
Sample Collected:	11-JUN-13	Findings:	29. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	09-SEP-13	Findings:	35. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02-DEC-13	Findings:	27. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	03-MAR-14	Findings:	. 30. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	02-JUN-14	Findings:	. 28. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-SEP-14	Findings:	. 24. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	01-DEC-14	Findings:	. 28. MG/L
Chemical:	NITRATE (AS NO3)		

Sample Collected:	08-DEC-14	Findings:	. 4. UG/L
Chemical:	CHROMIUM, HEXAVALENT		
Sample Collected:	04-MAR-15	Findings:	. 28. MG/L
Chemical:	NITRATE (AS NO3)		
Sample Collected:	08-JUN-15	Findings:	. 24. MG/L
Chemical:	NITRATE (AS NO3)		

F18
SSW
1/4 - 1/2 Mile
Lower

FED USGS **USGS40000139680**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-335949117040601		
Monloc name:	002S002W14M001S		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18070203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	33.9967528
Longitude:	-117.0691306	Sourcemap scale:	24000
Horiz Acc measure:	.01	Horiz Acc measure units:	seconds
Horiz Collection method:	Differentially corrected Global Positioning System (DGPS)		
Horiz coord refsys:	NAD83	Vert measure val:	2352.60
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Differential Global Positioning System (GPS)r		
Vert coord refsys:	NAVD88	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 190

Date	Feet below Surface	Feet to Sealevel
1999-04-01	258	
1998-06-01	230	
1993-10-07	235.9	
1991-11-21	219	
1991-08-15	219	
1991-05-01	453	
1991-02-07	453	
1990-11-01	301	
1990-08-09	335	
1989-07-31	352	
1988-08-24	361	
1988-06-17	353	
1986-06-24	273	
1986-02-10	261	
1985-08-14	408	
1983-12-28	236	
1983-06-15	375	

Date	Feet below Surface	Feet to Sealevel
1999-04-01	258	
1998-06-01	230	
1993-10-07	235.9	
1991-11-21	219	
1991-08-15	219	
1991-05-01	453	
1991-02-07	453	
1990-11-01	301	
1990-08-09	335	
1989-07-31	352	
1988-08-24	361	
1988-06-17	353	
1986-06-24	273	
1986-02-10	261	
1985-08-14	408	
1983-12-28	236	
1983-06-15	375	

Ground-water levels, continued.

Date	Feet below Surface	Feet to Sealevel
1983-04-22	232	
1983-02-08	344	
1982-07-19	216.5	
1982-06-09	251	
1981-12-16	263	
1981-11-24	265	
1981-10-27	264	
1981-08-19	266	
1981-05-15	266.6	
1981-04-15	266	
1981-02-15	264	
1981-01-15	266	
1980-12-15	265	
1980-11-15	267	
1980-10-15	265	
1980-09-15	268	
1980-08-15	263	
1980-05-13	261	
1980-04-15	262	
1980-03-15	263	
1980-02-15	263	
1979-03-15	263	
1979-02-15	264	
1979-01-15	284	
1978-09-15	278	
1978-08-15	278	
1978-03-28	274	
1978-02-28	273	
1977-11-28	277	
1977-10-27	268	
1977-09-22	269	
1977-08-19	269	
1977-06-14	271	
1977-05-23	270	
1977-04-19	269	
1977-03-14	270	
1977-02-14	269	
1977-01-18	277	
1976-12-13	320	
1976-11-12	292	
1976-10-18	303	
1976-09-21	283	
1976-08-18	282	
1976-07-12	278	
1976-05-07	276	
1976-04-13	276	
1976-03-15	268	
1976-01-15	275	
1975-12-15	286	
1975-09-11	293	
1975-08-13	280	
1975-07-16	330	
1975-06-09	293	
1975-05-12	287	
1975-04-10	279	

Date	Feet below Surface	Feet to Sealevel
1983-04-22	232	
1983-02-08	344	
1982-07-19	216.5	
1982-06-09	251	
1981-12-16	263	
1981-11-24	265	
1981-10-27	264	
1981-08-19	266	
1981-05-15	266.6	
1981-04-15	266	
1981-02-15	264	
1981-01-15	266	
1980-12-15	265	
1980-11-15	267	
1980-10-15	265	
1980-09-15	268	
1980-08-15	263	
1980-05-13	261	
1980-04-15	262	
1980-03-15	263	
1980-02-15	263	
1979-03-15	263	
1979-02-15	264	
1979-01-15	284	
1978-09-15	278	
1978-08-15	278	
1978-03-28	274	
1978-02-28	273	
1977-11-28	277	
1977-10-27	268	
1977-09-22	269	
1977-08-19	269	
1977-06-14	271	
1977-05-23	270	
1977-04-19	269	
1977-03-14	270	
1977-02-14	269	
1977-01-18	277	
1976-12-13	320	
1976-11-12	292	
1976-10-18	303	
1976-09-21	283	
1976-08-18	282	
1976-07-12	278	
1976-05-07	276	
1976-04-13	276	
1976-03-15	268	
1976-01-15	275	
1975-12-15	286	
1975-09-11	293	
1975-08-13	280	
1975-07-16	330	
1975-06-09	293	
1975-05-12	287	
1975-04-10	279	

Ground-water levels, continued.

Date	Feet below Surface	Feet to Sealevel
1975-03-11	280	
1975-02-13	282	
1975-01-13	283	
1974-12-16	285	
1974-11-14	290	
1974-08-12	300	
1974-06-12	280	
1974-05-08	291	
1974-04-05	283.7	
1974-03-06	284	
1974-02-07	284.2	
1974-01-10	282	
1973-12-06	291.7	
1973-11-07	288.8	
1973-04-06	278	
1972-12-12	297	
1971-12-27	287	
1970-04-07	298	
1969-11-05	285	
1969-05-02	299	
1969-01-08	287	
1967-11-27	323	
1967-05-10	282	

Date	Feet below Surface	Feet to Sealevel
1975-03-11	280	
1975-02-13	282	
1975-01-13	283	
1974-12-16	285	
1974-11-14	290	
1974-08-12	300	
1974-06-12	280	
1974-05-08	291	
1974-04-05	283.7	
1974-03-06	284	
1974-02-07	284.2	
1974-01-10	282	
1973-12-06	291.7	
1973-11-07	288.8	
1973-04-06	278	
1972-12-12	297	
1971-12-27	287	
1970-04-07	298	
1969-11-05	285	
1969-05-02	299	
1969-01-08	287	
1967-11-27	323	
1967-05-10	282	

F19
SSW
1/4 - 1/2 Mile
Lower

FED USGS **USGS40000139678**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-335948117040501		
Monloc name:	002S002W14E001S		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18070203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	33.9966819
Longitude:	-117.0689201	Sourcemap scale:	24000
Horiz Acc measure:	5	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	2240
Vert measure units:	feet	Vertacc measure val:	20
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19490207	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	1119
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 2

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1949-02-07	256		1949-02-07	256	

F20
SSW
1/2 - 1 Mile
Lower

CA WELLS **CADW60000018777**

Objectid:	18777
Latitude:	33.9967
Longitude:	-117.0698
Site code:	339967N1170698W001
State well numbe:	02S02W14E001S
Local well name:	''
Well use id:	6
Well use descrip:	Unknown
County id:	33
County name:	Riverside
Basin code:	'8-2.08'
Basin desc:	San Timoteo
Dwr region id:	80238
Dwr region:	Southern Region Office
Site id:	CADW60000018777

G21
SE
1/2 - 1 Mile
Higher

CA WELLS **CADW60000031441**

Objectid:	31441
Latitude:	33.9953
Longitude:	-117.0573
Site code:	339953N1170573W001
State well numbe:	02S02W14J002S
Local well name:	''
Well use id:	6
Well use descrip:	Unknown
County id:	33
County name:	Riverside
Basin code:	'8-2.08'
Basin desc:	San Timoteo
Dwr region id:	80238
Dwr region:	Southern Region Office
Site id:	CADW60000031441

22
NW
1/2 - 1 Mile
Lower

FED USGS **USGS40000139762**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-340036117043701		
Monloc name:	002S002W10K001S		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18070203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	34.0100149
Longitude:	-117.0778098	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	Not Reported
Vert measure units:	Not Reported	Vertacc measure val:	Not Reported
Vert accmeasure units:	Not Reported		
Vertcollection method:	Not Reported		
Vert coord refsys:	Not Reported	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	200
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

G23
SE
1/2 - 1 Mile
Higher

FED USGS **USGS40000139618**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-335943117032001		
Monloc name:	002S002W14J002S		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	18070203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	33.9952667
Longitude:	-117.0563778	Sourcemap scale:	24000
Horiz Acc measure:	.01	Horiz Acc measure units:	seconds
Horiz Collection method:	Differentially corrected Global Positioning System (DGPS)		
Horiz coord refsys:	NAD83	Vert measure val:	2418.07
Vert measure units:	feet	Vertacc measure val:	1
Vert accmeasure units:	feet		
Vertcollection method:	Differential Global Positioning System (GPS)r		
Vert coord refsys:	NAVD88	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 28

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
2004-10-25	161.5		2004-10-25	161.5	
2004-04-20	160.5		2004-04-20	160.5	
2003-11-17	160.4		2003-11-17	160.4	
2003-04-28	159.5		2003-04-28	159.5	
2002-11-04	160.5		2002-11-04	160.5	
2002-04-22	158.0		2002-04-22	158.0	
2001-11-05	158.9		2001-11-05	158.9	
2001-05-14	156.9		2001-05-14	156.9	
2000-10-23	157.1		2000-10-23	157.1	
2000-04-25	156.2		2000-04-25	156.2	
1999-10-25	156.9		1999-10-25	156.9	
1999-04-26	155.7		1999-04-26	155.7	
1998-06-02	157.4		1998-06-02	157.4	
1967-05-11	218.52		1967-05-11	218.52	

24
North
1/2 - 1 Mile
Lower

FED USGS **USGS40000139810**

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-340057117040601		
Monloc name:	002S002W11D001S		
Monloc type:	Well		
Monloc desc:	ELEV FROM GPS STUDY BY SBVMWD		
Huc code:	18070203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	34.015848
Longitude:	-117.0691984	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	2327.4
Vert measure units:	feet	Vertacc measure val:	20
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	1956	Welldepth:	518
Welldepth units:	ft	Wellholedepth:	530
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

H25
North
1/2 - 1 Mile
Lower

CA WELLS **2387**

Water System Information:

Prime Station Code:	02S/02W-02N01 S	User ID:	TAN
FRDS Number:	3610055007	County:	San Beernardino
District Number:	13	Station Type:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	340100.0 1170400.0	Precision:	Undefined
Source Name:	WELL 04		
System Number:	3610055		
System Name:	YUCAIPA VALLEY WD ID-A&2		
Organization That Operates System:			
	P.O. BOX 730		
	YUCAIPA, CA 92399		
Pop Served:	34000	Connections:	7831
Area Served:	YUCAIPA		

H26
North
1/2 - 1 Mile
Lower

CA WELLS **2386**

Water System Information:

Prime Station Code:	02S/02W-02M02 S	User ID:	TAN
FRDS Number:	3610055012	County:	San Beernardino
District Number:	13	Station Type:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	340100.0 1170400.0	Precision:	Undefined
Source Name:	WELL 11		
System Number:	3610055		
System Name:	YUCAIPA VALLEY WD ID-A&2		
Organization That Operates System:			
	P.O. BOX 730		
	YUCAIPA, CA 92399		
Pop Served:	34000	Connections:	7831
Area Served:	YUCAIPA		

H27
North
1/2 - 1 Mile
Lower

CA WELLS **2407**

Water System Information:

Prime Station Code:	02S/02W-11D01 S	User ID:	TAN
FRDS Number:	3610055011	County:	San Beernardino
District Number:	13	Station Type:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Water Type:	Well/Groundwater	Well Status:	Active Raw
Source Lat/Long:	340100.0 1170400.0	Precision:	Undefined
Source Name:	WELL 10		
System Number:	3610055		
System Name:	YUCAIPA VALLEY WD ID-A&2		
Organization That Operates System:			
	P.O. BOX 730		
	YUCAIPA, CA 92399		
Pop Served:	34000	Connections:	7831
Area Served:	YUCAIPA		

Map ID
Direction
Distance
Elevation | Database | EDR ID Number

H28
North
1/2 - 1 Mile
Lower | **CA WELLS** | **2403**

Water System Information:

Prime Station Code:	02S/02W-10K01 S	User ID:	TAN
FRDS Number:	3610037006	County:	San Beernardino
District Number:	13	Station Type:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Water Type:	Well/Groundwater	Well Status:	Inactive Raw
Source Lat/Long:	340100.0 1170400.0	Precision:	Undefined
Source Name:	DAIRY BARN WELL - INACTIVE		
System Number:	3610037		
System Name:	REDLANDS CITY MUD-WATER DIV		
Organization That Operates System:			
	PO BOX 3005		
	REDLANDS, CA 92373		
Pop Served:	69300	Connections:	18447
Area Served:	REDLANDS		

I29
ESE
1/2 - 1 Mile
Lower | **CA WELLS** | **2412**

Water System Information:

Prime Station Code:	02S/02W-14B01 S	User ID:	WAT
FRDS Number:	3310017011	County:	Riverside
District Number:	14	Station Type:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Water Type:	Well/Groundwater	Well Status:	Abandoned
Source Lat/Long:	340000.0 1170300.0	Precision:	Undefined
Source Name:	WELL 14 - ABANDONED		
System Number:	3310017		
System Name:	South Mesa WC		
Organization That Operates System:			
	P O BOX 458		
	CALIMESA, CA 92320		
Pop Served:	7200	Connections:	2539
Area Served:	SOUTH MESA-CALIMESA		

I30
ESE
1/2 - 1 Mile
Lower | **CA WELLS** | **2416**

Water System Information:

Prime Station Code:	02S/02W-14J02 S	User ID:	WAT
FRDS Number:	3310017001	County:	Riverside
District Number:	14	Station Type:	WELL/AMBNT/MUN/INTAKE/SUPPLY
Water Type:	Well/Groundwater	Well Status:	Abandoned
Source Lat/Long:	340000.0 1170300.0	Precision:	Undefined
Source Name:	WELL 01 - ABANDONED		

System Number: 3310017
System Name: South Mesa WC
Organization That Operates System:
P O BOX 458
CALIMESA, CA 92320
Pop Served: 7200 Connections: 2539
Area Served: SOUTH MESA-CALIMESA

J31
ENE
1/2 - 1 Mile
Higher

CA WELLS **CADW60000018776**

Objectid: 18776
Latitude: 34.0108
Longitude: -117.0527
Site code: 340108N1170527W001
State well numbe: 02S02W12M001S
Local well name: ''
Well use id: 6
Well use descrip: Unknown
County id: 33
County name: Riverside
Basin code: '8-2.07'
Basin desc: Yucaipa
Dwr region id: 80238
Dwr region: Southern Region Office
Site id: CADW60000018776

J32
ENE
1/2 - 1 Mile
Higher

FED USGS **USGS40000139765**

Org. Identifier: USGS-CA
Formal name: USGS California Water Science Center
Monloc Identifier: USGS-340039117030301
Monloc name: 002S002W12M001S
Monloc type: Well
Monloc desc: Not Reported
Huc code: 18070203 Drainagearea value: Not Reported
Drainagearea Units: Not Reported Contrib drainagearea: Not Reported
Contrib drainagearea units: Not Reported Latitude: 34.0107889
Longitude: -117.0517694 Sourcemap scale: 24000
Horiz Acc measure: .01 Horiz Acc measure units: seconds
Horiz Collection method: Differentially corrected Global Positioning System (DGPS)
Horiz coord refsys: NAD83 Vert measure val: 2474.52
Vert measure units: feet Vertacc measure val: 1
Vert accmeasure units: feet
Vertcollection method: Differential Global Positioning System (GPS)r
Vert coord refsys: NAVD88 Countrycode: US
Aquifername: California Coastal Basin aquifers
Formation type: Not Reported

Aquifer type:	Not Reported		
Construction date:	Not Reported	Welldepth:	Not Reported
Welldepth units:	Not Reported	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 186

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
2002-11-04					
Note: An obstruction was encountered in the well above the water surface (no water level recorded).					
2002-04-22					
Note: An obstruction was encountered in the well above the water surface (no water level recorded).					
2001-11-05					
Note: An obstruction was encountered in the well above the water surface (no water level recorded).					
2001-04-09	321.79				
2000-10-24					
Note: An obstruction was encountered in the well above the water surface (no water level recorded).					
2000-04-25	323.9				
Note: A nearby site that taps the same aquifer was being pumped.					
1999-10-25					
Note: An obstruction was encountered in the well above the water surface (no water level recorded).					
1998-11-09					
Note: An obstruction was encountered in the well above the water surface (no water level recorded).					
1998-11-01					
Note: An obstruction was encountered in the well above the water surface (no water level recorded).					
1998-06-02	322.5				
Note: A nearby site that taps the same aquifer was being pumped.					
1998-06-01	323		1994-11-10	315	
1994-05-09	307.5		1993-10-07	308	
1991-11-12	286		1991-08-14	286	
1991-05-01	286		1991-02-07	284	
1990-11-01	284		1990-08-09	277	
1989-12-01	278		1989-07-31	269	
1988-08-24	269		1988-06-17	270	
1988-05-15	270		1987-06-16	264	
1986-12-16	272		1986-06-24	273	
1986-02-10	261		1985-12-20	276	
1985-08-14	269		1984-12-18	286	
1984-06-07	280		1984-04-03	282	
1983-12-28	282		1983-06-15	299	
1983-04-22	266		1983-02-08	284	
1982-12-07	292		1982-10-25	301	
1982-08-23	300		1982-07-19	299	
1982-06-09	310		1981-12-16	306	
1981-11-24	310		1981-10-27	309	
1981-09-16	307		1981-08-19	307	
1981-07-15	307		1981-06-24	310	
1981-05-15	309		1981-04-15	309	
1981-03-15	311		1981-02-15	306	
1981-01-15	307		1980-12-15	307	
1980-11-15	310		1980-09-15	313	
1980-08-15	310		1980-07-15	312	
1980-06-15	310		1980-05-15	310	
1980-04-15	310		1980-03-15	301	
1980-02-15	313		1980-01-15	315	
1979-12-15	316		1979-11-15	316	
1979-10-15	317		1979-09-15	310	
1979-08-15	311		1979-07-15	311	

Ground-water levels, continued.

Date	Feet below Surface	Feet to Sealevel
1979-06-15	310	
1979-04-15	311	
1979-02-15	311	
1978-12-15	325	
1978-10-15	326	
1978-08-15	320	
1978-02-28	323	
1977-10-27	323	
1977-08-19	318	
1977-05-23	321	
1977-03-14	323	
1977-01-18	324.5	
1976-11-12	325.7	
1976-09-21	326.5	
1976-07-12	323	
1976-05-07	322	
1976-03-15	323.5	
1975-12-15	327	
1975-10-13	327	
1975-08-13	325	
1975-06-09	323	
1975-04-10	324	
1975-02-13	326	
1974-12-16	328	
1974-10-10	319	
1974-08-12	320	
1974-06-12	315	
1974-04-05	327.4	
1974-02-07	330	
1973-12-06	332.7	
1973-04-06	329	
1971-12-27	332	
1969-01-08	336	
1956-08-09	298	
1949-07-26	265	
1948-10-06	258.2	
1948-04-14	248.2	
1947-12-05	257.8	
1945-04-03	239.8	
1943-04-01	235.4	
1941-10-03	227.8	
1940-10-04	237.8	
1939-10-04	232.3	
1938-10-04	232.4	
1937-10-04	235	
1936-04-04	224	
1935-04-10	224.5	
1933-04-12	222.2	
1932-04-13	221	
1931-10-12	228.4	
1930-10-04	240.6	
1929-12-06	224.9	
1929-03-11	217.7	
1928-12-06	222.5	
1928-10-06	227.6	
1979-05-15	311	
1979-03-15	312	
1979-01-15	314	
1978-11-15	326	
1978-09-15	326	
1978-03-28	322.5	
1977-11-28	325	
1977-09-22	324	
1977-06-14	320.5	
1977-04-19	322	
1977-02-14	325	
1976-12-13	325	
1976-10-18	326	
1976-08-18	325	
1976-06-08	322.5	
1976-04-13	322.5	
1976-01-15	326.5	
1975-11-10	327	
1975-09-11	326	
1975-07-16	323.5	
1975-05-12	323	
1975-03-11	325	
1975-01-13	327	
1974-11-14	329	
1974-09-17	320	
1974-07-16	318	
1974-05-08	325	
1974-03-06	328.5	
1974-01-10	331.3	
1973-11-07	328.5	
1972-12-12	330	
1970-12-07	333	
1967-01-05	332	
1955-03-30	306.7	
1949-04-06	254.1	
1948-04-15	248.2	
1947-12-09	257.9	
1947-04-05	248	
1944-04-05	235.5	
1942-10-12	239.4	
1941-04-03	229	
1940-04-03	227.2	
1939-04-04	227.3	
1938-04-02	228.1	
1937-04-03	226.5	
1935-10-10	236.5	
1934-04-06	222	
1932-10-10	233.5	
1932-03-31	221.5	
1931-04-04	224.3	
1930-04-30	219.4	
1929-04-19	216.4	
1929-01-07	220.3	
1928-11-02	224.1	
1928-01-28	214.6	

Ground-water levels, continued.

Date	Feet below Surface	Feet to Sealevel	Date	Feet below Surface	Feet to Sealevel
1927-10-07	220.6		1927-05-01	206.4	
1927-01-31	209		1926-12-06	211.8	

33
NNE **FED USGS** **USGS40000139809**
1/2 - 1 Mile
Higher

Org. Identifier:	USGS-CA		
Formal name:	USGS California Water Science Center		
Monloc Identifier:	USGS-340057117032501		
Monloc name:	002S002W11B001S		
Monloc type:	Well		
Monloc desc:	Well was 464 ft deep, now 638, no record deepening		
Huc code:	18070203	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	34.0158479
Longitude:	-117.0578089	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	2420
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	NGVD29	Countrycode:	US
Aquifername:	California Coastal Basin aquifers		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	1922	Welldepth:	638
Welldepth units:	ft	Wellholedepth:	638
Wellholedepth units:	ft		

Ground-water levels, Number of Measurements: 0

GEOCHECK® - PHYSICAL SETTING SOURCE MAP FINDINGS
RADON

AREA RADON INFORMATION

State Database: CA Radon

Radon Test Results

Zipcode	Num Tests	> 4 pCi/L
92320	4	0

Federal EPA Radon Zone for RIVERSIDE County: 2

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for RIVERSIDE COUNTY, CA

Number of sites tested: 12

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.117 pCi/L	100%	0%	0%
Living Area - 2nd Floor	0.450 pCi/L	100%	0%	0%
Basement	1.700 pCi/L	100%	0%	0%

PHYSICAL SETTING SOURCE RECORDS SEARCHED

TOPOGRAPHIC INFORMATION

USGS 7.5' Digital Elevation Model (DEM)
Source: United States Geologic Survey
EDR acquired the USGS 7.5' Digital Elevation Model in 2002 and updated it in 2006. The 7.5 minute DEM corresponds to the USGS 1:24,000- and 1:25,000-scale topographic quadrangle maps. The DEM provides elevation data with consistent elevation units and projection.

Current USGS 7.5 Minute Topographic Map
Source: U.S. Geological Survey

HYDROLOGIC INFORMATION

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetland Inventory
Source: Department of Fish & Game
Telephone: 916-445-0411

HYDROGEOLOGIC INFORMATION

AQUIFLOW^{R} Information System
Source: EDR proprietary database of groundwater flow information
EDR has developed the AQUIFLOW Information System (AIS) to provide data on the general direction of groundwater flow at specific points. EDR has reviewed reports submitted to regulatory authorities at select sites and has extracted the date of the report, hydrogeologically determined groundwater flow direction and depth to water table information.

GEOLOGIC INFORMATION

Geologic Age and Rock Stratigraphic Unit
Source: P.G. Schruben, R.E. Arndt and W.J. Bawiec, Geology of the Conterminous U.S. at 1:2,500,000 Scale - A digital representation of the 1974 P.B. King and H.M. Beikman Map, USGS Digital Data Series DDS - 11 (1994).

STATSGO: State Soil Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
The U.S. Department of Agriculture's (USDA) Natural Resources Conservation Service (NRCS) leads the national Conservation Soil Survey (NCSS) and is responsible for collecting, storing, maintaining and distributing soil survey information for privately owned lands in the United States. A soil map in a soil survey is a representation of soil patterns in a landscape. Soil maps for STATSGO are compiled by generalizing more detailed (SSURGO) soil survey maps.

SSURGO: Soil Survey Geographic Database
Source: Department of Agriculture, Natural Resources Conservation Service (NRCS)
Telephone: 800-672-5559
SSURGO is the most detailed level of mapping done by the Natural Resources Conservation Service, mapping scales generally range from 1:12,000 to 1:63,360. Field mapping methods using national standards are used to construct the soil maps in the Soil Survey Geographic (SSURGO) database. SSURGO digitizing duplicates the original soil survey maps. This level of mapping is designed for use by landowners, townships and county natural resource planning and management.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

LOCAL / REGIONAL WATER AGENCY RECORDS

FEDERAL WATER WELLS

PWS: Public Water Systems
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data
Source: EPA/Office of Drinking Water
Telephone: 202-564-3750
Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)
This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

STATE RECORDS

Water Well Database
Source: Department of Water Resources
Telephone: 916-651-9648

California Drinking Water Quality Database
Source: Department of Public Health
Telephone: 916-324-2319
The database includes all drinking water compliance and special studies monitoring for the state of California since 1984. It consists of over 3,200,000 individual analyses along with well and water system information.

OTHER STATE DATABASE INFORMATION

California Oil and Gas Well Locations
Source: Department of Conservation
Telephone: 916-323-1779
Oil and Gas well locations in the state.

RADON

State Database: CA Radon
Source: Department of Health Services
Telephone: 916-324-2208
Radon Database for California

Area Radon Information
Source: USGS
Telephone: 703-356-4020
The National Radon Database has been developed by the U.S. Environmental Protection Agency (USEPA) and is a compilation of the EPA/State Residential Radon Survey and the National Residential Radon Survey. The study covers the years 1986 - 1992. Where necessary data has been supplemented by information collected at private sources such as universities and research institutions.

EPA Radon Zones
Source: EPA
Telephone: 703-356-4020
Sections 307 & 309 of IRAA directed EPA to list and identify areas of U.S. with the potential for elevated indoor radon levels.

PHYSICAL SETTING SOURCE RECORDS SEARCHED

OTHER

Airport Landing Facilities: Private and public use landing facilities
Source: Federal Aviation Administration, 800-457-6656

Epicenters: World earthquake epicenters, Richter 5 or greater
Source: Department of Commerce, National Oceanic and Atmospheric Administration

California Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary fault lines, prepared in 1975 by the United State Geological Survey. Additional information (also from 1975) regarding activity at specific fault lines comes from California's Preliminary Fault Activity Map prepared by the California Division of Mines and Geology.

STREET AND ADDRESS INFORMATION

Calimesa Vacant Lot

Northwest Corner of County Line Road & 7th Place

Calimesa, CA 92320

Inquiry Number: 4721830.5

September 09, 2016

The EDR Aerial Photo Decade Package

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

EDR Aerial Photo Decade Package

09/09/16

Site Name:

Calimesa Vacant Lot
Northwest Corner of County Lir
Calimesa, CA 92320
EDR Inquiry # 4721830.5

Client Name:

Partner Engineering and Science, Inc.
2154 Torrance Blvd, Suite 200
Torrance, CA 90501-0000
Contact: Brett Nielsen

Environmental Data Resources, Inc. (EDR) Aerial Photo Decade Package is a screening tool designed to assist environmental professionals in evaluating potential liability on a target property resulting from past activities. EDR's professional researchers provide digitally reproduced historical aerial photographs, and when available, provide one photo per decade.

Search Results:

Year	*Scale*	*Details*	*Source*
1938	1"=500'	Flight Date: August 09, 1938	USDA
1949	1"=500'	Flight Date: May 23, 1949	USDA
1953	1"=500'	Flight Date: February 16, 1953	USDA
1959	1"=500'	Flight Date: October 16, 1959	USDA
1961	1"=500'	Flight Date: July 08, 1961	USDA
1967	1"=500'	Flight Date: May 09, 1967	USDA
1975	1"=500'	Flight Date: August 01, 1975	USGS
1985	1"=500'	Flight Date: September 02, 1985	USDA
1989	1"=500'	Flight Date: August 14, 1989	USDA
1990	1"=500'	Flight Date: August 29, 1990	USDA
1995	1"=500'	Acquisition Date: October 07, 1995	USGS/DOQQ
2005	1"=500'	Flight Year: 2005	USDA/NAIP
2006	1"=500'	Flight Year: 2006	USDA/NAIP
2009	1"=500'	Flight Year: 2009	USDA/NAIP
2010	1"=500'	Flight Year: 2010	USDA/NAIP
2012	1"=500'	Flight Year: 2012	USDA/NAIP

When delivered electronically by EDR, the aerial photo images included with this report are for ONE TIME USE ONLY. Further reproduction of these aerial photo images is prohibited without permission from EDR. For more information contact your EDR Account Executive.


INQUIRY #: 4721830.5
YEAR: 1938
= 500'
N
EDR


INQUIRY #: 4721830.5
YEAR: 1949
= 500'
N
EDR


INQUIRY #: 4721830.5
YEAR: 1953
= 500'
N
EDR


INQUIRY #: 4721830.5
YEAR: 1959
= 500'
N
EDR


INQUIRY #: 4721830.5
YEAR: 1961
= 500'
N
EDR


INQUIRY #: 4721830.5
YEAR: 1967
= 500'
N
EDR


INQUIRY #: 4721830.5
YEAR: 1975
= 500'
N
EDR


INQUIRY #: 4721830.5
YEAR: 1985
= 500'
N
EDR


INQUIRY #: 4721830.5
YEAR: 1989
= 500'
N
EDR


INQUIRY #: 4721830.5
YEAR: 1990
= 500'
N
EDR


INQUIRY #: 4721830.5
YEAR: 1995
= 500'
N
EDR


INQUIRY #: 4721830.5
YEAR: 2005
= 500'
N
EDR


INQUIRY #: 4721830.5
YEAR: 2006
= 500'
N
EDR


INQUIRY #: 4721830.5
YEAR: 2009
= 500'
N
EDR


INQUIRY #: 4721830.5
YEAR: 2010
= 500'
N
EDR


INQUIRY #: 4721830.5
YEAR: 2012
= 500'
N
EDR

Calimesa Vacant Lot

Northwest Corner of County Line Road & 7th Place

Calimesa, CA 92320

Inquiry Number: 4721830.3

September 08, 2016

Certified Sanborn® Map Report

6 Armstrong Road, 4th floor
Shelton, CT 06484
Toll Free: 800.352.0050
www.edrnet.com

Certified Sanborn® Map Report

09/08/16

Site Name:

Calimesa Vacant Lot
Northwest Corner of County Lir
Calimesa, CA 92320
EDR Inquiry # 4721830.3

Client Name:

Partner Engineering and Science, Inc.
2154 Torrance Blvd, Suite 200
Torrance, CA 90501-0000
Contact: Brett Nielsen

The Sanborn Library has been searched by EDR and maps covering the target property location as provided by Partner Engineering and Science, Inc. were identified for the years listed below. The Sanborn Library is the largest, most complete collection of fire insurance maps. The collection includes maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow, and others. Only Environmental Data Resources Inc. (EDR) is authorized to grant rights for commercial reproduction of maps by the Sanborn Library LLC, the copyright holder for the collection. Results can be authenticated by visiting www.edrnet.com/sanborn.

The Sanborn Library is continually enhanced with newly identified map archives. This report accesses all maps in the collection as of the day this report was generated.

Certified Sanborn Results:

Certification # B75B-40AB-9ED3

PO # NA

Project 16-170530.1

UNMAPPED PROPERTY

This report certifies that the complete holdings of the Sanborn Library, LLC collection have been searched based on client supplied target property information, and fire insurance maps covering the target property were not found.

Sanborn® Library search results

Certification #: B75B-40AB-9ED3

The Sanborn Library includes more than 1.2 million fire insurance maps from Sanborn, Bromley, Perris & Browne, Hopkins, Barlow and others which track historical property usage in approximately 12,000 American cities and towns. Collections searched:

- ☑ Library of Congress
- ☑ University Publications of America
- ☑ EDR Private Collection

The Sanborn Library LLC Since 1866™

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Property Information for the 2014-2015 tax year as of January 1, 2014

Property Information

Parcel Number:	411040002-0
Property Address:	
Legal Description:	Lot 243 MB 010/032 RESURVEY OF PART OF SUB 9 YUCAIPA VALLEY
Property Type:	N/A
Assessment Description:	N/A
Year Built	N/A
Square Feet:	N/A
Bedroom:	N/A
Bath:	N/A
Pool:	N
Lot Size:	0.86 Acres

Sales Information

Last Recorded Document:	08/1990
Recording Number:	0228508

Assessed Value Information

Land	419,004
Full Value	419,004
Total Net	419,004

Assessment Information

Assessment Number:	411040002-0
Tax Rate Area:	022-053
Taxability Code:	0-00
Base Year:	1991

Parcel Map

View Parcel Map

Related Property Information

City Sphere:	CALIMESA
Supervisorial District:	MARION ASHLEY
Landuse Designation:	CITY
Agriculture Preserve:	NOT IN AN AGRICULTURE PRESERVE
School District:	YUCAIPA-CALIMESA JOINT UNIFIED
Water District:	SGPWA
Fema Flood Plan:	FLOOD ZONE X

Tax Assessment District

CALIMESA RDV PROJ 1
CITY OF CALIMESA
COUNTY FREE LIBRARY
COUNTY STRUCTURE FIRE PROTECTION
EAST VALLEY RESOURCE CONS
ERAF RDV
FLOOD CONTROL ADMINISTRATION
FLOOD CONTROL ZONE 5
GENERAL
GENERAL PURPOSE
RIV CO REG PARK & OPEN SPACE
RIV. CO. OFFICE OF EDUCATION
SAN BERNARDINO VAL COM COLLEGE
SAN GORGONIO PASS WTR AG DEBT SV
SUMMIT CEMETERY DISTRICT
YUCAIPA UNIFIED B AND I
YUCAIPA UNIFIED SCHOOL
YUCAIPA UNIFIED STATE REPAYMENT
YUCAIPA VALLEY COUNTY WATER

411-04
15-4-1

TRA 022-053

POR. NW. 1/4 SEC. 14, T.2S., R.2W

THIS MAP IS FOR ASSESSMENT PURPOSES ONLY

Resurvey of
M.B. 10/32 Part of Sub. 9 of a Part of Yucaipa Valley

ASSESSOR'S MAP BK. 411 PG. 04

Appendix C

Air Quality Technical Memo

605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 760.942.5147 F 760.632.0164

MEMORANDUM

To:	Claudia Graujeda, Project Manager
From:	Ian McIntires, Dudek
Subject:	Air Quality Analysis for the 7th Street and County Line Road RV Fueling and Retail Project
Date:	December 2, 2019
Attachment(s):	A: CalEEMod 2016.3.2 Modeling and Estimated Emissions

County Line Road RV Fueling and Retail Project (Project) located northeast of County Line Lane and County Line Road in the City of Calimesa (City), California. This memorandum estimates criteria air pollutant emissions from construction and operation of the Project and evaluates potential air quality impacts resulting from Project implementation.

The Project is located within the South Coast Air Basin (SCAB) and is within the jurisdictional boundaries of the South Coast Air Quality Management District (SCAQMD), which has jurisdiction over Calimesa. California Emissions Estimator Model (CalEEMod) Version 2016.3.2 was used to estimate air quality emissions.

The contents and organization of this memorandum are as follows: project description; environmental setting; methodology; threshold of significance and an impact analysis for the air quality assessment; conclusions; and references cited.

1 Project Description

The Project includes the construction of 3,000 square feet of coffee/donut shop and a 3 fueling position RV fueling facility on a 1.3-acre site, which is currently unoccupied. Access to the Project site would be provided on County Line Lane via two protected driveways. In addition, Right turn in only access to the Project site would be provided on County Line Road via two protected driveways.

2 Environmental Setting

2.3 Existing Conditions

The Project is located within the SCAB. The SCAB is a 6,745-square-mile area bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The SCAB's air pollution problems are a consequence of the combination of emissions from the nation's second-largest urban area, meteorological conditions that hinder dispersion of those emissions, and mountainous terrain surrounding

the SCAB that traps pollutants as they are pushed inland with the sea breeze (SCAQMD 2017). Meteorological and topographical factors that affect air quality in the SCAB are described below.[1]

Climate

The SCAB is characterized as having a Mediterranean climate (typified as semiarid with mild winters, warm summers, and moderate rainfall). The general region lies in the semi-permanent high-pressure zone of the eastern Pacific; as a result, the climate is mild and tempered by cool sea breezes. The usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds. The extent and severity of the air pollution problem in the SCAB is a function of the area's natural physical characteristics (e.g., weather and topography) and of manufactured influences (e.g., development patterns and lifestyle). Moderate temperatures, comfortable humidity, and limited precipitation characterize the climate in the SCAB. The average annual temperature varies little throughout the SCAB, averaging 75 degrees Fahrenheit (°F). However, with a less-pronounced oceanic influence, the eastern inland portions of the SCAB show greater variability in annual minimum and maximum temperatures. All portions of the SCAB have recorded temperatures over 100°F in recent years. Although the SCAB has a semiarid climate, the air near the surface is moist because of the presence of a shallow marine layer. Except for infrequent periods when dry air is brought into the SCAB by offshore winds, the ocean effect is dominant. Periods with heavy fog are frequent, and low stratus clouds, occasionally referred to as "high fog," are a characteristic climate feature. Annual average relative humidity is 70% at the coast and 57% in the eastern part of the SCAB. Precipitation in the SCAB is typically 9 to 14 inches annually and is rarely in the form of snow or hail because of typically warm weather. The frequency and amount of rainfall is greater in the coastal areas of the SCAB.

The City of Calimesa's climate is characterized by relatively low rainfall, with warm summers and mild winters. Average temperatures range from a high of 94°F in August to a low of 39°F in December (Western Regional Climate Center (WRCC) 2016).[2] Annual precipitation averages about 14 inches, falling mostly from October through April (WRCC 2016).

Sunlight

The presence and intensity of sunlight are necessary prerequisites for the formation of photochemical smog. Under the influence of the ultraviolet radiation of sunlight, certain "primary" pollutants (mainly reactive hydrocarbons and oxides of nitrogen [NO_X][3]) react to form "secondary" pollutants (primarily oxidants). Since this process is time dependent, secondary pollutants can be formed many miles downwind of the emission sources. Southern California also has abundant sunshine, which drives the photochemical reactions that form pollutants such as ozone (O_3) and a substantial portion of fine particulate matter ($PM_{2.5}$, particles less than 2.5 microns in diameter). In the SCAB, high concentrations of O_3 are normally recorded during the late spring, summer, and early autumn months, when more intense sunlight drives enhanced photochemical reactions. Because of the prevailing daytime winds and time-

1 The discussion of meteorological and topographical conditions of the SCAB is based on information provided in the *Final 2016 Air Quality Management Plan* (SCAQMD 2017).

2 Local climate data for the City is based on the closest and most-representative station measured by the Western Regional Climate Center, which is the Long Beach WSCMO climatological station.

3 NO_X is a general term pertaining to compounds of nitric oxide (NO), nitrogen dioxide (NO_2) and other oxides of nitrogen.

delayed nature of photochemical smog, oxidant concentrations are highest in the inland areas of Southern California.

Temperature Inversions

Under ideal meteorological conditions and irrespective of topography, pollutants emitted into the air mix and disperse into the upper atmosphere. However, the Southern California region frequently experiences temperature inversions in which pollutants are trapped and accumulate close to the ground. The inversion, a layer of warm, dry air overlaying cool, moist marine air, is a normal condition in coastal Southern California. The cool, damp, and hazy sea air capped by coastal clouds is heavier than the warm, clear air, which acts as a lid through which the cooler marine layer cannot rise. The height of the inversion is important in determining pollutant concentration. When the inversion is approximately 2,500 feet above mean sea level (amsl), the sea breezes carry the pollutants inland to escape over the mountain slopes or through the passes. At a height of 1,200 feet amsl, the terrain prevents the pollutants from entering the upper atmosphere, resulting in the pollutants settling in the foothill communities. Below 1,200 feet amsl, the inversion puts a tight lid on pollutants, concentrating them in a shallow layer over the entire coastal basin. Usually, inversions are lower before sunrise than during the daylight hours.

Mixing heights for inversions are lower in the summer and inversions are more persistent, being partly responsible for the high levels of O_3 observed during summer months in the SCAB. Smog in Southern California is generally the result of these temperature inversions combining with coastal day winds and local mountains to contain the pollutants for long periods, allowing them to form secondary pollutants by reacting in the presence of sunlight. The SCAB has a limited ability to disperse these pollutants due to typically low wind speeds and the surrounding mountain ranges.

As with other cities within the SCAB, the City is susceptible to air inversions, which trap a layer of stagnant air near the ground where pollutants are further concentrated. These inversions produce haziness, which is caused by moisture, suspended dust, and a variety of chemical aerosols emitted by trucks, automobiles, furnaces, and other sources. Elevated concentrations of particles less than 10 microns in diameter (PM_{10}) and of $PM_{2.5}$ can occur in the SCAB throughout the year, but they occur most frequently in fall and winter. Although there are some changes in emissions by day of the week and by season, the observed variations in pollutant concentrations are primarily the result of seasonal differences in weather conditions.

2.3 Criteria Air Pollutants

Criteria air pollutants are defined as pollutants for which the federal and state governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. Criteria air pollutants that are evaluated include volatile organic compounds (VOCs, also referred to as reactive organic gases (ROGs)), NO_x, carbon monoxide (CO), sulfur oxides (SO_x), PM_{10}, and $PM_{2.5}$. VOCs and NO_x are important because they are precursors to ozone (O_3) formation. Criteria air pollutant emissions from construction activities is typically associated with operation of off-road construction equipment, on-road hauling and vendor (material delivery) trucks, and worker vehicle trips. Operational emission sources for the Project would typically include mobile (vehicle) sources, area sources associated with use of consumer products, as well as energy use (electricity and natural gas) associated with operations.

3 Methodology

3.1 Construction

Emissions from Project construction activities were estimated using the CalEEMod. CalEEMod is a statewide computer model developed in cooperation with air districts throughout the state to quantify criteria air pollutant and GHG emissions associated with the construction and operational activities from a variety of land use projects, such as residential, commercial, and industrial facilities. CalEEMod input parameters, including the Project land use type and size and construction schedule were based on information provided by the Project applicant, or default model assumptions if Project specifics were unavailable.

For the purposes of estimating the Project construction emissions, it is anticipated that construction would commence in May 2020 and would be completed by April 2021. The construction equipment mix and estimated hours of equipment operation per day used for the air emissions modeling of the Project are based on CalEEMod defaults based on the multi-family residential land use type which are shown in Table 1. Construction worker estimates, vendor, and haul truck trips by construction phase were based on CalEEMod default values. CalEEMod default trip length values were used for the distances for all construction-related trips.

The construction equipment mix and vehicle trips used for estimating the Project-generated construction emissions are shown in Table 1.

Table 1
Construction Scenario Assumptions

Construction Phase	One-way Vehicle Trips			Equipment		
	Average Daily Worker Trips	Average Daily Vendor Truck Trips	Total Haul Truck Trips	Equipment Type	Quantity	Usage Hours
Demolition	14	0	8	Concrete/Industrial Saws	1	8
				Rubber Tired Dozers	1	8
				Tractors/Loaders/Backhoes	3	8
Site Preparation	8	0	0	Graders	1	8
				Rubber Tired Dozers	1	7
				Tractors/Loaders/Backhoes	1	8
Grading	8	0	0	Graders	1	6
				Rubber Tired Dozers	1	6
				Tractors/Loaders/Backhoes	1	7
Building Construction	24	9	0	Cranes	1	6
				Forklifts	1	6
				Generator Sets	1	8
				Tractors/Loaders/Backhoes	1	6
				Welders	3	8
Paving	14	0	0	Cement and Mortar Mixers	1	6
				Pavers	1	6
				Paving Equipment	1	8
				Rollers	1	7
				Tractors/Loaders/Backhoes	1	8
Architectural Coating	6	0	0	Air Compressors	1	6

Source: See Attachment A for details.

3.2 Operations

During long-term operations, the Project would generate air pollutants and GHGs from mobile, energy, and area sources. GHGs would also be generated by water and waste water generation and solid waste. CalEEMod was used to estimate emissions from all these sources. Emission factors representing the vehicle mix and emissions for 2022 were used to estimate emissions associated with mobile sources. Default CalEEMod assumptions were used for building and lighting electricity use, generation of electricity associated with water supply, treatment, distribution and wastewater treatment, natural gas combustion, area sources (i.e., landscaping, consumer products, and architectural coatings for building maintenance) and solid waste disposal. However, default vehicle trip generation rates included in CalEEMod for the Project were adjusted to match the Project trip generation estimates from the Traffic Impact Analysis (TIA). Overall, the Project would result in approximately 2,977 daily vehicle trips.

4 Air Quality Assessment

4.1 Thresholds of Significance

The State of California has developed guidelines to address the significance of air quality impacts based on Appendix G of the CEQA Guidelines (14 CCR 15000 et seq.), which provides guidance that a Project would have a significant environmental impact if it would:

- Conflict with or obstruct the implementation of the applicable air quality plan (AQP)
- Result in a cumulatively considerable new increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard
- Expose sensitive receptors to substantial pollutant concentrations
- Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people

Construction of the Project would result in emissions of criteria air pollutants for which the California Air Resources Board (CARB) and the United States Environmental Protection Agency (EPA) have adopted ambient air quality standards (i.e., the National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS)). Projects that emit these pollutants have the potential to cause or contribute to violations of these standards. The SCAQMD *CEQA Air Quality Handbook*, as revised in March 2015, sets forth quantitative emission significance thresholds for criteria air pollutants, which, if exceeded, would indicate the potential to contribute to violations of the NAAQS or CAAQS. Project-related air quality impacts estimated in this environmental analysis, as shown in Table 2 (SCAQMD Air Quality Significance Thresholds), would be exceeded.

If the Project's construction or operational emissions would exceed the SCAQMD VOC or NO_x thresholds shown in Table 2, then it would result in a substantial contribution to an existing air quality violation of the NAAQS or CAAQS for O_3, which is a nonattainment pollutant. Ozone is not emitted directly into the air but is a pollutant formed by a photochemical reaction in the atmosphere. Ozone precursors, VOC and NO_x, react in the atmosphere in the presence of sunlight to form ozone. Therefore, the SCAQMD does not have a recommended ozone threshold, but it does have thresholds of significance for VOC and NO_x.

Table 2
SCAQMD Air Quality Significance Thresholds

Criteria Pollutants Mass Daily Thresholds		
Pollutant	Construction (pounds per day)	Operation (pounds per day)
VOCs	75	55
NO_x	100	55
CO	550	550
SO_x	150	150
PM_{10}	150	150
$PM_{2.5}$	55	55
Lead[a]	3	3
TACs and Odor Thresholds		
TACs[b]	Maximum incremental cancer risk ≥ 10 in 1 million Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 in 1 million) Chronic and acute hazard index ≥ 1.0 (project increment)	
Odor	Project creates an odor nuisance pursuant to SCAQMD Rule 402	
Ambient Air Quality Standards for Criteria Pollutants[c]		
NO_2 1-hour average NO_2 annual arithmetic mean	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 0.18 ppm (state) 0.030 ppm (state) and 0.0534 ppm (federal)	
CO 1-hour average CO 8-hour average	SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 20 ppm (state) and 35 ppm (federal) 9.0 ppm (state/federal)	
PM_{10} 24-hour average PM_{10} annual average	10.4 μg/m³ (construction)[d] 2.5 μg/m³ (operation) 1.0 μg/m³	
$PM_{2.5}$ 24-hour average	10.4 μg/m³ (construction)[d] 2.5 μg/m³ (operation)	

Source: SCAQMD 2015.
Notes: SCAQMD = South Coast Air Quality Management District; VOC = volatile organic compounds; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; TAC = toxic air contaminant; NO_2 = nitrogen dioxide; ppm = parts per million by volume; μg/m³ = micrograms per cubic meter.
GHG emissions thresholds for industrial projects, as added in the March 2015 revision to the SCAQMD Air Quality Significance Thresholds, were not include included in Table 3.2-4 as they are addressed within the GHG emissions analysis and not the air quality analysis.

[a] The phaseout of leaded gasoline started in 1976. Since gasoline no longer contains lead, the Project is not anticipated to result in impacts related to lead; therefore, it is not discussed in this analysis.
[b] TACs include carcinogens and noncarcinogens.
[c] Ambient air quality standards for criteria pollutants are based on SCAQMD Rule 1303, Table A-2, unless otherwise stated.
[d] Ambient air quality threshold are based on SCAQMD Rule 403.

4.1 Impact Analysis

a) Would the Project Conflict With or Obstruct Implementation of the Applicable Air Quality Plan?

As previously discussed, the Project site is located within the SCAB under the jurisdiction of the SCAQMD, which is the local agency responsible for administration and enforcement of air quality regulations for the area. The SCAQMD has established criteria for determining consistency with the AQMP, currently the 2016 AQMP, in Chapter 12, Sections 12.2 and 12.3, in the SCAQMD CEQA Air Quality Handbook (SCAQMD 1993). The criteria are as follows (SCAQMD 1993):

- **Consistency Criterion No. 1:** The Project will not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, or delay the timely attainment of air quality standards of the interim emissions reductions specified in the AQMP.
- **Consistency Criterion No. 2:** The Project will not exceed the assumptions in the AQMP or increments based on the year of project buildout and phase.

Consistency Criterion No. 1

Impact Criterion b), evaluates the Project's potential impacts in regards to CEQA Guidelines Appendix G Threshold 2 (the Project's potential to violate any air quality standard or contribute substantially to an existing or projected air quality violation impact analysis). As discussed in below, the Project would result in a less than significant impact associated with the violation of an air quality standard. Because the Project would not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, the Project would not conflict with Consistency Criterion No. 1 of the SCAQMD CEQA Air Quality Handbook.

Consistency Criterion No. 2

While striving to achieve the NAAQS for O_3 and $PM_{2.5}$ and the CAAQS for O_3, PM_{10}, and $PM_{2.5}$ through a variety of air quality control measures, the 2016 AQMP also accommodates planned growth in the SCAB. Projects are considered consistent with, and would not conflict with or obstruct implementation of, the AQMP if the growth in socioeconomic factors (e.g., population, employment) is consistent with the underlying regional plans used to develop the AQMP (per Consistency Criterion No. 2 of the SCAQMD CEQA Air Quality Handbook).

The SCAQMD primarily uses demographic growth forecasts for various socioeconomic categories (e.g., population, housing, employment by industry) developed by the SCAG for its RTP/SCS (SCAG 2016), which is based on general plans for cities and counties in the SCAB, for the development of the AQMP emissions inventory (SCAQMD 2017).[4] The SCAG 2016 RTP/SCS, and associated Regional Growth Forecast, are

[4] Information necessary to produce the emission inventory for the SCAB is obtained from the SCAQMD and other governmental agencies, including CARB, Caltrans, and SCAG. Each of these agencies is responsible for collecting data (e.g., industry growth factors, socio-economic projections, travel activity levels, emission factors, emission speciation profile, and emissions) and developing methodologies (e.g., model and demographic forecast improvements) required to generate a comprehensive emissions inventory. SCAG incorporates these data into their

generally consistent with the local plans; therefore, the 2016 AQMP is generally consistent with local government plans.

The City's 2014 General Plan identifies the Project site as C-C (Community Commercial) (City of Calimesa 2014). The Project would be consistent with the current zoning and General Plan land use designation. In addition, the Project does not include development that would result in population growth. The Project includes development of a coffee/donut shop and a 3 fueling position RV fueling facility, which would be consistent with the City's zoning and General Plan as well as SCAG's growth projections anticipated in the 2016 Final AQMP. Vehicle trips and trip distance would be consistent with SCAG's growth projections anticipated in the 2016 Final AQMP. As such, it is reasonable to assume vehicle trip generation and planned development for the site has been anticipated in the SCAG growth projections because the land use would remain the same (i.e., commercial). Because the Project is consistent with the anticipated population growth of the City and the associated vehicle trips have been factored into the underlying growth projections of the 2016 Final AQMP, the Project would not result in a conflict with, or obstruct implementation of, the applicable air quality plan. Accordingly, the Project would meet Consistency Criterion No. 2 of the SCAQMD *CEQA Air Quality Handbook*.

Summary

As described previously, the Project would not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, and would not conflict with Consistency Criterion No. 1. The Project would be consistent with the land use assumptions and demographic growth forecasts in the SCAG 2016 RTP/SCS; therefore, would also be consistent with the SCAQMD 2016 AQMP, which based future emission estimates on the SCAG 2016 RTP/SCS. Thus, the Project would not conflict with Consistency Criterion No. 2. Based on these considerations, impacts related to the Project's potential to conflict with or obstruct implementation of the applicable air quality plan would be **less than significant**.

b) Would the Project result in a cumulatively considerable new increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard?

Construction and operation of the Project would result in emissions of criteria air pollutants from mobile, area, and energy source, which may cause exceedances of national and California ambient air quality standards or contribute to existing nonattainment of ambient air quality standards. The following discussion identifies potential short-term construction and long-term operational impacts that would result from implementation of the Project.

Construction

Construction of the Project would result in the temporary addition of pollutants to the local airshed caused by on-site sources (i.e., off-road construction equipment, soil disturbance, and VOC off-gassing) and off-site sources (i.e., on-road haul trucks, vendor trucks, and worker vehicle trips). Construction emissions can vary substantially from day to day, depending on the level of activity, the specific type of operation, and for dust,

Travel Demand Model for estimating/projecting vehicle miles traveled and driving speeds. SCAG's socio-economic and transportation activities projections in their 2016 RTP/SCS are integrated in the 2016 AQMP (SCAQMD 2017).

the prevailing weather conditions. Therefore, such emission levels can only be approximately estimated with a corresponding uncertainty in precise ambient air quality impacts.

As discussed in Section 3, Methodology (Construction), criteria air pollutant emissions associated with temporary construction activity were quantified using CalEEMod. Construction schedule assumptions, including phase type, duration, and sequencing, were based on CalEEMod default values and is intended to represent a reasonable scenario in the absence of Project-specific information. It was assumed that construction would commence in May 2020 and would be completed by April 2021.

Implementation of the Project would generate criteria air pollutant emissions from entrained dust, off-road equipment, vehicle emissions, architectural coatings, and asphalt pavement application. Entrained dust results from the exposure of earth surfaces to wind from the direct disturbance and movement of soil, resulting in PM_{10} and $PM_{2.5}$ emissions. The Project would be required to comply with SCAQMD Rule 403 to control dust emissions generated during the grading activities. Standard construction practices that were assumed to be employed to reduce fugitive dust emissions, and were quantified in CalEEMod, include watering of the active sites two times per day depending on weather conditions. Internal combustion engines used by construction equipment, vendor trucks (i.e., delivery trucks), and worker vehicles would result in emissions of VOCs, NO_x, CO, PM_{10}, and $PM_{2.5}$. The application of architectural coatings, such as exterior application/interior paint and other finishes, and application of asphalt pavement would also produce VOC emissions; however, the contractor is required to procure architectural coatings from a supplier in compliance with the requirements of SCAQMD's Rule 1113 (Architectural Coatings).

Table 3 presents the estimated maximum daily construction emissions generated during construction of the Project. The values shown are the maximum summer or winter daily emissions results from CalEEMod. Details of the emission calculations are provided in Attachment A.

Table 3
Estimated Maximum Daily Construction Criteria Air Pollutant Emissions

	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
Year	pounds per day					
2020	2.22	21.10	15.41	0.03	3.55	2.12
2021	6.03	14.59	14.22	0.03	1.12	0.78
Maximum Daily Emissions	**6.03**	**21.10**	**15.41**	**0.03**	**3.55**	**2.12**
SCAQMD Threshold	*75*	*100*	*550*	*150*	*150*	*55*
Threshold Exceeded?	No	No	No	No	No	No

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter.
See Attachment A for complete results.
The values shown are the maximum summer or winter daily emissions results from CalEEMod.

As shown in Table 3, daily construction emissions would not exceed the SCAQMD significance thresholds for VOC, NO_x. CO, SO_x, PM_{10}, or $PM_{2.5}$ during construction in all construction years. Construction-generated emissions would be temporary and would not represent a long-term source of criteria air pollutant emissions. As such, impacts would be **less than significant**.

Operation

Operation of the Project would produce VOCs, NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$ emissions from area sources, including natural gas combustion, use of consumer products, and motor vehicle trips the Project site. The estimation of operational emissions was based on proposed land use defaults and total area (i.e., square footage) that would be in operation by 2022 (first year of full operation).

CalEEMod was used to estimate daily emissions from Project-related operational sources. Table 4 summarizes the operational emissions criteria pollutants that would be generated from the Project. Operational emissions were then compared to the SCAQMD operational thresholds.

Table 4
Estimated Maximum Daily Operational Criteria Air Pollutant Emissions

Emission Source	VOC	NO_x	CO	SO_x	PM_{10}	$PM_{2.5}$
	pounds per day					
Area	0.13	<0.01[a]	<0.01[a]	0.00	0.00	0.00
Energy	0.02	0.22	0.19	<0.01[a]	0.02	0.02
Mobile	6.04	40.23	41.35	0.17	10.48	2.88
Total	**6.19**	**40.45**	**41.54**	**0.17**	**10.50**	**2.90**
SCAQMD Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Threshold Exceeded?	No	No	No	No	No	No

Notes: VOC = volatile organic compound; NO_x = oxides of nitrogen; CO = carbon monoxide; SO_x = sulfur oxides; PM_{10} = coarse particulate matter; $PM_{2.5}$ = fine particulate matter; SCAQMD = South Coast Air Quality Management District.
See Attachment A for complete results.
The values shown are the maximum summer or winter daily emissions results from CalEEMod.
[a] <0.01 = value less than reported 0.01 metric tons per year.

As shown in Table 4, the combined daily area, energy, and mobile source emissions would not exceed the SCAQMD operational thresholds for VOC, NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$. Impacts associated with Project-generated operational criteria air pollutant emissions would be **less than significant**.

c) Would the Project expose sensitive receptors to substantial pollutant concentrations?

Air quality varies as a direct function of the amount of pollutants emitted into the atmosphere, the size and topography of the air basin, and the prevailing meteorological conditions. Air quality problems arise when the rate of pollutant emissions exceeds the rate of dispersion. Reduced visibility, eye irritation, and adverse health impacts upon those persons termed "sensitive receptors" are the most serious hazards of existing air quality conditions. Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. People most likely to be affected by air pollution, include children, the elderly, athletes, and people with cardiovascular and chronic respiratory diseases. Sensitive receptors include residences, schools, playgrounds, child-care centers, athletic facilities, long-term health-care facilities, rehabilitation centers, convalescent centers, and retirement homes. The discussion below reviews the significance of emissions within the context of potential impacts to sensitive receptors. Sensitive receptors in the vicinity of the Project include single-family residential uses to the north, south, and west of the Project site, adjacent to County Line Lane and County Line Road.

Localized Significance Thresholds

The SCAQMD recommends a localized significance threshold (LST) analysis to evaluate localized air quality impacts to sensitive receptors in the immediate vicinity of the Project site as a result of construction activities. The impacts were analyzed using methods consistent with those in the SCAQMD's Final Localized Significance Threshold Methodology (SCAQMD 2009). The Project is located in Source Receptor Area (SRA) 28 (Hemet/San Jacinto Valley). The Project's construction activities would occur over a 1.3-acre work area; therefore, for the purposes of the LST analysis, emissions thresholds based on a one-acre site were utilized. This is a conservative approach, as LSTs increase with the size of project site. As mentioned previously, the closest sensitive receptors are residences located adjacent to the Project site. The closest receptor distance available in the SCAQMD LST Methodology is 25 meters (82 feet) which was assumed for this analysis.

Project construction activities would result in temporary sources of on-site criteria air pollutant emissions associated with construction equipment exhaust and dust-generating activities. The maximum daily on-site construction emissions generated during construction of the Project is presented in Table 5, and compared to the SCAQMD localized significance criteria for SRA 28 to determine whether Project-generated on-site construction emissions would result in potential LST impacts.

Table 5
Construction Localized Significance Thresholds Analysis

Year	NO_2	CO	PM_{10}	$PM_{2.5}$
	pounds per day (on site)			
2020	1.63	18.35	2.90	1.77
SCAQMD LST Criteria	162	750	4	3
Threshold Exceeded?	**No**	**No**	**No**	**No**

Source: SCAQMD 2009.
Notes: NO_2 = nitrogen dioxide; CO = carbon monoxide; PM_{10} = particulate matter; $PM_{2.5}$ = fine particulate matter; SCAQMD = South Coast Air Quality Management District; LST = localized significance threshold.
See Attachment A for detailed results.
Localized significance thresholds are shown for a 1-acre project site corresponding to a distance to a sensitive receptor of 25 meters.

As shown in Table 5, proposed construction activities would not generate emissions in excess of site-specific LSTs; therefore, localized Project construction impacts would be **less than significant**.

CO Hotspots

Traffic-congested roadways and intersections have the potential to generate localized high levels of CO. Localized areas where ambient concentrations exceed federal and/or state standards for CO are termed CO "hotspots." CO transport is extremely limited, because CO disperses rapidly with distance from the source. Under certain extreme meteorological conditions, however, CO concentrations near a congested roadway or intersection may reach unhealthy levels, affecting sensitive receptors. Typically, high CO concentrations are associated with severely congested intersections. Projects contributing to adverse traffic impacts may result in the formation of a CO hotspot. Additional analysis of CO hotspot impacts would

be conducted if a project would result in a significant impact or contribute to an adverse traffic impact at a signalized intersection that would potentially subject sensitive receptors to CO hotspots. During construction of the Project, construction traffic would affect the intersections near the Project site. However, construction activities would be temporary and would not be a source of substantial daily vehicle trips. Regarding long-term mobile-source emissions, the Project would not generate a substantial amount of traffic that would contribute to potential adverse traffic impacts that may result in the formation of CO hotspots. In addition, due to continued improvement in vehicular emissions at a rate faster than the rate of vehicle growth and/or congestion, the potential for CO hotspots in the SCAB is steadily decreasing. Finally, as discussed in the TIA, transportation impacts would be less than significant. Therefore, the Project would not generate additional traffic volumes and impacts related to CO hot spots would be **less than significant**.

Toxic Air Contaminants

Toxic air contaminants (TACs) are defined as substances that may cause or contribute to an increase in deaths or in serious illness, or that may pose a present or potential hazard to human health. As discussed under the LST analysis, the nearest sensitive receptors to the Project site are residences located adjacent to the Project.

Health effects from carcinogenic air toxics are usually described in terms of cancer risk. The SCAQMD recommends an incremental cancer risk threshold of 10 in 1 million. "Incremental cancer risk" is the net increased likelihood that a person continuously exposed to concentrations of TACs resulting from a project over a 9-, 30-, and 70-year exposure period will contract cancer based on the use of standard Office of Environmental Health Hazard Assessment risk-assessment methodology (OEHHA 2015). In addition, some TACs have non-carcinogenic effects. The SCAQMD recommends a Hazard Index of 1 or more for acute (short-term) and chronic (long-term) non-carcinogenic effects.[5] TACs that would potentially be emitted during construction activities associated with the Project would be diesel particulate matter.

Diesel particulate matter emissions would be emitted from heavy equipment operations and heavy-duty trucks. Heavy-duty construction equipment is subject to a CARB Airborne Toxics Control Measure for in-use diesel construction equipment to reduce diesel particulate emissions. As described for the LST analysis, PM_{10} and $PM_{2.5}$ (representative of diesel particulate matter) exposure would be minimal. According to the Office of Environmental Health Hazard Assessment, health risk assessments (which determine the exposure of sensitive receptors to toxic emissions) should be based on a 30-year exposure period for the maximally exposed individual resident; however, such assessments should also be limited to the period/duration of activities associated with the Project. The duration of the proposed construction activities would constitute a small percentage of the total 30-year exposure period. The construction period for the Project would be approximately 12 months, after which construction-related TAC emissions would cease. Due to this relatively short period of exposure and minimal particulate emissions on site, TACs generated during construction would not be expected to result in concentrations causing significant health risks.

[5] Non-cancer adverse health risks are measured against a hazard index, which is defined as the ratio of the predicted incremental exposure concentrations of the various non-carcinogens from the Project to published reference exposure levels that can cause adverse health effects.

It is expected that operation of the Project would not result in any non-permitted direct emissions (e.g., those from a point source such as diesel generators). In addition, the Project would not result in substantial diesel vehicle trips (i.e., delivery trucks). Therefore, the Project would not result in exposure of sensitive receptors in the vicinity of the Project site to substantial TAC concentrations due to either construction or operation and impacts would be **less than significant**.

Health Effects of Criteria Air Pollutants

Construction emissions of the Project would not exceed the SCAQMD thresholds for any criteria air pollutants, including VOC, NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$.

Health effects associated with O_3 include respiratory symptoms, worsening of lung disease leading to premature death, and damage to lung tissue (CARB 2019). VOCs and NO_x are precursors to O_3, for which the SCAB is designated as nonattainment with respect to the NAAQS and CAAQS. The contribution of VOCs and NO_x to regional ambient O_3 concentrations is the result of complex photochemistry. The increases in O_3 concentrations in the SCAB due to O_3 precursor emissions tend to be found downwind of the source location because of the time required for the photochemical reactions to occur. Further, the potential for exacerbating excessive O_3 concentrations would also depend on the time of year that the VOC emissions would occur, because exceedances of the O_3 NAAQS and CAAQS tend to occur between April and October when solar radiation is highest. Due to the lack of quantitative methods to assess this complex photochemistry, the holistic effect of a single project's emissions of O_3 precursors is speculative. That being said, because the Project would not exceed the SCAQMD thresholds, the Project would not contribute to health effects associated with O_3.

Health effects associated with NO_x include lung irritation and enhanced allergic responses (CARB 2019). Because project-related NO_x emissions would not exceed the SCAQMD mass daily thresholds, and because the SCAB is a designated attainment area for NO_2 and the existing NO_2 concentrations in the area are well below the NAAQS and CAAQS standards, it is not anticipated that the Project would cause an exceedance of the NAAQS and CAAQS for NO_2 or result in potential health effects associated with NO_2 and NO_x.

Health effects associated with CO include chest pain in patients with heart disease, headache, light-headedness, and reduced mental alertness (CARB 2019). CO tends to be a localized impact associated with congested intersections. The associated potential for CO hotspots was discussed previously and determined to be less than significant. Thus, the Project's CO emissions would not contribute to significant health effects associated with CO.

Health effects associated with PM_{10} include premature death and hospitalization, primarily for worsening of respiratory disease (CARB 2019). Construction of the Project would not exceed thresholds for PM_{10} or $PM_{2.5}$, would not contribute to exceedances of the NAAQS and CAAQS for particulate matter, and would not obstruct the SCAB from coming into attainment for these pollutants. The Project would also not result in substantial diesel particulate matter emissions during construction. Additionally, the Project would be required to comply with SCAQMD Rule 403, which limits the amount of fugitive dust generated during construction. Due to the minimal contribution of particulate matter during construction, the Project is not anticipated to result in health effects associated with PM_{10} or $PM_{2.5}$.

In summary, construction and operation of the Project would not result in exceedances of the SCAQMD significance thresholds for criteria pollutants, and potential health effects associated with criteria air pollutants would be **less than significant** .

d) Would the Project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

The occurrence and severity of potential odor impacts depend on numerous factors. The nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of receiving location each contribute to the intensity of the impact. Although offensive odors seldom cause physical harm, they can be annoying, cause distress among the public, and generate citizen complaints.

During Project construction, exhaust from equipment may produce discernible odors typical of most construction sites. Potential odors produced during construction would be attributable to concentrations of unburned hydrocarbons from tailpipes of construction equipment. However, such odors would disperse rapidly from the Project site and generally occur at magnitudes that would not affect substantial numbers of people. Accordingly, impacts associated with odors during construction would be **less than significant**.

Land uses and industrial operations associated with odor complaints include agricultural uses, wastewater treatment plants, food-processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding (SCAQMD 1993). Operation of the Project would create odors related to RV fueling at the proposed fuel facility. These odors would be temporary and dissipated quickly by regional air movement and localized winds, and no buildup of odors is expected to occur. In addition, the fuel facility would be equipped with Phase I and Phase II control to be in compliance with CARB and SCAQMD requirement of installing a vapor recovery system to collect gasoline vapors during fuel delivery or fuel storage and vehicle fueling, which would also have a co-benefit for controlling odors. This system will control at least 90% of the fuel vapors typically vented and the associated odors. Therefore, Project operations would result in an odor impact that is **less than significant**.

5 Conclusion

Construction of the Project would not exceed the SCAQMD's construction significance thresholds for VOC, NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$. In addition, operational criteria air pollutant emissions associated with the Project would not would not exceed the SCAQMD's operational significance thresholds for VOC, NO_x, CO, SO_x, PM_{10}, and $PM_{2.5}$. Air quality impacts would be less than significant.

6 References

14 CCR 15000–15387 and Appendices A through L. Guidelines for Implementation of the California Environmental Quality Act, as amended.

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Attachment A

CalEEMod 2016.3.2 Modeling and Estimated Emissions

CalEEMod Version: CalEEMod.2016.3.2

Date: 11/13/2019 10:07 AM

7th St & County Line Rd RV Fueling & Retail Project

Riverside-South Coast County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Fast Food Restaurant with Drive Thru	3.00	1000sqft	0.07	3,000.00	0
Gasoline/Service Station	3.00	Pump	0.04	1,680.00	0
Other Asphalt Surfaces	1.19	Acre	1.19	51,836.40	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 7th St & County Line Rd RV Fueling & Retail Project. Riverside County.

Land Use - Construction of 3,000 SF in retail and RV fuel station on 1.3 acre site.

Construction Phase - Default schedule assumed.

Off-road Equipment - Default equipment assumed.

Grading - Assumed soil will be balanced.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Demolition - Demolition of 1,625 SF single family home.

Trips and VMT - Rounded trips.

Vehicle Trips - Updated trip rates per TIA (Ganddini Group, Inc).

Energy Use - Assumed no natural gas consumption by fuel pumps.

Water And Wastewater - Assume 100% aerobic.

Construction Off-road Equipment Mitigation - Compliance with SCAQMD Rule 403 - water twice daily.

Water Mitigation - Assume 20% reduction in water consumption per CalGreen.

Waste Mitigation - Assum 50% waste diverted per AB 939.

Table Name	Column Name	Default Value	New Value
tblEnergyUse	NT24NG	17.13	0.00
tblEnergyUse	T24NG	15.36	0.00
tblLandUse	LandUseSquareFeet	423.52	1,680.00
tblLandUse	LotAcreage	0.01	0.04
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripNumber	7.00	8.00
tblTripsAndVMT	PhaseName		Architectural Coating
tblTripsAndVMT	PhaseName		Building Construction
tblTripsAndVMT	PhaseName		Demolition
tblTripsAndVMT	PhaseName		Grading
tblTripsAndVMT	PhaseName		Paving
tblTripsAndVMT	PhaseName		Site Preparation
tblTripsAndVMT	WorkerTripNumber	5.00	6.00
tblTripsAndVMT	WorkerTripNumber	13.00	14.00
tblTripsAndVMT	WorkerTripNumber	13.00	14.00
tblVehicleTrips	ST_TR	722.03	1,193.94
tblVehicleTrips	ST_TR	168.56	172.01
tblVehicleTrips	SU_TR	542.72	897.44

tblVehicleTrips	SU_TR	168.56	172.01
tblVehicleTrips	WD_TR	496.12	820.38
tblVehicleTrips	WD_TR	168.56	172.01
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

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					
2020	0.1902	1.4422	1.2514	2.3900e-003	0.0502	0.0736	0.1239	0.0172	0.0707	0.0879	0.0000	202.8326	202.8326	0.0338	0.0000	203.6767
2021	0.0861	0.4191	0.4158	8.0000e-004	0.0122	0.0201	0.0323	3.2800e-003	0.0193	0.0226	0.0000	68.1094	68.1094	0.0109	0.0000	68.3805
Maximum	**0.1902**	**1.4422**	**1.2514**	**2.3900e-003**	**0.0502**	**0.0736**	**0.1239**	**0.0172**	**0.0707**	**0.0879**	**0.0000**	**202.8326**	**202.8326**	**0.0338**	**0.0000**	**203.6767**

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					
2020	0.1902	1.4422	1.2514	2.3900e-003	0.0412	0.0736	0.1148	0.0127	0.0707	0.0834	0.0000	202.8324	202.8324	0.0338	0.0000	203.6765
2021	0.0861	0.4191	0.4158	8.0000e-004	0.0122	0.0201	0.0323	3.2800e-003	0.0193	0.0226	0.0000	68.1093	68.1093	0.0109	0.0000	68.3805
Maximum	**0.1902**	**1.4422**	**1.2514**	**2.3900e-003**	**0.0412**	**0.0736**	**0.1148**	**0.0127**	**0.0707**	**0.0834**	**0.0000**	**202.8324**	**202.8324**	**0.0338**	**0.0000**	**203.6765**

	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**	**14.48**	**0.00**	**5.79**	**21.82**	**0.00**	**4.05**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	0.0232	0.0000	9.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.8000e-004	1.8000e-004	0.0000	0.0000	1.9000e-004
Energy	4.4200e-003	0.0402	0.0338	2.4000e-004		3.0600e-003	3.0600e-003		3.0600e-003	3.0600e-003	0.0000	94.5930	94.5930	2.9400e-003	1.2400e-003	95.0349
Mobile	0.6980	5.6479	5.4703	0.0223	1.4158	0.0150	1.4308	0.3793	0.0141	0.3934	0.0000	2,078.0517	2,078.0517	0.1666	0.0000	2,082.2156
Waste						0.0000	0.0000		0.0000	0.0000	7.3442	0.0000	7.3442	0.4340	0.0000	18.1950
Water						0.0000	0.0000		0.0000	0.0000	0.3363	4.2354	4.5717	1.3300e-003	7.7000e-004	4.8337
Total	**0.7256**	**5.6881**	**5.5042**	**0.0226**	**1.4158**	**0.0181**	**1.4339**	**0.3793**	**0.0171**	**0.3964**	**7.6805**	**2,176.8802**	**2,184.5607**	**0.6049**	**2.0100e-003**	**2,200.2793**

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	0.0232	0.0000	9.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.8000e-004	1.8000e-004	0.0000	0.0000	1.9000e-004
Energy	4.4200e-003	0.0402	0.0338	2.4000e-004		3.0600e-003	3.0600e-003		3.0600e-003	3.0600e-003	0.0000	94.5930	94.5930	2.9400e-003	1.2400e-003	95.0349
Mobile	0.6980	5.6479	5.4703	0.0223	1.4158	0.0150	1.4308	0.3793	0.0141	0.3934	0.0000	2,078.0517	2,078.0517	0.1666	0.0000	2,082.2156
Waste						0.0000	0.0000		0.0000	0.0000	3.6721	0.0000	3.6721	0.2170	0.0000	9.0975
Water						0.0000	0.0000		0.0000	0.0000	0.2690	3.3883	3.6573	1.0700e-003	6.1000e-004	3.8669
Total	**0.7256**	**5.6881**	**5.5042**	**0.0226**	**1.4158**	**0.0181**	**1.4339**	**0.3793**	**0.0171**	**0.3964**	**3.9411**	**2,176.0332**	**2,179.9743**	**0.3876**	**1.8500e-003**	**2,190.2151**

	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**	**48.69**	**0.04**	**0.21**	**35.92**	**7.96**	**0.46**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/1/2020	5/28/2020	5	20	
2	Site Preparation	Site Preparation	5/29/2020	6/1/2020	5	2	
3	Grading	Grading	6/2/2020	6/5/2020	5	4	
4	Building Construction	Building Construction	6/6/2020	3/12/2021	5	200	
5	Paving	Paving	3/13/2021	3/26/2021	5	10	
6	Architectural Coating	Architectural Coating	3/27/2021	4/9/2021	5	10	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 1.19

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 7,020; Non-Residential Outdoor: 2,340; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	6.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Paving	Paving Equipment	1	8.00	132	0.36
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Building Construction	Welders	3	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
Architectural Coating	1	6.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	24.00	9.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	5	14.00	0.00	8.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	14.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 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					
Fugitive Dust					8.0000e-004	0.0000	8.0000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0213	0.2095	0.1466	2.4000e-004		0.0115	0.0115		0.0108	0.0108	0.0000	21.0677	21.0677	5.4200e-003	0.0000	21.2031
Total	**0.0213**	**0.2095**	**0.1466**	**2.4000e-004**	**8.0000e-004**	**0.0115**	**0.0123**	**1.2000e-004**	**0.0108**	**0.0109**	**0.0000**	**21.0677**	**21.0677**	**5.4200e-003**	**0.0000**	**21.2031**

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	2.0000e-005	9.7000e-004	1.3000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2900	0.2900	2.0000e-005	0.0000	0.2905
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	5.9000e-004	6.2600e-003	2.0000e-005	2.0700e-003	1.0000e-005	2.0800e-003	5.5000e-004	1.0000e-005	5.6000e-004	0.0000	1.7243	1.7243	4.0000e-005	0.0000	1.7254
Total	**8.3000e-004**	**1.5600e-003**	**6.3900e-003**	**2.0000e-005**	**2.1400e-003**	**1.0000e-005**	**2.1500e-003**	**5.7000e-004**	**1.0000e-005**	**5.8000e-004**	**0.0000**	**2.0144**	**2.0144**	**6.0000e-005**	**0.0000**	**2.0159**

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					3.6000e-004	0.0000	3.6000e-004	5.0000e-005	0.0000	5.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0213	0.2095	0.1466	2.4000e-004		0.0115	0.0115		0.0108	0.0108	0.0000	21.0676	21.0676	5.4200e-003	0.0000	21.2030
Total	**0.0213**	**0.2095**	**0.1466**	**2.4000e-004**	**3.6000e-004**	**0.0115**	**0.0119**	**5.0000e-005**	**0.0108**	**0.0108**	**0.0000**	**21.0676**	**21.0676**	**5.4200e-003**	**0.0000**	**21.2030**

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	2.0000e-005	9.7000e-004	1.3000e-004	0.0000	7.0000e-005	0.0000	7.0000e-005	2.0000e-005	0.0000	2.0000e-005	0.0000	0.2900	0.2900	2.0000e-005	0.0000	0.2905
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	5.9000e-004	6.2600e-003	2.0000e-005	2.0700e-003	1.0000e-005	2.0800e-003	5.5000e-004	1.0000e-005	5.6000e-004	0.0000	1.7243	1.7243	4.0000e-005	0.0000	1.7254
Total	**8.3000e-004**	**1.5600e-003**	**6.3900e-003**	**2.0000e-005**	**2.1400e-003**	**1.0000e-005**	**2.1500e-003**	**5.7000e-004**	**1.0000e-005**	**5.8000e-004**	**0.0000**	**2.0144**	**2.0144**	**6.0000e-005**	**0.0000**	**2.0159**

3.3 Site Preparation - 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					
Fugitive Dust					5.8000e-003	0.0000	5.8000e-003	2.9500e-003	0.0000	2.9500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.6300e-003	0.0184	7.7100e-003	2.0000e-005		8.2000e-004	8.2000e-004		7.6000e-004	7.6000e-004	0.0000	1.5127	1.5127	4.9000e-004	0.0000	1.5249
Total	**1.6300e-003**	**0.0184**	**7.7100e-003**	**2.0000e-005**	**5.8000e-003**	**8.2000e-004**	**6.6200e-003**	**2.9500e-003**	**7.6000e-004**	**3.7100e-003**	**0.0000**	**1.5127**	**1.5127**	**4.9000e-004**	**0.0000**	**1.5249**

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	5.0000e-005	3.0000e-005	3.6000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0985	0.0985	0.0000	0.0000	0.0986
Total	**5.0000e-005**	**3.0000e-005**	**3.6000e-004**	**0.0000**	**1.2000e-004**	**0.0000**	**1.2000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0985**	**0.0985**	**0.0000**	**0.0000**	**0.0986**

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					2.6100e-003	0.0000	2.6100e-003	1.3300e-003	0.0000	1.3300e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.6300e-003	0.0184	7.7100e-003	2.0000e-005		8.2000e-004	8.2000e-004		7.6000e-004	7.6000e-004	0.0000	1.5127	1.5127	4.9000e-004	0.0000	1.5249
Total	**1.6300e-003**	**0.0184**	**7.7100e-003**	**2.0000e-005**	**2.6100e-003**	**8.2000e-004**	**3.4300e-003**	**1.3300e-003**	**7.6000e-004**	**2.0900e-003**	**0.0000**	**1.5127**	**1.5127**	**4.9000e-004**	**0.0000**	**1.5249**

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	5.0000e-005	3.0000e-005	3.6000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0985	0.0985	0.0000	0.0000	0.0986
Total	**5.0000e-005**	**3.0000e-005**	**3.6000e-004**	**0.0000**	**1.2000e-004**	**0.0000**	**1.2000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0985**	**0.0985**	**0.0000**	**0.0000**	**0.0986**

3.4 Grading - 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					
Fugitive Dust					9.8300e-003	0.0000	9.8300e-003	5.0500e-003	0.0000	5.0500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.7000e-003	0.0302	0.0129	3.0000e-005		1.3700e-003	1.3700e-003		1.2600e-003	1.2600e-003	0.0000	2.4779	2.4779	8.0000e-004	0.0000	2.4980
Total	**2.7000e-003**	**0.0302**	**0.0129**	**3.0000e-005**	**9.8300e-003**	**1.3700e-003**	**0.0112**	**5.0500e-003**	**1.2600e-003**	**6.3100e-003**	**0.0000**	**2.4779**	**2.4779**	**8.0000e-004**	**0.0000**	**2.4980**

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	9.0000e-005	7.0000e-005	7.2000e-004	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1971	0.1971	0.0000	0.0000	0.1972
Total	**9.0000e-005**	**7.0000e-005**	**7.2000e-004**	**0.0000**	**2.4000e-004**	**0.0000**	**2.4000e-004**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**0.0000**	**0.1971**	**0.1971**	**0.0000**	**0.0000**	**0.1972**

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					4.4200e-003	0.0000	4.4200e-003	2.2700e-003	0.0000	2.2700e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.7000e-003	0.0302	0.0129	3.0000e-005		1.3700e-003	1.3700e-003		1.2600e-003	1.2600e-003	0.0000	2.4779	2.4779	8.0000e-004	0.0000	2.4980
Total	**2.7000e-003**	**0.0302**	**0.0129**	**3.0000e-005**	**4.4200e-003**	**1.3700e-003**	**5.7900e-003**	**2.2700e-003**	**1.2600e-003**	**3.5300e-003**	**0.0000**	**2.4779**	**2.4779**	**8.0000e-004**	**0.0000**	**2.4980**

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	9.0000e-005	7.0000e-005	7.2000e-004	0.0000	2.4000e-004	0.0000	2.4000e-004	6.0000e-005	0.0000	6.0000e-005	0.0000	0.1971	0.1971	0.0000	0.0000	0.1972
Total	**9.0000e-005**	**7.0000e-005**	**7.2000e-004**	**0.0000**	**2.4000e-004**	**0.0000**	**2.4000e-004**	**6.0000e-005**	**0.0000**	**6.0000e-005**	**0.0000**	**0.1971**	**0.1971**	**0.0000**	**0.0000**	**0.1972**

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	0.1513	1.1017	0.9825	1.6400e-003		0.0593	0.0593		0.0573	0.0573	0.0000	135.2489	135.2489	0.0251	0.0000	135.8766
Total	**0.1513**	**1.1017**	**0.9825**	**1.6400e-003**		**0.0593**	**0.0593**		**0.0573**	**0.0573**	**0.0000**	**135.2489**	**135.2489**	**0.0251**	**0.0000**	**135.8766**

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	2.0300e-003	0.0733	0.0143	1.9000e-004	4.8500e-003	4.5000e-004	5.2900e-003	1.4000e-003	4.3000e-004	1.8300e-003	0.0000	18.1934	18.1934	1.3400e-003	0.0000	18.2270
Worker	0.0104	7.5500e-003	0.0799	2.4000e-004	0.0265	1.6000e-004	0.0266	7.0300e-003	1.5000e-004	7.1700e-003	0.0000	22.0221	22.0221	5.4000e-004	0.0000	22.0356
Total	**0.0124**	**0.0808**	**0.0943**	**4.3000e-004**	**0.0313**	**6.1000e-004**	**0.0319**	**8.4300e-003**	**5.8000e-004**	**9.0000e-003**	**0.0000**	**40.2155**	**40.2155**	**1.8800e-003**	**0.0000**	**40.2626**

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	0.1513	1.1017	0.9825	1.6400e-003		0.0593	0.0593		0.0573	0.0573	0.0000	135.2487	135.2487	0.0251	0.0000	135.8764
Total	**0.1513**	**1.1017**	**0.9825**	**1.6400e-003**		**0.0593**	**0.0593**		**0.0573**	**0.0573**	**0.0000**	**135.2487**	**135.2487**	**0.0251**	**0.0000**	**135.8764**

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	2.0300e-003	0.0733	0.0143	1.9000e-004	4.8500e-003	4.5000e-004	5.2900e-003	1.4000e-003	4.3000e-004	1.8300e-003	0.0000	18.1934	18.1934	1.3400e-003	0.0000	18.2270
Worker	0.0104	7.5500e-003	0.0799	2.4000e-004	0.0265	1.6000e-004	0.0266	7.0300e-003	1.5000e-004	7.1700e-003	0.0000	22.0221	22.0221	5.4000e-004	0.0000	22.0356
Total	**0.0124**	**0.0808**	**0.0943**	**4.3000e-004**	**0.0313**	**6.1000e-004**	**0.0319**	**8.4300e-003**	**5.8000e-004**	**9.0000e-003**	**0.0000**	**40.2155**	**40.2155**	**1.8800e-003**	**0.0000**	**40.2626**

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	0.0462	0.3477	0.3289	5.6000e-004		0.0175	0.0175		0.0169	0.0169	0.0000	46.2946	46.2946	8.2600e-003	0.0000	46.5013
Total	**0.0462**	**0.3477**	**0.3289**	**5.6000e-004**		**0.0175**	**0.0175**		**0.0169**	**0.0169**	**0.0000**	**46.2946**	**46.2946**	**8.2600e-003**	**0.0000**	**46.5013**

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	5.8000e-004	0.0223	4.3000e-003	6.0000e-005	1.6600e-003	5.0000e-005	1.7000e-003	4.8000e-004	4.0000e-005	5.2000e-004	0.0000	6.1795	6.1795	4.4000e-004	0.0000	6.1904
Worker	3.3200e-003	2.3200e-003	0.0251	8.0000e-005	9.0600e-003	5.0000e-005	9.1100e-003	2.4100e-003	5.0000e-005	2.4500e-003	0.0000	7.2857	7.2857	1.7000e-004	0.0000	7.2898
Total	**3.9000e-003**	**0.0247**	**0.0294**	**1.4000e-004**	**0.0107**	**1.0000e-004**	**0.0108**	**2.8900e-003**	**9.0000e-005**	**2.9700e-003**	**0.0000**	**13.4651**	**13.4651**	**6.1000e-004**	**0.0000**	**13.4802**

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	0.0462	0.3477	0.3289	5.6000e-004		0.0175	0.0175		0.0169	0.0169	0.0000	46.2946	46.2946	8.2600e-003	0.0000	46.5012
Total	**0.0462**	**0.3477**	**0.3289**	**5.6000e-004**		**0.0175**	**0.0175**		**0.0169**	**0.0169**	**0.0000**	**46.2946**	**46.2946**	**8.2600e-003**	**0.0000**	**46.5012**

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	5.8000e-004	0.0223	4.3000e-003	6.0000e-005	1.6600e-003	5.0000e-005	1.7000e-003	4.8000e-004	4.0000e-005	5.2000e-004	0.0000	6.1795	6.1795	4.4000e-004	0.0000	6.1904
Worker	3.3200e-003	2.3200e-003	0.0251	8.0000e-005	9.0600e-003	5.0000e-005	9.1100e-003	2.4100e-003	5.0000e-005	2.4500e-003	0.0000	7.2857	7.2857	1.7000e-004	0.0000	7.2898
Total	**3.9000e-003**	**0.0247**	**0.0294**	**1.4000e-004**	**0.0107**	**1.0000e-004**	**0.0108**	**2.8900e-003**	**9.0000e-005**	**2.9700e-003**	**0.0000**	**13.4651**	**13.4651**	**6.1000e-004**	**0.0000**	**13.4802**

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	3.8700e-003	0.0387	0.0443	7.0000e-005		2.0800e-003	2.0800e-003		1.9100e-003	1.9100e-003	0.0000	5.8825	5.8825	1.8600e-003	0.0000	5.9291
Paving	1.5600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.4300e-003**	**0.0387**	**0.0443**	**7.0000e-005**		**2.0800e-003**	**2.0800e-003**		**1.9100e-003**	**1.9100e-003**	**0.0000**	**5.8825**	**5.8825**	**1.8600e-003**	**0.0000**	**5.9291**

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	3.8000e-004	2.7000e-004	2.8700e-003	1.0000e-005	1.0400e-003	1.0000e-005	1.0400e-003	2.8000e-004	1.0000e-005	2.8000e-004	0.0000	0.8333	0.8333	2.0000e-005	0.0000	0.8338
Total	**3.8000e-004**	**2.7000e-004**	**2.8700e-003**	**1.0000e-005**	**1.0400e-003**	**1.0000e-005**	**1.0400e-003**	**2.8000e-004**	**1.0000e-005**	**2.8000e-004**	**0.0000**	**0.8333**	**0.8333**	**2.0000e-005**	**0.0000**	**0.8338**

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	3.8700e-003	0.0387	0.0443	7.0000e-005		2.0800e-003	2.0800e-003		1.9100e-003	1.9100e-003	0.0000	5.8825	5.8825	1.8600e-003	0.0000	5.9291
Paving	1.5600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**5.4300e-003**	**0.0387**	**0.0443**	**7.0000e-005**		**2.0800e-003**	**2.0800e-003**		**1.9100e-003**	**1.9100e-003**	**0.0000**	**5.8825**	**5.8825**	**1.8600e-003**	**0.0000**	**5.9291**

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	3.8000e-004	2.7000e-004	2.8700e-003	1.0000e-005	1.0400e-003	1.0000e-005	1.0400e-003	2.8000e-004	1.0000e-005	2.8000e-004	0.0000	0.8333	0.8333	2.0000e-005	0.0000	0.8338
Total	**3.8000e-004**	**2.7000e-004**	**2.8700e-003**	**1.0000e-005**	**1.0400e-003**	**1.0000e-005**	**1.0400e-003**	**2.8000e-004**	**1.0000e-005**	**2.8000e-004**	**0.0000**	**0.8333**	**0.8333**	**2.0000e-005**	**0.0000**	**0.8338**

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	0.0289					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0900e-003	7.6300e-003	9.0900e-003	1.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	1.2766	1.2766	9.0000e-005	0.0000	1.2788
Total	**0.0300**	**7.6300e-003**	**9.0900e-003**	**1.0000e-005**		**4.7000e-004**	**4.7000e-004**		**4.7000e-004**	**4.7000e-004**	**0.0000**	**1.2766**	**1.2766**	**9.0000e-005**	**0.0000**	**1.2788**

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	1.6000e-004	1.1000e-004	1.2300e-003	0.0000	4.4000e-004	0.0000	4.5000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3571	0.3571	1.0000e-005	0.0000	0.3573
Total	**1.6000e-004**	**1.1000e-004**	**1.2300e-003**	**0.0000**	**4.4000e-004**	**0.0000**	**4.5000e-004**	**1.2000e-004**	**0.0000**	**1.2000e-004**	**0.0000**	**0.3571**	**0.3571**	**1.0000e-005**	**0.0000**	**0.3573**

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	0.0289					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.0900e-003	7.6300e-003	9.0900e-003	1.0000e-005		4.7000e-004	4.7000e-004		4.7000e-004	4.7000e-004	0.0000	1.2766	1.2766	9.0000e-005	0.0000	1.2788
Total	**0.0300**	**7.6300e-003**	**9.0900e-003**	**1.0000e-005**		**4.7000e-004**	**4.7000e-004**		**4.7000e-004**	**4.7000e-004**	**0.0000**	**1.2766**	**1.2766**	**9.0000e-005**	**0.0000**	**1.2788**

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	1.6000e-004	1.1000e-004	1.2300e-003	0.0000	4.4000e-004	0.0000	4.5000e-004	1.2000e-004	0.0000	1.2000e-004	0.0000	0.3571	0.3571	1.0000e-005	0.0000	0.3573
Total	**1.6000e-004**	**1.1000e-004**	**1.2300e-003**	**0.0000**	**4.4000e-004**	**0.0000**	**4.5000e-004**	**1.2000e-004**	**0.0000**	**1.2000e-004**	**0.0000**	**0.3571**	**0.3571**	**1.0000e-005**	**0.0000**	**0.3573**

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	0.6980	5.6479	5.4703	0.0223	1.4158	0.0150	1.4308	0.3793	0.0141	0.3934	0.0000	2,078.0517	2,078.0517	0.1666	0.0000	2,082.2156
Unmitigated	0.6980	5.6479	5.4703	0.0223	1.4158	0.0150	1.4308	0.3793	0.0141	0.3934	0.0000	2,078.0517	2,078.0517	0.1666	0.0000	2,082.2156

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant with Drive Thru	2,461.14	3,581.82	2692.32	3,313,300	3,313,300
Gasoline/Service Station	516.03	516.03	516.03	394,993	394,993
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	2,977.17	4,097.85	3,208.35	3,708,294	3,708,294

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-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant with	18.50	10.10	7.90	2.20	78.80	19.00	29	21	50
Gasoline/Service Station	18.50	10.10	7.90	2.00	79.00	19.00	14	27	59
Other Asphalt Surfaces	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Fast Food Restaurant with Drive Thru	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Gasoline/Service Station	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Other Asphalt Surfaces	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965

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	50.8176	50.8176	2.1000e-003	4.3000e-004	50.9994
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	50.8176	50.8176	2.1000e-003	4.3000e-004	50.9994
NaturalGas Mitigated	4.4200e-003	0.0402	0.0338	2.4000e-004		3.0600e-003	3.0600e-003		3.0600e-003	3.0600e-003	0.0000	43.7754	43.7754	8.4000e-004	8.0000e-004	44.0355
NaturalGas Unmitigated	4.4200e-003	0.0402	0.0338	2.4000e-004		3.0600e-003	3.0600e-003		3.0600e-003	3.0600e-003	0.0000	43.7754	43.7754	8.4000e-004	8.0000e-004	44.0355

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					
Fast Food Restaurant with D...	820320	4.4200e-003	0.0402	0.0338	2.4000e-004		3.0600e-003	3.0600e-003		3.0600e-003	3.0600e-003	0.0000	43.7754	43.7754	8.4000e-004	8.0000e-004	44.0355
Gasoline/Service Station	0	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
Other Asphalt Surfaces	0	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
Total		**4.4200e-003**	**0.0402**	**0.0338**	**2.4000e-004**		**3.0600e-003**	**3.0600e-003**		**3.0600e-003**	**3.0600e-003**	**0.0000**	**43.7754**	**43.7754**	**8.4000e-004**	**8.0000e-004**	**44.0355**

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					
Fast Food Restaurant with	820320	4.4200e-003	0.0402	0.0338	2.4000e-004		3.0600e-003	3.0600e-003		3.0600e-003	3.0600e-003	0.0000	43.7754	43.7754	8.4000e-004	8.0000e-004	44.0355
Gasoline/Service Station	0	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
Other Asphalt Surfaces	0	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
Total		**4.4200e-003**	**0.0402**	**0.0338**	**2.4000e-004**		**3.0600e-003**	**3.0600e-003**		**3.0600e-003**	**3.0600e-003**	**0.0000**	**43.7754**	**43.7754**	**8.4000e-004**	**8.0000e-004**	**44.0355**

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Fast Food Restaurant with	142440	45.3844	1.8700e-003	3.9000e-004	45.5468
Gasoline/Service Station	17052	5.4331	2.2000e-004	5.0000e-005	5.4526
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**50.8176**	**2.0900e-003**	**4.4000e-004**	**50.9994**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Fast Food Restaurant with	142440	45.3844	1.8700e-003	3.9000e-004	45.5468
Gasoline/Service Station	17052	5.4331	2.2000e-004	5.0000e-005	5.4526
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**50.8176**	**2.0900e-003**	**4.4000e-004**	**50.9994**

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	0.0232	0.0000	9.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.8000e-004	1.8000e-004	0.0000	0.0000	1.9000e-004
Unmitigated	0.0232	0.0000	9.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.8000e-004	1.8000e-004	0.0000	0.0000	1.9000e-004

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	2.8900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0203					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	9.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.8000e-004	1.8000e-004	0.0000	0.0000	1.9000e-004
Total	**0.0232**	**0.0000**	**9.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.8000e-004**	**1.8000e-004**	**0.0000**	**0.0000**	**1.9000e-004**

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	2.8900e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.0203					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	1.0000e-005	0.0000	9.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.8000e-004	1.8000e-004	0.0000	0.0000	1.9000e-004
Total	**0.0232**	**0.0000**	**9.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.8000e-004**	**1.8000e-004**	**0.0000**	**0.0000**	**1.9000e-004**

7.0 Water Detail

7.1 Mitigation Measures Water

Apply Water Conservation Strategy

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	3.6573	1.0700e-003	6.1000e-004	3.8669
Unmitigated	4.5717	1.3300e-003	7.7000e-004	4.8337

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Fast Food Restaurant with	0.910601 / 0.0581235	4.3058	1.2700e-003	7.3000e-004	4.5566
Gasoline/Service Station	0.0398457 /	0.2659	6.0000e-005	3.0000e-005	0.2771
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**4.5717**	**1.3300e-003**	**7.6000e-004**	**4.8337**

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Fast Food Restaurant with	0.728481 / 0.0464988	3.4446	1.0200e-003	5.9000e-004	3.6452
Gasoline/Service Station	0.0318765 /	0.2127	5.0000e-005	3.0000e-005	0.2217
Other Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**3.6573**	**1.0700e-003**	**6.2000e-004**	**3.8669**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Institute Recycling and Composting Services

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	3.6721	0.2170	0.0000	9.0975
Unmitigated	7.3442	0.4340	0.0000	18.1950

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Fast Food Restaurant with	34.56	7.0154	0.4146	0.0000	17.3803
Gasoline/Service Station	1.62	0.3289	0.0194	0.0000	0.8147
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**7.3442**	**0.4340**	**0.0000**	**18.1950**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Fast Food Restaurant with	17.28	3.5077	0.2073	0.0000	8.6901
Gasoline/Service Station	0.81	0.1644	9.7200e-003	0.0000	0.4074
Other Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**3.6721**	**0.2170**	**0.0000**	**9.0975**

CalEEMod Version: CalEEMod.2016.3.2

Date: 11/13/2019 10:10 AM

7th St & County Line Rd RV Fueling & Retail Project

Riverside-South Coast County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Fast Food Restaurant with Drive Thru	3.00	1000sqft	0.07	3,000.00	0
Gasoline/Service Station	3.00	Pump	0.04	1,680.00	0
Other Asphalt Surfaces	1.19	Acre	1.19	51,836.40	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 7th St & County Line Rd RV Fueling & Retail Project. Riverside County.

Land Use - Construction of 3,000 SF in retail and RV fuel station on 1.3 acre site.

Construction Phase - Default schedule assumed.

Off-road Equipment - Default equipment assumed.

Grading - Assumed soil will be balanced.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Demolition - Demolition of 1,625 SF single family home.

Trips and VMT - Rounded trips.

Vehicle Trips - Updated trip rates per TIA (Ganddini Group, Inc).

Energy Use - Assumed no natural gas consumption by fuel pumps.

Water And Wastewater - Assume 100% aerobic.

Construction Off-road Equipment Mitigation - Compliance with SCAQMD Rule 403 - water twice daily.

Water Mitigation - Assume 20% reduction in water consumption per CalGreen.

Waste Mitigation - Assum 50% waste diverted per AB 939.

Table Name	Column Name	Default Value	New Value
tblEnergyUse	NT24NG	17.13	0.00
tblEnergyUse	T24NG	15.36	0.00
tblLandUse	LandUseSquareFeet	423.52	1,680.00
tblLandUse	LotAcreage	0.01	0.04
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripNumber	7.00	8.00
tblTripsAndVMT	PhaseName		Architectural Coating
tblTripsAndVMT	PhaseName		Building Construction
tblTripsAndVMT	PhaseName		Demolition
tblTripsAndVMT	PhaseName		Grading
tblTripsAndVMT	PhaseName		Paving
tblTripsAndVMT	PhaseName		Site Preparation
tblTripsAndVMT	WorkerTripNumber	5.00	6.00
tblTripsAndVMT	WorkerTripNumber	13.00	14.00
tblTripsAndVMT	WorkerTripNumber	13.00	14.00
tblVehicleTrips	ST_TR	722.03	1,193.94
tblVehicleTrips	ST_TR	168.56	172.01
tblVehicleTrips	SU_TR	542.72	897.44

tblVehicleTrips	SU_TR	168.56	172.01
tblVehicleTrips	WD_TR	496.12	820.38
tblVehicleTrips	WD_TR	168.56	172.01
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

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	lb/day										lb/day					
2020	2.2168	21.0962	15.4091	0.0282	5.9200	1.1540	6.7417	2.9856	1.0776	3.7416	0.0000	2,628.4757	2,628.4757	0.6041	0.0000	2,638.4611
2021	6.0341	14.5883	14.2192	0.0281	0.4272	0.6882	1.1154	0.1148	0.6644	0.7792	0.0000	2,614.5933	2,614.5933	0.4158	0.0000	2,624.1751
Maximum	**6.0341**	**21.0962**	**15.4091**	**0.0282**	**5.9200**	**1.1540**	**6.7417**	**2.9856**	**1.0776**	**3.7416**	**0.0000**	**2,628.4757**	**2,628.4757**	**0.6041**	**0.0000**	**2,638.4611**

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	lb/day										lb/day					
2020	2.2168	21.0962	15.4091	0.0282	2.7302	1.1540	3.5519	1.3611	1.0776	2.1170	0.0000	2,628.4757	2,628.4757	0.6041	0.0000	2,638.4611
2021	6.0341	14.5883	14.2192	0.0281	0.4272	0.6882	1.1154	0.1148	0.6644	0.7792	0.0000	2,614.5933	2,614.5933	0.4158	0.0000	2,624.1751
Maximum	**6.0341**	**21.0962**	**15.4091**	**0.0282**	**2.7302**	**1.1540**	**3.5519**	**1.3611**	**1.0776**	**2.1170**	**0.0000**	**2,628.4757**	**2,628.4757**	**0.6041**	**0.0000**	**2,638.4611**

	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**	**50.25**	**0.00**	**40.60**	**52.40**	**0.00**	**35.93**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	lb/day										lb/day					
Area	0.1269	1.0000e-005	7.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.5700e-003	1.5700e-003	0.0000		1.6800e-003
Energy	0.0242	0.2203	0.1851	1.3200e-003		0.0168	0.0168		0.0168	0.0168		264.4061	264.4061	5.0700e-003	4.8500e-003	265.9774
Mobile	6.0417	40.2341	41.3455	0.1696	10.3774	0.1071	10.4845	2.7764	0.1002	2.8767		17,389.9005	17,389.9005	1.2686		17,421.6161
Total	**6.1929**	**40.4544**	**41.5314**	**0.1709**	**10.3774**	**0.1239**	**10.5013**	**2.7764**	**0.1170**	**2.8934**		**17,654.3082**	**17,654.3082**	**1.2737**	**4.8500e-003**	**17,687.5951**

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	lb/day										lb/day					
Area	0.1269	1.0000e-005	7.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.5700e-003	1.5700e-003	0.0000		1.6800e-003
Energy	0.0242	0.2203	0.1851	1.3200e-003		0.0168	0.0168		0.0168	0.0168		264.4061	264.4061	5.0700e-003	4.8500e-003	265.9774
Mobile	6.0417	40.2341	41.3455	0.1696	10.3774	0.1071	10.4845	2.7764	0.1002	2.8767		17,389.9005	17,389.9005	1.2686		17,421.6161
Total	**6.1929**	**40.4544**	**41.5314**	**0.1709**	**10.3774**	**0.1239**	**10.5013**	**2.7764**	**0.1170**	**2.8934**		**17,654.3082**	**17,654.3082**	**1.2737**	**4.8500e-003**	**17,687.5951**

	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

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/1/2020	5/28/2020	5	20	
2	Site Preparation	Site Preparation	5/29/2020	6/1/2020	5	2	
3	Grading	Grading	6/2/2020	6/5/2020	5	4	
4	Building Construction	Building Construction	6/6/2020	3/12/2021	5	200	
5	Paving	Paving	3/13/2021	3/26/2021	5	10	
6	Architectural Coating	Architectural Coating	3/27/2021	4/9/2021	5	10	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 1.19

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 7,020; Non-Residential Outdoor: 2,340; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	6.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Paving	Paving Equipment	1	8.00	132	0.36
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Building Construction	Welders	3	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
Architectural Coating	1	6.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	24.00	9.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	5	14.00	0.00	8.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	14.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 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	lb/day										lb/day					
Fugitive Dust					0.0805	0.0000	0.0805	0.0122	0.0000	0.0122			0.0000			0.0000
Off-Road	2.1262	20.9463	14.6573	0.0241		1.1525	1.1525		1.0761	1.0761		2,322.3127	2,322.3127	0.5970		2,337.2363
Total	**2.1262**	**20.9463**	**14.6573**	**0.0241**	**0.0805**	**1.1525**	**1.2330**	**0.0122**	**1.0761**	**1.0883**		**2,322.3127**	**2,322.3127**	**0.5970**		**2,337.2363**

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	lb/day										lb/day					
Hauling	2.0600e-003	0.0947	0.0117	3.0000e-004	7.0000e-003	3.0000e-004	7.3000e-003	1.9200e-003	2.9000e-004	2.2100e-003		32.3107	32.3107	1.9300e-003		32.3588
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
Worker	0.0885	0.0552	0.7401	2.0700e-003	0.2107	1.2500e-003	0.2120	0.0559	1.1500e-003	0.0570		206.6243	206.6243	5.2200e-003		206.7549
Total	**0.0906**	**0.1499**	**0.7518**	**2.3700e-003**	**0.2177**	**1.5500e-003**	**0.2193**	**0.0578**	**1.4400e-003**	**0.0592**		**238.9350**	**238.9350**	**7.1500e-003**		**239.1137**

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	lb/day										lb/day					
Fugitive Dust					0.0362	0.0000	0.0362	5.4800e-003	0.0000	5.4800e-003			0.0000			0.0000
Off-Road	2.1262	20.9463	14.6573	0.0241		1.1525	1.1525		1.0761	1.0761	0.0000	2,322.3127	2,322.3127	0.5970		2,337.2363
Total	**2.1262**	**20.9463**	**14.6573**	**0.0241**	**0.0362**	**1.1525**	**1.1887**	**5.4800e-003**	**1.0761**	**1.0816**	**0.0000**	**2,322.3127**	**2,322.3127**	**0.5970**		**2,337.2363**

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	lb/day										lb/day					
Hauling	2.0600e-003	0.0947	0.0117	3.0000e-004	7.0000e-003	3.0000e-004	7.3000e-003	1.9200e-003	2.9000e-004	2.2100e-003		32.3107	32.3107	1.9300e-003		32.3588
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
Worker	0.0885	0.0552	0.7401	2.0700e-003	0.2107	1.2500e-003	0.2120	0.0559	1.1500e-003	0.0570		206.6243	206.6243	5.2200e-003		206.7549
Total	**0.0906**	**0.1499**	**0.7518**	**2.3700e-003**	**0.2177**	**1.5500e-003**	**0.2193**	**0.0578**	**1.4400e-003**	**0.0592**		**238.9350**	**238.9350**	**7.1500e-003**		**239.1137**

3.3 Site Preparation - 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	lb/day										lb/day					
Fugitive Dust					5.7996	0.0000	5.7996	2.9537	0.0000	2.9537			0.0000			0.0000
Off-Road	1.6299	18.3464	7.7093	0.0172		0.8210	0.8210		0.7553	0.7553		1,667.4119	1,667.4119	0.5393		1,680.8937
Total	**1.6299**	**18.3464**	**7.7093**	**0.0172**	**5.7996**	**0.8210**	**6.6205**	**2.9537**	**0.7553**	**3.7090**		**1,667.4119**	**1,667.4119**	**0.5393**		**1,680.8937**

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	lb/day										lb/day					
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
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
Worker	0.0506	0.0316	0.4229	1.1900e-003	0.1204	7.1000e-004	0.1211	0.0319	6.6000e-004	0.0326		118.0711	118.0711	2.9800e-003		118.1456
Total	**0.0506**	**0.0316**	**0.4229**	**1.1900e-003**	**0.1204**	**7.1000e-004**	**0.1211**	**0.0319**	**6.6000e-004**	**0.0326**		**118.0711**	**118.0711**	**2.9800e-003**		**118.1456**

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	lb/day										lb/day					
Fugitive Dust					2.6098	0.0000	2.6098	1.3292	0.0000	1.3292			0.0000			0.0000
Off-Road	1.6299	18.3464	7.7093	0.0172		0.8210	0.8210		0.7553	0.7553	0.0000	1,667.4119	1,667.4119	0.5393		1,680.8937
Total	**1.6299**	**18.3464**	**7.7093**	**0.0172**	**2.6098**	**0.8210**	**3.4308**	**1.3292**	**0.7553**	**2.0844**	**0.0000**	**1,667.4119**	**1,667.4119**	**0.5393**		**1,680.8937**

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	lb/day										lb/day					
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
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
Worker	0.0506	0.0316	0.4229	1.1900e-003	0.1204	7.1000e-004	0.1211	0.0319	6.6000e-004	0.0326		118.0711	118.0711	2.9800e-003		118.1456
Total	**0.0506**	**0.0316**	**0.4229**	**1.1900e-003**	**0.1204**	**7.1000e-004**	**0.1211**	**0.0319**	**6.6000e-004**	**0.0326**		**118.0711**	**118.0711**	**2.9800e-003**		**118.1456**

3.4 Grading - 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	lb/day										lb/day					
Fugitive Dust					4.9143	0.0000	4.9143	2.5256	0.0000	2.5256			0.0000			0.0000
Off-Road	1.3498	15.0854	6.4543	0.0141		0.6844	0.6844		0.6296	0.6296		1,365.7183	1,365.7183	0.4417		1,376.7609
Total	**1.3498**	**15.0854**	**6.4543**	**0.0141**	**4.9143**	**0.6844**	**5.5986**	**2.5256**	**0.6296**	**3.1552**		**1,365.7183**	**1,365.7183**	**0.4417**		**1,376.7609**

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	lb/day										lb/day					
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
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
Worker	0.0506	0.0316	0.4229	1.1900e-003	0.1204	7.1000e-004	0.1211	0.0319	6.6000e-004	0.0326		118.0711	118.0711	2.9800e-003		118.1456
Total	**0.0506**	**0.0316**	**0.4229**	**1.1900e-003**	**0.1204**	**7.1000e-004**	**0.1211**	**0.0319**	**6.6000e-004**	**0.0326**		**118.0711**	**118.0711**	**2.9800e-003**		**118.1456**

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	lb/day										lb/day					
Fugitive Dust					2.2114	0.0000	2.2114	1.1365	0.0000	1.1365			0.0000			0.0000
Off-Road	1.3498	15.0854	6.4543	0.0141		0.6844	0.6844		0.6296	0.6296	0.0000	1,365.7183	1,365.7183	0.4417		1,376.7609
Total	**1.3498**	**15.0854**	**6.4543**	**0.0141**	**2.2114**	**0.6844**	**2.8958**	**1.1365**	**0.6296**	**1.7662**	**0.0000**	**1,365.7183**	**1,365.7183**	**0.4417**		**1,376.7609**

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	lb/day										lb/day					
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
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
Worker	0.0506	0.0316	0.4229	1.1900e-003	0.1204	7.1000e-004	0.1211	0.0319	6.6000e-004	0.0326		118.0711	118.0711	2.9800e-003		118.1456
Total	**0.0506**	**0.0316**	**0.4229**	**1.1900e-003**	**0.1204**	**7.1000e-004**	**0.1211**	**0.0319**	**6.6000e-004**	**0.0326**		**118.0711**	**118.0711**	**2.9800e-003**		**118.1456**

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	lb/day										lb/day					
Off-Road	2.0305	14.7882	13.1881	0.0220		0.7960	0.7960		0.7688	0.7688		2,001.1595	2,001.1595	0.3715		2,010.4467
Total	**2.0305**	**14.7882**	**13.1881**	**0.0220**		**0.7960**	**0.7960**		**0.7688**	**0.7688**		**2,001.1595**	**2,001.1595**	**0.3715**		**2,010.4467**

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	lb/day										lb/day					
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
Vendor	0.0267	0.9706	0.1787	2.5900e-003	0.0660	5.9900e-003	0.0719	0.0190	5.7300e-003	0.0247		273.1031	273.1031	0.0190		273.5774
Worker	0.1518	0.0947	1.2688	3.5600e-003	0.3613	2.1400e-003	0.3634	0.0958	1.9700e-003	0.0978		354.2131	354.2131	8.9500e-003		354.4369
Total	**0.1785**	**1.0653**	**1.4475**	**6.1500e-003**	**0.4272**	**8.1300e-003**	**0.4353**	**0.1148**	**7.7000e-003**	**0.1225**		**627.3162**	**627.3162**	**0.0279**		**628.0143**

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	lb/day										lb/day					
Off-Road	2.0305	14.7882	13.1881	0.0220		0.7960	0.7960		0.7688	0.7688	0.0000	2,001.1595	2,001.1595	0.3715		2,010.4467
Total	**2.0305**	**14.7882**	**13.1881**	**0.0220**		**0.7960**	**0.7960**		**0.7688**	**0.7688**	**0.0000**	**2,001.1595**	**2,001.1595**	**0.3715**		**2,010.4467**

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	lb/day										lb/day					
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
Vendor	0.0267	0.9706	0.1787	2.5900e-003	0.0660	5.9900e-003	0.0719	0.0190	5.7300e-003	0.0247		273.1031	273.1031	0.0190		273.5774
Worker	0.1518	0.0947	1.2688	3.5600e-003	0.3613	2.1400e-003	0.3634	0.0958	1.9700e-003	0.0978		354.2131	354.2131	8.9500e-003		354.4369
Total	**0.1785**	**1.0653**	**1.4475**	**6.1500e-003**	**0.4272**	**8.1300e-003**	**0.4353**	**0.1148**	**7.7000e-003**	**0.1225**		**627.3162**	**627.3162**	**0.0279**		**628.0143**

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	lb/day										lb/day					
Off-Road	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608		2,001.2200	2,001.2200	0.3573		2,010.1517
Total	**1.8125**	**13.6361**	**12.8994**	**0.0221**		**0.6843**	**0.6843**		**0.6608**	**0.6608**		**2,001.2200**	**2,001.2200**	**0.3573**		**2,010.1517**

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	lb/day										lb/day					
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
Vendor	0.0222	0.8672	0.1559	2.5700e-003	0.0660	1.7900e-003	0.0677	0.0190	1.7100e-003	0.0207		271.0112	271.0112	0.0180		271.4601
Worker	0.1416	0.0850	1.1639	3.4400e-003	0.3613	2.0800e-003	0.3633	0.0958	1.9100e-003	0.0977		342.3621	342.3621	8.0500e-003		342.5634
Total	**0.1637**	**0.9523**	**1.3198**	**6.0100e-003**	**0.4272**	**3.8700e-003**	**0.4311**	**0.1148**	**3.6200e-003**	**0.1184**		**613.3733**	**613.3733**	**0.0260**		**614.0234**

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	lb/day										lb/day					
Off-Road	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608	0.0000	2,001.2200	2,001.2200	0.3573		2,010.1517
Total	**1.8125**	**13.6361**	**12.8994**	**0.0221**		**0.6843**	**0.6843**		**0.6608**	**0.6608**	**0.0000**	**2,001.2200**	**2,001.2200**	**0.3573**		**2,010.1517**

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	lb/day										lb/day					
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
Vendor	0.0222	0.8672	0.1559	2.5700e-003	0.0660	1.7900e-003	0.0677	0.0190	1.7100e-003	0.0207		271.0112	271.0112	0.0180		271.4601
Worker	0.1416	0.0850	1.1639	3.4400e-003	0.3613	2.0800e-003	0.3633	0.0958	1.9100e-003	0.0977		342.3621	342.3621	8.0500e-003		342.5634
Total	**0.1637**	**0.9523**	**1.3198**	**6.0100e-003**	**0.4272**	**3.8700e-003**	**0.4311**	**0.1148**	**3.6200e-003**	**0.1184**		**613.3733**	**613.3733**	**0.0260**		**614.0234**

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	lb/day										lb/day					
Off-Road	0.7739	7.7422	8.8569	0.0135		0.4153	0.4153		0.3830	0.3830		1,296.8664	1,296.8664	0.4111		1,307.1442
Paving	0.3118					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0857**	**7.7422**	**8.8569**	**0.0135**		**0.4153**	**0.4153**		**0.3830**	**0.3830**		**1,296.8664**	**1,296.8664**	**0.4111**		**1,307.1442**

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	lb/day										lb/day					
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
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
Worker	0.0826	0.0496	0.6790	2.0000e-003	0.2107	1.2100e-003	0.2119	0.0559	1.1200e-003	0.0570		199.7112	199.7112	4.7000e-003		199.8286
Total	**0.0826**	**0.0496**	**0.6790**	**2.0000e-003**	**0.2107**	**1.2100e-003**	**0.2119**	**0.0559**	**1.1200e-003**	**0.0570**		**199.7112**	**199.7112**	**4.7000e-003**		**199.8286**

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	lb/day										lb/day					
Off-Road	0.7739	7.7422	8.8569	0.0135		0.4153	0.4153		0.3830	0.3830	0.0000	1,296.8664	1,296.8664	0.4111		1,307.1442
Paving	0.3118					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0857**	**7.7422**	**8.8569**	**0.0135**		**0.4153**	**0.4153**		**0.3830**	**0.3830**	**0.0000**	**1,296.8664**	**1,296.8664**	**0.4111**		**1,307.1442**

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	lb/day										lb/day					
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
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
Worker	0.0826	0.0496	0.6790	2.0000e-003	0.2107	1.2100e-003	0.2119	0.0559	1.1200e-003	0.0570		199.7112	199.7112	4.7000e-003		199.8286
Total	**0.0826**	**0.0496**	**0.6790**	**2.0000e-003**	**0.2107**	**1.2100e-003**	**0.2119**	**0.0559**	**1.1200e-003**	**0.0570**		**199.7112**	**199.7112**	**4.7000e-003**		**199.8286**

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	lb/day										lb/day					
Archit. Coating	5.7798					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	**5.9987**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.9309**

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	lb/day										lb/day					
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
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
Worker	0.0354	0.0213	0.2910	8.6000e-004	0.0903	5.2000e-004	0.0908	0.0240	4.8000e-004	0.0244		85.5905	85.5905	2.0100e-003		85.6408
Total	**0.0354**	**0.0213**	**0.2910**	**8.6000e-004**	**0.0903**	**5.2000e-004**	**0.0908**	**0.0240**	**4.8000e-004**	**0.0244**		**85.5905**	**85.5905**	**2.0100e-003**		**85.6408**

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	lb/day										lb/day					
Archit. Coating	5.7798					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	**5.9987**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**	**0.0000**	**281.4481**	**281.4481**	**0.0193**		**281.9309**

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	lb/day										lb/day					
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
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
Worker	0.0354	0.0213	0.2910	8.6000e-004	0.0903	5.2000e-004	0.0908	0.0240	4.8000e-004	0.0244		85.5905	85.5905	2.0100e-003		85.6408
Total	**0.0354**	**0.0213**	**0.2910**	**8.6000e-004**	**0.0903**	**5.2000e-004**	**0.0908**	**0.0240**	**4.8000e-004**	**0.0244**		**85.5905**	**85.5905**	**2.0100e-003**		**85.6408**

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	lb/day										lb/day					
Mitigated	6.0417	40.2341	41.3455	0.1696	10.3774	0.1071	10.4845	2.7764	0.1002	2.8767		17,389.9005	17,389.9005	1.2686		17,421.6161
Unmitigated	6.0417	40.2341	41.3455	0.1696	10.3774	0.1071	10.4845	2.7764	0.1002	2.8767		17,389.9005	17,389.9005	1.2686		17,421.6161

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant with Drive Thru	2,461.14	3,581.82	2692.32	3,313,300	3,313,300
Gasoline/Service Station	516.03	516.03	516.03	394,993	394,993
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	2,977.17	4,097.85	3,208.35	3,708,294	3,708,294

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-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant with Drive Thru	18.50	10.10	7.90	2.20	78.80	19.00	29	21	50
Gasoline/Service Station	18.50	10.10	7.90	2.00	79.00	19.00	14	27	59
Other Asphalt Surfaces	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Fast Food Restaurant with Drive Thru	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Gasoline/Service Station	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Other Asphalt Surfaces	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965

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	lb/day										lb/day					
NaturalGas Mitigated	0.0242	0.2203	0.1851	1.3200e-003		0.0168	0.0168		0.0168	0.0168		264.4061	264.4061	5.0700e-003	4.8500e-003	265.9774
NaturalGas Unmitigated	0.0242	0.2203	0.1851	1.3200e-003		0.0168	0.0168		0.0168	0.0168		264.4061	264.4061	5.0700e-003	4.8500e-003	265.9774

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	lb/day										lb/day					
Fast Food Restaurant with Drive Thru	2247.45	0.0242	0.2203	0.1851	1.3200e-003		0.0168	0.0168		0.0168	0.0168		264.4061	264.4061	5.0700e-003	4.8500e-003	265.9774
Gasoline/Service Station	0	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
Other Asphalt Surfaces	0	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
Total		**0.0242**	**0.2203**	**0.1851**	**1.3200e-003**		**0.0168**	**0.0168**		**0.0168**	**0.0168**		**264.4061**	**264.4061**	**5.0700e-003**	**4.8500e-003**	**265.9774**

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	lb/day										lb/day					
Fast Food Restaurant with	2.24745	0.0242	0.2203	0.1851	1.3200e-003		0.0168	0.0168		0.0168	0.0168		264.4061	264.4061	5.0700e-003	4.8500e-003	265.9774
Gasoline/Service Station	0	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
Other Asphalt Surfaces	0	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
Total		**0.0242**	**0.2203**	**0.1851**	**1.3200e-003**		**0.0168**	**0.0168**		**0.0168**	**0.0168**		**264.4061**	**264.4061**	**5.0700e-003**	**4.8500e-003**	**265.9774**

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	lb/day										lb/day					
Mitigated	0.1269	1.0000e-005	7.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.5700e-003	1.5700e-003	0.0000		1.6800e-003
Unmitigated	0.1269	1.0000e-005	7.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.5700e-003	1.5700e-003	0.0000		1.6800e-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	lb/day										lb/day					
Architectural Coating	0.0158					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1110					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.0000e-005	1.0000e-005	7.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.5700e-003	1.5700e-003	0.0000		1.6800e-003
Total	**0.1269**	**1.0000e-005**	**7.4000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.5700e-003**	**1.5700e-003**	**0.0000**		**1.6800e-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	lb/day										lb/day					
Architectural Coating	0.0158					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1110					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.0000e-005	1.0000e-005	7.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.5700e-003	1.5700e-003	0.0000		1.6800e-003
Total	**0.1269**	**1.0000e-005**	**7.4000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.5700e-003**	**1.5700e-003**	**0.0000**		**1.6800e-003**

CalEEMod Version: CalEEMod.2016.3.2

Date: 11/13/2019 10:13 AM

7th St & County Line Rd RV Fueling & Retail Project

Riverside-South Coast County, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Fast Food Restaurant with Drive Thru	3.00	1000sqft	0.07	3,000.00	0
Gasoline/Service Station	3.00	Pump	0.04	1,680.00	0
Other Asphalt Surfaces	1.19	Acre	1.19	51,836.40	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.4	**Precipitation Freq (Days)**	28
Climate Zone	10			**Operational Year**	2022
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Project Characteristics - 7th St & County Line Rd RV Fueling & Retail Project. Riverside County.

Land Use - Construction of 3,000 SF in retail and RV fuel station on 1.3 acre site.

Construction Phase - Default schedule assumed.

Off-road Equipment - Default equipment assumed.

Grading - Assumed soil will be balanced.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Off-road Equipment - Default equipment assumed.

Demolition - Demolition of 1,625 SF single family home.

Trips and VMT - Rounded trips.

Vehicle Trips - Updated trip rates per TIA (Ganddini Group, Inc).

Energy Use - Assumed no natural gas consumption by fuel pumps.

Water And Wastewater - Assume 100% aerobic.

Construction Off-road Equipment Mitigation - Compliance with SCAQMD Rule 403 - water twice daily.

Water Mitigation - Assume 20% reduction in water consumption per CalGreen.

Waste Mitigation - Assum 50% waste diverted per AB 939.

Table Name	Column Name	Default Value	New Value
tblEnergyUse	NT24NG	17.13	0.00
tblEnergyUse	T24NG	15.36	0.00
tblLandUse	LandUseSquareFeet	423.52	1,680.00
tblLandUse	LotAcreage	0.01	0.04
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblTripsAndVMT	HaulingTripNumber	7.00	8.00
tblTripsAndVMT	PhaseName		Architectural Coating
tblTripsAndVMT	PhaseName		Building Construction
tblTripsAndVMT	PhaseName		Demolition
tblTripsAndVMT	PhaseName		Grading
tblTripsAndVMT	PhaseName		Paving
tblTripsAndVMT	PhaseName		Site Preparation
tblTripsAndVMT	WorkerTripNumber	5.00	6.00
tblTripsAndVMT	WorkerTripNumber	13.00	14.00
tblTripsAndVMT	WorkerTripNumber	13.00	14.00
tblVehicleTrips	ST_TR	722.03	1,193.94
tblVehicleTrips	ST_TR	168.56	172.01
tblVehicleTrips	SU_TR	542.72	897.44

tblVehicleTrips	SU_TR	168.56	172.01
tblVehicleTrips	WD_TR	496.12	820.38
tblVehicleTrips	WD_TR	168.56	172.01
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AerobicPercent	87.46	100.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	AnaerobicandFacultativeLagoonsPercent	2.21	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00
tblWater	SepticTankPercent	10.33	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

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	lb/day										lb/day					
2020	2.2170	21.0990	15.2631	0.0277	5.9200	1.1540	6.7417	2.9856	1.0776	3.7416	0.0000	2,582.5812	2,582.5812	0.6036	0.0000	2,592.5884
2021	6.0342	14.5859	14.0117	0.0276	0.4272	0.6883	1.1155	0.1148	0.6645	0.7793	0.0000	2,569.9888	2,569.9888	0.4152	0.0000	2,579.5935
Maximum	**6.0342**	**21.0990**	**15.2631**	**0.0277**	**5.9200**	**1.1540**	**6.7417**	**2.9856**	**1.0776**	**3.7416**	**0.0000**	**2,582.5812**	**2,582.5812**	**0.6036**	**0.0000**	**2,592.5884**

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	lb/day										lb/day					
2020	2.2170	21.0990	15.2631	0.0277	2.7302	1.1540	3.5519	1.3611	1.0776	2.1170	0.0000	2,582.5812	2,582.5812	0.6036	0.0000	2,592.5884
2021	6.0342	14.5859	14.0117	0.0276	0.4272	0.6883	1.1155	0.1148	0.6645	0.7793	0.0000	2,569.9888	2,569.9888	0.4152	0.0000	2,579.5935
Maximum	**6.0342**	**21.0990**	**15.2631**	**0.0277**	**2.7302**	**1.1540**	**3.5519**	**1.3611**	**1.0776**	**2.1170**	**0.0000**	**2,582.5812**	**2,582.5812**	**0.6036**	**0.0000**	**2,592.5884**

	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**	**50.25**	**0.00**	**40.60**	**52.40**	**0.00**	**35.93**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	lb/day										lb/day					
Area	0.1269	1.0000e-005	7.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.5700e-003	1.5700e-003	0.0000		1.6800e-003
Energy	0.0242	0.2203	0.1851	1.3200e-003		0.0168	0.0168		0.0168	0.0168		264.4061	264.4061	5.0700e-003	4.8500e-003	265.9774
Mobile	4.9842	39.4697	39.0371	0.1553	10.3774	0.1097	10.4871	2.7764	0.1027	2.8791		15,934.6151	15,934.6151	1.3749		15,968.9882
Total	**5.1354**	**39.6900**	**39.2229**	**0.1567**	**10.3774**	**0.1264**	**10.5039**	**2.7764**	**0.1194**	**2.8959**		**16,199.0228**	**16,199.0228**	**1.3800**	**4.8500e-003**	**16,234.9673**

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	lb/day										lb/day					
Area	0.1269	1.0000e-005	7.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.5700e-003	1.5700e-003	0.0000		1.6800e-003
Energy	0.0242	0.2203	0.1851	1.3200e-003		0.0168	0.0168		0.0168	0.0168		264.4061	264.4061	5.0700e-003	4.8500e-003	265.9774
Mobile	4.9842	39.4697	39.0371	0.1553	10.3774	0.1097	10.4871	2.7764	0.1027	2.8791		15,934.6151	15,934.6151	1.3749		15,968.9882
Total	**5.1354**	**39.6900**	**39.2229**	**0.1567**	**10.3774**	**0.1264**	**10.5039**	**2.7764**	**0.1194**	**2.8959**		**16,199.0228**	**16,199.0228**	**1.3800**	**4.8500e-003**	**16,234.9673**

	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

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	5/1/2020	5/28/2020	5	20	
2	Site Preparation	Site Preparation	5/29/2020	6/1/2020	5	2	
3	Grading	Grading	6/2/2020	6/5/2020	5	4	
4	Building Construction	Building Construction	6/6/2020	3/12/2021	5	200	
5	Paving	Paving	3/13/2021	3/26/2021	5	10	
6	Architectural Coating	Architectural Coating	3/27/2021	4/9/2021	5	10	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 1.19

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 7,020; Non-Residential Outdoor: 2,340; Striped Parking Area:

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	6.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Paving	Paving Equipment	1	8.00	132	0.36
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Building Construction	Welders	3	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
Architectural Coating	1	6.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	24.00	9.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Demolition	5	14.00	0.00	8.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	14.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	19.80	7.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

3.2 Demolition - 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	lb/day										lb/day					
Fugitive Dust					0.0805	0.0000	0.0805	0.0122	0.0000	0.0122			0.0000			0.0000
Off-Road	2.1262	20.9463	14.6573	0.0241		1.1525	1.1525		1.0761	1.0761		2,322.3127	2,322.3127	0.5970		2,337.2363
Total	**2.1262**	**20.9463**	**14.6573**	**0.0241**	**0.0805**	**1.1525**	**1.2330**	**0.0122**	**1.0761**	**1.0883**		**2,322.3127**	**2,322.3127**	**0.5970**		**2,337.2363**

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	lb/day										lb/day					
Hauling	2.1600e-003	0.0955	0.0137	3.0000e-004	7.0000e-003	3.1000e-004	7.3000e-003	1.9200e-003	2.9000e-004	2.2100e-003		31.5023	31.5023	2.1100e-003		31.5550
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
Worker	0.0886	0.0571	0.5921	1.8600e-003	0.2107	1.2500e-003	0.2120	0.0559	1.1500e-003	0.0570		185.2853	185.2853	4.5100e-003		185.3981
Total	**0.0908**	**0.1527**	**0.6058**	**2.1600e-003**	**0.2177**	**1.5600e-003**	**0.2193**	**0.0578**	**1.4400e-003**	**0.0592**		**216.7876**	**216.7876**	**6.6200e-003**		**216.9531**

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	lb/day										lb/day					
Fugitive Dust					0.0362	0.0000	0.0362	5.4800e-003	0.0000	5.4800e-003			0.0000			0.0000
Off-Road	2.1262	20.9463	14.6573	0.0241		1.1525	1.1525		1.0761	1.0761	0.0000	2,322.3127	2,322.3127	0.5970		2,337.2363
Total	**2.1262**	**20.9463**	**14.6573**	**0.0241**	**0.0362**	**1.1525**	**1.1887**	**5.4800e-003**	**1.0761**	**1.0816**	**0.0000**	**2,322.3127**	**2,322.3127**	**0.5970**		**2,337.2363**

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	lb/day										lb/day					
Hauling	2.1600e-003	0.0955	0.0137	3.0000e-004	7.0000e-003	3.1000e-004	7.3000e-003	1.9200e-003	2.9000e-004	2.2100e-003		31.5023	31.5023	2.1100e-003		31.5550
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
Worker	0.0886	0.0571	0.5921	1.8600e-003	0.2107	1.2500e-003	0.2120	0.0559	1.1500e-003	0.0570		185.2853	185.2853	4.5100e-003		185.3981
Total	**0.0908**	**0.1527**	**0.6058**	**2.1600e-003**	**0.2177**	**1.5600e-003**	**0.2193**	**0.0578**	**1.4400e-003**	**0.0592**		**216.7876**	**216.7876**	**6.6200e-003**		**216.9531**

3.3 Site Preparation - 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	lb/day										lb/day					
Fugitive Dust					5.7996	0.0000	5.7996	2.9537	0.0000	2.9537			0.0000			0.0000
Off-Road	1.6299	18.3464	7.7093	0.0172		0.8210	0.8210		0.7553	0.7553		1,667.4119	1,667.4119	0.5393		1,680.8937
Total	**1.6299**	**18.3464**	**7.7093**	**0.0172**	**5.7996**	**0.8210**	**6.6205**	**2.9537**	**0.7553**	**3.7090**		**1,667.4119**	**1,667.4119**	**0.5393**		**1,680.8937**

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	lb/day										lb/day					
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
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
Worker	0.0506	0.0327	0.3384	1.0600e-003	0.1204	7.1000e-004	0.1211	0.0319	6.6000e-004	0.0326		105.8773	105.8773	2.5800e-003		105.9417
Total	**0.0506**	**0.0327**	**0.3384**	**1.0600e-003**	**0.1204**	**7.1000e-004**	**0.1211**	**0.0319**	**6.6000e-004**	**0.0326**		**105.8773**	**105.8773**	**2.5800e-003**		**105.9417**

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	lb/day										lb/day					
Fugitive Dust					2.6098	0.0000	2.6098	1.3292	0.0000	1.3292			0.0000			0.0000
Off-Road	1.6299	18.3464	7.7093	0.0172		0.8210	0.8210		0.7553	0.7553	0.0000	1,667.4119	1,667.4119	0.5393		1,680.8937
Total	**1.6299**	**18.3464**	**7.7093**	**0.0172**	**2.6098**	**0.8210**	**3.4308**	**1.3292**	**0.7553**	**2.0844**	**0.0000**	**1,667.4119**	**1,667.4119**	**0.5393**		**1,680.8937**

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	lb/day										lb/day					
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
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
Worker	0.0506	0.0327	0.3384	1.0600e-003	0.1204	7.1000e-004	0.1211	0.0319	6.6000e-004	0.0326		105.8773	105.8773	2.5800e-003		105.9417
Total	**0.0506**	**0.0327**	**0.3384**	**1.0600e-003**	**0.1204**	**7.1000e-004**	**0.1211**	**0.0319**	**6.6000e-004**	**0.0326**		**105.8773**	**105.8773**	**2.5800e-003**		**105.9417**

3.4 Grading - 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	lb/day										lb/day					
Fugitive Dust					4.9143	0.0000	4.9143	2.5256	0.0000	2.5256			0.0000			0.0000
Off-Road	1.3498	15.0854	6.4543	0.0141		0.6844	0.6844		0.6296	0.6296		1,365.7183	1,365.7183	0.4417		1,376.7609
Total	**1.3498**	**15.0854**	**6.4543**	**0.0141**	**4.9143**	**0.6844**	**5.5986**	**2.5256**	**0.6296**	**3.1552**		**1,365.7183**	**1,365.7183**	**0.4417**		**1,376.7609**

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	lb/day										lb/day					
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
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
Worker	0.0506	0.0327	0.3384	1.0600e-003	0.1204	7.1000e-004	0.1211	0.0319	6.6000e-004	0.0326		105.8773	105.8773	2.5800e-003		105.9417
Total	**0.0506**	**0.0327**	**0.3384**	**1.0600e-003**	**0.1204**	**7.1000e-004**	**0.1211**	**0.0319**	**6.6000e-004**	**0.0326**		**105.8773**	**105.8773**	**2.5800e-003**		**105.9417**

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	lb/day										lb/day					
Fugitive Dust					2.2114	0.0000	2.2114	1.1365	0.0000	1.1365			0.0000			0.0000
Off-Road	1.3498	15.0854	6.4543	0.0141		0.6844	0.6844		0.6296	0.6296	0.0000	1,365.7183	1,365.7183	0.4417		1,376.7609
Total	**1.3498**	**15.0854**	**6.4543**	**0.0141**	**2.2114**	**0.6844**	**2.8958**	**1.1365**	**0.6296**	**1.7662**	**0.0000**	**1,365.7183**	**1,365.7183**	**0.4417**		**1,376.7609**

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	lb/day										lb/day					
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
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
Worker	0.0506	0.0327	0.3384	1.0600e-003	0.1204	7.1000e-004	0.1211	0.0319	6.6000e-004	0.0326		105.8773	105.8773	2.5800e-003		105.9417
Total	**0.0506**	**0.0327**	**0.3384**	**1.0600e-003**	**0.1204**	**7.1000e-004**	**0.1211**	**0.0319**	**6.6000e-004**	**0.0326**		**105.8773**	**105.8773**	**2.5800e-003**		**105.9417**

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	lb/day										lb/day					
Off-Road	2.0305	14.7882	13.1881	0.0220		0.7960	0.7960		0.7688	0.7688		2,001.1595	2,001.1595	0.3715		2,010.4467
Total	**2.0305**	**14.7882**	**13.1881**	**0.0220**		**0.7960**	**0.7960**		**0.7688**	**0.7688**		**2,001.1595**	**2,001.1595**	**0.3715**		**2,010.4467**

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	lb/day										lb/day					
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
Vendor	0.0281	0.9681	0.2076	2.5000e-003	0.0660	6.0500e-003	0.0720	0.0190	5.7900e-003	0.0248		263.7897	263.7897	0.0211		264.3165
Worker	0.1519	0.0980	1.0151	3.1900e-003	0.3613	2.1400e-003	0.3634	0.0958	1.9700e-003	0.0978		317.6320	317.6320	7.7300e-003		317.8252
Total	**0.1800**	**1.0661**	**1.2227**	**5.6900e-003**	**0.4272**	**8.1900e-003**	**0.4354**	**0.1148**	**7.7600e-003**	**0.1225**		**581.4217**	**581.4217**	**0.0288**		**582.1417**

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	lb/day										lb/day					
Off-Road	2.0305	14.7882	13.1881	0.0220		0.7960	0.7960		0.7688	0.7688	0.0000	2,001.1595	2,001.1595	0.3715		2,010.4467
Total	**2.0305**	**14.7882**	**13.1881**	**0.0220**		**0.7960**	**0.7960**		**0.7688**	**0.7688**	**0.0000**	**2,001.1595**	**2,001.1595**	**0.3715**		**2,010.4467**

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	lb/day										lb/day					
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
Vendor	0.0281	0.9681	0.2076	2.5000e-003	0.0660	6.0500e-003	0.0720	0.0190	5.7900e-003	0.0248		263.7897	263.7897	0.0211		264.3165
Worker	0.1519	0.0980	1.0151	3.1900e-003	0.3613	2.1400e-003	0.3634	0.0958	1.9700e-003	0.0978		317.6320	317.6320	7.7300e-003		317.8252
Total	**0.1800**	**1.0661**	**1.2227**	**5.6900e-003**	**0.4272**	**8.1900e-003**	**0.4354**	**0.1148**	**7.7600e-003**	**0.1225**		**581.4217**	**581.4217**	**0.0288**		**582.1417**

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	lb/day										lb/day					
Off-Road	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608		2,001.2200	2,001.2200	0.3573		2,010.1517
Total	**1.8125**	**13.6361**	**12.8994**	**0.0221**		**0.6843**	**0.6843**		**0.6608**	**0.6608**		**2,001.2200**	**2,001.2200**	**0.3573**		**2,010.1517**

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	lb/day										lb/day					
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
Vendor	0.0235	0.8619	0.1830	2.4800e-003	0.0660	1.8400e-003	0.0678	0.0190	1.7600e-003	0.0207		261.7612	261.7612	0.0200		262.2603
Worker	0.1420	0.0879	0.9293	3.0800e-003	0.3613	2.0800e-003	0.3633	0.0958	1.9100e-003	0.0977		307.0077	307.0077	6.9500e-003		307.1815
Total	**0.1655**	**0.9498**	**1.1123**	**5.5600e-003**	**0.4272**	**3.9200e-003**	**0.4311**	**0.1148**	**3.6700e-003**	**0.1185**		**568.7688**	**568.7688**	**0.0269**		**569.4418**

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	lb/day										lb/day					
Off-Road	1.8125	13.6361	12.8994	0.0221		0.6843	0.6843		0.6608	0.6608	0.0000	2,001.2200	2,001.2200	0.3573		2,010.1517
Total	**1.8125**	**13.6361**	**12.8994**	**0.0221**		**0.6843**	**0.6843**		**0.6608**	**0.6608**	**0.0000**	**2,001.2200**	**2,001.2200**	**0.3573**		**2,010.1517**

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	lb/day										lb/day					
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
Vendor	0.0235	0.8619	0.1830	2.4800e-003	0.0660	1.8400e-003	0.0678	0.0190	1.7600e-003	0.0207		261.7612	261.7612	0.0200		262.2603
Worker	0.1420	0.0879	0.9293	3.0800e-003	0.3613	2.0800e-003	0.3633	0.0958	1.9100e-003	0.0977		307.0077	307.0077	6.9500e-003		307.1815
Total	**0.1655**	**0.9498**	**1.1123**	**5.5600e-003**	**0.4272**	**3.9200e-003**	**0.4311**	**0.1148**	**3.6700e-003**	**0.1185**		**568.7688**	**568.7688**	**0.0269**		**569.4418**

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	lb/day										lb/day					
Off-Road	0.7739	7.7422	8.8569	0.0135		0.4153	0.4153		0.3830	0.3830		1,296.8664	1,296.8664	0.4111		1,307.1442
Paving	0.3118					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0857**	**7.7422**	**8.8569**	**0.0135**		**0.4153**	**0.4153**		**0.3830**	**0.3830**		**1,296.8664**	**1,296.8664**	**0.4111**		**1,307.1442**

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	lb/day										lb/day					
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
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
Worker	0.0828	0.0513	0.5421	1.8000e-003	0.2107	1.2100e-003	0.2119	0.0559	1.1200e-003	0.0570		179.0878	179.0878	4.0600e-003		179.1892
Total	**0.0828**	**0.0513**	**0.5421**	**1.8000e-003**	**0.2107**	**1.2100e-003**	**0.2119**	**0.0559**	**1.1200e-003**	**0.0570**		**179.0878**	**179.0878**	**4.0600e-003**		**179.1892**

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	lb/day										lb/day					
Off-Road	0.7739	7.7422	8.8569	0.0135		0.4153	0.4153		0.3830	0.3830	0.0000	1,296.8664	1,296.8664	0.4111		1,307.1442
Paving	0.3118					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.0857**	**7.7422**	**8.8569**	**0.0135**		**0.4153**	**0.4153**		**0.3830**	**0.3830**	**0.0000**	**1,296.8664**	**1,296.8664**	**0.4111**		**1,307.1442**

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	lb/day										lb/day					
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
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
Worker	0.0828	0.0513	0.5421	1.8000e-003	0.2107	1.2100e-003	0.2119	0.0559	1.1200e-003	0.0570		179.0878	179.0878	4.0600e-003		179.1892
Total	**0.0828**	**0.0513**	**0.5421**	**1.8000e-003**	**0.2107**	**1.2100e-003**	**0.2119**	**0.0559**	**1.1200e-003**	**0.0570**		**179.0878**	**179.0878**	**4.0600e-003**		**179.1892**

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	lb/day										lb/day					
Archit. Coating	5.7798					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941		281.4481	281.4481	0.0193		281.9309
Total	**5.9987**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**		**281.4481**	**281.4481**	**0.0193**		**281.9309**

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	lb/day										lb/day					
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
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
Worker	0.0355	0.0220	0.2323	7.7000e-004	0.0903	5.2000e-004	0.0908	0.0240	4.8000e-004	0.0244		76.7519	76.7519	1.7400e-003		76.7954
Total	**0.0355**	**0.0220**	**0.2323**	**7.7000e-004**	**0.0903**	**5.2000e-004**	**0.0908**	**0.0240**	**4.8000e-004**	**0.0244**		**76.7519**	**76.7519**	**1.7400e-003**		**76.7954**

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	lb/day										lb/day					
Archit. Coating	5.7798					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2189	1.5268	1.8176	2.9700e-003		0.0941	0.0941		0.0941	0.0941	0.0000	281.4481	281.4481	0.0193		281.9309
Total	**5.9987**	**1.5268**	**1.8176**	**2.9700e-003**		**0.0941**	**0.0941**		**0.0941**	**0.0941**	**0.0000**	**281.4481**	**281.4481**	**0.0193**		**281.9309**

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	lb/day										lb/day					
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
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
Worker	0.0355	0.0220	0.2323	7.7000e-004	0.0903	5.2000e-004	0.0908	0.0240	4.8000e-004	0.0244		76.7519	76.7519	1.7400e-003		76.7954
Total	**0.0355**	**0.0220**	**0.2323**	**7.7000e-004**	**0.0903**	**5.2000e-004**	**0.0908**	**0.0240**	**4.8000e-004**	**0.0244**		**76.7519**	**76.7519**	**1.7400e-003**		**76.7954**

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	lb/day										lb/day					
Mitigated	4.9842	39.4697	39.0371	0.1553	10.3774	0.1097	10.4871	2.7764	0.1027	2.8791		15,934.6151	15,934.6151	1.3749		15,968.9882
Unmitigated	4.9842	39.4697	39.0371	0.1553	10.3774	0.1097	10.4871	2.7764	0.1027	2.8791		15,934.6151	15,934.6151	1.3749		15,968.9882

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Fast Food Restaurant with Drive Thru	2,461.14	3,581.82	2692.32	3,313,300	3,313,300
Gasoline/Service Station	516.03	516.03	516.03	394,993	394,993
Other Asphalt Surfaces	0.00	0.00	0.00		
Total	2,977.17	4,097.85	3,208.35	3,708,294	3,708,294

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-	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Fast Food Restaurant with Drive Thru	18.50	10.10	7.90	2.20	78.80	19.00	29	21	50
Gasoline/Service Station	18.50	10.10	7.90	2.00	79.00	19.00	14	27	59
Other Asphalt Surfaces	18.50	10.10	7.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Fast Food Restaurant with Drive Thru	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Gasoline/Service Station	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965
Other Asphalt Surfaces	0.545527	0.036856	0.186032	0.115338	0.015222	0.004970	0.017525	0.069528	0.001397	0.001160	0.004547	0.000932	0.000965

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	lb/day										lb/day					
NaturalGas Mitigated	0.0242	0.2203	0.1851	1.3200e-003		0.0168	0.0168		0.0168	0.0168		264.4061	264.4061	5.0700e-003	4.8500e-003	265.9774
NaturalGas Unmitigated	0.0242	0.2203	0.1851	1.3200e-003		0.0168	0.0168		0.0168	0.0168		264.4061	264.4061	5.0700e-003	4.8500e-003	265.9774

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	lb/day										lb/day					
Fast Food Restaurant with Drive Thru	2247.45	0.0242	0.2203	0.1851	1.3200e-003		0.0168	0.0168		0.0168	0.0168		264.4061	264.4061	5.0700e-003	4.8500e-003	265.9774
Gasoline/Service Station	0	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
Other Asphalt Surfaces	0	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
Total		**0.0242**	**0.2203**	**0.1851**	**1.3200e-003**		**0.0168**	**0.0168**		**0.0168**	**0.0168**		**264.4061**	**264.4061**	**5.0700e-003**	**4.8500e-003**	**265.9774**

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	lb/day										lb/day					
Fast Food Restaurant with	2.24745	0.0242	0.2203	0.1851	1.3200e-003		0.0168	0.0168		0.0168	0.0168		264.4061	264.4061	5.0700e-003	4.8500e-003	265.9774
Gasoline/Service Station	0	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
Other Asphalt Surfaces	0	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
Total		**0.0242**	**0.2203**	**0.1851**	**1.3200e-003**		**0.0168**	**0.0168**		**0.0168**	**0.0168**		**264.4061**	**264.4061**	**5.0700e-003**	**4.8500e-003**	**265.9774**

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	lb/day										lb/day					
Mitigated	0.1269	1.0000e-005	7.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.5700e-003	1.5700e-003	0.0000		1.6800e-003
Unmitigated	0.1269	1.0000e-005	7.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.5700e-003	1.5700e-003	0.0000		1.6800e-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	lb/day										lb/day					
Architectural Coating	0.0158					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1110					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.0000e-005	1.0000e-005	7.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.5700e-003	1.5700e-003	0.0000		1.6800e-003
Total	**0.1269**	**1.0000e-005**	**7.4000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.5700e-003**	**1.5700e-003**	**0.0000**		**1.6800e-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	lb/day										lb/day					
Architectural Coating	0.0158					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1110					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.0000e-005	1.0000e-005	7.4000e-004	0.0000		0.0000	0.0000		0.0000	0.0000		1.5700e-003	1.5700e-003	0.0000		1.6800e-003
Total	**0.1269**	**1.0000e-005**	**7.4000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.5700e-003**	**1.5700e-003**	**0.0000**		**1.6800e-003**

Appendix D

Biological Resources Records and Literature Search

78-075 MAIN STREET, SUITE G-203
LA QUINTA, CALIFORNIA 92253
T 760.341.6660 F 760.346.6118

December 20, 2019 12214

Claudia Grajeda
J & T Management, Inc.
139 Radio Road
Corona, CA 92879

Subject: Results of Biological Resources Records and Literature Search conducted for the 742 County Line Road Project in the City of Calimesa, California

Dear Ms. Grajeda

Dudek conducted a review of available relevant literature and data on special-status biological resources (habitats, species, and aquatic resources) that occur or have the potential for occurrence within the project site, plus a 100-foot buffer (the study area).

Special-status biological resources present or potentially present on the study area were identified through a literature search using the following sources: USFWS's Critical Habitat and Occurrence Data (USFWS 2019a); CDFW's California Natural Diversity Database (CDFW 2019b); the California Native Plant Society's online Inventory of Rare and Endangered Plants (CNPS 2019); the Calflora database, which compiles observation and plant data from both private and public institutions, including the Consortium of California herbaria (Calflora 2019); a Natural Resources Conservation Service soil map (USDA 2019); the USGS 7.5-minute topographic quadrangle (USGS 2019); U.S. Environmental Protection Agency Watershed Assessment, Tracking & Environmental Results System (EPA 2019), which includes the National Hydrography Dataset; and the National Wetland Inventory (USFWS 2019b). Searches were completed for the following USGS quadrangles (which include the quadrangle within which the study area is located and the eight surrounding quadrangles): Yucaipa, Keller Peak, Big Bear Lake, Harrison Mountain, Redlands, Forest Falls, Sunnymead, El Casco, and Beaumont.

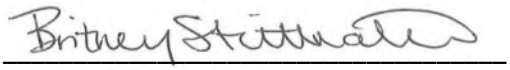
Attachment A, Special-Status Plant Species Potentially Occurring in the Study Area, lists special-status plant species that have been documented in the USGS 7.5-minute Yucaipa quadrangle and the eight surrounding quadrangles (CDFW 2019; CNPS 2019). For each species listed, a determination was made regarding the potential for the species to occur in the study area based on information gathered during the literature search, including the location of the site, habitats present, current site conditions, and past and present land use.

Attachment B, Special-Status Wildlife Species Potentially Occurring in the Study Area, lists special-status wildlife species that have been documented in the USGS 7.5-minute Yucaipa quadrangle and the eight surrounding quadrangles (CDFW 2019). For each special-status wildlife species, a determination was made regarding potential use of the study area based on information gathered during the literature review, known habitat preferences, and knowledge of the species' relative distributions in the area.

The Biological Resources Literature and Records Search concluded that there are no listed species with a potential to occur within the project site or study area. There are no special-status plant or wildlife species with a moderate or high potential to occur; however, there are seven special-status wildlife species, California Species of Special Concern (SSC), which were determined to have a low potential to occur within the project site and study area.

The complete impact analysis for biological resources will be included in the Initial Study/Mitigated Negative Declaration, pursuant to the California Environmental Quality Act statutes and guidelines. If you have any additional questions regarding the results of the Biological Resources Literature and Records Search, please contact me at 760.601.3416 or bstrittmater@dudek.com

Sincerely,



Britney Strittmater
Senior Biologist

Att.: Attachment A. Special-Status Plant Species Potentially Occurring in the Study Area
Attachment B. Special-Status Wildlife Species Potentially Occurring in the Study Area

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Attachment A

Plant PTO Table

Scientific Name	Common Name	Status (Federal/State/C	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Abronia villosa var. aurita	chaparral sand-verbena	None/None/1B.1	Chaparral, Coastal scrub, Desert dunes; sandy/annual herb/(Jan)Mar–Sep/245–5250	Not expected to occur. The site is located within the appropriate elevation range for this species; however, it lacks the chaparral, coastal scrub, or sand dune habitat suitable to support this species.
Allium howellii var. clokeyi	Mt. Pinos onion	None/None/1B.3	Great Basin scrub, Meadows and seeps (edges), Pinyon and juniper woodland/perennial bulbiferous herb/Apr–June/4265–6070	Not expected to occur. The site is located outside of the species' known elevation range and there is no suitable vegetation present.
Allium marvinii	Yucaipa onion	None/None/1B.2	Chaparral (clay, openings)/perennial bulbiferous herb/Apr–May/2490–3495	Not expected to occur. There is no suitable chaparral or clay soils present to support this species.
Arenaria lanuginosa var. saxosa	rock sandwort	None/None/2B.3	Subalpine coniferous forest, Upper montane coniferous forest; mesic, sandy/perennial herb/July–Aug/4770–8530	Not expected to occur. The site is located outside of the species' known elevation range and there is no suitable vegetation present.
Arenaria paludicola	marsh sandwort	FE/SE/1B.1	Marshes and swamps (freshwateror brackish); sandy, openings/perennial stoloniferous herb/May–Aug/5–560	Not expected to occur. The site is located outside of the species' known elevation range and there is no suitable vegetation present to support this species.
Astragalus lentiginosus var. coach	Coachella Valley milk-vetch	FE/None/1B.2	Desert dunes, Sonoran desert scrub (sandy)/annual / perennial herb/Feb–May/130–2150	Not expected to occur. The site is located outside of the species' known elevation range and there are no desert dunes or desert scrub habitat present.
Astragalus lentiginosus var. sierrae	Big Bear Valley milk-vetch	None/None/1B.2	Mojavean desert scrub, Meadows and seeps, Pinyon and juniper woodland, Upper montane coniferous forest; gravelly or rocky/perennial herb/Apr–Aug/5905–8530	Not expected to occur. The site is located outside of the species' known elevation range and there is no suitable vegetation present.
Astragalus leucolobus	Big Bear Valley woollypod	None/None/1B.2	Lower montane coniferous forest, Pebble (Pavement) plain, Pinyon and juniper woodland, Upper montane coniferous forest; rocky/perennial herb/May–July/3605–9465	Not expected to occur. The site is located outside of the species' known elevation range and there is no suitable vegetation present.
Astragalus pachypus var. jaegeri	Jaeger's bush milk-vetch	None/None/1B.1	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland; sandy or rocky/perennial shrub/Dec–June/1195–3200	Not expected to occur. The project site is located within the species' known elevation range and although non-native grassland is present; the grassland is associated the rural residences present and the site lacks rocky substrates to support this species. The nearest known occurrence is approximately 6.2 miles from the site (CDFW 2019).
Atriplex coronata var. notatior	San Jacinto Valley crownscale	FE/None/1B.1	Playas, Valley and foothill grassland (mesic), Vernal pools; alkaline/annual herb/Apr–Aug/455–1640	Not expected to occur. The site is located outside of the species' known elevation range.
Atriplex serenana var. davidsonii	Davidson's saltscale	None/None/1B.2	Coastal bluff scrub, Coastal scrub; alkaline/annual herb/Apr–Oct/30–655	Not expected to occur. The site is located outside of the species' known elevation range and there is no suitable vegetation or alkali soils present.
Berberis nevinii	Nevin's barberry	FE/SE/1B.1	Chaparral, Cismontane woodland, Coastal scrub, Riparian scrub; sandy or gravelly/perennial evergreen shrub/(Feb)Mar–June/225–2705	Not expected to occur. There is no chaparral, woodland, coastal scrub, or riparian vegetation to support this species.
Boechera parishii	Parish's rockcress	None/None/1B.2	Pebble (Pavement) plain, Pinyon and juniper woodland, Upper montane coniferous forest; rocky, quartzite on clay, or sometimes carbonate/perennial herb/Apr–May/5805–9810	Not expected to occur. The site located is outside of the species' known elevation range and there is no woodland or coniferous forest to support this species.
Botrychium crenulatum	scalloped moonwort	None/None/2B.2	Bogs and fens, Lower montane coniferous forest, Meadows and seeps, Marshes and swamps (freshwater), Upper montane coniferous forest/perennial rhizomatous herb/June–Sep/4160–10760	Not expected to occur. The site is located outside of the species' known elevation range and there is no suitable vegetation present.

Scientific Name	Common Name	Status (Federal/State/C	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Calochortus palmeri var. palmeri	Palmer's mariposa lily	None/None/1B.2	Chaparral, Lower montane coniferous forest, Meadows and seeps; mesic/perennial bulbiferous herb/Apr–July/2325–7840	Not expected to occur. There is no suitable vegetation present and the site lacks mesic conditions to support this species.
Calyptridium pygmaeum	pygmy pussypaws	None/None/1B.2	Subalpine coniferous forest, Upper montane coniferous forest; sandy or gravelly/annual herb/June–Aug/6495–10205	Not expected to occur. The site is located outside of the species' known elevation range and there is no suitable vegetation present.
Carex occidentalis	western sedge	None/None/2B.3	Lower montane coniferous forest, Meadows and seeps/perennial rhizomatous herb/June–Aug/5395–10285	Not expected to occur. The site is located outside of the species' known elevation range and there is no suitable vegetation present.
Castilleja cinerea	ash-gray paintbrush	FT/None/1B.2	Mojavean desert scrub, Meadows and seeps, Pebble (Pavement) plain, Pinyon and juniper woodland, Upper montane coniferous forest (clay openings)/perennial herb (hemiparasitic)/June–Aug/5905–9710	Not expected to occur. The site is located outside of the species' known elevation range and there is no suitable vegetation or clay soils present.
Castilleja lasiorhyncha	San Bernardino Mountains owl's-clover	None/None/1B.2	Chaparral, Meadows and seeps, Pebble (Pavement) plain, Riparian woodland, Upper montane coniferous forest; mesic/annual herb (hemiparasitic)/May–Aug/4265–7840	Not expected to occur. The site is located outside of the species' known elevation range and there is no suitable vegetation present.
Centromadia pungens ssp. laevis	smooth tarplant	None/None/1B.1	Chenopod scrub, Meadows and seeps, Playas, Riparian woodland, Valley and foothill grassland; alkaline/annual herb/Apr–Sep/0–2100	Not expected to occur. The site is located outside of the species' known elevation range and lacks suitable alkaline soils to support this species.
Chloropyron maritimum ssp. mariti	salt marsh bird's-beak	FE/SE/1B.2	Coastal dunes, Marshes and swamps (coastal salt)/annual herb (hemiparasitic)/May–Oct(Nov)/0–100	Not expected to occur. The site is located outside of the species' known elevation range and there is no suitable vegetation present.
Chorizanthe parryi var. parryi	Parry's spineflower	None/None/1B.1	Chaparral, Cismontane woodland, Coastal scrub, Valley and foothill grassland; sandy or rocky, openings/annual herb/Apr–June/900–4005	Not expected to occur. The site is located within the species' known elevation range; however, this species is primarily restricted to alluvial floodplains and alluvial chaparral and scrub which are absent from the site. The nearest known occurrence is approximately 3.1 miles from the site (CDFW 2019).
Chorizanthe xanti var. leucotheca	white-bracted spineflower	None/None/1B.2	Coastal scrub (alluvial fans), Mojavean desert scrub, Pinyon and juniper woodland; sandy or gravelly/annual herb/Apr–June/980–3935	Not expected to occur. The site is located within the species' known elevation range; however, suitable vegetation and alluvial fans are absent.
Cuscuta obtusiflora var. glandulosa	Peruvian dodder	None/None/2B.2	Marshes and swamps (freshwater)/annual vine (parasitic)/July–Oct/45–920	Not expected to occur. This is located outside of the species' known elevation range and are no marshes or swamps in the study area.
Deinandra mohavensis	Mojave tarplant	None/SE/1B.3	Chaparral, Coastal scrub, Riparian scrub; mesic/annual herb/(May)June–Oct(Jan)/2095–5250	Not expected to occur. The site does not contain chaparral, coastal scrub, or riparian scrub to support this species.
Dodecahema leptoceras	slender-horned spineflower	FE/SE/1B.1	Chaparral, Cismontane woodland, Coastal scrub (alluvial fan); sandy/annual herb/Apr–June/655–2495	Not expected to occur. The site is located within the species' known elevation; however, there is no suitable chaparral, cismontane woodland, or coastal scrub to support this species and the site lacks suitable alluvial fan habitat to support this species. The nearest known occurrence is approximately 5.4 miles from the site (CDFW 2019).
Drymocallis cuneifolia var. cuneifol	wedgeleaf woodbeauty	None/None/1B.1	Riparian scrub, Upper montane coniferous forest; Sometimes carbonate/perennial herb/June–Aug/5905–7925	Not expected to occur. The site is located outside of the species' known elevation range and there is no riparian scrub or coniferous forest present.
Eremogone ursina	Big Bear Valley sandwort	FT/None/1B.2	Meadows and seeps, Pebble (Pavement) plain, Pinyon and juniper woodland; mesic, rocky/perennial herb/May–Aug/5905–9515	Not expected to occur. The site is located outside of the species' known elevation range and there is no suitable vegetation present.
Eriastrum densifolium ssp. sanctor	Santa Ana River woollystar	FE/SE/1B.1	Chaparral, Coastal scrub (alluvial fan); sandy or gravelly/perennial herb/Apr–Sep/295–2000	Not expected to occur. The site is located outside of the species' known elevation range and there is no suitable vegetation present.
Eriogonum kennedyi var. alpigenu	southern alpine buckwheat	None/None/1B.3	Alpine boulder and rock field, Subalpine coniferous forest; granitic, gravelly/perennial herb/July–Sep/8530–11485	Not expected to occur. The site is located outside of the species' known elevation range and there is no suitable vegetation present.

Scientific Name	Common Name	Status (Federal/State/C	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Eriogonum kennedyi var. austromo	southern mountain buckwheat	FT/None/1B.2	Lower montane coniferous forest (gravelly), Pebble (Pavement) plain/perennial herb/June–Sep/5805–9480	Not expected to occur. The site is located outside of the species' known elevation range and there is no suitable vegetation present.
Eriogonum microthecum var. lacus	Bear Lake buckwheat	None/None/1B.1	Great Basin scrub, Lower montane coniferous forest; clay outcrops/perennial shrub/July–Aug/6560–6890	Not expected to occur. The site is located outside of the species' known elevation range and there is no suitable vegetation present.
Erythranthe exigua	San Bernardino Mountains monkeyflow	None/None/1B.2	Meadows and seeps, Pebble (Pavement) plain, Upper montane coniferous forest; mesic, clay/annual herb/May–July/5905–7595	Not expected to occur. The site is located outside of the species' known elevation range and there is no suitable vegetation present.
Erythranthe purpurea	little purple monkeyflower	None/None/1B.2	Meadows and seeps, Pebble (Pavement) plain, Upper montane coniferous forest/annual herb/May–June/6230–7545	Not expected to occur. The site is located outside of the species' known elevation range and there is no suitable vegetation present.
Gilia leptantha ssp. leptantha	San Bernardino gilia	None/None/1B.3	Lower montane coniferous forest (sandy or gravelly)/annual herb/June–Aug/4920–8400	Not expected to occur. The site is located outside of the species' known elevation range and there are no coniferous forests present to support this species.
Heuchera parishii	Parish's alumroot	None/None/1B.3	Alpine boulder and rock field, Lower montane coniferous forest, Subalpine coniferous forest, Upper montane coniferous forest; rocky, sometimes carbonate/perennial rhizomatous herb/June–Aug/4920–12465	Not expected to occur. The site is located outside of the species' known elevation range and there are no rocky areas or coniferous forests to support this species.
Horkelia cuneata var. puberula	mesa horkelia	None/None/1B.1	Chaparral (maritime), Cismontane woodland, Coastal scrub; sandy or gravelly/perennial herb/Feb–July(Sep)/225–2655	Not expected to occur. The site is located within the species' known elevation range; however, there is no suitable vegetation present.
Horkelia wilderae	Barton Flats horkelia	None/None/1B.1	Chaparral (edges), Lower montane coniferous forest, Upper montane coniferous forest/perennial herb/May–Sep/5495–9595	Not expected to occur. The site is located outside of the species' known elevation range and there is no suitable vegetation present.
Hulsea vestita ssp. pygmaea	pygmy hulsea	None/None/1B.3	Alpine boulder and rock field, Subalpine coniferous forest; granitic, gravelly/perennial herb/June–Oct/9300–12795	Not expected to occur. The site is located outside of the species' known elevation range and there is no suitable vegetation present.
Imperata brevifolia	California satintail	None/None/2B.1	Chaparral, Coastal scrub, Mojavean desert scrub, Meadows and seeps (often alkali), Riparian scrub; mesic/perennial rhizomatous herb/Sep–May/0–3985	Not expected to occur. Although the site is located within the appropriate elevation range, there is no suitable vegetation present or mesic conditions to support this species.
Ivesia argyrocoma var. argyrocom	silver-haired ivesia	None/None/1B.2	Meadows and seeps (alkaline), Pebble (Pavement) plain, Upper montane coniferous forest/perennial herb/(May)June–Aug/4795–9710	Not expected to occur. The site is located outside of the species' known elevation range and there is no suitable vegetation present.
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	None/None/1B.1	Marshes and swamps (coastal salt), Playas, Vernal pools/annual herb/Feb–June/0–4005	Not expected to occur. The site is located within the species' known elevation range; however, there are no marshes, swamps, playas, or vernal pools present to support this species.
Lewisia brachycalyx	short-sepaled lewisia	None/None/2B.2	Lower montane coniferous forest, Meadows and seeps; mesic/perennial herb/(Feb)Apr–June(July)/4490–7545	Not expected to occur. The site is located outside of the species' known elevation range and there is no suitable vegetation present.
Lilium parryi	lemon lily	None/None/1B.2	Lower montane coniferous forest, Meadows and seeps, Riparian forest, Upper montane coniferous forest; mesic/perennial bulbiferous herb/July–Aug/4000–9005	Not expected to occur. The site is located outside of the species' known elevation range and there is no suitable vegetation or mesic conditions present to support this species.
Malacothamnus parishii	Parish's bush-mallow	None/None/1A	Chaparral, Coastal scrub/perennial deciduous shrub/June–July/1000–1495	Not expected to occur. The site is located outside of the species' known elevation range and there is no suitable vegetation present.
Mentzelia tricuspis	spiny-hair blazing star	None/None/2B.1	Mojavean desert scrub; sandy, gravelly, slopes, and washes/annual herb/Mar–May/490–4200	Not expected to occur. Although the site is located within the appropriate elevation range for this species, there is no suitable vegetation present and the project lacks slopes or washes to support this species.

Scientific Name	Common Name	Status (Federal/State/C	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Monardella macrantha ssp. hallii	Hall's monardella	None/None/1B.3	Broadleafed upland forest, Chaparral, Cismontane woodland, Lower montane coniferous forest, Valley and foothill grassland/perennial rhizomatous herb/June–Oct/2395–7200	Not expected to occur. The site contains non-native grasslands; however, the site is located slightly below the species' known elevation range and this species is known to occur within the Santa Ana Mountains, San Jacinto Mountains, San Bernardino Mountains, and Agua Tibia Mountain bioregions. The nearest CNDDB occurrence is approximately 6.1 miles from the site (CDFW 2019).
Nama stenocarpa	mud nama	None/None/2B.2	Marshes and swamps (lake margins, riverbanks)/annual / perennial herb/Jan–July/15–1640	Not expected to occur. The site is located outside of the species' known elevation range and there is no suitable vegetation present.
Navarretia peninsularis	Baja navarretia	None/None/1B.2	Chaparral (openings), Lower montane coniferous forest, Meadows and seeps, Pinyon and juniper woodland; mesic/annual herb/(May)June–Aug/4920–7545	Not expected to occur. The site is located outside of the species' known elevation range and there is no suitable vegetation or mesic conditions present to support this species.
Oxytropis oreophila var. oreophila	rock-loving oxytrope	None/None/2B.3	Alpine boulder and rock field, Subalpine coniferous forest; gravelly or rocky/perennial herb/June–Sep/11150–12465	Not expected to occur. The site is located outside of the species' known elevation range and there are no rocky areas or coniferous forests to support this species.
Packera bernardina	San Bernardino ragwort	None/None/1B.2	Meadows and seeps (mesic, sometimes alkaline), Pebble (Pavement) plain, Upper montane coniferous forest/perennial herb/May–July/5905–7545	Not expected to occur. The site is located outside of the species' known elevation range and there is no suitable vegetation present to support this species. Additionally, the site contains sandy loam, compacted soils instead of the mesic or alkaline soils needed to support this species.
Parnassia cirrata var. cirrata	San Bernardino grass-of-Parnassus	None/None/1B.3	Lower montane coniferous forest, Meadows and seeps, Upper montane coniferous forest; mesic, streamsides, sometimes calcareous/perennial herb/Aug–Sep/4100–8005	Not expected to occur. The site is located outside of the species' known elevation range and there is no suitable vegetation present.
Perideridia parishii ssp. parishii	Parish's yampah	None/None/2B.2	Lower montane coniferous forest, Meadows and seeps, Upper montane coniferous forest/perennial herb/June–Aug/4805–9845	Not expected to occur. The site is located outside of the species' known elevation range and there is no suitable vegetation present.
Petalonyx linearis	narrow-leaf sandpaper-plant	None/None/2B.3	Mojavean desert scrub, Sonoran desert scrub; Sandy or rocky canyons/perennial shrub/(Jan–Feb)Mar–May(June–Dec)/-80–3660	Not expected to occur. No suitable vegetation present.
Phlox dolichantha	Big Bear Valley phlox	None/None/1B.2	Pebble (Pavement) plain, Upper montane coniferous forest (openings)/perennial herb/May–July/6000–9745	Not expected to occur. The site is located outside of the species' known elevation range and there is no suitable vegetation present.
Physaria kingii ssp. bernardina	San Bernardino Mountains bladderpod	FE/None/1B.1	Lower montane coniferous forest, Pinyon and juniper woodland, Subalpine coniferous forest; usually carbonate/perennial herb/May–June/6065–8860	Not expected to occur. The site is located outside of the species' known elevation range and there is no suitable vegetation or carbonate soils present.
Poa atropurpurea	San Bernardino blue grass	FE/None/1B.2	Meadows and seeps (mesic)/perennial rhizomatous herb/(Apr)May–July(Aug)/4460–8055	Not expected to occur. The site is located outside of the species' known elevation range and there is no suitable vegetation or mesic conditions present to support this species.
Pyrrocoma uniflora var. gossypina	Bear Valley pyrrocoma	None/None/1B.2	Meadows and seeps, Pebble (Pavement) plain/perennial herb/July–Sep/5245–7545	Not expected to occur. The site is located outside of the species' known elevation range and there is no suitable vegetation present.
Ribes divaricatum var. parishii	Parish's gooseberry	None/None/1A	Riparian woodland/perennial deciduous shrub/Feb–Apr/210–985	Not expected to occur. The site is located outside of the species' known elevation range and there is no suitable vegetation present.
Sidalcea hickmanii ssp. parishii	Parish's checkerbloom	None/SR/1B.2	Chaparral, Cismontane woodland, Lower montane coniferous forest/perennial herb/(May)June–Aug/3280–8200	Not expected to occur. The site is located outside of the species' known elevation range and there is no suitable vegetation present.

Scientific Name	Common Name	Status (Federal/State/C	Primary Habitat Associations/ Life Form/ Blooming Period/ Elevation Range (feet)	Potential to Occur
Sidalcea malviflora ssp. dolosa	Bear Valley checkerbloom	None/None/1B.2	Lower montane coniferous forest (meadows and seeps), Meadows and seeps, Riparian woodland, Upper montane coniferous forest (meadows and seeps)/perennial herb/May–Aug/4900–8810	Not expected to occur. The site is located outside of the species' known elevation range and there is no suitable vegetation present.
Sidalcea neomexicana	salt spring checkerbloom	None/None/2B.2	Chaparral, Coastal scrub, Lower montane coniferous forest, Mojavean desert scrub, Playas; alkaline, mesic/perennial herb/Mar–June/45–5020	Not expected to occur. The site is located within the species' known elevation range; however, there are no coniferous forests, meadows, seeps, or riparian woodlands present to support this species.
Sidalcea pedata	bird-foot checkerbloom	FE/SE/1B.1	Meadows and seeps (mesic), Pebble (Pavement) plain/perennial herb/May–Aug/5245–8200	Not expected to occur. The site is located outside of the species' known elevation range and there is no suitable vegetation present to support this species.
Streptanthus campestris	southern jewelflower	None/None/1B.3	Chaparral, Lower montane coniferous forest, Pinyon and juniper woodland; rocky/perennial herb/(Apr)May–July/2950–7545	Not expected to occur. The site is located outside of the species' known elevation range and there is no suitable vegetation present to support this species.
Symphyotrichum defoliatum	San Bernardino aster	None/None/1B.2	Cismontane woodland, Coastal scrub, Lower montane coniferous forest, Meadows and seeps, Marshes and swamps, Valley and foothill grassland (vernally mesic); near ditches, streams, springs/perennial rhizomatous herb/July–Nov(Dec)/5–6695	Not expected to occur. The site is located within the species' known elevation range and non-native grasslands are present; however, the grasslands are associated with rural residential development and the site lacks vernally mesic conditions and ditches, streams, or springs are absent.
Taraxacum californicum	California dandelion	FE/None/1B.1	Meadows and seeps (mesic)/perennial herb/May–Aug/5310–9185	Not expected to occur. The site is located outside of the species' known elevation range and there is no suitable vegetation or mesic conditions present to support this species.
Thelypodium stenopetalum	slender-petaled thelypodium	FE/SE/1B.1	Meadows and seeps (mesic, alkaline)/perennial herb/May–Sep/5245–8200	Not expected to occur. The site is located outside of the species' known elevation range and there is no suitable vegetation present and the site lacks suitable mesic or alkaline soils to support this species.
Thelypteris puberula var. sonorens	Sonoran maiden fern	None/None/2B.2	Meadows and seeps (seeps and streams)/perennial rhizomatous herb/Jan–Sep/160–2000	Not expected to occur. The site is located outside of the species' known elevation range and there are no meadows or seeps present to support this species.
Trichocoronis wrightii var. wrightii	Wright's trichocoronis	None/None/2B.1	Meadows and seeps, Marshes and swamps, Riparian forest, Vernal pools; alkaline/annual herb/May–Sep/15–1425	Not expected to occur. The site is located outside of the species' known elevation range and there is no suitable vegetation or vernal pools present and the site lacks suitable alkaline soils to support this species.
Viola pinetorum ssp. grisea	grey-leaved violet	None/None/1B.2	Meadows and seeps, Subalpine coniferous forest, Upper montane coniferous forest/perennial herb/Apr–July/4920–11155	Not expected to occur. The site is located outside of the species' known elevation range and there is no suitable vegetation present to support this species.

Attachment B

Wildlife PTO Table

Row Labels	Common Name	Status (Federal/Sta	Habitat	Potential to Occur	Western Riverside MSHCP
Amphibians					
Rana draytonii	California red-legged frog	FT/SSC	Lowland streams, wetlands, riparian woodlands, livestock ponds; dense, shrubby or emergent vegetation associated with deep, still or slow-moving water; uses adjacent uplands	Not expected to occur. The project site does not have the aquatic habitat to support this species.	Covered
Rana muscosa	mountain yellow-legged frog	FE/SE, WL	Lakes, ponds, meadow streams, isolated pools, and open riverbanks; rocky canyons in narrow canyons and in chaparral	Not expected to occur. The project site does not have the aquatic habitat to support this species.	Covered
Spea hammondii	western spadefoot	None/SSC	Primarily grassland and vernal pools, but also in ephemeral wetlands that persist at least 3 weeks in chaparral, coastal scrub, valley–foothill woodlands, pastures, and other agriculture	Not expected to occur. The project site does not have the aquatic habitat to support this species.	Covered
Reptiles					
Actinemys marmorata	northwestern pond turtle	None/SSC	Slow-moving permanent or intermittent streams, ponds, small lakes, and reservoirs with emergent basking sites; adjacent uplands used for nesting and during winter	Not expected to occur. The project site does not have the aquatic habitat to support this species.	Covered
Anniella stebbinsi	southern California legless lizard	None/SSC	Coastal dunes, stabilized dunes, beaches, dry washes, valley–foothill, chaparral, and scrubs; pine, oak, and riparian woodlands; associated with sparse vegetation and moist sandy or loose, loamy soils	Low potential to occur. There are sandy loamy soils present and this species has been found approximately 3.7 miles away from the site (CDFW 2019). However, the site lacks mesic conditions to support these species and is located in an urbanized area minimizing the potential to occur.	None
Arizona elegans occidentalis	California glossy snake	None/SSC	Commonly occurs in desert regions throughout southern California. Prefers open sandy areas with scattered brush. Also found in rocky areas.	Not expected to occur. The project site does not have open sandy or rocky areas to support this species.	None
Aspidoscelis tigris stejnegeri	San Diegan tiger whiptail	None/SSC	Hot and dry areas with sparse foliage, including chaparral, woodland, and riparian areas.	Not expected to occur. There is no chaparral or woodland areas in the project site. There are also no water resources or riparian vegetation present.	Covered
Charina umbratica	southern rubber boa	None/ST	Montane oak–conifer and mixed-conifer forests, montane chaparral, wet meadows; usually in vicinity of streams or wet meadows	Not expected to occur. There is no suitable vegetation present or water resources (i.e., streams or wet meadows) present to support this species.	Covered
Crotalus ruber	red diamondback rattlesnake	None/SSC	Coastal scrub, chaparral, oak and pine woodlands, rocky grasslands, cultivated areas, and desert flats	Not expected to occur. Although there non-native grassland present, the site lacks rocky substrates,	Covered
Phrynosoma blainvillii	Blainville's horned lizard	None/SSC	Open areas of sandy soil in valleys, foothills, and semi-arid mountains including coastal scrub, chaparral, valley–foothill hardwood, conifer, riparian, pine–cypress, juniper, and annual grassland habitats	Low potential to occur. Non-native grasslands are present; however, the site is located in an urbanized area. There is also no coastal scrub, chaparral, or riparian habitat in the project site to support this species. The nearest CNDDB occurrence is approximately 5.2 miles from the site (CDFW 2019).	Covered
Salvadora hexalepis virgultea	coast patch-nosed snake	None/SSC	Brushy or shrubby vegetation; requires small mammal burrows for refuge and overwintering sites	Not expected to occur. The site does not contain shrubby vegetation to support this species.	None
Thamnophis hammondii	two-striped gartersnake	None/SSC	Streams, creeks, pools, streams with rocky beds, ponds, lakes, vernal pools	Not expected to occur. There are no water resources present to support this species.	None
Birds					
Agelaius tricolor (nesting colony)	tricolored blackbird	BCC/SSC, ST	Nests near freshwater, emergent wetland with cattails or tules, but also in Himalayan blackberrry; forages in grasslands, woodland, and agriculture	Not expected to occur. No suitable emergent wetland vegetation present to support this species.	Covered
Aquila chrysaetos (nesting & wint	golden eagle	BCC/FP, WL	Nests and winters in hilly, open/semi-open areas, including shrublands, grasslands, pastures, riparian areas, mountainous canyon land, open desert rimrock terrain; nests in large trees and on cliffs in open areas and forages in open habitats	Not expected to nest in the project site; low potential to forage. There are no cliffs or many large trees in the project site to support nesting of this species. The project site is a marginally flat open area that can potentially provide foraging habitat for this species; however potential is low due to it being a highly disturbed and urbanized area.	Covered
Athene cunicularia (burrow sites &	burrowing owl	BCC/SSC	Nests and forages in grassland, open scrub, and agriculture, particularly with ground squirrel burrows	Low potential to occur. The project site is open and does contain non-native grasses. However, the nearest known occurrence is approximately 8.9 miles from the site (CDFW 2019).	Covered
Buteo swainsoni (nesting)	Swainson's hawk	BCC/ST	Nests in open woodland and savanna, riparian, and in isolated large trees; forages in nearby grasslands and agricultural areas such as wheat and alfalfa fields and pasture	Not expected to occur. There is no suitable woodland and savanna, riparian, or isolated trees for nesting. Species may forage in open areas to the northwest. The nearest known occurrence is approximately 1.5 miles away from the site (CDFW 2019).	Covered
Coccyzus americanus occidentali	western yellow-billed cuckoo	FT, BCC/SE	Nests in dense, wide riparian woodlands and forest with well-developed understories	Not expected to occur. The site does not contain riparian woodlands and forests to support this species.	Covered
Cypseloides niger (nesting)	black swift	BCC/SSC	Nests in moist crevices, caves, and cliffs behind or adjacent to waterfalls in deep canyons; forages over a wide range of habitats	Not expected to occur. There are no caves, cliffs, or waterfalls in the site to support this species.	Covered
Elanus leucurus (nesting)	white-tailed kite	None/FP	Nests in woodland, riparian, and individual trees near open lands; forages opportunistically in grassland, meadows, scrubs, agriculture, emergent wetland, savanna, and disturbed lands	Not expected to nest. Low potential to forage. There is no suitable vegetation for this species to nest. However, non-native grasslands are present that can potentially provide foraging habitat. The nearest known occurrence is approximately 2.3 miles from the site (CDFW 2019).	Covered

Row Labels	Common Name	Status (Federal/Sta	Habitat	Potential to Occur	Western Riverside MSHCP
Empidonax traillii extimus (nesting	southwestern willow flycatcher	FE/SE	Nests in dense riparian habitats along streams, reservoirs, or wetlands; uses variety of riparian and shrubland habitats during migration	Not expected to occur. No suitable riparian or wetland vegetation is present to support this species.	Covered
Haliaeetus leucocephalus (nesting	bald eagle	FDL, BCC/FP, SE	Nests in forested areas adjacent to large bodies of water, including seacoasts, rivers, swamps, large lakes; winters near large bodies of water in lowlands and mountains	Not expected to occur. The site lacks suitable forested areas for nesting and there are no water resources present to support this species.	Covered
Icteria virens (nesting)	yellow-breasted chat	None/SSC	Nests and forages in dense, relatively wide riparian woodlands and thickets of willows, vine tangles, and dense brush	Not expected to occur. The project site does not have the suitable vegetation or water resources needed to support this species.	Covered
Lanius ludovicianus (nesting)	loggerhead shrike	BCC/SSC	Nests and forages in open habitats with scattered shrubs, trees, or other perches	Not expected to occur. The site does not contain scattered shrub, trees, or other perches. The nearest known occurrence is approximately 5.9 miles from the site (CDFW 2019).	Covered
Polioptila californica californica	coastal California gnatcatcher	FT/SSC	Nests and forages in various sage scrub communities, often dominated by California sagebrush and buckwheat; generally avoids nesting in areas with a slope of greater than 40%; majority of nesting at less than 1,000 feet above mean sea level	Not expected to occur. There is no suitable coastal sage scrub present to support this species.	Covered
Progne subis (nesting)	purple martin	None/SSC	Nests and forages in woodland habitats including riparian, coniferous, and valley foothill and montane woodlands; in the Sacramento region often nests in weep holes under elevated freeways	Not expected to occur. No suitable vegetation present.	Covered
Setophaga petechia (nesting)	yellow warbler	BCC/SSC	Nests and forages in riparian and oak woodlands, montane chaparral, open ponderosa pine, and mixed-conifer habitats	Not expected to occur. There is no suitable riparian and woodlands, chaparral, or conifer habitats present to support this species.	Covered
Vireo bellii pusillus (nesting)	least Bell's vireo	FE/SE	Nests and forages in low, dense riparian thickets along water or along dry parts of intermittent streams; forages in riparian and adjacent shrubland late in nesting season	Not expected to occur. There is no suitable riparian vegetation or water resources present to support this species.	Covered
Fishes					
Catostomus santaanae	Santa Ana sucker	FT/None	Small, shallow, cool, clear streams less than 7 meters (23 feet) in width and a few centimeters to more than a meter (1.5 inches to more than 3 feet) in depth; substrates are generally coarse gravel, rubble, and boulder	Not expected to occur. The site does not have aquatic habitat to support this species.	Covered
Oncorhynchus mykiss irideus pop	southern steelhead - southern California I	FE/None	Clean, clear, cool, well-oxygenated streams; needs relatively deep pools in migration and gravelly substrate to spawn	Not expected to occur. The site is outside of the species' known geographic range, there is no aquatic habitat available and there is no suitable vegetation present.	None
Rhinichthys osculus ssp. 3	Santa Ana speckled dace	None/SSC	Headwaters of the Santa Ana and San Gabriel Rivers; may be extirpated from the Los Angeles River system	Not expected to occur. There is no aquatic habitat to support this species in the site .	None
Mammals					
Antrozous pallidus	pallid bat	None/SSC	Grasslands, shrublands, woodlands, forests; most common in open, dry habitats with rocky outcrops for roosting, but also roosts in man-made structures and trees	Not expected to roost, low potential to forage The site contains non-native grasslands; however, there are no rocky outcrops for roosting.	None
Chaetodipus californicus femorali	Dulzura pocket mouse	None/SSC	Open habitat, coastal scrub, chaparral, oak woodland, chamise chaparral, mixed-conifer habitats; disturbance specialist; 0 to 3,000 feet above mean sea level	Not expected to occur. The site does not have suitable vegetation to support this species.	None
Chaetodipus fallax fallax	northwestern San Diego pocket mouse	None/SSC	Coastal scrub, mixed chaparral, sagebrush, desert wash, desert scrub, desert succulent shrub, pinyon–juniper, and annual grassland	Low potential to occur. Although there are non-native grasslands present, the grasslands present are associated with rural residential development and the site is also surrounded by rural residential development to the east, south, and west which is a threat to this species.	Covered
Dipodomys merriami parvus	San Bernardino kangaroo rat	FE/SSC	Sparse scrub habitat, alluvial scrub/coastal scrub habitats on gravelly and sandy soils near river and stream terraces	Not expected to occur. Although the site contains sandy loam soils, it does not have the coastal scrub or stream terraces needed to support this species and the site has compacted soils which are not suitable for burrowing.	Covered
Dipodomys stephensi	Stephens' kangaroo rat	FE/ST	Annual and perennial grassland habitats, coastal scrub or sagebrush with sparse canopy cover, or in disturbed areas	Low potential to occur. There is no coastal or sagebrush scrub present; however, the site non-native grasslands that can potentially provide habitat for this species. The nearest known occurrence is approximately 4.8 miles from the site (CDFW 2019).	Covered
Eumops perotis californicus	western mastiff bat	None/SSC	Chaparral, coastal and desert scrub, coniferous and deciduous forest and woodland; roosts in crevices in rocky canyons and cliffs where the canyon or cliff is vertical or nearly vertical, trees, and tunnels	Not expected to occur. There are is no chaparral, coastal scrub, woodland forests, or rocky canyons present to support species to occur.	None
Glaucomys oregonensis californic	San Bernardino flying squirrel	None/SSC	Coniferous and deciduous forests, including riparian forests	Not expected to occur. There are no coniferous, deciduous or riparian forests present.	Covered
Lasiurus xanthinus	western yellow bat	None/SSC	Valley–foothill riparian, desert riparian, desert wash, and palm oasis habitats; below 2,000 feet above mean sea level; roosts in riparian and palms	Not expected to occur. There are no water resources or palm trees present to support this species.	None
Leptonycteris yerbabuenae	lesser long-nosed bat	FDL/None	Sonoran desert scrub, semi-desert grasslands, lower oak woodlands	Not expected to occur. There are no oak woodlands, desert like scrub, or desert grasslands present for this species to occur.	None

Row Labels	Common Name	Status (Federal/Sta	Habitat	Potential to Occur	Western Riverside MSHCP
Lepus californicus bennettii	San Diego black-tailed jackrabbit	None/SSC	Arid habitats with open ground; grasslands, coastal scrub, agriculture, disturbed areas, and rangelands	Low potential to occur. Non-native grasslands are present; however, they are associated with a rural residential development and the site is surrounded by rural residences to the east, south, and west. The nearest known occurrence is approximately 5.6 miles from the site (CDFW 2019).	Covered
Neotoma lepida intermedia	San Diego desert woodrat	None/SSC	Coastal scrub, desert scrub, chaparral, cacti, rocky areas	Not expected to occur. No suitable vegetation present.	Covered
Nyctinomops femorosaccus	pocketed free-tailed bat	None/SSC	Pinyon–juniper woodlands, desert scrub, desert succulent shrub, desert riparian, desert wash, alkali desert scrub, Joshua tree, and palm oases; roosts in high cliffs or rock outcrops with drop-offs, caverns, and buildings	Not expected to occur. The site does not have desert like habitat suitable for this species to occur.	None
Onychomys torridus ramona	southern grasshopper mouse	None/SSC	Grassland and sparse coastal scrub	Low potential to occur. Non-native grasslands are present; however, they are associated with a rural residential development and the site is surrounded by rural residences to the east, south, and west.	None
Perognathus alticolus alticolus	white-eared pocket mouse	None/SSC	Arid ponderosa pine communities	Not expected to occur. There are no pine communities present.	None
Perognathus longimembris brevin	Los Angeles pocket mouse	None/SSC	Lower-elevation grassland, alluvial sage scrub, and coastal scrub	Not expected to occur. There is suitable coastal scrub present to support this species.	Covered
Taxidea taxus	American badger	None/SSC	Dry, open, treeless areas; grasslands, coastal scrub, agriculture, and pastures, especially with friable soils	Not expected to occur. Non-native grasslands are present; however, they are associated with a rural residential development and the site is surrounded by rural residences to the east, south, and west.	None
Invertebrates					

Appendix E

Historical/Archaeological Resources Survey Report

HISTORICAL/ARCHAEOLOGICAL RESOURCES SURVEY REPORT

COUNTY LINE NEIGHBORHOOD MARKET PROJECT

727 County Line Lane
Assessor's Parcel No. 411-040-001
City of Calimesa, Riverside County, California

For Submittal to:

Community Development Department, Planning Division
City of Calimesa
908 Park Avenue
Calimesa, CA 92320

Prepared for:

County Line Neighborhood Market, LP
P.O. Box 1958
Corona, CA 92878

Prepared by:

CRM TECH
1016 East Cooley Drive, Suite A/B
Colton, CA 92324

Bai "Tom" Tang, Principal Investigator
Michael Hogan, Principal Investigator

January 15, 2019
CRM TECH Contract No. 3568

Title: Historical/Archaeological Resources Survey: County Line Neighborhood Market Project, 727 County Line Lane, Assessor's Parcel Nos. 411-040-001, City of Calimesa, Riverside County, California

Author(s): Bai "Tom" Tang, Principal Investigator
Terri Jacquemain Historian/Architectural Historian
Daniel Ballester, Archaeologist/Field Director

Consulting Firm: CRM TECH
1016 East Cooley Drive, Suite A/B
Colton, CA 92324
(909) 824-6400

Date: January 15, 2019

For Submittal to: Community Development Department, Planning Division
City of Calimesa
908 Park Avenue
Calimesa, CA 92320
(909) 795-9801

Prepared for: Mainor Bojorquez
County Line Neighborhood Market, LP
P.O. Box 1958
Corona, CA 92878
(951) 280-3833

Project Size: Approximately 1.3 acres

USGS Quadrangle: Yucaipa, Calif., 7.5' quadrangle (Section 14, T2S R2E, San Bernardino Baseline and Meridian)

Keywords: Yucaipa Valley area; Phase I historical/archaeological resources survey; WWII era single-family residence, Minimal Traditional style; not a "historical resource" under CEQA

MANAGEMENT SUMMARY

In December 2019 and January 2020, at the request of County Line Neighborhood Market, LP, CRM TECH performed a cultural resources survey on a residential property at 727 County Line Lane, City of Calimesa, Riverside County, California. The subject property of the study comprises Assessor's Parcel No. 411-040-001, an approximately 1.3-acre parcel located on the northeast corner of County Line Road and County Line Lane, in the northwest quarter of Section 14, T2S R2W, San Bernardino Baseline and Meridian.

The study is part of the environmental review process for the proposed County Line Neighborhood Market Project, which entails demolition of the existing buildings on the property and the construction of an approximately 2,400-square-foot convenience store/restaurant and a canopied fueling station. The City of Calimesa, as the lead agency for the project, required the study in compliance with the California Environmental Quality Act (CEQA). The purpose of the study is to provide the City with the necessary information and analysis to determine whether the proposed project would cause substantial adverse changes to any "historical resources," as defined by CEQA, that may exist in or around the project area.

In order to identify such resources, CRM TECH conducted a historical/archaeological resources records search, pursued historical background research, and carried out an intensive-level field survey. As a result of these research procedures, the existing residence on the property was found to date to circa 1940 and to retain sufficient historical characteristics to warrant recording into the California Historical Resources Inventory. It does not, however, appear to meet any of the criteria for listing in the California Register of Historical Resources. Therefore, the building does not constitute a "historical resource" under CEQA provisions.

No other potential "historical resources" were identified within the project area. Based on these findings, CRM TECH recommends to the City of Calimesa a conclusion that the proposed project will have *No Impact* on any "historical resources." No further cultural resources investigation is recommended for the project unless development plans undergo such changes as to include areas not covered by this study. However, if buried cultural materials are discovered during any earth-moving operations associated with the project, all work within 50 feet of the discovery should be halted or diverted until a qualified archaeologist can evaluate the nature and significance of the finds.

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INTRODUCTION

In December 2019 and January 2020, at the request of County Line Neighborhood Market, LP, CRM TECH performed a cultural resources survey on a residential property at 727 County Line Lane, City of Calimesa, Riverside County, California (Fig. 1). The subject property of the study comprises Assessor's Parcel No. 411-040-001, an approximately 1.3-acre parcel located on the northeast corner of County Line Road and County Line Lane, in the northwest quarter of Section 14, T2S R2W, San Bernardino Baseline and Meridian (Figs. 2, 3).

The study is part of the environmental review process for the proposed County Line Neighborhood Market Project, which entails demolition of the existing buildings on the property and the construction of an approximately 2,400-square-foot convenience store/restaurant and a canopied fueling station. The City of Calimesa, as the lead agency for the project, required the study in compliance with the California Environmental Quality Act (CEQA; PRC §21000, et seq.). The purpose of the study is to provide the City with the necessary information and analysis to determine whether the proposed project would cause substantial adverse changes to any "historical resources," as defined by CEQA, that may exist in or around the project area.

In order to identify such resources, CRM TECH conducted a historical/archaeological resources records search, pursued historical background research, and carried out an intensive-level field survey. The following report is a complete account of the methods, results, and final conclusion of the study. Personnel who participated in the study are named in the appropriate sections below, and their qualifications are provided in Appendix 1.

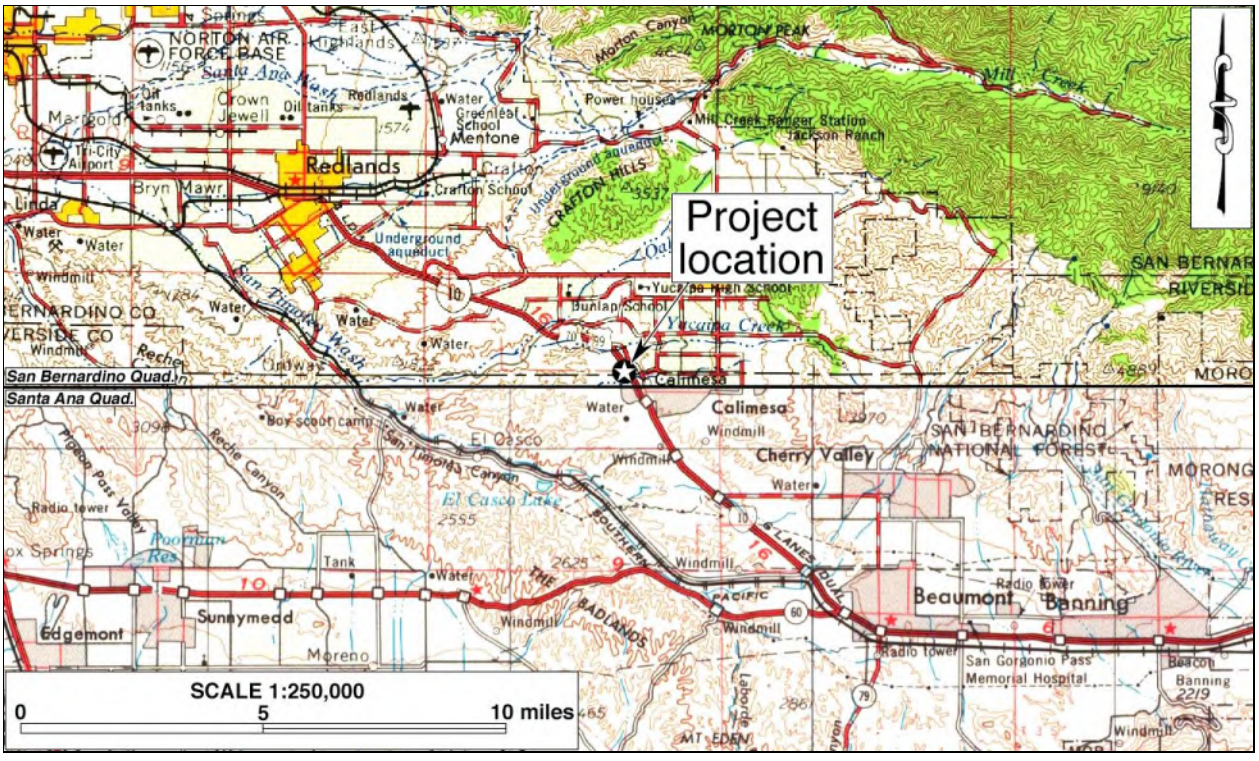

Figure 1. Project vicinity. (Based on USGS San Bernardino and Santa Ana, Calif., 120'x60' quadrangles [USGS 1969; 1979a])

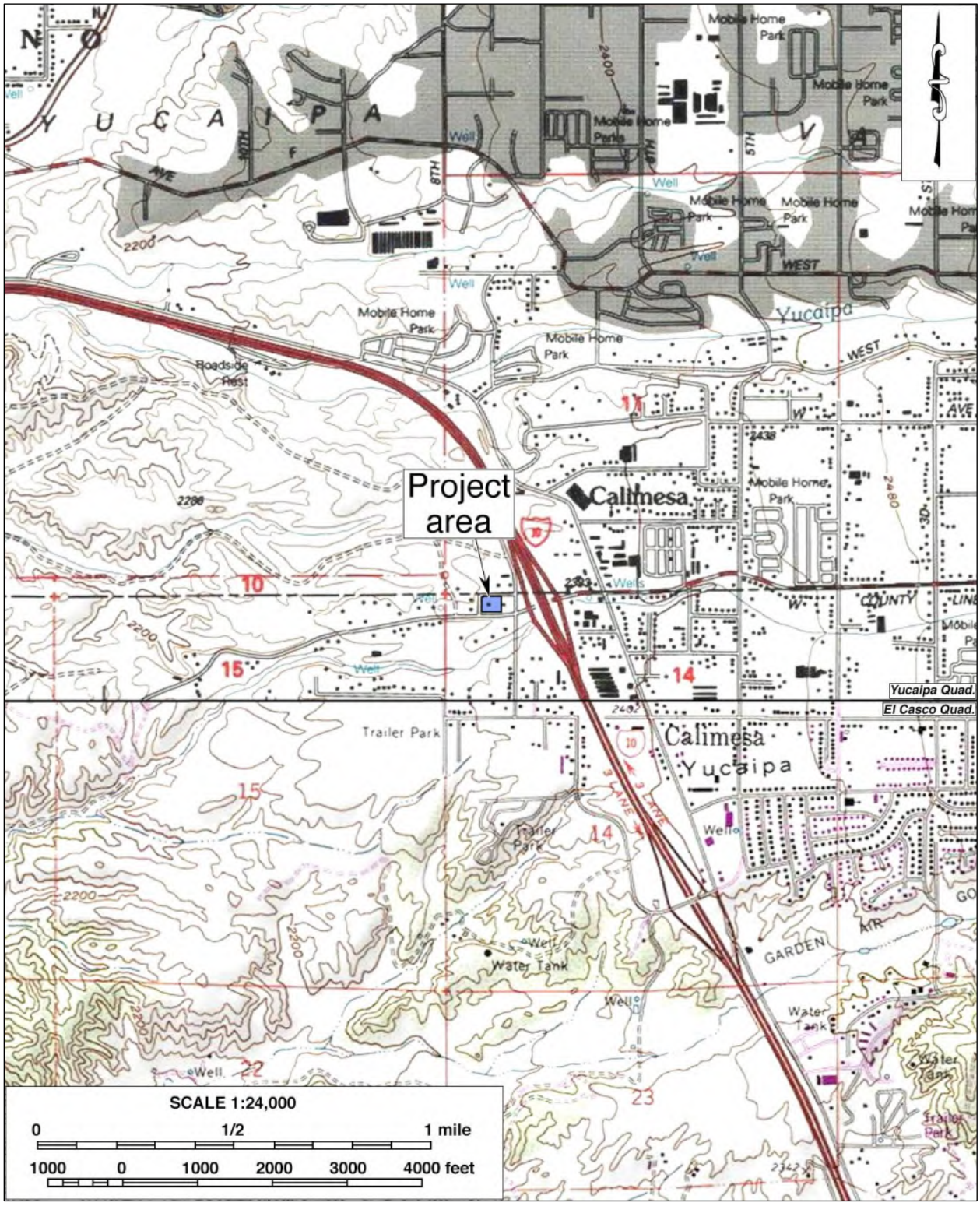

Figure 2. Project area. (Based on USGS El Casco and Yucaipa, Calif., 7.5' quadrangles [USGS 1979b; 1996])

Figure 3. Aerial image of the project area.

SETTING

CURRENT NATURAL SETTING

The City of Calimesa is located in the southern portion of the Yucaipa Valley, an eastward extension of the larger San Bernardino Valley. The topography of the project vicinity is dominated by rolling hills and eroded drainages, and the natural environment is characterized by the temperate Mediterranean climate, with the average maximum temperature in July reaching well into the 90s (Fahrenheit) and the average minimum temperature in January hovering around 35 degrees. Rainfall is typically less than 20 inches annually, most of which occurs between November and March.

Formerly rural and agricultural in character, in recent decades the Yucaipa Valley area has been gradually developing into a more suburban landscape. The generally rectangular-shaped project area is bounded by County Line Road on the south, a vacant parcel on the east, and County Line Lane on the north and the west. The surrounding land use is predominantly rural residential, with the Interstate Highway 10 corridor lying a short distance to the east (Fig. 3).

A vacant residence and a detached garage are currently situated in the western portion of the property, accompanied by what remains of a cluster of domestic trees. The ground surface in the project area has been extensively disturbed by past agricultural use and construction activities. The elevation is roughly 2,372 feet above mean sea level, and the terrain is generally level. Aside from the introduced landscaping plants, vegetation in the project area consists mainly of the typical small shrubs and grasses (Fig. 4).

Figure 4. Overview of the project area. (Photograph taken on December 19, 2019; view to the northwest)

CULTURAL SETTING

Prehistoric Context

The earliest evidence of human occupation in inland southern California was discovered below the surface of an alluvial fan in the northern portion of the Lakeview Mountains, overlooking the San Jacinto Valley, with radiocarbon dates clustering around 9,500 B.P. (Horne and McDougall 2008). Another site found near the shoreline of Lake Elsinore, close to the confluence of Temescal Wash and the San Jacinto River, yielded radiocarbon dates between 8,000 and 9,000 B.P. (Grenda 1997). Additional sites with isolated Archaic dart points, bifaces, and other associated lithic artifacts from the same age range have been found in the Cajon Pass area, typically atop knolls with good viewsheds (Basgall and True 1985; Goodman and McDonald 2001; Goodman 2002; Milburn et al. 2008).

The cultural prehistory of southern California has been summarized into numerous chronologies, including those developed by Chartkoff and Chartkoff (1984), Warren (1984), and others. Specifically, the prehistory of the inland region has been addressed by O'Connell et al. (1974), McDonald et al. (1987), Keller and McCarthy (1989), Grenda (1993), Goldberg (2001), and Horne and McDougall (2008). Although the beginning and ending dates of each's cultural horizons vary, the framework of regional prehistory can be generally parsed into three primary periods:

- Paleoindian Period (ca. 18,000-9,000 B.P.): Native peoples of this period created fluted spearhead bases designed to be hafted to wooden shafts. The distinctive method of thinning bifaces and spearhead preforms by removing long, linear flakes leaves diagnostic Paleoindian markers at tool-making sites. Other artifacts associated with the Paleoindian toolkit include choppers, cutting tools, retouched flakes, and perforators. Sites from this period are very sparse across the landscape and most are deeply buried.
- Archaic Period (ca. 9,000-1,500 B.P.): Archaic sites are characterized by abundant lithic scatters of considerable size with many biface thinning flakes, bifacial preforms broken during manufacture, and well-made groundstone bowls and basin metates. As a consequence of making dart points, many biface thinning waste flakes were generated at individual production stations, which is a diagnostic feature of Archaic sites.
- Late Prehistoric Period (ca. 1,500 B.P.-contact): Sites from this period typically contain small lithic scatters from the manufacture of small arrow points, expedient groundstone tools such as tabular metates and unshaped manos, wooden mortars with stone pestles, acorn or mesquite bean granaries, ceramic vessels, shell beads suggestive of extensive trading networks, and steatite implements such as pipes and arrow shaft straighteners.

Ethnohistoric Context

The Yucaipa Valley area is generally considered a part of the traditional homeland of the Serrano people, which is centered in the San Bernardino Mountains. Together with that of the Vanyume people, linguistically a subgroup, the territory of the Serrano also includes part of the San Gabriel Mountains, much of the San Bernardino Valley, and the Mojave River valley in the southern portion of the Mojave Desert, reaching as far east as the Cady, Bullion, Sheep Hole, and Coxcomb Mountains.

The name "Serrano" was derived from a Spanish term meaning "mountaineer" or "highlander." One of the more important Serrano villages, known as *Yukaipa't* and occupied by the *Yucaipaiem* clan, was located in the Yucaipa Valley and ultimately bestowed its name to this area (Strong 1929:11). The basic written sources on Serrano culture are Kroeber (1925), Strong (1929), and Bean and Smith (1978). The following ethnographic discussion of the Serrano culture is based mainly on these sources.

Prior to European contact, the Serrano were primarily hunter-gatherers and occasionally fishers, and settled mostly on elevated terraces, hills, and finger ridges near where flowing water emerged from the mountains. They were loosely organized into exogamous clans, which were led by hereditary heads, and the clans in turn were affiliated with one of two exogamous moieties. The clans were patrilineal, but their exact structure, function, and number are unknown, except that each clan was the largest autonomous political and landholding unit. There was no pan-tribal political union among the clans, but they shared strong trade, ceremonial, and marital connections that sometimes also extended to other surrounding nations, such as the Kitanemuk, the Tataviam, and the Cahuilla.

Although contact with Europeans may have occurred as early as 1771 or 1772, Spanish influence on Serrano lifeways was negligible until the 1810s, when a mission *asistencia* was established on the southern edge of Serrano territory. Between then and the end of the mission era in 1834, most of the Serrano in the western portion of their traditional territory were removed to the nearby missions. In the eastern portion, a series of punitive expeditions in 1866-1870 resulted in the death or displacement of almost all remaining Serrano population in the San Bernardino Mountains. Today, most Serrano descendants are affiliated with the San Manuel Band of Mission Indians, the Morongo Band of Mission Indians, or the Serrano Nation of Indians.

Historic Context

The Yucaipa Valley area received its first European visitors in 1772, when a small force of Spanish soldiers traveled through the San Bernardino Valley under the command of Pedro Fages, the comandante of Alta California (Beck and Haase 1974:15; Schuiling 1984:23). The name "San Bernardino" was bestowed on the region in the 1810s, when an *asistencia* to Mission San Gabriel and an associated mission rancho were established under that name in present-day Loma Linda (Lerch and Haenszel 1981).

In 1842, after secularization of the mission system, the Mexican authorities in Alta California granted Rancho San Bernardino, along with several adjacent former mission ranchos, to members of a prominent Los Angeles family, the Lugos. An adobe house built the following year by one of the grantees, Diego Sepulveda, became the earliest non-Indian settlement in the Yucaipa Valley (Schuiling 1984:38). As elsewhere in Alta California during the Spanish and Mexican periods, cattle raising was the primary economic activity on Rancho San Bernardino and other nearby land grants, often with the local Native American population providing the labor force (Lerch and Haenszel 1981). The subject property was not included in any of the land grants and thus remained public land when Alta California was annexed by the United States in 1848.

After nine years of cattle raising on their vast domain, the Lugo family sold the entire rancho in 1851 to Amasa M. Lyman and Charles C. Rich, leaders of the Mormon colony that was to become today's

City of San Bernardino (Schuiling 1984:45). During the 1850s, the Yucaipa wing of the rancho and the former Sepulveda adobe were occupied by John Brown, Sr., an early non-Mormon pioneer, although he never acquired the property from the Mormon leaders (Archer 1976). In 1857, the Yucaipa property was purchased by James W. Waters, who developed it into one of southern California's most prosperous stock ranches and grain farms (*ibid.*; Schuiling 1984:106).

James Waters sold the property to John C. Dunlap in 1869, and the Dunlap family continued the successful ranching and farming operations on the Yucaipa Ranch for the rest of the 19th century (Archer 1976; Schuiling 1984:106). In the early 20th century, following the death of John Dunlap and his wife, their heirs incorporated the Yucaipa Land and Water Company to subdivide the ranch into small farms (Archer 1976). For the next few decades, the Yucaipa Valley remained primarily an agricultural area where the local economy focused on a number of cash staples, from apples in the 1910s to peaches, plums, and cherries in the 1930s, followed by poultry after World War II (*ibid.*; Schuiling 1984:107).

In the southern portion of the Yucaipa Valley, the Calimesa area was initially named South Yucaipa or the South Bench and was known mainly for being a stop on a branch of the wagon road between the San Bernardino Valley and the San Gorgonio Pass (Gunther 1984:94; COC n.d.). In the 1910s, when the automobile highway network began to replace the wagon roads, the Yucaipa Valley route was selected for what would later become U.S. Highway 70/99 (now Interstate Highway 10) over the formerly preferred route in the San Timoteo Canyon, which provided a major boost to the growth of South Yucaipa (COC n.d.). In an effort to establish its own identity, South Yucaipa obtained a separate post office in 1929, and in the process adopted the new name of Calimesa, coined from "California" and "mesa," through a local contest (*ibid.*; Gunther 1984:94).

The Calimesa Improvement Association was formed in 1939 and a community center was constructed (COC n.d.). Ten years later, the community organized a volunteer fire department (*ibid.*). The City of Calimesa was incorporated in 1990, one year after its sister community of Yucaipa in San Bernardino County, with a land base of some 15 square miles (U.S. Census Bureau n.d.). Like other formerly agrarian communities in the San Bernardino Valley region, Calimesa's rapid growth in recent decades has been driven primarily by residential and commercial development in the ongoing suburban expansion (COC n.d.).

RESEARCH METHODS

RECORDS SEARCH

As the project area lies in close proximity to the boundary between Riverside County and San Bernardino County, the records search for this study was conducted at the official repositories of cultural resources records for either county, namely the Eastern Information Center (EIC) at the University of California, Riverside, and the South Central Coastal Information Center (SCCIC) at California State University, Fullerton. CRM TECH archaeologist Nina Gallardo completed the portion of the records search at the EIC on December 16, 2019, and the portion at the SCCIC on December 19.

During the records search, Gallardo examined maps and records on file at the information centers for previously identified cultural resources and existing cultural resources reports within a one-mile radius of the project area. Previously identified cultural resources include properties designated as California Historical Landmarks, Points of Historical Interest, or Riverside/San Bernardino County Historical Landmarks as well as those listed in the National Register of Historic Places, the California Register of Historical Resources, or the California Historical Resources Inventory.

HISTORICAL RESEARCH

Historical background research for this study was conducted by CRM TECH historian/architectural historian Terri Jacquemain on the basis of published literature in local and regional history, real property tax assessment records and building safety records of the County of Riverside, various online genealogical databases, U.S. General Land Office (GLO) land survey plat maps dated 1880, U.S. Geological Survey (USGS) topographic maps dated 1901-1996, and aerial photographs taken in 1938-2018. The historic maps are collected at the Science Library of the University of California, Riverside, and the California Desert District of the U.S. Bureau of Land Management, located in Moreno Valley. The aerial photographs are available at the Nationwide Environmental Title Research (NETR) Online website and through the Google Earth software.

FIELD SURVEY

On December 19, 2019, CRM TECH archaeologist Daniel Ballester carried out the field survey of the project area. The survey was completed on foot at an intensive-level by walking a series of parallel east-west transects at 15-meter (approximately 50-foot) intervals except there the transects were interrupted by the existing buildings. In this way, the ground surface in the entire project area was systematically and carefully examined for any evidence of human activities dating to the prehistoric or historic period (i.e., 50 years ago or older). Ground visibility was poor to fair (50%-80%) due to moderate vegetation growth over most of the property, which was considered adequate in light of past ground disturbances.

As the existing residence and garage on the property appeared to date to the historic period, Ballester made detailed notations and preliminary photo-recordation of their structural and architectural characteristics, including notable features, construction details, and current conditions of each building. Ballester's observations and photographs form the basis of the building description presented below. The field data were then compiled into standard record forms and submitted to the EIC for inclusion in the California Historical Resources Inventory (see App. 2).

RESULTS AND FINDINGS

RECORDS SEARCH

According to EIC and SCCIC records, the project area had not been surveyed for cultural resources prior to this study (Fig. 5), and no cultural resources had been recorded within or adjacent to its boundaries. Within the one-mile scope of the records search, EIC and SCCIC records show a total of 25 previous studies on various tracts of land and linear features (Fig. 5). As a result, 16 historical/

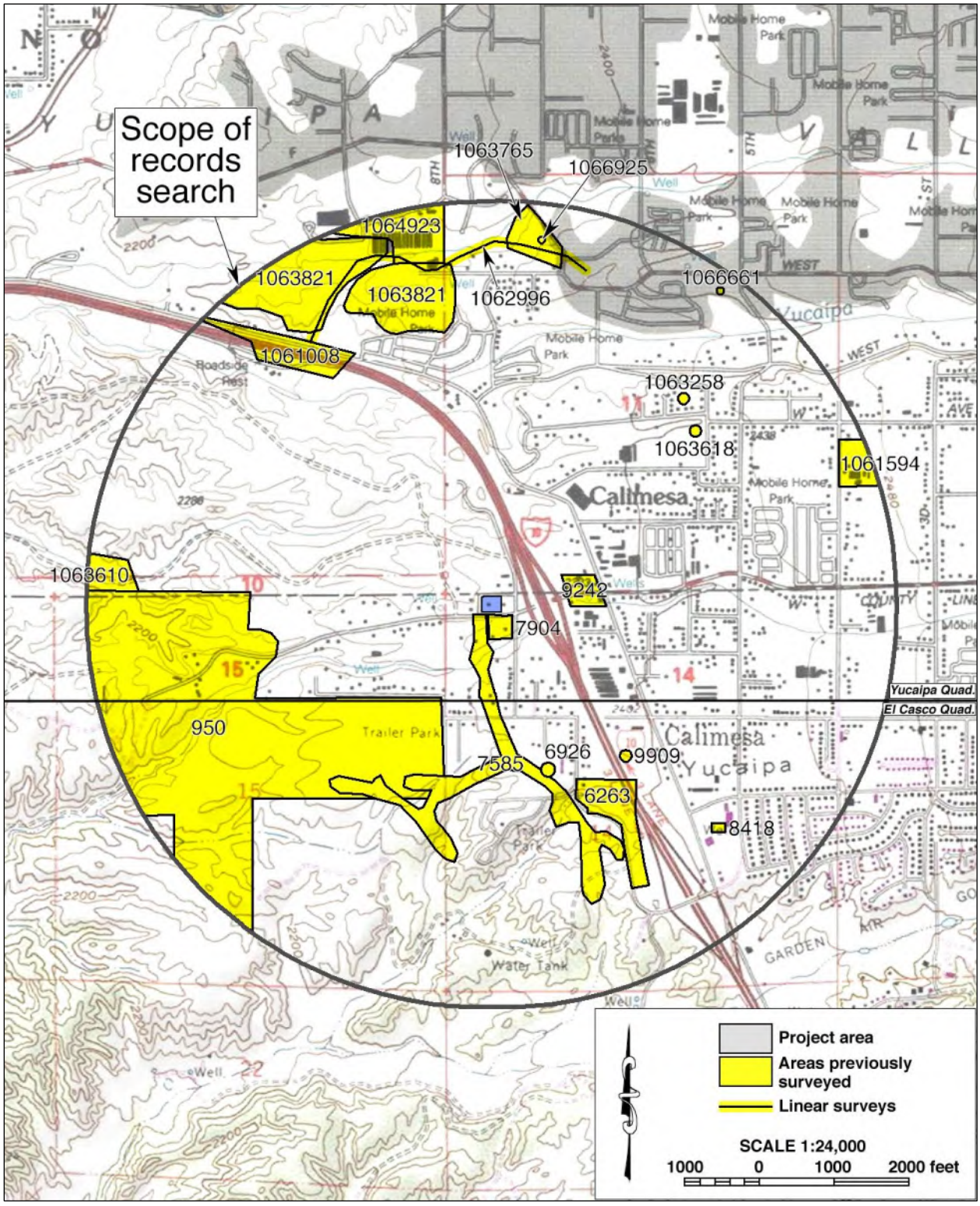

Figure 5. Previous cultural resources studies in the vicinity of the project area, listed by EIC file number. Locations of known historical/archaeological sites are not shown as a protective measure.

archaeological sites, including 15 recorded sites and one pending site, and one isolate—i.e., a locality with fewer than three artifacts—have been identified within the one-mile radius.

Five of the 16 known sites were of prehistoric—i.e., Native American—origin, consisting primarily of bedrock milling features, habitational debris, a burial, and lithic scatters. All five of them were located along Yucaipa Creek, roughly a half-mile to the north of the project area. The other 11 sites, including the pending site, and the isolate dated to the historic period and included three early and mid-20th century residences, structural remains, a hog farm, various infrastructure features, and scattered refuse items. Closest among these was a circa 1946 single-family residence located on Seventh Place and south of County Line Road, a few hundred feet to the southeast. In view of their distance from the project area, none of these 17 known cultural resources require further consideration during this study.

HISTORICAL RESEARCH

Historical sources consulted for this study suggest that the first man-made feature known to be present within the project area was the residence currently on the property, which was constructed around 1940, at the onset of World War II (Figs. 6-8; County of Riverside 1937-1963). Prior to that, a dirt road may have traversed near the southern edge of the project area in 1879, but by the turn of the 20th century no man-made features were found in the immediate vicinity of the project area (Figs. 6, 7). In the Calimesa-Yucaipa area, only a few winding roads and a handful of widely scattered buildings were reported at the time (Fig. 7).

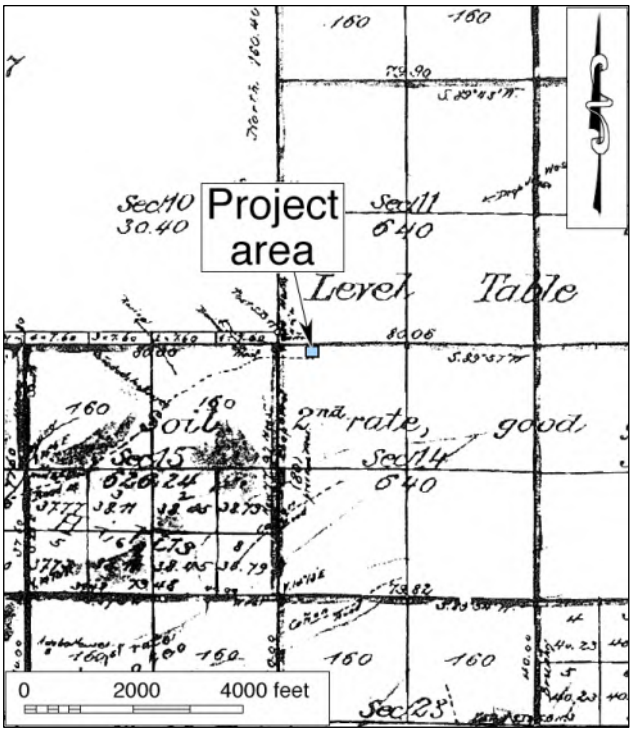

Figure 6. The project area and vicinity in 1879. (Source: GLO 1880)

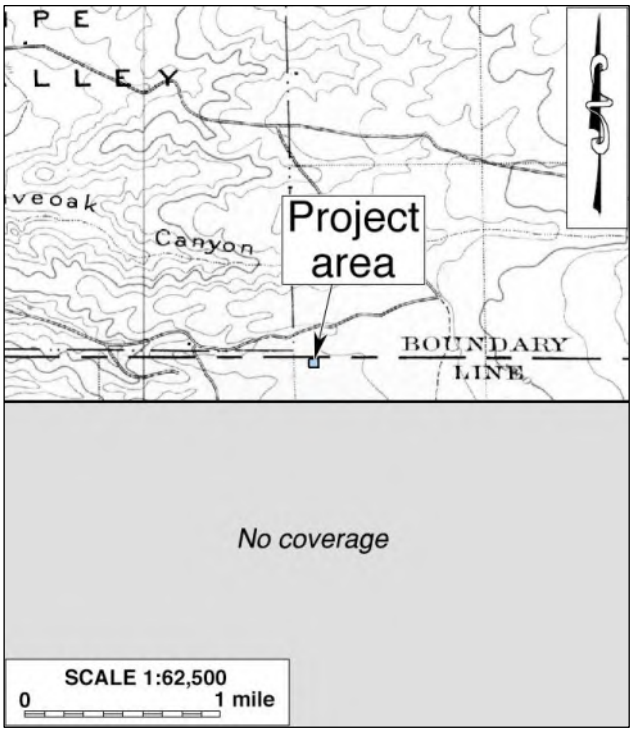

Figure 7. The project area and vicinity in 1898-1899. (Source: USGS 1901a; 1901b)

The earliest available aerial photographs demonstrate that at least by 1938 ground disturbances had occurred at and around the location of the buildings currently in existence in the project area, likely indicating the beginning of construction (NETR Online 1938). By the 1950s, the residence and the garage were both in place, along with the addition to the residence (Fig. 8; NETR Online 1959). At that time, what is now County Line Lane served as the original alignment of County Line Road at the project location (*ibid.*). The completion of Interstate Highway 10 in the 1950s soon resulted in the realignment of County Line Road, leaving the project area "sandwiched" between the two roads (NETR Online 1966-1969).

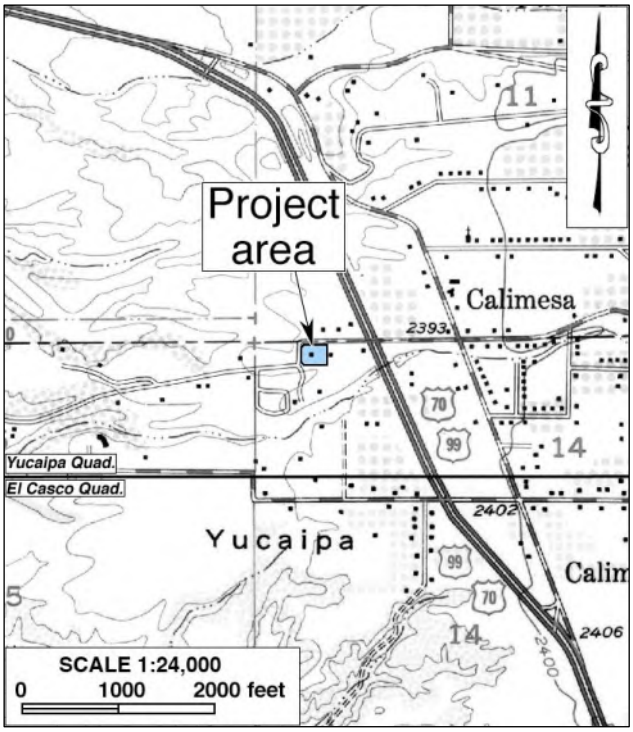

Figure 8. The project area and vicinity in 1951-1954. (Source: USGS 1953; 1954)

Prior to 1972, aside from a cluster of landscaping trees near the house, no agricultural activities were evident in the project area (NETR Online 1959-1972). By 1978, part of the land surrounding the house had been evidently planted into an orchard of some kind (NETR Online 1978; 1980). In any event, by 1995 the orchard had been removed, and no further construction or agricultural activities appear to have occurred on the property since then (NETR Online 1995-2016; Google Earth 1995-2018).

According to archival records of the County of Riverside, the project area remained in the hands of the Redlands and Yucaipa Land Company until Grover C. and Anna A. Cox acquired the property and evidently built their home on it around 1940 (County of Riverside 1937-1963). Five years later, their son John Cox was added to the title (*ibid.*; Ancestry.com n.d.). Grover Cleveland Cox (1884-1961), an Illinois native, was listed in local directories as a rancher at this address throughout the 1950s (Ancestry.com n.d). After his death in 1961, the property was acquired by Don Parker as of 1965 and by O.W. Hiatt as of 1975 (County of Riverside 1965-1975). Permits for a seepage pit in 1965 and an electrical change-out in 1975 are the only records pertaining to this house found on file at the County of Riverside Building and Safety Department (*ibid.*).

FIELD SURVEY

During the field survey, the existing residence at 727 County Line Lane and the accompanying garage were found to be the only features in the project area that date to the prehistoric or historic period. These buildings, although rather unremarkable in character and suffering from recent neglect, are known to be more than 50 years of age and retain sufficient historic integrity to relate to the period of origin, namely the 1940s era. The design, layout, materials, and overall appearance of the residence, exemplified by its frugal plan and unembellished profile, are all consistent with the

Minimal Traditional-style buildings from the "lean years" of the Great Depression and WWII. As such, the residence was recorded into the California Historical Resources Inventory during this study, with the garage as an associated feature (see App. 2 for description and other details). No other potential "historical resources" were encountered throughout the course of the survey.

DISCUSSION

The purpose of this study is to identify any cultural resources within the project area and to assist the City of Calimesa in determining whether such resources meet the official definition of "historical resources," as provided in the California Public Resources Code, in particular CEQA. According to PRC §5020.1(j), "'historical resource' includes, but is not limited to, any object, building, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California."

More specifically, CEQA guidelines state that the term "historical resources" applies to any such resources listed in or determined to be eligible for listing in the California Register of Historical Resources, included in a local register of historical resources, or determined to be historically significant by the lead agency (Title 14 CCR §15064.5(a)(1)-(3)). Regarding the proper criteria for the evaluation of historical significance, CEQA guidelines mandate that "generally a resource shall be considered by the lead agency to be 'historically significant' if the resource meets the criteria for listing on the California Register of Historical Resources" (Title 14 CCR §15064.5(a)(3)). A resource may be listed in the California Register if it meets any of the following criteria:

(1) Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage.
(2) Is associated with the lives of persons important in our past.
(3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
(4) Has yielded, or may be likely to yield, information important in prehistory or history. (PRC §5024.1(c))

In summary of the research results presented above, the residence at 727 County Line Lane is the only potential "historical resource" encountered within the project area. Dating to circa 1940, this modest building retains sufficient historical characteristics to warrant recording into the California Historical Resources Inventory. However, there is no evidence that the residence is closely associated with any person or event of recognized historic significance, nor is it known to embody the work of a prominent architect, designer, or builder. It does not represent an important example of its architectural style or any property type, period, region, and method of construction, and it holds little potential for any important data for the study of history. Based on these findings, the present study concludes that the residence at 727 County Line Lane does not appear to meet any of the criteria for listing in the California Register of Historical Resources, and does not qualify as a "historical resource" under CEQA provisions.

CONCLUSIONS AND RECOMMENDATIONS

CEQA establishes 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" (PRC §21084.1). "Substantial adverse change," according to PRC §5020.1(q), "means demolition, destruction, relocation, or alteration such that the significance of a historical resource would be impaired."

As stated above, the residence at 727 County Line Lane, the only feature of prehistoric or historic origin found in the project area, does not appear to meet CEQA's definition of a "historical resource." Therefore, CRM TECH concludes that no "historical resources" exist within the project area and presents the following recommendations to the City of Calimesa:

- The proposed project will not cause a substantial adverse change to any known "historical resources."
- No further cultural resources investigation will be necessary for the project unless development plans undergo such changes as to include areas not covered by this study.
- If any buried cultural materials are encountered during earth-moving operations associated with the project, all work within 50 feet of the discovery should be halted or diverted until a qualified archaeologist can evaluate the nature and significance of the finds.

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APPENDIX 1:
PERSONNEL QUALIFICATIONS

PRINCIPAL INVESTIGATOR/HISTORIAN
Bai "Tom" Tang, M.A.

Education

1988-1993	Graduate Program in Public History/Historic Preservation, UC Riverside.
1987	M.A., American History, Yale University, New Haven, Connecticut.
1982	B.A., History, Northwestern University, Xi'an, China.
2000	"Introduction to Section 106 Review," presented by the Advisory Council on Historic Preservation and the University of Nevada, Reno.
1994	"Assessing the Significance of Historic Archaeological Sites," presented by the Historic Preservation Program, University of Nevada, Reno.

Professional Experience

2002-	Principal Investigator, CRM TECH, Riverside/Colton, California.
1993-2002	Project Historian/Architectural Historian, CRM TECH, Riverside, California.
1993-1997	Project Historian, Greenwood and Associates, Pacific Palisades, California.
1991-1993	Project Historian, Archaeological Research Unit, UC Riverside.
1990	Intern Researcher, California State Office of Historic Preservation, Sacramento.
1990-1992	Teaching Assistant, History of Modern World, UC Riverside.
1988-1993	Research Assistant, American Social History, UC Riverside.
1985-1988	Research Assistant, Modern Chinese History, Yale University.
1985-1986	Teaching Assistant, Modern Chinese History, Yale University.
1982-1985	Lecturer, History, Xi'an Foreign Languages Institute, Xi'an, China.

Cultural Resources Management Reports

Preliminary Analyses and Recommendations Regarding California's Cultural Resources Inventory System (With Special Reference to Condition 14 of NPS 1990 Program Review Report). California State Office of Historic Preservation working paper, Sacramento, September 1990.

Numerous cultural resources management reports with the Archaeological Research Unit, Greenwood and Associates, and CRM TECH, since October 1991.

PRINCIPAL INVESTIGATOR/ARCHAEOLOGIST
Michael Hogan, Ph.D., RPA*

Education

1991	Ph.D., Anthropology, University of California, Riverside.
1981	B.S., Anthropology, University of California, Riverside; with honors.
1980-1981	Education Abroad Program, Lima, Peru.
2002	Section 106—National Historic Preservation Act: Federal Law at the Local Level. UCLA Extension Course #888.
2002	"Recognizing Historic Artifacts," workshop presented by Richard Norwood, Historical Archaeologist.
2002	"Wending Your Way through the Regulatory Maze," symposium presented by the Association of Environmental Professionals.
1992	"Southern California Ceramics Workshop," presented by Jerry Schaefer.
1992	"Historic Artifact Workshop," presented by Anne Duffield-Stoll.

Professional Experience

2002-	Principal Investigator, CRM TECH, Riverside/Colton, California.
1999-2002	Project Archaeologist/Field Director, CRM TECH, Riverside.
1996-1998	Project Director and Ethnographer, Statistical Research, Inc., Redlands.
1992-1998	Assistant Research Anthropologist, University of California, Riverside
1992-1995	Project Director, Archaeological Research Unit, U. C. Riverside.
1993-1994	Adjunct Professor, Riverside Community College, Mt. San Jacinto College, U.C. Riverside, Chapman University, and San Bernardino Valley College.
1991-1992	Crew Chief, Archaeological Research Unit, U. C. Riverside.
1984-1998	Archaeological Technician, Field Director, and Project Director for various southern California cultural resources management firms.

Research Interests

Cultural Resource Management, Southern Californian Archaeology, Settlement and Exchange Patterns, Specialization and Stratification, Culture Change, Native American Culture, Cultural Diversity.

Cultural Resources Management Reports

Author and co-author of, contributor to, and principal investigator for numerous cultural resources management study reports since 1986.

Memberships

* Register of Professional Archaeologists; Society for American Archaeology; Society for California Archaeology; Pacific Coast Archaeological Society; Coachella Valley Archaeological Society.

PROJECT HISTORIAN/ARCHITECTURAL HISTORIAN
Terri Jacquemain, M.A.

Education

2004 M.A., Public History and Historic Resource Management, University of California, Riverside.
- M.A. thesis: Managing Cultural Outreach, Public Affairs and Tribal Policies of the Cabazon Band of Mission Indians, Indio, California; internship served as interim Public Information Officer, Cabazon Band of Mission Indians, June-October, 2002.

2002 B.S., Anthropology, University of California, Riverside.
2001 Archaeological Field School, University of California, Riverside.
1991 A.A., Riverside Community College, Norco Campus.

Professional Experience

2003- Historian/Architectural Historian/Report Writer, CRM TECH, Riverside/Colton, California.
- Author/co-author of legally defensible cultural resources reports for CEQA and NHPA Section 106;
- Historic context development, historical/archival research, oral historical interviews, consultation with local communities and historical organizations;
- Historic building surveys and recordation, research in architectural history; architectural description.

2002-2003 Teaching Assistant, Religious Studies Department, University of California, Riverside.
2002 Interim Public Information Officer, Cabazon Band of Mission Indians.
2000 Administrative Assistant, Native American Student Programs, University of California, Riverside.
1997-2000 Reporter, *Inland Valley Daily Bulletin*, Ontario, California.
1991-1997 Reporter, *The Press-Enterprise*, Riverside, California.

Membership

California Preservation Foundation.

PROJECT ARCHAEOLOGIST/FIELD DIRECTOR
Daniel Ballester, M.S.

Education

2013	M.S., Geographic Information System (GIS), University of Redlands, California.
1998	B.A., Anthropology, California State University, San Bernardino.
1997	Archaeological Field School, University of Las Vegas and University of California, Riverside.
1994	University of Puerto Rico, Rio Piedras, Puerto Rico.
2007	Certificate in Geographic Information Systems (GIS), California State University, San Bernardino.
2002	"Historic Archaeology Workshop," presented by Richard Norwood, Base Archaeologist, Edwards Air Force Base; presented at CRM TECH, Riverside, California.

Professional Experience

2002-	Field Director/GIS Specialist, CRM TECH, Riverside/Colton, California.
2011-2012	GIS Specialist for Caltrans District 8 Project, Garcia and Associates, San Anselmo, California.
2009-2010	Field Crew Chief, Garcia and Associates, San Anselmo, California.
2009-2010	Field Crew, ECorp, Redlands.
1999-2002	Project Archaeologist, CRM TECH, Riverside, California.
1998-1999	Field Crew, K.E.A. Environmental, San Diego, California.
1998	Field Crew, A.S.M. Affiliates, Encinitas, California.
1998	Field Crew, Archaeological Research Unit, University of California, Riverside.

PROJECT ARCHAEOLOGIST
Nina Gallardo, B.A.

Education

2004	B.A., Anthropology/Law and Society, University of California, Riverside.

Professional Experience

2004-	Project Archaeologist, CRM TECH, Riverside/Colton, California.

Cultural Resources Management Reports

Co-author of and contributor to numerous cultural resources management reports since 2004.

APPENDIX 2

CALIFORNIA HISTORICAL RESOURCES INVENTORY RECORD FORMS

727 County Line Lane

State of California--The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code 6Z
Other Listings
Review Code Reviewer Date

Page 1 of 4 *Resource Name or # (Assigned by recorder) CRM TECH 3568-1H

P1. Other Identifier: 727 County Line Lane

***P2. Location:** Not for Publication √ Unrestricted ***a. County** Riverside

and (P2b and P2c or P2d. Attach a Location Map as necessary.)

***b. USGS 7.5' Quad** Yucaipa, Calif. **Date** 1996

T2S; **R**2W; NW **1/4 of** NW **1/4 of** NW **1/4 of Sec** 14 ; S.B. **B.M.**

Elevation: Approximately 2,372 feet above mean sea level

c. Address 727 County Line Lane **City** Calimesa **Zip** 92320

d. UTM: (Give more than one for large and/or linear resources) **Zone** 11 ; 493,782 **mE/** 3,762,555 **mN**

UTM Derivation: USGS Quad GPS √ Google Earth

e. Other Locational Data: (e.g., parcel #, directions to resource, etc., as appropriate) APN 410—041-001; on the northeast corner of County Line Road and County Line Lane, approximately 300 feet west of Seventh Place

***P3a. Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries) This Minimal Traditional-style, one-story single-family residence is L-shaped in plan as the result of an addition to the south side of the west-facing primary façade. The wood-framed original portion is rectangular in shape and features a medium-pitched front-gable roof and stuccoed exterior walls, and the brick masonry addition, slightly recessed from the main façade, is surmounted by a low-pitched shed roof. The roof (*Continued on p. 3*)

***P3b. Resource Attributes:** (List attributes and codes) HP2: Single family property

***P4. Resources Present:** √ Building Structure Object Site District Element of District Other (isolates, etc.)

P5a. Photograph or Drawing (Photograph required for buildings, structures, and objects.)

P5b. Description of Photo: Taken on December 19, 2019; view to the northeast

***P6. Date Constructed/Age of Sources:** √ Historic Prehistoric Both Ca. 1940 (see Items B6 and B12 for details)

***P7. Owner and Address:** Betty Jean Holcomb, 35355 Panorama Drive, Yucaipa, CA 92399

***P8. Recorded by** (Name, affiliation, and address): Daniel Ballester, CRM TECH, 1016 East Cooley Drive, Suite A/B, Colton, CA 92324

***P9. Date Recorded:** December 19, 2019

***P10. Survey Type:** Intensive-level survey for CEQA-compliance purpose

***P11. Report Citation:** (Cite survey report and other sources, or enter "none.") Bai "Tom" Tang, Terri Jacquemain, and Daniel Ballester (2020): Historical/Archaeological Resources Survey: County Line Neighborhood Market Project, 727 County Line Lane, Assessor's Parcel Nos. 411-040-001, City of Calimesa, Riverside County, California

***Attachments:** None √ Location Map √ Continuation Sheet √ Building, Structure, and Object Record
Archaeological Record District Record Linear Resource Record Milling Station Record
Rock Art Record Artifact Record Photograph Record Other (List):

BUILDING, STRUCTURE, AND OBJECT RECORD

*NRHP Status Code 6Z

*Resource Name or # (Assigned by recorder) CRM TECH 3568-1H

B1. Historic Name:
B2. Common Name:
B3. Original Use: Residential
B4. Present Use: Vacant
*B5. Architectural Style: Minimal Traditional
*B6. Construction History: (Construction date, alterations, and date of alterations) Archival records indicate that this residence was built around 1940, when Grover C. and Anna A. Cox were property owners. Five years later, their son John Cox was added to the title. Grover Cleveland Cox (1884-1961), an Illinois native, was listed as a rancher at this address throughout the 1950s. After his death in 1961, the property was acquired by Don Parker as of 1965 and by O.W. Hiatt as of 1975. Permits for a seepage pit in 1965 and an electrical change-out in 1975 are the only records pertaining to this house found at the County of Riverside Building and Safety Department.
*B7. Moved? √ No Yes Unknown Date: Original Location:
*B8. Related Features: See Item P3a.
B9a. Architect: Unknown
b. Builder: Unknown
*B10. Significance: Theme Mid-20th century rural residential development
Area Calimesa/Yucaipa Valley
Period of Significance 1940-1945
Property Type Single-family residence
Applicable Criteria N/A
(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.) There is no evidence that this residence is closely associated with any person or event of recognized historic significance, nor is it known to embody the work of a prominent architect, designer, or builder. It does not represent an important example of its architectural style or any property type, period, region, and method of construction, and (*Continued on p. 3*)
B11. Additional Resource Attributes: (List attributes and codes) HP4: Ancillary building
*B12. References: Riverside County real property tax assessment records and building safety records; online genealogical databases at www.ancestry.com
B13. Remarks:
*B14. Evaluator: Terri Jacquemain
*Date of Evaluation: January 2020

(Sketch Map with north arrow required.)

(This space reserved for official comments.)

Recorded by: Daniel Ballester ***Date:** December 19, 2019 √ Continuation Update

***P3a. Description** (continued)**:** over the main mass ends with medium-width eave and rake overhangs, and the roof of the addition sports wide overhangs with dog-ear wood trim under the rakes. The entire roof is covered with brown composition shingles, and the exteriors walls are painted bluish gray in contrast to the white trim.

The main entry is set at the northern end of the primary façade and is filled with a weathered wood door and a metal security screen that open to a small, elevated porch under a secondary front-facing gable. The porch roof is supported by four square wooden posts, while the concrete platform and the accompanying concrete steps are flanked by plain wooden balustrades. A secondary front entry opens on the addition, with a glazed wood door accessed by an unadorned concrete stoop with two concrete steps.

Fenestration to the house consists of modern vinyl-framed double-hung and sliding windows with undivided panes on the main mass and steel-framed casement windows in 3x3-pane configuration on the addition. Almost all of the windows have been sealed with oriented strand board, as has the glazing on the secondary front door.

A rectangular garage that is similar in materials and design elements to the original portion of the residence stands to the southwest, with hinged double doors opening in the center of the northern façade, under a gable end. A paneled wood door of modern origin with a pet door in set on the eastern façade. Fenestration to the garage is limited to a small vinyl-framed sliding window in each of the side wall and on the rear side. The buildings are situated in a rural setting and surrounded by more than one acre of vacant land, along with paved walkways, abandoned planters, domestic trees, and other remnants of the simple landscaping.

***B10. Significance:** (continued)**:** it holds little potential for any important data for the study of history. Therefore, the residence does not appear eligible for listing in the National Register of Historic Places or the California Register of Historical Resources.

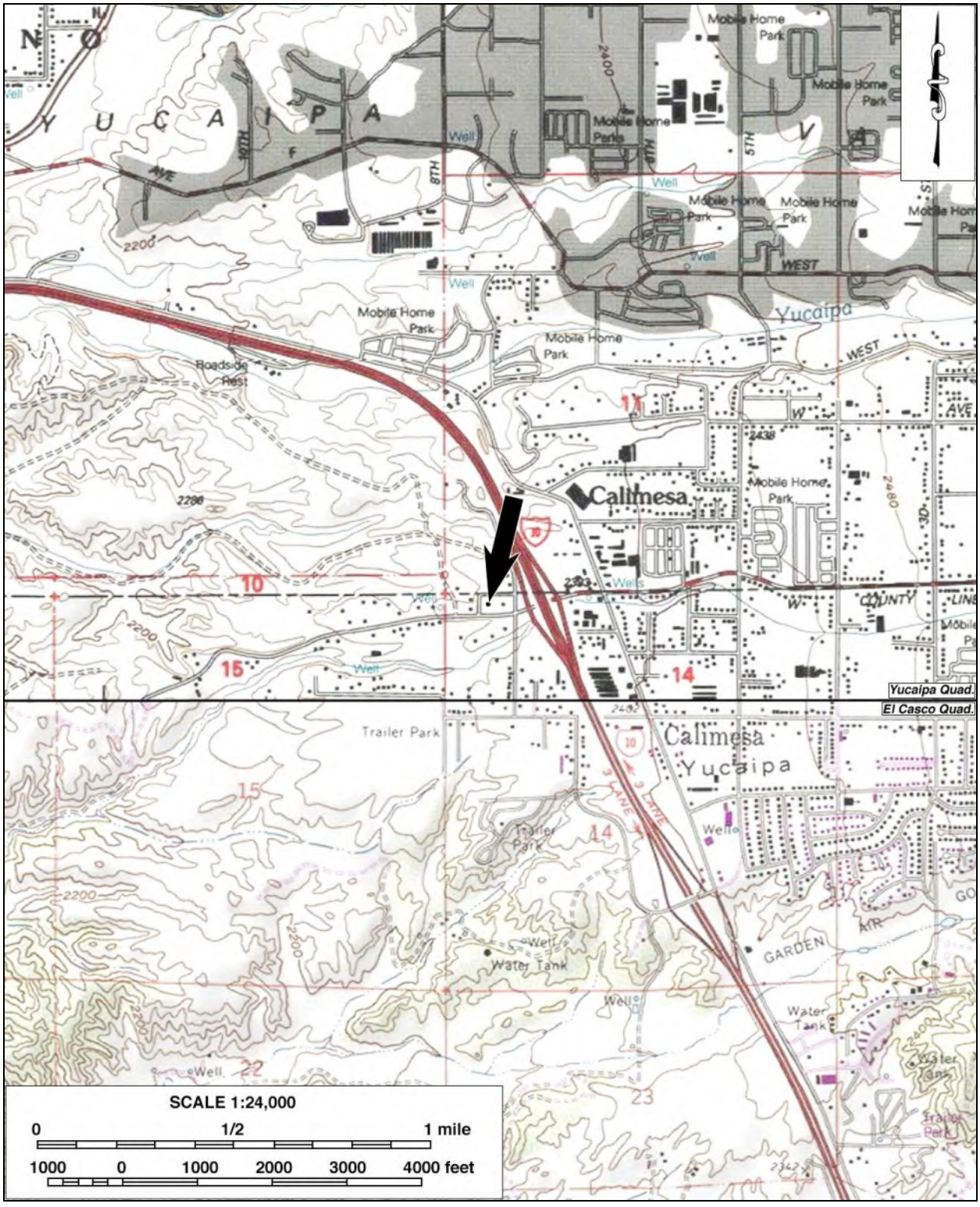
State of California--The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

LOCATION MAP

Primary # _____
HRI # _____
Trinomial _____

Page 4 of 4 *Resource Name or # (Assigned by recorder) CRM TECH 3568-1H

*Map Name: Yucaipa and El Casco, Calif. *Scale: 1:24,000 *Date of Map: 1979/1996



DPR 523J (1/95) *Required information

Appendix F

Geotechnical Engineering Investigation

GEOTECHNICAL • ENVIRONMENTAL • GEOLOGY • MATERIALS TESTING & INSPECTION • FORENSIC • LABORATORY

SALEM
engineering group, inc.

GEOTECHNICAL ENGINEERING INVESTIGATION

PROPOSED COMMERCIAL DEVELOPMENT
COUNTY LINE LANE & COUNTY LINE ROAD
CALIMESA, CALIFORNIA

SALEM PROJECT NO. 3-219-1043
DECEMBER 30, 2019

PREPARED FOR:

MS. CLAUDIA GRAJEDA
J&T MANAGEMENT, INC.
139 RADIO ROAD
CORONA, CA 92879

PREPARED BY:

SALEM ENGINEERING GROUP, INC.
8711 MONROE COURT, SUITE A
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Fax (909) 980-6435

December 30, 2019 Project No. 3-219-1043

Ms. Claudia Grajeda
J&T Management, Inc.
139 Radio Road
Corona, CA 92879

SUBJECT: GEOTECHNICAL ENGINEERING INVESTIGATION
PROPOSED COMMERCIAL DEVELOPMENT
COUNTY LINE LANE & COUNTY LINE ROAD
CALIMESA, CALIFORNIA

Dear Ms. Grajeda:

At your request and authorization, SALEM Engineering Group, Inc. (SALEM) has prepared this Geotechnical Engineering Investigation report for the Proposed Commercial Development to be located at the subject site.

The accompanying report presents our findings, conclusions, and recommendations regarding the geotechnical aspects of designing and constructing the project as presently proposed. In our opinion, the proposed project is feasible from a geotechnical viewpoint provided our recommendations are incorporated into the design and construction of the project.

We appreciate the opportunity to assist you with this project. Should you have questions regarding this report or need additional information, please contact the undersigned at (909) 980-6455.

Respectfully Submitted,

SALEM ENGINEERING GROUP, INC.

Clarence Jiang, GE
Senior Geotechnical Engineer
RGE 2477

R. Sammy Salem, MS, PE, GE
Principal Engineer
RCE 52762 / RGE 2549

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SALEM engineering group, inc.

8711 Monroe Court, Suite A
Rancho Cucamonga, CA 91730
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GEOTECHNICAL ENGINEERING INVESTIGATION
PROPOSED COMMERCIAL DEVELOPMENT
COUNTY LINE LANE & COUNTY LINE ROAD
CALIMESA, CALIFORNIA

1. PURPOSE AND SCOPE

This report presents the results of our Geotechnical Engineering Investigation for the Proposed Commercial Development to be located at the northeast corner of County Line Lane and County Line Road in Calimesa, California (see Figure 1, Vicinity Map).

The purpose of our geotechnical engineering investigation was to observe and sample the subsurface conditions encountered at the site, and provide conclusions and recommendations relative to the geotechnical aspects of constructing the project as presently proposed.

The scope of this investigation included a field exploration, laboratory testing, engineering analysis and the preparation of this report. Our field exploration was performed on December 13, 2019 and included the drilling of six (6) small-diameter soil borings to a maximum depth of 46½ feet at the site. Additionally, two (2) percolation tests were performed at depths of approximately 5 and 10 feet below ground surface. The locations of the soil borings and percolation tests are depicted on Figure 2, Site Plan. A detailed discussion of our field investigation, exploratory boring logs are presented in Appendix A.

Laboratory tests were performed on selected soil samples obtained during the investigation to evaluate pertinent physical properties for engineering analyses. Appendix B presents the laboratory test results in tabular and graphic format.

The recommendations presented herein are based on analysis of the data obtained during the investigation and our experience with similar soil and geologic conditions.

If project details vary significantly from those described herein, SALEM should be contacted to determine the necessity for review and possible revision of this report. Earthwork and Pavement Specifications are presented in Appendix C. If text of the report conflict with the specifications in Appendix C, the recommendations in the text of the report have precedence.

2. PROJECT DESCRIPTION

Based on the information provided to us, we understand that the proposed development of the site will include demolition of an existing single family residence and construction of an RV fueling center with a 4-pump canopy, underground storage tanks, and a 3,000 square-foot coffee shop/retail building with a drive-thru. Maximum wall load is expected to be on the order of 3 kips per linear foot. Maximum column load is expected to be on the order of 50 kips. Floor slab bearing pressure is expected to be on the order of 150 psf.

A site grading plan was not available at the time of preparation of this report. As the site area is essentially level, we anticipate that cuts and fills during earthwork will be minimal and limited to providing level pads and positive site drainage. In the event that changes occur in the nature or design of the project, the conclusions and recommendations contained in this report will not be considered valid unless the changes are reviewed and the conclusions of our report are modified. The site configuration and locations of proposed improvements are shown on the Site Plan, Figure 2.

3. SITE LOCATION AND DESCRIPTION

The subject site is located on the northeast corner of County Line Lane and County Line Road in the City of Calimesa, California (Vicinity Map, Figure 1). The site is rectangular in shape and encompasses approximately 2.60 acres.

The site is currently a single-family residence with 2 buildings surrounded by undeveloped land. The project site is relatively flat with no major changes in grade level. The site's elevation is approximately 2,373 feet above mean sea level based on Goggle Earth Imagery.

4. FIELD EXPLORATION

Our field exploration consisted of site surface reconnaissance and subsurface exploration. The exploratory test borings (B-1 through B-6) were drilled on December 13, 2019 in the areas shown on the Site Plan, Figure 2. The test borings were advanced with a 4-inch diameter solid flight auger rotated by a truck-mounted CME 45 drill rig. The test borings were extended to a maximum depth of 46½ feet below existing grade.

The materials encountered in the test borings were visually classified in the field, and logs were recorded by a field engineer and stratification lines were approximated on the basis of observations made at the time of drilling. Visual classification of the materials encountered in the test borings were generally made in accordance with the Unified Soil Classification System (ASTM D2487).

A soil classification chart and key to sampling is presented on the Unified Soil Classification Chart, in Appendix "A." The logs of the test borings are presented in Appendix "A." The Boring Logs include the soil type, color, moisture content, dry density, and the applicable Unified Soil Classification System symbol. The location of the test borings were determined by measuring from features shown on the Site Plan, provided to us. Hence, accuracy can be implied only to the degree that this method warrants.

The actual boundaries between different soil types may be gradual and soil conditions may vary. For a more detailed description of the materials encountered, the Boring Logs in Appendix "A" should be consulted. Soil samples were obtained from the test borings at the depths shown on the logs of borings. The MCS samples were recovered and capped at both ends to preserve the samples at their natural moisture content; SPT samples were recovered and placed in a sealed bag to preserve their natural moisture content. The borings were backfilled with soil cuttings after completion of the drilling.

5. LABORATORY TESTING

Laboratory tests were performed on selected soil samples to evaluate their physical characteristics and engineering properties. The laboratory-testing program was formulated with emphasis on the evaluation of natural moisture, density, shear strength, consolidation, expansion index, maximum density and optimum moisture determination, expansion index, and gradation of the materials encountered.

In addition, chemical tests were performed to evaluate the corrosivity of the soils to buried concrete and metal. Details of the laboratory test program and the results of laboratory test are summarized in Appendix "B." This information, along with the field observations, was used to prepare the final boring logs in Appendix "A."

6. GEOLOGIC SETTING

The site is located within the northwestern portion of the San Gorgonio pass within the northernmost portion of the Peninsular Ranges Geomorphic Province. The San Gorgonio Pass is a tectonic physiographic feature that separates the San Bernardino Mountains of the Transverse Ranges on the north and the San Jacinto Mountains on the south. The San Gorgonio Pass is expressed as a narrow notch that cuts through the mountains into the Colorado Desert to the east. Most of the Calimesa's vicinity is underlain by a thick sequence of terrestrial sediments that rest on the basement comprising igneous-metamorphic rocks. Younger alluvium occurs in active channels of San Timoteo Wash and tributary canyons, where the alluvium has been deposited on sediments of San Timoteo Formation. The near-surface deposits in the vicinity of the subject site are mapped as (Qoa) dissected older alluvium deposits that are slightly indurated, and consisting of alluvial fan gravel, and sand, light-orange brown-red. Deposits encountered on the subject site during exploratory drilling are discussed in detail in this report.

7. GEOLOGIC HAZARDS

7.1 Faulting and Seismicity

The Peninsular Range has historically been a province of relatively high seismic activity. The nearest faults to the project site are associated with the S. San Andreas Fault system located approximately 5.6 miles from the site. There are no known active fault traces in the project vicinity. Based on mapping and historical seismicity, the seismicity of the Peninsular Range has been generally considered high by the scientific community.

The project area is not within an Alquist-Priolo Earthquake Fault (Special Studies) Zone and will not require a special site investigation by an Engineering Geologist. Soils on site are classified as Site Class D in accordance with Chapter 16 of the California Building Code.

The proposed structures are determined to be in Seismic Design Category D. To determine the distance of known active faults within 100 miles of the site, we used the United States Geological Survey (USGS) web-based application *2008 National Seismic Hazard Maps - Fault Parameters*. Site latitude is 34.0035° North; site longitude is 117.0673° West. The ten closest active faults are summarized below in Table 7.1.

TABLE 7.1
REGIONAL FAULT SUMMARY

Fault Name	Distance to Site (miles)	Maximum Earthquake Magnitude, M_w
S. San Andreas; PK+CH+CC+BB+NM+SM+NSB+SSB+BG+CO	5.6	8.2
San Jacinto; SBV+SJV+A+CC+B+SM	5.9	7.9
San Jacinto; A+CC+B+SM	8.1	7.6
San Jacinto; SBV	9.8	7.1
San Andreas; PK+CH+CC+BB+NM+SM+NSB	13.5	8.0
S. San Andreas; BG+CO	15.6	7.4
Pinto Mtn	20.2	7.3
Cleghorn	20.8	6.8
North Frontal (West)	24.5	7.2
Cucamonga	24.7	6.7

The faults tabulated above and numerous other faults in the region are sources of potential ground motion. However, earthquakes that might occur on other faults throughout California are also potential generators of significant ground motion and could subject the site to intense ground shaking.

7.2 Surface Fault Rupture

The site is not within a currently established State of California Earthquake Fault Zone for surface fault rupture hazards. No active faults with the potential for surface fault rupture are known to pass directly beneath the site. Therefore, the potential for surface rupture due to faulting occurring beneath the site during the design life of the proposed development is considered low.

7.3 Ground Shaking

Based on the 2016 CBC, a Site Class D was selected for the site based on soil conditions encountered and our experience in the vicinity of the subject site. Table 9.2.1 includes design seismic coefficients and spectral response parameters, based on the 2016 California Building Code (CBC) for the project foundation design.

Based on Office of Statewide Health Planning and Development (OSHPD) Seismic Design Maps, the estimated design peak ground acceleration adjusted for site class effects (PGA_M) was determined to be 0.625g (based on both probabilistic and deterministic seismic ground motion).

7.4 Liquefaction

Soil liquefaction is a state of soil particles suspension caused by a complete loss of strength when the effective stress drops to zero. Liquefaction normally occurs under saturated conditions in soils such as sand in which the strength is purely frictional. Primary factors that trigger liquefaction are: moderate to strong ground shaking (seismic source), relatively clean, loose granular soils (primarily poorly graded sands and silty sands), and saturated soil conditions (shallow groundwater). Due to the increasing overburden pressure

with depth, liquefaction of granular soils is generally limited to the upper 50 feet of a soil profile. However, liquefaction has occurred in soils other than clean sand.

The soils encountered within the depth of 46½ feet on the project site consisted predominately of medium dense to very dense clayey sand, silty sand, well-graded sand with silt, poorly graded sand with silt; and stiff to hard sandy clay, sandy silt, and sandy clayey silt. The historically highest groundwater is estimated to be at a depth more than 50 feet below ground surface based on regional groundwater data. Low to very low cohesion strength is commonly associated with the sandy soil profile at the site. A seismic hazard, which could cause damage to the proposed development during seismic shaking, is the post-liquefaction settlement of liquefied sands.

The Riverside County Office of Information Technology GIS website shows the subject site to be in a low liquefaction potential area. The site was evaluated for liquefaction potential. The liquefaction analysis indicated that the soils had a low potential for liquefaction under seismic condition. Therefore, no mitigation measures are warranted.

7.5 Seismic Densification

One of the most common phenomena during seismic shaking accompanying any earthquake is the induced settlement of loose unconsolidated soils. Based on site subsurface conditions and the seismicity of the region, any loose granular materials at the site could be vulnerable to this potential hazard. Our analysis of dynamic densification of "dry" soil in the upper 50 feet of existing soil profile was performed.

For the analysis, a maximum earthquake magnitude of 8.2 M_w and a peak horizontal ground surface acceleration of 0.625g (with a 2 percent probability of exceedance in 50 years) were considered appropriate for the analysis. The seismic densification of dry to damp alluvial sandy soils due to onsite seismic activity is calculated to have a total settlement of approximately 0.19 inch. The differential settlement is estimated to be 0.1 inch. The seismic densification settlement analysis is included in Appendix A.

7.6 Lateral Spreading

Lateral spreading is a phenomenon in which soils move laterally during seismic shaking and is often associated with liquefaction. The amount of movement depends on the soil strength, duration and intensity of seismic shaking, topography, and free face geometry. Due to the relatively flat site topography, we judge the likelihood of lateral spreading to be low.

7.7 Landslides

There are no known landslides at the site, nor is the site in the path of any known or potential landslides. We do not consider the potential for a landslide to be a hazard to this project.

7.8 Tsunamis and Seiches

The site is not located within a coastal area. Therefore, tsunamis (seismic sea waves) are not considered a significant hazard at the site. Seiches are large waves generated in enclosed bodies of water in response to ground shaking. No major water-retaining structures are located immediately up gradient from the project site. Flooding from a seismically-induced seiche is considered unlikely.

8. SOIL AND GROUNDWATER CONDITIONS

8.1 Subsurface Conditions

The subsurface conditions encountered appear typical of those found in the geologic region of the site. In general, the soils within the depth of exploration consisted predominately of medium dense to very dense clayey sand, silty sand, well-graded sand with silt, poorly graded sand with silt; and stiff to hard sandy clay, sandy silt, and sandy clayey silt.

No significant fill soils were encountered in our borings. However, fill soils are expected to be present on site between or beyond our boring locations since the site is currently occupied by a single-family residence. Verification of the possible fill soil and the extent of fill should be determined during site grading.

The soils were classified in the field during the drilling and sampling operations. The stratification lines were approximated by the field engineer on the basis of observations made at the time of drilling. The actual boundaries between different soil types may be gradual and soil conditions may vary. For a more detailed description of the materials encountered, the Boring Logs in Appendix "A" should be consulted.

The Boring Logs include the soil type, color, moisture content, dry density, and the applicable Unified Soil Classification System symbol. The locations of the test borings were determined by measuring from feature shown on the Site Plan, provided to us. Hence, accuracy can be implied only to the degree that this method warrants.

8.2 Groundwater

The test boring locations were checked for the presence of groundwater during and after the drilling operations. Free groundwater was not encountered during this investigation. The historically highest groundwater is anticipated to be at a depth of more than 50 feet below existing grade based on local groundwater data.

It should be recognized that water table elevations may fluctuate with time, being dependent upon seasonal precipitation, irrigation, land use, localized pumping, and climatic conditions as well as other factors. Therefore, water level observations at the time of the field investigation may vary from those encountered during the construction phase of the project. The evaluation of such factors is beyond the scope of this report.

8.3 Soil Corrosion Screening

Excessive sulfate in either the soil or native water may result in an adverse reaction between the cement in concrete and the soil. The 2014 Edition of ACI 318 (ACI 318) has established criteria for evaluation of sulfate and chloride levels and how they relate to cement reactivity with soil and/or water.

A soil sample was obtained from the project site and was tested for the evaluation of the potential for concrete deterioration or steel corrosion due to attack by soil-borne soluble salts and soluble chloride.

The water-soluble sulfate concentration in the saturation extract from the soil sample was detected to be 533 mg/kg. ACI 318 Tables 19.3.1.1 and 19.3.2.1 outline exposure categories, classes, and concrete requirements by exposure class. ACI 318 requirements for site concrete based upon soluble sulfate are summarized in Table 8.3 below.

TABLE 8.3
WATER SOLUBLE SULFATE EXPOSURE REQUIREMENTS

Water Soluble Sulfate (SO_4) in Soil, Percentage by Weight	Exposure Severity	Exposure Class	Maximum w/cm Ratio	Minimum Concrete Compressive Strength	Cementations Materials Type
0.0533	Not Applicable	S0	N/A	2,500 psi	No Restriction

The water-soluble chloride concentration detected in saturation extract from the soil samples was 115 mg/kg. This level of chloride concentration is considered to be mildly corrosive.

It is recommended that a qualified corrosion engineer be consulted regarding protection of buried steel or ductile iron piping and conduit or, at a minimum, applicable manufacturer's recommendations for corrosion protection of buried metal pipe be closely followed.

8.4 Percolation Testing

Two (2) percolation tests (P-1 and P-2) were performed within assumed infiltration areas and were conducted in accordance with the guidelines established by the County of Riverside. The approximate locations of the percolation tests are shown on the attached Site Plan, Figure 2. The boreholes were advanced to the depths shown on the percolation test worksheets. The holes were pre-saturated before percolation testing commenced.

Percolation rates were measured by filling the test holes with clean water and measuring the water drops at a certain time interval. The percolation rate data are presented in tabular format at the end of this Report. The difference in the percolation rates are reflected by the varied type of soil materials at the bottom of the test holes. The test results are shown on the table below.

Test No.	Depth (Feet)	Measured Percolation Rate (min/inch)	Infiltration Rate* (inch/hour)	Soil Type**
P-1	9	250.0	**0.01**	Clayey SILT (ML)
P-2	5	125.0	**0.03**	Clayey SAND (SC)

*** Tested infiltration Rate = (ΔH 60 r) / (Δt(r + 2H_{avg}))**
**** At bottom of drilled holes**

The soil infiltration or percolation rates are based on tests conducted with clear water. The infiltration/percolation rates may vary with time as a result of soil clogging from water impurities. The infiltration/percolation rates will deteriorate over time due to the soil conditions and an appropriate factor of safety (FS) may be applied. The owner or civil engineer may elect to use a lower FS for the design; however, more frequent maintenance will be expected. The soils may also become less permeable to impermeable if the soil is compacted. Thus, periodic maintenance consisting of clearing the bottom of the drainage system of clogged soils should be expected.

The infiltration rate may become slower if the surrounding soil is wet or saturated due to prolonged rainfalls. Additional infiltration tests should be conducted at bottom of the drainage system during construction to verify the infiltration rate. Groundwater, if closer to the bottom of the drainage system, will also reduce the infiltration rate.

The scope of our services did not include a groundwater study and was limited to the performance of infiltration testing and soil profile description, and the submitted data only. Our services did not include those associated with septic system design. Neither did services include an Environmental Site Assessment for the presence or absence of hazardous and/or toxic materials in the soil, groundwater, or atmosphere; or the presence of wetlands.

Any statements, or absence of statements, in this report or on any boring logs regarding odors, unusual or suspicious items, or conditions observed, are strictly for descriptive purposes and are not intended to convey engineering judgment regarding potential hazardous and/or toxic assessment. The geotechnical engineering information presented herein is based upon professional interpretation utilizing standard engineering practices. The work conducted through the course of this investigation, including the preparation of this report, has been performed in accordance with the generally accepted standards of geotechnical engineering practice, which existed in the geographic area at the time the report was written. No other warranty, express or implied, is made.

Please be advised that when performing infiltration testing services in relatively small areas (double rings) that the testing may not fully model the actual full scale long term performance of a given site. This is particularly true where infiltration test data is to be used in the design of large infiltration areas such as those proposed for the site. Subsurface conditions, including infiltration rates, can change over time as fine-grained soils migrate. It is not warranted that such information and interpretation cannot be superseded by future geotechnical engineering developments. We emphasize that this report is valid for the project outlined above and should not be used for any other sites.

9. CONCLUSIONS AND RECOMMENDATIONS

9.1 General

9.1.1 Based upon the data collected during this investigation, and from a geotechnical engineering standpoint, it is our opinion that the site is suitable for the proposed construction of improvements at the site as planned, provided the recommendations contained in this report are incorporated into the project design and construction. Conclusions and recommendations provided in this report are based on our review of available literature, analysis of data obtained from our field exploration and laboratory testing program, and our understanding of the proposed development at this time.

9.1.2 The primary geotechnical constraints identified in our investigation is the presence of potentially compressible (collapsible) soils and expansive soils at the site. Recommendations to mitigate the effects of these soils are provided in this report.

9.1.3 The scope of this investigation did not include subsurface exploration within the existing building or areas inaccessible to our drill rig. As such, subsurface soil conditions and materials present below the existing site structures are unknown and may be different than those noted within this report. The presence of potentially unacceptable fill materials, undocumented fill, and/or loose soil material that may be present below existing site features shall be taken into consideration. Our firm shall be present at the time of demolition activities to verify soil conditions are consistent with those identified as part of this investigation.

9.1.4 No significant fill soils were encountered in our borings. However, fill soils are expected to be present on site between our boring locations since the site is currently occupied by a single-family residence. Undocumented fill materials are not suitable to support any future structures and should be excavated and recompacted. The extent and consistency of the fills should be verified during site construction. Prior to fill placement, Salem Engineering Group, Inc. should inspect the bottom of the excavation to verify the fill condition.

9.1.5 Tree root systems in proposed improvement areas should be removed to a minimum depth of 3 feet and to such an extent which would permit removal of all roots greater than ½ inch in diameter. Tree roots removed in parking areas may be limited to the upper 1½ feet of the ground surface. Backfill of tree root excavations is not permitted until all exposed surfaces have been inspected and the Soils Engineer is present for the proper control of backfill placement and compaction. Burning in areas which are to receive fill materials shall not be permitted.

9.1.6 The site is currently occupied by a single-family residence. Underground structures may exist within the site area. Site demolition activities shall include removal of all surface obstructions not intended to be incorporated into final design. In addition, underground buried structures and/or utility lines encountered during demolition and construction should be properly removed and the resulting excavations backfilled with Engineered Fill. It is suspected that possible demolition activities of the existing structures may disturb the upper soils. After demolition activities, it is recommended that disturbed soils be removed and/or recompacted.

9.1.7 The majority of the upper soils within the project site are identified primarily as clayey sand and sandy clay. The clayey soils exhibit a moderate swell potential and are subject to volumetric changes if moisture contents vary. The clayey soil, in its present condition, possess hazards to construction in terms of possible post-construction movement of the foundations and floor systems if no mitigation measures are employed. The estimate swell pressures of the clayey material may cause movement affecting slabs and brittle exterior finishes. Accordingly, measures are considered necessary to reduce anticipated soil movement.

9.1.8 To minimize the potential soil movement due to expansive soil conditions, it is recommended that the upper 12 inches of soil beneath the required granular aggregate subbase within slab on grade and exterior flatwork areas be replaced with Non-Expansive Engineered Fill meeting the requirements of Section 9.4. Other than complete soil replacement, mitigation measures will not eliminate post-construction soil movement, but will reduce the soil movement. Success of the

mitigation measures will depend on the thoroughness of the contractor and developer in dealing with the soil conditions. In any event, the developer should be aware that some soil movement is to be expected.

9.1.9 As an alternative to the use of non-expansive soils, its' recommended the slab to have a minimum thickness of 5 inches and a minimum concrete compressive strength of 4,500 psi.

9.1.10 Based on the subsurface conditions at the site and the anticipated structural loading, we anticipate that the proposed buildings may be supported using conventional shallow foundations provided that the recommendations presented herein are incorporated in the design and construction of the project.

9.1.11 Provided the site is graded in accordance with the recommendations of this report and foundations constructed as described herein, we estimate that total settlement due to static and seismic loads utilizing conventional shallow foundations for the proposed structures will be within 1 inch and corresponding differential settlement will be less than ½ inch over 20 feet.

9.1.12 All references to relative compaction and optimum moisture content in this report are based on ASTM D1557 (latest edition).

9.1.13 SALEM shall review the project grading and foundation plans, and specifications prior to final design submittal to assess whether our recommendations have been properly implemented and evaluate if additional analysis and/or recommendations are required. If SALEM is not provided plans and specifications for review, we cannot assume any responsibility for the future performance of the project.

9.1.14 SALEM shall be present at the site during site demolition and preparation to observe site clearing/demolition, preparation of exposed surfaces after clearing, and placement, treatment and compaction of fill material.

9.1.15 SALEM's observations should be supplemented with periodic compaction tests to establish substantial conformance with these recommendations. Moisture content of footings and slab subgrade should be tested immediately prior to concrete placement. SALEM should observe foundation excavations prior to placement of reinforcing steel or concrete to assess whether the actual bearing conditions are compatible with the conditions anticipated during the preparation of this report.

9.2 Seismic Design Criteria

9.2.1 For seismic design of the structures, and in accordance with the seismic provisions of the 2016 CBC, our recommended parameters are shown below. These parameters were determined using California's Office of Statewide Health Planning and Development (OSHPD) (https://seismicmaps.org/) in accordance with the 2016 CBC. The Site Class was determined based on the soils encountered during our field exploration.

TABLE 9.2.1
SEISMIC DESIGN PARAMETERS

Seismic Item	Symbol	Value
Site Coordinates (Datum = NAD 83)		34.0035 Lat -117.0673 Lon
Site Class	--	D
Soil Profile Name	--	Stiff Soil
Risk Category	--	II
Site Coefficient for PGA	F_{PGA}	1.000
Peak Ground Acceleration (adjusted for Site Class effects)	PGA_M	0.625g
Seismic Design Category	SDC	D
Mapped Spectral Acceleration (Short period - 0.2 sec)	S_S	1.543 g
Mapped Spectral Acceleration (1.0 sec. period)	S_1	0.730 g
Site Class Modified Site Coefficient	F_a	1.000
Site Class Modified Site Coefficient	F_v	1.500
MCE Spectral Response Acceleration (Short period - 0.2 sec) $S_{MS} = F_a S_S$	S_{MS}	1.543 g
MCE Spectral Response Acceleration (1.0 sec. period) $S_{M1} = F_v S_1$	S_{M1}	1.095 g
Design Spectral Response Acceleration $S_{DS}=⅔S_{MS}$ (short period - 0.2 sec)	S_{DS}	1.029 g
Design Spectral Response Acceleration $S_{D1}=⅔S_{M1}$ (1.0 sec. period)	S_{D1}	0.730 g

9.2.2 Conformance to the criteria in the above table for seismic design does not constitute any kind of guarantee or assurance that significant structural damage or ground failure will not occur if a large earthquake occurs. The primary goal of seismic design is to protect life, not to avoid all damage, since such design may be economically prohibitive.

9.3 Soil and Excavation Characteristics

9.3.1 Based on the soil conditions encountered in our soil borings, the upper soils can be excavated with moderate effort using heavy-duty conventional earthmoving equipment.

9.3.2 It is the responsibility of the contractor to ensure that all excavations and trenches are properly shored and maintained in accordance with applicable Occupational Safety and Health Administration (OSHA) rules and regulations to maintain safety and maintain the stability of adjacent existing improvements.

9.3.3 The upper soils within the project site are identified primarily as clayey sand and sandy clay. The clayey soils are moisture-sensitive and moderately expansive.

9.3.4 The near surface soils identified as part of our investigation are, generally, moist due to the absorption characteristics of the soil. Earthwork operations may encounter very moist unstable soils which may require removal to a stable bottom. Exposed native soils exposed as part of site grading operations shall not be allowed to dry out and should be kept continuously moist prior to placement of subsequent fill.

9.4 Materials for Fill

9.4.1 The upper soils are predominately clayey sand and sandy clay. The test results indicate that the soils have a moderate expansion potential (EI=45). It is recommended that the upper 12 inches of soil within the building pad and exterior flatwork areas be replaced with Non-Expansive Fill (EI≤20).

9.4.2 The soils with an Expansion Index greater than 20 (EI>20) but no greater than 50 (EI≤50) may be placed below a depth of 12 inches within the building pad and exterior flatwork areas or in the parking and non-structural areas.

9.4.3 Import soil shall be well-graded, slightly cohesive silty fine sand or sandy silt, with relatively impervious characteristics when compacted. A clean sand or very sandy soil is not acceptable for this purpose. This material should be approved by the Engineer prior to use and should typically possess the soil characteristics summarized below in Table 9.4.3.

TABLE 9.4.3
IMPORT FILL REQUIREMENTS

Minimum Percent Passing No. 200 Sieve	20
Maximum Percent Passing No. 200 Sieve	50
Minimum Percent Passing No. 4 Sieve	80
Maximum Particle Size	3"
Maximum Plasticity Index	12
Maximum CBC Expansion Index	20

9.4.4 The preferred materials specified for Engineered Fill are suitable for most applications with the exception of exposure to erosion. Project site winterization and protection of exposed soils during the construction phase should be the sole responsibility of the Contractor, since they have complete control of the project site.

9.4.5 Environmental characteristics and corrosion potential of import soil materials should also be considered.

9.4.6 Proposed import materials should be sampled, tested, and approved by SALEM prior to its transportation to the site.

9.5 Grading

9.5.1 A SALEM representative should be present during all site clearing and grading operations to test and observe earthwork construction. This testing and observation is an integral part of our service as acceptance of earthwork construction is dependent upon compaction of the material and the stability of the material. The Geotechnical Engineer may reject any material that does not meet compaction and stability requirements. Further recommendations of this report are predicated upon the assumption that earthwork construction will conform to recommendations set forth in this section as well as other portions of this report.

9.5.2 A preconstruction conference should be held at the site prior to the beginning of grading operations with the owner, contractor, civil engineer and geotechnical engineer in attendance.

9.5.3 Site preparation should begin with removal of existing surface/subsurface structures, underground utilities (as required), any existing uncertified fill, and debris. Excavations or depressions resulting from site clearing operations, or other existing excavations or depressions, should be restored with Engineered Fill in accordance with the recommendations of this report.

9.5.4 Surface vegetation consisting of grasses and other similar vegetation should be removed by stripping to a sufficient depth to remove organic-rich topsoil. The upper 2 to 4 inches of the soils containing, vegetation, roots and other objectionable organic matter encountered at the time of grading should be stripped and removed from the surface. Deeper stripping may be required in localized areas. In addition, existing concrete and asphalt materials shall be removed from areas of proposed improvements and stockpiled separately from excavated soil material. The stripped vegetation, asphalt and concrete materials will not be suitable for use as Engineered Fill or within 5 feet of building pads or within pavement areas. However, stripped topsoil may be stockpiled and reused in landscape or non-structural areas or exported from the site.

9.5.5 Structural building pad areas should be considered as areas extending a minimum of 5 feet horizontally beyond the outside dimensions of buildings, including footings and non-cantilevered overhangs carrying structural loads.

9.5.6 Any fill materials encountered during grading should be removed and replaced with engineered fill. The actual depth of the overexcavation and recompaction should be determined by our field representative during construction.

9.5.7 To minimize post-construction soil movement and provide uniform support for the proposed buildings, it is recommended that the overexcavation and recompaction within the proposed building area be performed to a minimum depth of **three (3)** feet below existing grade or **two (2)** feet below proposed footing bottom, whichever is deeper. The overexcavation and recompaction should also extend laterally to a minimum of 5 feet beyond the building area.

9.5.8 To minimize the potential soil movement, it is recommended that the upper 12 inches of soil beneath the required granular aggregate subbase within slab on grade and exterior flatwork areas be removed and replaced with Non-Expansive Engineered Fill meeting the requirements of Section 9.4.

9.5.9 As an alternative to the use of non-expansive soils, its' recommended the slab to have a minimum thickness of 5 inches and a minimum concrete compressive strength of 4,500 psi.

9.5.10 Within pavement and canopy areas, it is recommended that the overexcavation and recompaction be performed to a minimum depth of **one (1) foot** below existing grade or proposed grade, whichever is deeper. The overexcavation and recompaction should also extend laterally to a minimum of 2 feet beyond the pavement area.

9.5.11 Prior to placement of fill soils, the upper 8 to 10 inches of native subgrade soils should be scarified, moisture-conditioned to no less than the optimum moisture content and recompacted to a minimum of 90 percent (95% for granular, non-expansive soils) of the maximum dry density based on ASTM D1557-07 Test Method.

9.5.12 All Engineered Fill (including scarified ground surfaces and backfill) should be placed in thin lifts to allow for adequate bonding and compaction (typically 6 to 8 inches in loose thickness).

9.5.13 Engineered Fill soils should be placed, moisture conditioned to near optimum moisture content, and compacted to at least 90 percent relative compaction.

9.5.14 Non-Expansive Engineered Fill and non-cohesive soils should be placed, moisture conditioned to near optimum moisture content, and compacted to at least 95% relative compaction

9.5.15 Final pavement subgrade should be finished to a smooth, unyielding surface. We further recommend proof-rolling the subgrade with a loaded water truck (or similar equipment with high contact pressure) to verify the stability of the subgrade prior to placing aggregate base.

9.5.16 An integral part of satisfactory fill placement is the stability of the placed lift of soil. If placed materials exhibit excessive instability as determined by a SALEM field representative, the lift will be considered unacceptable and shall be remedied prior to placement of additional fill material. Additional lifts should not be placed if the previous lift did not meet the required dry density or if soil conditions are not stable.

9.5.17 The most effective site preparation alternatives will depend on site conditions prior to grading. We should evaluate site conditions and provide supplemental recommendations immediately prior to grading, if necessary.

9.5.18 We do not anticipate groundwater or seepage to adversely affect construction if conducted during the drier moths of the year (typically summer and fall). However, groundwater and soil moisture conditions could be significantly different during the wet season (typically winter and spring) as surface soil becomes wet; perched groundwater conditions may develop. Grading during this time period will likely encounter wet materials resulting in possible excavation and fill placement difficulties.

Project site winterization consisting of placement of aggregate base and protecting exposed soils during construction should be performed. If the construction schedule requires grading operations during the wet season, we can provide additional recommendations as conditions warrant.

9.5.19 The wet soils may become non conducive to site grading as the upper soils yield under the weight of the construction equipment. Therefore, mitigation measures should be performed for stabilization.

Typical remedial measures include: discing and aerating the soil during dry weather; mixing the soil with dryer materials; removing and replacing the soil with an approved fill material or placement of slurry, crushed rocks or aggregate base material; or mixing the soil with an approved lime or cement product.

The most common remedial measure of stabilizing the bottom of the excavation due to wet soil condition is to reduce the moisture of the soil to near the optimum moisture content by having the subgrade soils scarified and aerated or mixed with drier soils prior to compacting. However, the drying process may require an extended period of time and delay the construction operation.

To expedite the stabilizing process, slurry or crushed rock may be utilized for stabilization provided this method is approved by the owner for the cost purpose. If the use of slurry or crushed rock is considered, it is recommended that the upper soft and wet soils be replaced by 6 to 24 inches of slurry or ¾-inch to 1-inch crushed rocks. The thickness of the slurry or rock layer depends on the severity of the soil instability.

The recommended 6 to 24 inches of slurry or crushed rock material will provide a stable platform. It is further recommended that lighter compaction equipment be utilized for compacting the crushed rock. A layer of geofabric is recommended to be placed on top of the compacted crushed rock to minimize migration of soil particles into the voids of the crushed rock, resulting in soil movement. Although it is not required, the use of geogrid (e.g. Tensar TX7) below the crushed rock will enhance stability and reduce the required thickness of crushed rock necessary for stabilization.

Our firm should be consulted prior to implementing remedial measures to provide appropriate recommendations.

9.6 Shallow Foundations

9.6.1 The site is suitable for use of conventional shallow foundations consisting of continuous footings and isolated pad footings bearing in properly compacted Engineered Fill.

9.6.2 The bearing wall footings considered for the structure should be continuous with a minimum width of 18 inches and extend to a minimum depth of 18 inches below the lowest adjacent grade. Isolated column footings should have a minimum width of 24 inches and extend a minimum depth of 18 inches below the lowest adjacent grade.

9.6.3 The bottom of footing excavations should be maintained free of loose and disturbed soil. Footing concrete should be placed into a neat excavation.

9.6.4 Footings proportioned as recommended above may be designed for the maximum allowable soil bearing pressures shown in the table below.

Loading Condition	Allowable Bearing
Dead Load Only	2,500 psf
Dead-Plus-Live Load	3,000 psf
Total Load, Including Wind or Seismic Loads	4,000 psf

9.6.5 For design purposes, total settlement due to static and seismic loadings on the order of 1 inch may be assumed for shallow footings. Differential settlement due to static and seismic loadings, along a 20-foot exterior wall footing or between adjoining column footings, should be ½ inch, producing an angular distortion of 0.002. Most of the settlement is expected to occur during construction as the loads are applied. However, additional post-construction settlement may occur if the foundation soils are flooded or saturated. The footing excavations should not be allowed to dry out any time prior to pouring concrete.

9.6.6 Resistance to lateral footing displacement can be computed using an allowable coefficient of friction factor of 0.30 acting between the base of foundations and the supporting native subgrade.

9.6.7 Lateral resistance for footings can alternatively be developed using an equivalent fluid passive pressure of 300 pounds per cubic foot acting against the appropriate vertical native footing faces. The frictional and passive resistance of the soil may be combined without reduction in determining the total lateral resistance. An increase of one-third is permitted when using the alternate load combination that includes wind or earthquake loads.

9.6.8 Minimum reinforcement for continuous footings should consist of four No. 5 steel reinforcing bars; two placed near the top of the footing and two near the bottom. Reinforcement for spread footings should be designed by the project structural engineer.

9.6.9 Underground utilities running parallel to footings should not be constructed in the zone of influence of footings. The zone of influence may be taken to be the area beneath the footing and within a 1:1 plane extending out and down from the bottom edge of the footing.

9.6.10 The foundation subgrade should be sprinkled as necessary to maintain a moist condition without significant shrinkage cracks as would be expected in any concrete placement. Prior to placing rebar reinforcement, foundation excavations should be evaluated by a representative of SALEM for appropriate support characteristics and moisture content. Moisture conditioning may be required for the materials exposed at footing bottom, particularly if foundation excavations are left open for an extended period.

9.7 Caisson Foundations

9.7.1 It is recommended that the caisson foundation should have a minimum depth of 8 feet below the lowest adjacent grade.

9.7.2 The caissons may be designed using an allowable sidewall friction of 300 psf. This value is for dead-plus-live loads. An allowable end bearing capacity of 4,500 psf may be used provided that the bottom of the caisson is cleaned with the use of a clean-out bucket or equivalent and inspected by our representative prior to placement of reinforcement and concrete. An increase of one-third is permitted when using the alternate load combination that includes wind or earthquake loads.

9.7.3 Uplift loads can be resisted by caissons using an allowable sidewall friction of 200 psf of the surface area and the weight of the caisson.

9.7.4 The total static and seismic settlement of the caisson footing is not expected to exceed 1 inch. Differential settlement should be less than ½ inch. Most of the settlement is expected to occur during construction as the loads are applied.

9.7.5 Lateral loads for caissons may be designed utilizing the Isolated Pole Formula and Specifications shown on Table 1804.2, Sections 1804.3.1 and 1808.2.2 of the California Building Code. The drilled caissons may be designed for a lateral capacity of 300 pounds per square foot per foot of depth below the lowest adjacent grade to a maximum of 4,500 psf.

9.7.6 These values may be increased by one-third when using the alternative load combinations that include wind or earthquake loads. These values should not be doubled since the values given herein are higher than the tabular values shown on the Table 1804.2. The lateral loading criteria is based on the assumption that the load application is applied at the ground level, flexible cap connections applied and a minimum embedment depth of 8 feet.

9.7.7 Sandy soils were encountered at the site. Casing of the drilled caisson will be required if seepage is encountered or the drilled hole has to be left open for an extended period of time.

9.8 Concrete Slabs-on-Grade

9.8.1 Slab thickness and reinforcement should be determined by the structural engineer based on the anticipated loading. We recommend that non-structural slabs-on-grade be at least 4 inches thick and underlain by six (6) inches of compacted granular aggregate subbase material compacted to at least 95% relative compaction.

9.8.2 Granular aggregate subbase material shall conform to ASTM D-2940, Latest Edition (Table 1, bases) with at least 95 percent passing a 1½-inch sieve and not more than 8% passing a No. 200 sieve or its approved equivalent to prevent capillary moisture rise.

9.8.3 <u>The use of processed asphalt in the granular aggregate subbase material (i.e. recycled or miscellaneous base) will have to be approved by the owner.</u> Asphalt is a petroleum hydrocarbon with numerous components, including naphthalene and other semi-volatile constituents that are regulated by California. This material in the subsurface could become a potential vapor intrusion risk (naphthalene is a recent risk-driver that DTSC is actively pursuing).

9.8.4 We recommend reinforcing slabs, at a minimum, with No. 4 reinforcing bars placed 18 inches on center, each way.

9.8.5 Slabs subject to structural loading may be designed utilizing a modulus of subgrade reaction K of 140 pounds per square inch per inch. The K value was approximated based on inter-relationship of soil classification and bearing values (Portland Cement Association, Rocky Mountain Northwest).

9.8.6 The spacing of crack control joints should be designed by the project structural engineer. In order to regulate cracking of the slabs, we recommend that full depth construction joints or control joints be provided at a maximum spacing of 15 feet in each direction for 5-inch thick slabs and 12 feet for 4-inch thick slabs.

9.8.7 Crack control joints should extend a minimum depth of one-fourth the slab thickness and should be constructed using saw-cuts or other methods as soon as practical after concrete placement. The exterior floors should be poured separately in order to act independently of the walls and foundation system.

9.8.8 It is recommended that the utility trenches within the structure be compacted, as specified in our report, to minimize the transmission of moisture through the utility trench backfill. Special attention to the immediate drainage and irrigation around the structures is recommended.

9.8.9 Moisture within the structure may be derived from water vapors, which were transformed from the moisture within the soils. This moisture vapor penetration can affect floor coverings and produce mold and mildew in the structure. To minimize moisture vapor intrusion, it is recommended that a vapor retarder be installed in accordance with manufacturer's recommendations and/or ASTM guidelines, whichever is more stringent. In addition, ventilation of the structure is recommended to reduce the accumulation of interior moisture.

9.8.10 In areas where it is desired to reduce floor dampness where moisture-sensitive coverings are anticipated, construction should have a suitable waterproof vapor retarder (a minimum of 15 mils thick polyethylene vapor retarder sheeting, Raven Industries "VaporBlock 15, Stego Industries 15 mil "StegoWrap" or W.R. Meadows Sealtight 15 mil "Perminator") incorporated into the floor slab design. The water vapor retarder should be decay resistant material complying with ASTM E96 not exceeding 0.04 perms, ASTM E154 and ASTM E1745 Class A. The vapor barrier should be placed between the concrete slab and the compacted granular aggregate subbase material. The water vapor retarder (vapor barrier) should be installed in accordance with ASTM Specification E 1643-94.

9.8.11 The concrete maybe placed directly on vapor retarder. The vapor retarder should be inspected prior to concrete placement. Cut or punctured retarder should be repaired using vapor retarder material lapped 6 inches beyond damaged areas and taped.

9.8.12 The recommendations of this report are intended to reduce the potential for cracking of slabs due to soil movement. However, even with the incorporation of the recommendations presented herein, foundations, stucco walls, and slabs-on-grade may exhibit some cracking due to soil movement. This is common for project areas that contain expansive soils since designing to eliminate potential soil movement is cost prohibitive. The occurrence of concrete shrinkage cracks is independent of the supporting soil characteristics. Their occurrence may be reduced and/or controlled by limiting the slump of the concrete, proper concrete placement and curing,

and by the placement of crack control joints at periodic intervals, in particular, where re-entrant slab corners occur.

9.8.13 Proper finishing and curing should be performed in accordance with the latest guidelines provided by the American Concrete Institute, Portland Cement Association, and ASTM.

9.9 Lateral Earth Pressures and Frictional Resistance

9.9.1 Active, at-rest and passive unit lateral earth pressures against footings and walls are summarized in the table below:

Lateral Pressures Drained and Level Backfill Conditions	**Equivalent Fluid Pressure, pcf**
Active Pressure	47
At-Rest Pressure	67
Passive Pressure	300
Related Parameters	
Allowable Coefficient of Friction	0.30
In-Place Soil Density (lbs/ft^3)	120

9.9.2 Active pressure applies to walls, which are free to rotate. At-rest pressure applies to walls, which are restrained against rotation. The preceding lateral earth pressures assume sufficient drainage behind retaining walls to prevent the build-up of hydrostatic pressure.

9.9.3 The top one-foot of adjacent subgrade should be deleted from the passive pressure computation.

9.9.4 The foregoing values of lateral earth pressures represent equivalent soil values and a safety factor consistent with the design conditions should be included in their usage.

9.9.5 For stability against lateral sliding, which is resisted solely by the passive pressure, we recommend a minimum safety factor of 1.5.

9.9.6 For stability against lateral sliding, which is resisted by the combined passive and frictional resistance, a minimum safety factor of 2.0 is recommended.

9.9.7 For lateral stability against seismic loading conditions, we recommend a minimum safety factor of 1.1.

9.9.8 For dynamic seismic lateral loading the following equation shall be used:

Dynamic Seismic Lateral Loading Equation
Dynamic Seismic Lateral Load = $\frac{3}{8}\gamma K_h H^2$
Where: γ = In-Place Soil Density
K_h = Horizontal Acceleration = $\frac{2}{3}PGA_M$
H = Wall Height

9.10 Retaining Walls

9.10.1 Retaining and/or below grade walls should be drained with either perforated pipe encased in free-draining gravel or a prefabricated drainage system. The gravel zone should have a minimum width of 12 inches wide and should extend upward to within 12 inches of the top of the wall. The upper 12 inches of backfill should consist of native soils, concrete, asphaltic-concrete or other suitable backfill to minimize surface drainage into the wall drain system. The gravel should conform to Class II permeable materials graded in accordance with the current CalTrans Standard Specifications.

9.10.2 Prefabricated drainage systems, such as Miradrain®, Enkadrain®, or an equivalent substitute, are acceptable alternatives in lieu of gravel provided they are installed in accordance with the manufacturer's recommendations. If a prefabricated drainage system is proposed, our firm should review the system for final acceptance prior to installation.

9.10.3 Drainage pipes should be placed with perforations down and should discharge in a non-erosive manner away from foundations and other improvements. The top of the perforated pipe should be placed at or below the bottom of the adjacent floor slab or pavements. The pipe should be placed in the center line of the drainage blanket and should have a minimum diameter of 4 inches. Slots should be no wider than 1/8-inch in diameter, while perforations should be no more than ¼-inch in diameter.

9.10.4 If retaining walls are less than 5 feet in height, the perforated pipe may be omitted in lieu of weep holes on 4 feet maximum spacing. The weep holes should consist of 2-inch minimum diameter holes (concrete walls) or unmortared head joints (masonry walls) and placed no higher than 18 inches above the lowest adjacent grade. Two 8-inch square overlapping patches of geotextile fabric (conforming to the CalTrans Standard Specifications for "edge drains") should be affixed to the rear wall opening of each weep hole to retard soil piping.

9.10.5 During grading and backfilling operations adjacent to any walls, heavy equipment should not be allowed to operate within a lateral distance of 5 feet from the wall, or within a lateral distance equal to the wall height, whichever is greater, to avoid developing excessive lateral pressures. Within this zone, only hand operated equipment ("whackers," vibratory plates, or pneumatic compactors) should be used to compact the backfill soils.

9.11 Temporary Excavations

9.11.1 We anticipate that the majority of the sandy site soils will be classified as Cal-OSHA "Type C" soil when encountered in excavations during site development and construction. Excavation sloping, benching, the use of trench shields, and the placement of trench spoils should conform to the latest applicable Cal-OSHA standards. The contractor should have a Cal-OSHA-approved "competent person" onsite during excavation to evaluate trench conditions and make appropriate recommendations where necessary.

9.11.2 It is the contractor's responsibility to provide sufficient and safe excavation support as well as protecting nearby utilities, structures, and other improvements which may be damaged by earth movements. All onsite excavations must be conducted in such a manner that potential surcharges from existing structures, construction equipment, and vehicle loads are resisted. The surcharge area may be defined by a 1:1 projection down and away from the bottom of an existing foundation or vehicle load.

9.11.3 Temporary excavations and slope faces should be protected from rainfall and erosion. Surface runoff should be directed away from excavations and slopes.

9.11.4 Open, unbraced excavations in undisturbed soils should be made according to the slopes presented in the following table:

RECOMMENDED EXCAVATION SLOPES

Depth of Excavation (ft)	Slope (Horizontal : Vertical)
0-5	1:1
5-10	2:1

9.11.5 If, due to space limitation, excavations near property lines or existing structures are performed in a vertical position, slot cuts, braced shorings or shields may be used for supporting vertical excavations. Therefore, in order to comply with the local and state safety regulations, a properly designed and installed shoring system would be required to accomplish planned excavations and installation. A Specialty Shoring Contractor should be responsible for the design and installation of such a shoring system during construction.

9.11.6 Braced shorings should be designed for a maximum pressure distribution of 30H, (where H is the depth of the excavation in feet). The foregoing does not include excess hydrostatic pressure or surcharge loading. Fifty percent of any surcharge load, such as construction equipment weight, should be added to the lateral load given herein. Equipment traffic should concurrently be limited to an area at least 3 feet from the shoring face or edge of the slope.

9.11.7 The excavation and shoring recommendations provided herein are based on soil characteristics derived from the borings within the area. Variations in soil conditions will likely be encountered during the excavations. SALEM Engineering Group, Inc. should be afforded the opportunity to provide field review to evaluate the actual conditions and account for field condition variations not otherwise anticipated in the preparation of this recommendation. Slope height, slope

inclination, or excavation depth should in no case exceed those specified in local, state, or federal safety regulation, (e.g. OSHA) standards for excavations, 29 CFR part 1926, or Assessor's regulations.

9.12 Underground Utilities

9.12.1 Underground utility trenches should be backfilled with properly compacted material. The material excavated from the trenches should be adequate for use as backfill provided it does not contain deleterious matter, vegetation or rock larger than 3 inches in maximum dimension. Trench backfill should be placed in loose lifts not exceeding 8 inches and compacted to at least 90% (95% for granular non-expansive soil) relative compaction at or above optimum moisture content.

9.12.2 Bedding and pipe zone backfill typically extends from the bottom of the trench excavations to approximately 6 to 12 inches above the crown of the pipe. Pipe bedding and backfill material should conform to the requirements of the governing utility agency.

9.12.3 It is suggested that underground utilities crossing beneath new or existing structures be plugged at entry and exit locations to the building or structure to prevent water migration. Trench plugs can consist of on-site clay soils, if available, or sand cement slurry. The trench plugs should extend 2 feet beyond each side of individual perimeter foundations.

9.12.4 The contractor is responsible for removing all water-sensitive soils from the trench regardless of the backfill location and compaction requirements. The contractor should use appropriate equipment and methods to avoid damage to the utilities and/or structures during fill placement and compaction.

9.13 Surface Drainage

9.13.1 Proper surface drainage is critical to the future performance of the project. Uncontrolled infiltration of irrigation excess and storm runoff into the soils can adversely affect the performance of the planned improvements. Saturation of a soil can cause it to lose internal shear strength and increase its compressibility, resulting in a change to important engineering properties. Proper drainage should be maintained at all times.

9.13.2 The ground immediately adjacent to the foundation shall be sloped away from the building at a slope of not less than 5 percent for a minimum distance of 10 feet.

9.13.3 Impervious surfaces within 10 feet of the building foundation shall be sloped a minimum of 2 percent away from the building and drainage gradients maintained to carry all surface water to collection facilities and off site. These grades should be maintained for the life of the project. Ponding of water should not be allowed adjacent to the structure. Over-irrigation within landscaped areas adjacent to the structure should not be performed.

9.13.4 Roof drains should be installed with appropriate downspout extensions out-falling on splash blocks so as to direct water a minimum of 5 feet away from the structures or be connected to the storm drain system for the development.

9.14 Pavement Design

9.14.1 Based on site soil conditions, an R-value of 15 was used for the preliminary flexible asphaltic concrete pavement design. The R-value may be verified during grading of the pavement areas.

9.14.2 The pavement design recommendations provided herein are based on the State of California Department of Transportation (CALTRANS) design manual. The following table shows the recommended pavement sections for various traffic indices.

TABLE 9.14.2
ASPHALT CONCRETE PAVEMENT

Traffic Index	Asphaltic Concrete	Class II Aggregate Base*	Compacted Subgrade**
5.0 (Parking & Vehicle Drive Areas)	3.0"	8.0"	12.0"
6.0 (Heavy Truck Areas)	3.0"	11.5"	12.0"

95% compaction based on ASTM D1557-07 Test Method
****90% (95% for granular non-cohesive soils) compaction based on ASTM D1557 Test Method***

9.14.3 The following recommendations are for light-duty and heavy-duty Portland Cement Concrete pavement sections.

TABLE 9.14.3
PORTLAND CEMENT CONCRETE PAVEMENT

Traffic Index	Portland Cement Concrete*	Class II Aggregate Base**	Compacted Subgrade***
5.0 (Light Duty)	5.5"	6.0"	12.0"
6.0 (Heavy Duty)	7.0"	8.0"	12.0"

****Minimum Compressive Strength of 4,000 psi***
***** 95% compaction based on ASTM D1557 Test Method***
******90% (95% for granular non-cohesive soils) compaction based on ASTM D1557 Test Method***

9.14.4 The concrete pavement should be reinforced with a minimum of No. 4 bars at 15-inch on center both ways placed at mid-height or specified by the structural engineer.

10. PLAN REVIEW, CONSTRUCTION OBSERVATION AND TESTING

10.1 Plan and Specification Review

10.1.1 SALEM should review the project plans and specifications prior to final design submittal to assess whether our recommendations have been properly implemented and evaluate if additional analysis and/or recommendations are required.

10.2 Construction Observation and Testing Services

10.2.1 The recommendations provided in this report are based on the assumption that we will continue as Geotechnical Engineer of Record throughout the construction phase. It is important to maintain continuity of geotechnical interpretation and confirm that field conditions encountered are similar to those anticipated during design. If we are not retained for these services, we cannot assume any responsibility for others interpretation of our recommendations, and therefore the future performance of the project.

10.2.2 SALEM should be present at the site during site preparation to observe site clearing, preparation of exposed surfaces after clearing, and placement, treatment and compaction of fill material.

10.2.3 SALEM's observations should be supplemented with periodic compaction tests to establish substantial conformance with these recommendations. Moisture content of footings and slab subgrade should be tested immediately prior to concrete placement. SALEM should observe foundation excavations prior to placement of reinforcing steel or concrete to assess whether the actual bearing conditions are compatible with the conditions anticipated during the preparation of this report.

11. LIMITATIONS AND CHANGED CONDITIONS

The analyses and recommendations submitted in this report are based upon the data obtained from the test borings drilled at the approximate locations shown on the Site Plan, Figure 2. The report does not reflect variations which may occur between our test boring locations. The nature and extent of such variations may not become evident until construction is initiated.

If variations then appear, a re-evaluation of the recommendations of this report will be necessary after performing on-site observations during the excavation period and noting the characteristics of such variations. The findings and recommendations presented in this report are valid as of the present and for the proposed construction.

If site conditions change due to natural processes or human intervention on the property or adjacent to the site, or changes occur in the nature or design of the project, or if there is a substantial time lapse between the submission of this report and the start of the work at the site, the conclusions and recommendations contained in our report will not be considered valid unless the changes are reviewed by SALEM and the conclusions of our report are modified or verified in writing.

The validity of the recommendations contained in this report is also dependent upon an adequate testing and observations program during the construction phase. Our firm assumes no responsibility for construction compliance with the design concepts or recommendations unless we have been retained to perform the on-site testing and review during construction. SALEM has prepared this report for the exclusive use of the owner and project design consultants.

SALEM does not practice in the field of corrosion engineering. It is recommended that a qualified corrosion engineer be consulted regarding protection of buried steel or ductile iron piping and conduit or, at a minimum, that manufacturer’s recommendations for corrosion protection be closely followed. Further, a corrosion engineer may be needed to incorporate the necessary precautions to avoid premature corrosion of concrete slabs and foundations in direct contact with native soil.

The importation of soil and or aggregate materials to the site should be screened to determine the potential for corrosion to concrete and buried metal piping. The report has been prepared in accordance with generally accepted geotechnical engineering practices in the area. No other warranties, either express or implied, are made as to the professional advice provided under the terms of our agreement and included in this report.

If you have any questions, or if we may be of further assistance, please do not hesitate to contact our office at (909) 980-6455.

Respectfully Submitted,

SALEM ENGINEERING GROUP, INC.

Jared Christiansen
Geotechnical Staff Engineer

Clarence Jiang, GE
Senior Geotechnical Engineer
RGE 2477

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Principal Engineer
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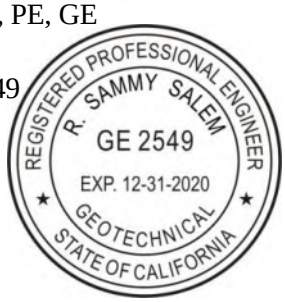
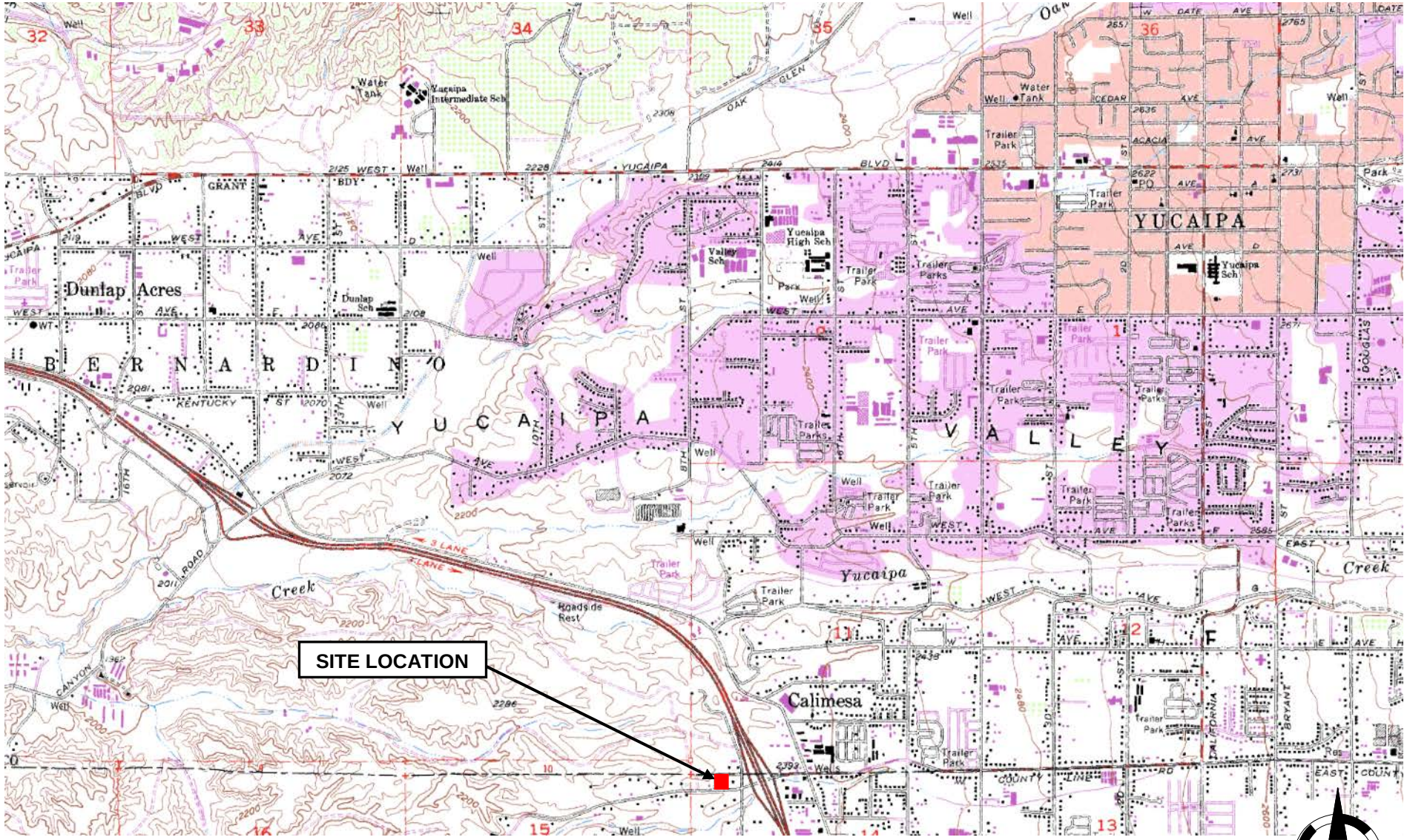




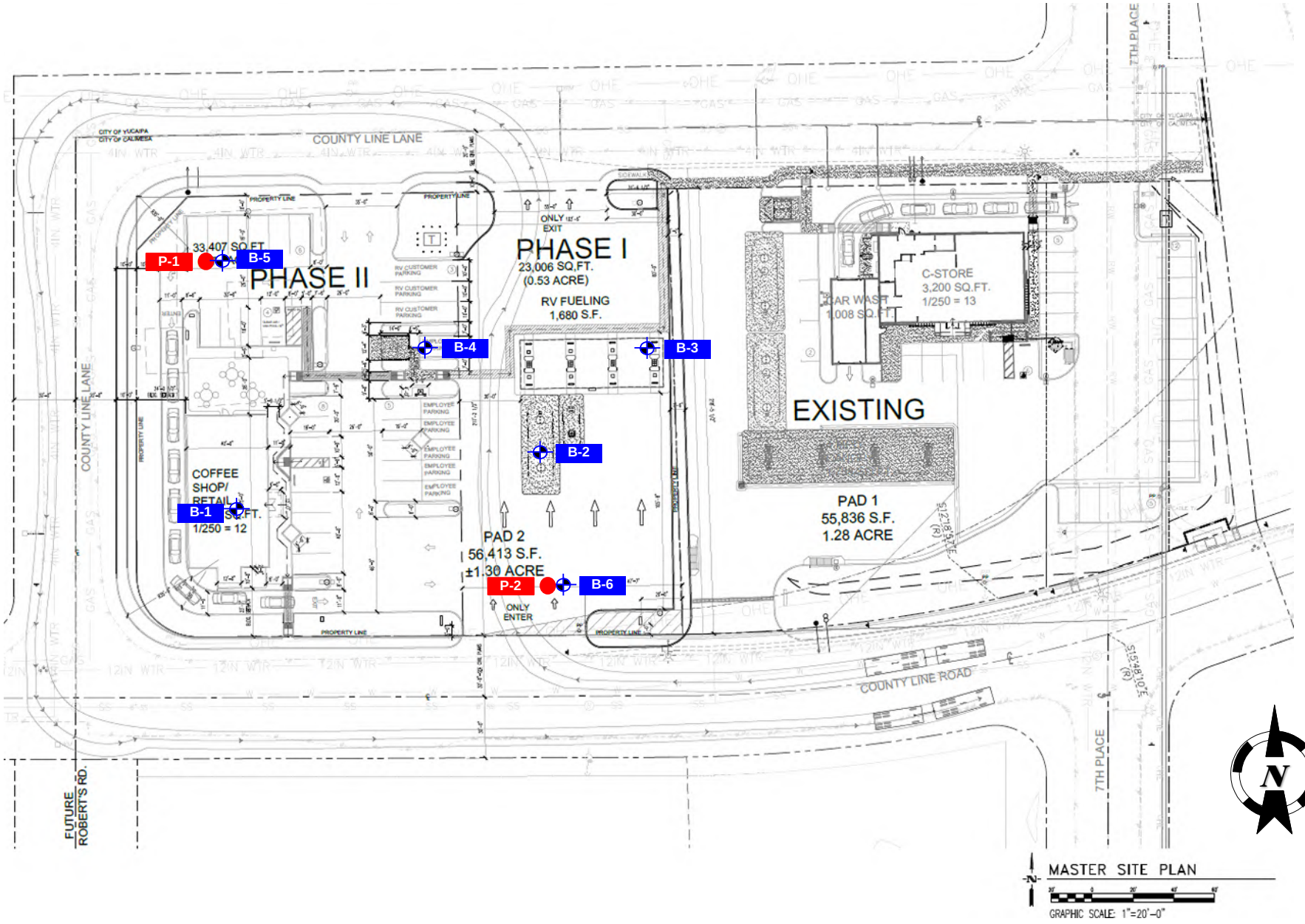
Source Image: U.S. Geological Survey, Yucaipa, California, N3422.5-W11715/7.5, 1956 (Photorevised 1980)

VICINITY MAP

GEOTECHNICAL ENGINEERING INVESTIGATION
Proposed Commercial Development
NEC County Line Lane & County Line Road
Calimesa, California

SCALE:	DATE:
NOT TO SCALE	12/2019
DRAWN BY:	APPROVED BY:
JC	CJ
PROJECT NO.	FIGURE NO.
3-219-1043	1

SALEM engineering group, inc.



SITE PLAN

GEOTECHNICAL ENGINEERING INVESTIGATION
Proposed Commercial Development
NEC County Line Lane & County Line Road
Calimesa, California

SCALE:	DATE:
NOT TO SCALE	12/2019
DRAWN BY:	APPROVED BY:
KV	CJ
PROJECT NO.	FIGURE NO.
3-219-1043	2

LEGEND:

B-1 Soil Boring Locations

P-1 Percolation Locations

All Locations Approximate

SALEM engineering group, inc.

APPENDIX

A

APPENDIX A
FIELD EXPLORATION

Fieldwork for our investigation (drilling) was conducted on December 13, 2019 and included a site visit, subsurface exploration, and soil sampling. The locations of the exploratory borings are shown on the Site Plan, Figure 2. Boring logs for our exploration are presented in figures following the text in this appendix. Borings were located in the field using existing reference points. Therefore, actual boring locations may deviate slightly.

In general, our borings were performed using a truck-mounted CME 45 drill rig equipped with 4-inch solid flight augers. Sampling in the borings was accomplished using a hydraulic 140-pound hammer with a 30-inch drop. Samples were obtained with a 3-inch outside-diameter (OD), split spoon (California Modified) sampler, and a 2-inch OD, Standard Penetration Test (SPT) sampler. The number of blows required to drive the sampler the last 12 inches (or fraction thereof) of the 18-inch sampling interval were recorded on the boring logs. The blow counts shown on the boring logs should not be interpreted as standard SPT "N" values; corrections have not been applied. Upon completion, the borings were backfilled with drill cuttings.

Subsurface conditions encountered in the exploratory borings were visually examined, classified and logged in general accordance with the American Society for Testing and Materials (ASTM) Practice for Description and Identification of Soils (Visual-Manual Procedure D2488). This system uses the Unified Soil Classification System (USCS) for soil designations. The logs depict soil and geologic conditions encountered and depths at which samples were obtained. The logs also include our interpretation of the conditions between sampling intervals. Therefore, the logs contain both observed and interpreted data. We determined the lines designating the interface between soil materials on the logs using visual observations, drill rig penetration rates, excavation characteristics and other factors. The transition between materials may be abrupt or gradual. Where applicable, the field logs were revised based on subsequent laboratory testing.

Test Boring: B-1 **Page** 1 **Of:** 2

Project Number: 3-219-1043

Date: 12/13/2019

Client: J&T Management, Inc.

Project: Proposed Commercial Development

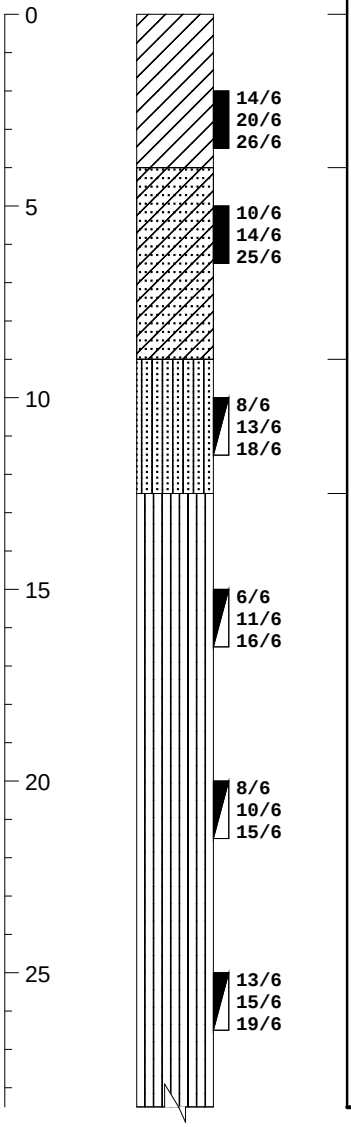
Location: NEC County Line Lane & County Line Road, Calimesa, California

Drilled By: SALEM **Logged By:** SK

Drill Type: CME 45 **Elevation:** N/A

Auger Type: 4 in. Solid Flight Auger **Initial Depth to Groundwater:** N/A

Hammer Type: Automatic Trip - 140 lb/30 in **Final Depth to Groundwater:** N/A



ELEVATION/ DEPTH (feet)	USCS	Soil Description	N-Values blows/ft.	Moisture Content %	Dry Density, PCF	Remarks
	CL	Sandy CLAY Hard; slightly moist; reddish brown; fine to medium grain sand.	46	5.0	120.0	
	SC	Clayey SAND Medium dense; moist; reddish brown; fine to medium grain sand.	39	12.0	121.9	
	SM	Silty SAND Dense; moist; brown; fine to medium grain sand; with clay.	31	8.5	-	
	ML	Clayey SILT with Sand Very stiff; very moist; brown; fine grain sand.	27	18.9	-	
		Grades as above.	25	18.6	-	
	ML	Sandy SILT Hard; very moist; brown; fine grain sand; with clay.	34	20.6	-	

Notes:

Figure Number A-1

SALEM engineering group, inc.

Project Number: 3-219-1043
Date: 12/13/2019
Test Boring: B-1

ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	N-Values blows/ft.	Moisture Content %	Dry Density, PCF	Remarks
30	34/6 50/6 -	SW-SM	Well-graded SAND with Silt Very dense; slightly moist; light brown; fine to coarse grain sand; trace gravel.	50/6"	4.4	-	Cu=17.9 Cc=1.0
35	12/6 29/6 46/6	SM	Silty SAND Very dense; moist; brown; fine to medium grain sand.	75	9.2	-	
40	29/6 39/6 55/6	SW-SM	Well-graded SAND with Silt Very dense; slightly moist; light brown; fine to coarse grain sand.	94	3.1	-	Cu=8.0 Cc=1.4
45	18/6 31/6 54/6	SM	Silty SAND Very dense; moist; brown; fine to medium grain sand; trace clay.	85	11.4	-	
50			End of boring at 46.5 feet BGS.				
55							
60							

Notes:

Figure Number A-1

Test Boring: B-2 **Page** 1 **Of:** 1

Project Number: 3-219-1043

Date: 12/13/2019

Client: J&T Management, Inc.

Project: Proposed Commercial Development

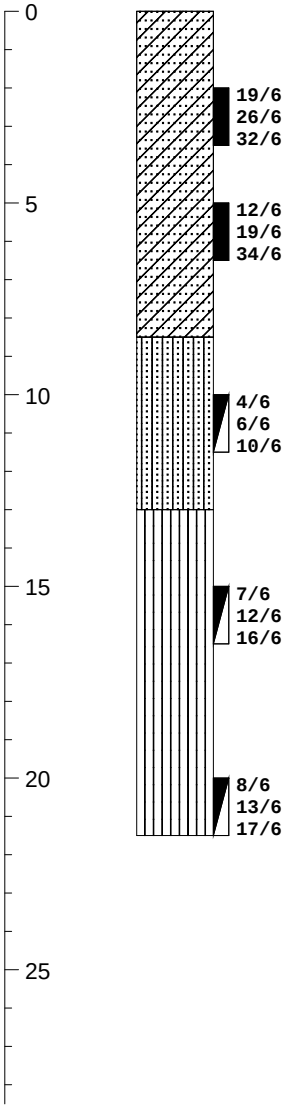
Location: NEC County Line Lane & County Line Road, Calimesa, California

Drilled By: SALEM **Logged By:** SK

Drill Type: CME 45 **Elevation:** N/A

Auger Type: 4 in. Solid Flight Auger **Initial Depth to Groundwater:** N/A

Hammer Type: Automatic Trip - 140 lb/30 in **Final Depth to Groundwater:** N/A



ELEVATION/ DEPTH (feet)	USCS	Soil Description	N-Values blows/ft.	Moisture Content %	Dry Density, PCF	Remarks
	SC	Clayey SAND Dense; moist; reddish brown; fine to medium grain sand.	58	8.1	113.0	
		Grades as above.	53	11.2	118.4	
	SM	Silty SAND Medium dense; moist; yellowish brown; fine to medium grain sand; with clay.	16	10.0	-	
	ML	Clayey SILT with Sand Very stiff; very moist; brown; fine grain sand.	28	13.9	-	
		Grades as above.	30	17.5	-	
		End of boring at 21.5 feet BGS.				

Notes:

Figure Number A-2

Test Boring: B-3 **Page** 1 **Of:** 1

Project Number: 3-219-1043

Date: 12/13/2019

Client: J&T Management, Inc.

Project: Proposed Commercial Development

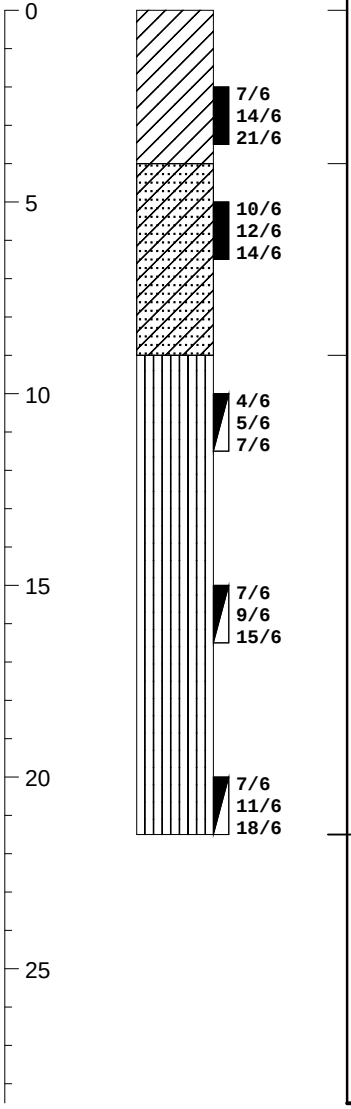
Location: NEC County Line Lane & County Line Road, Calimesa, California

Drilled By: SALEM **Logged By:** SK

Drill Type: CME 45 **Elevation:** N/A

Auger Type: 4 in. Solid Flight Auger **Initial Depth to Groundwater:** N/A

Hammer Type: Automatic Trip - 140 lb/30 in **Final Depth to Groundwater:** N/A



ELEVATION/ DEPTH (feet)	USCS	Soil Description	N-Values blows/ft.	Moisture Content %	Dry Density, PCF	Remarks
	CL	Sandy CLAY Very stiff; moist; brown; fine to medium grain sand.	35	12.9	120.6	
	SC	Clayey SAND Medium dense; moist; brown; fine to medium grain sand. Grades as above.	26	10.8	123.1	
	ML	Sandy SILT Stiff; moist; light brown; fine grain sand; with clay.	12	13.1	-	
	ML	Clayey SILT with Sand Very stiff; moist; brown; fine grain sand.	24	12.0	-	
		Grades as above.	29	16.6	-	
		End of boring at 21.5 feet BGS.				

Notes:

Figure Number A-3

Test Boring: B-4 **Page** 1 **Of:** 1

Project Number: 3-219-1043

Date: 12/13/2019

Client: J&T Management, Inc.

Project: Proposed Commercial Development

Location: NEC County Line Lane & County Line Road, Calimesa, California

Drilled By: SALEM **Logged By:** SK

Drill Type: CME 45 **Elevation:** N/A

Auger Type: 4 in. Solid Flight Auger **Initial Depth to Groundwater:** N/A

Hammer Type: Automatic Trip - 140 lb/30 in **Final Depth to Groundwater:** N/A

ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	N-Values blows/ft.	Moisture Content %	Dry Density, PCF	Remarks
0	11/6 18/6 28/6	SC	Clayey SAND Dense; very moist; brown; fine to medium grain sand.	46	13.6	124.6	
5	12/6 15/6 17/6	SM	Silty SAND Medium dense; moist; light brown; fine to medium grain sand; trace clay.	32	6.4	121.9	
10	7/6 11/6 15/6	SP-SM	Poorly graded SAND with Silt Medium dense; slightly moist; light brown; fine to coarse grain sand.	26	3.8	-	
15			End of boring at 11.5 feet BGS.				
20							
25							

Notes:

Figure Number A-4

SALEM engineering group, inc.

Test Boring: B-5 **Page** 1 **Of:** 1

Project Number: 3-219-1043

Date: 12/13/2019

Client: J&T Management, Inc.

Project: Proposed Commercial Development

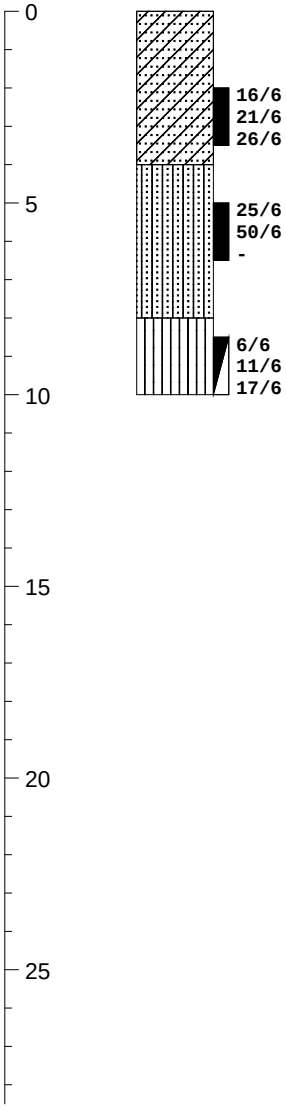
Location: NEC County Line Lane & County Line Road, Calimesa, California

Drilled By: SALEM **Logged By:** SK

Drill Type: CME 45 **Elevation:** N/A

Auger Type: 4 in. Solid Flight Auger **Initial Depth to Groundwater:** N/A

Hammer Type: Automatic Trip - 140 lb/30 in **Final Depth to Groundwater:** N/A



ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	N-Values blows/ft.	Moisture Content %	Dry Density, PCF	Remarks
		SC	Clayey SAND Dense; moist; reddish brown; fine to medium grain sand.	47	8.0	119.7	
		SM	Silty SAND Very dense; moist; brown; fine to medium grain sand; with clay.	50/6"	11.8	121.2	
		ML	Clayey SILT Very stiff; very moist; brown; fine grain sand.	28	17.6	-	
			End of boring at 10 feet BGS.				

Notes:

Figure Number A-5

SALEM engineering group, inc.

Test Boring: B-6 **Page** 1 **Of:** 1

Project Number: 3-219-1043

Date: 12/13/2019

Client: J&T Management, Inc.

Project: Proposed Commercial Development

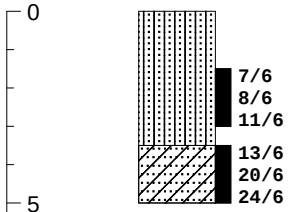
Location: NEC County Line Lane & County Line Road, Calimesa, California

Drilled By: SALEM **Logged By:** SK

Drill Type: CME 45 **Elevation:** N/A

Auger Type: 4 in. Solid Flight Auger **Initial Depth to Groundwater:** N/A

Hammer Type: Automatic Trip - 140 lb/30 in **Final Depth to Groundwater:** N/A



ELEVATION/ DEPTH (feet)	SOIL SYMBOLS SAMPLER SYMBOLS AND FIELD TEST DATA	USCS	Soil Description	N-Values blows/ft.	Moisture Content %	Dry Density, PCF	Remarks
		SM	Silty SAND Medium dense; moist; brown; fine to medium grain sand; with clay.	19	11.4	117.6	
		SC	Clayey SAND Dense; moist; reddish brown; fine to medium grain sand.	44	13.5	116.7	
			End of boring at 5 feet BGS.				

Notes:

Figure Number A-6

KEY TO SYMBOLS

Symbol Description

Strata symbols

 **Lean Clay**

 **Clayey sand**

 **Silty sand**

 **Silt**

 **Well graded sand with silt**

 **Poorly graded sand with silt**

Misc. Symbols

 **Boring continues**

Soil Samplers

 **California sampler**

 **Standard penetration test**

Notes:

Consistency Classification

Blows Per Foot (Uncorrected)

Granular Soils

	MCS	SPT
Very loose	<5	<4
Loose	5 -15	4 - 10
Medium dense	16 - 40	11 - 30
Dense	41 - 65	31 - 50
Very dense	>65	>50

Cohesive Soils

	MCS	SPT
Very soft	<3	<2
Soft	3 - 5	2 - 4
Firm	6 - 10	5 - 8
Stiff	11 - 20	9 - 15
Very Stiff	21 - 40	16 - 30
Hard	>40	>30

MCS = Modified California Sampler
SPT = Standard Penetration Test Sampler

Percolation Test Worksheet

Project: **Proposed Commercial Development**
County Line Lane & County Line Road
Calimesa, California

Job No.: **3-219-1043**
Date Drilled: **12/13/2019**
Soil Classification: **Clayey SILT (ML)**

Hole Radius: 4 in.
Pipe Dia.: 3 in.
Total Depth of Hole: 108 in.

Test Hole No.: **P-1**
Tested by: **JC**
Drilled Hole Depth: **9** ft.

Presoaking Date: **12/13/2019**
Test Date: **12/14/2019**

Pipe Stick up: 2 ft.

Time Start	Time Finish	Depth of Test Hole (ft)#	Refill- Yes or No	Elapsed Time (hrs:min)	Initial Water Level# (ft)	Final Water Level# (ft)	Δ Water Level (in.)	Δ Min.	Meas. Perc Rate (min/in)	Initial Height of Water (in)	Final Height of Water (in)	Average Height of Water (in)	Infiltration Rate, It (in/hr)
13:30	14:00	11.0	Y	0:30	7.87	7.95	0.96	30	31.3	37.6	36.6	37.1	0.10
14:00	14:30	11.0	N	0:30	7.95	8.01	0.72	30	41.7	36.6	35.9	36.2	0.08
14:30	15:00	11.0	N	0:30	8.01	8.06	0.60	30	50.0	35.9	35.3	35.6	0.06
15:00	15:30	11.0	N	0:30	8.06	8.09	0.36	30	83.3	35.3	34.9	35.1	0.04
15:30	16:00	11.0	N	0:30	8.09	8.12	0.36	30	83.3	34.9	34.6	34.7	0.04
16:00	16:30	11.0	N	0:30	8.12	8.15	0.36	30	83.3	34.6	34.2	34.4	0.04
16:30	17:00	11.0	N	0:30	8.15	8.17	0.24	30	125.0	34.2	34.0	34.1	0.03
17:00	17:30	11.0	N	0:30	8.17	8.19	0.24	30	125.0	34.0	33.7	33.8	0.03
17:30	18:00	11.0	N	0:30	8.19	8.21	0.24	30	125.0	33.7	33.5	33.6	0.03
18:00	18:30	11.0	N	0:30	8.21	8.22	0.12	30	250.0	33.5	33.4	33.4	0.01
18:30	19:00	11.0	N	0:30	8.22	8.23	0.12	30	250.0	33.4	33.2	33.3	0.01
19:00	19:30	11.0	N	0:30	8.23	8.24	0.12	30	250.0	33.2	33.1	33.2	0.01
Recommended for Design:										**Infiltration Rate**			**0.01**

SALEM engineering group, inc.

Percolation Test Worksheet

Project: **Proposed Commercial Development**
County Line Lane & County Line Road
Calimesa, California

Job No.: **3-219-1043**
Date Drilled: **12/13/2019**
Soil Classification: **Clayey SAND (SC)**

Hole Radius: 4 in.
Pipe Dia.: 3 in.
Total Depth of Hole: 60 in.

Test Hole No.: **P-2**
Tested by: **JC**
Drilled Hole Depth: **5** ft.

Presoaking Date: **12/13/2019**
Test Date: **12/14/2019**

Pipe Stick up: 0.5 ft.

Time Start	Time Finish	Depth of Test Hole (ft)#	Refill- Yes or No	Elapsed Time (hrs:min)	Initial Water Level# (ft)	Final Water Level# (ft)	Δ Water Level (in.)	Δ Min.	Meas. Perc Rate (min/in)	Initial Height of Water (in)	Final Height of Water (in)	Average Height of Water (in)	Infiltration Rate, It (in/hr)
13:25	13:55	5.5	Y	0:30	2.69	2.76	0.84	30	35.7	33.7	32.9	33.3	0.10
13:55	14:25	5.5	N	0:30	2.76	2.80	0.48	30	62.5	32.9	32.4	32.6	0.06
14:25	14:55	5.5	N	0:30	2.80	2.84	0.48	30	62.5	32.4	31.9	32.2	0.06
14:55	15:25	5.5	N	0:30	2.84	2.87	0.36	30	83.3	31.9	31.6	31.7	0.04
15:25	15:55	5.5	N	0:30	2.87	2.90	0.36	30	83.3	31.6	31.2	31.4	0.04
15:55	16:25	5.5	N	0:30	2.90	2.93	0.36	30	83.3	31.2	30.8	31.0	0.04
16:25	16:55	5.5	N	0:30	2.93	2.96	0.36	30	83.3	30.8	30.5	30.7	0.04
16:55	17:25	5.5	N	0:30	2.96	2.98	0.24	30	125.0	30.5	30.2	30.4	0.03
17:25	17:55	5.5	N	0:30	2.98	3.00	0.24	30	125.0	30.2	30.0	30.1	0.03
17:55	18:25	5.5	N	0:30	3.00	3.02	0.24	30	125.0	30.0	29.8	29.9	0.03
18:25	18:55	5.5	N	0:30	3.02	3.04	0.24	30	125.0	29.8	29.5	29.6	0.03
18:55	19:25	5.5	N	0:30	3.04	3.06	0.24	30	125.0	29.5	29.3	29.4	0.03
Recommended for Design:										**Infiltration Rate**			**0.03**

SALEM engineering group, inc.

DRY SAND SETTLEMENT DUE TO EARTHQUAKE SHAKING

Job No. 3-219-1043 **Job Name** Proposed Commercial
Boring No. B-1 **Drill Date** 12/13/19

* Use Fig. 11 of Tokimatsu & Seed (1987)
** Use Fig. 13 of Tokimatsu & Seed (1987)
*** $MSF=10^{2.24}/Mw^{2.56}$
# $C_N=2.2/(1.2+\sigma'_o/P_a)$
+ From Pradel, D. (1998) equations for modulus reduction curves

User Input Section			
Earthquake Data		Drilling GW Depth (ft)	50
Mag. (M_w)	8.2	Earthquake GW Depth (ft)	50
a_{max}/g	0.625	Rod Stick-Up (ft)	3
MSF***	0.80	SPT N-Value Correction Factors	
		Energy Ratio C_E	1.60 Notes
		Borehole Dia. C_B	1.00 Notes
		Sampling Method C_S	1.2 Notes
		Factor of Safety FS	1.0
		Rod Length C_R	Calculated
		Overburden Press C_N	Calculated

Lookup Tables

% Fines	ΔN	Length	C_R
0	0	1	0.75
10	1	12	0.85
25	2	20	0.95
50	4	30	0.98
75	5	33	1

Δ = -0.0006(% Fines)^2 + 0.1088(% Fines) - 0.0852
C_R = -0.0002(Length)^2 + 0.0131(Length) + 0.7324

Depth		Dry Unit		Fines	SPT	Layer	Unit	Total σ_o	Total σ_o	During Drilling Eff. σ'_o		SPT		Fines Corct'd SPT	During EQ Eff. σ'_{oeq}			Shear Modulus	Cyclic Shear Stress	Shear Strain/Shear Modulus Ratio	Eff. Shear Strain	Vol. Strain (1-way)	Vol. Strain Mw Corct'd	S (2-way)
(ft)	USCS	Wt (pcf)	w (%)	%	Field N	(ft)	Wt (pcf)	bottom (psf)	mid-pt. (psf)	(psf)	C_N #	$(N_1)_{60}$	ΔN	$(N_1)_{60f}$	(psf)	$\sigma_o/\sigma_{o'eq}$	r_d	G_{max} ##	T_{av}	$\gamma_{eff}(G_{eff}/G_{max})$	γ(%)*	V%**	V%*	in.
2	CL	120	5.0	51	29	2.0	126.0	252	126	126	1.74	72.7	4.0	76.7	126	1.000	0.997	7.69E+05	51.0	6.64E-05	1.2E-02	1.8E-3	0.00	0.00
5	SC	122	12.0	49	24	3.0	136.6	662	457	457	1.54	53.2	2.0	55.2	457	1.000	0.990	1.31E+06	183.8	1.40E-04	3.2E-02	7.6E-3	0.01	0.01
10	SM	120	8.5	40	31	5.0	130.2	1313	987	987	1.30	65.7	2.0	67.7	987	1.000	0.979	2.06E+06	392.7	1.90E-04	4.3E-02	7.8E-3	0.01	0.01
15	ML	120	18.9	75	27	5.0	142.7	2026	1670	1670	1.08	47.6	5.0	52.6	1670	1.000	0.968	2.47E+06	656.7	2.66E-04	7.3E-02	1.9E-2	0.02	0.03
20	ML	120	18.6	70	25	5.0	142.3	2738	2382	2382	0.92	42.0	4.0	46.0	2382	1.000	0.956	2.82E+06	925.5	3.28E-04	1.0E-01	3.1E-2	0.04	0.04
25	ML	120	20.6	67	34	5.0	144.7	3462	3100	3100	0.80	49.6	4.0	53.6	3100	1.000	0.941	3.38E+06	1184.9	3.50E-04	1.0E-01	2.5E-2	0.03	0.04
30	SW	120	4.4	11	50	5.0	125.3	4088	3775	3775	0.71	68.4	1.0	69.4	3775	1.000	0.919	4.07E+06	1409.5	3.46E-04	8.6E-02	1.5E-2	0.02	0.02
35	SM	120	9.2	30	75	5.0	131.0	4743	4416	4416	0.65	93.0	2.0	95.0	4416	1.000	0.888	4.89E+06	1593.4	3.26E-04	6.9E-02	8.0E-3	0.01	0.01
40	SW	120	3.1	10	94	5.0	123.7	5362	5052	5052	0.59	106.6	1.0	107.6	5052	1.000	0.848	5.45E+06	1739.9	3.19E-04	6.3E-02	6.1E-3	0.01	0.01
45	SM	120	11.4	37	85	5.0	133.7	6030	5696	5696	0.54	88.7	2.0	90.7	5696	1.000	0.799	5.47E+06	1849.7	3.38E-04	6.7E-02	8.2E-3	0.01	0.01
50	SM	120	11.0	30	85	5.0	133.2	6696	6363	6363	0.50	81.9	2.0	83.9	6363	1.000	0.748	5.63E+06	1933.3	3.43E-04	6.6E-02	9.0E-3	0.01	0.01
																							Total	0.19

The total seismic-induced settlement calculation is based on a water table depth of **50** *feet below grade*

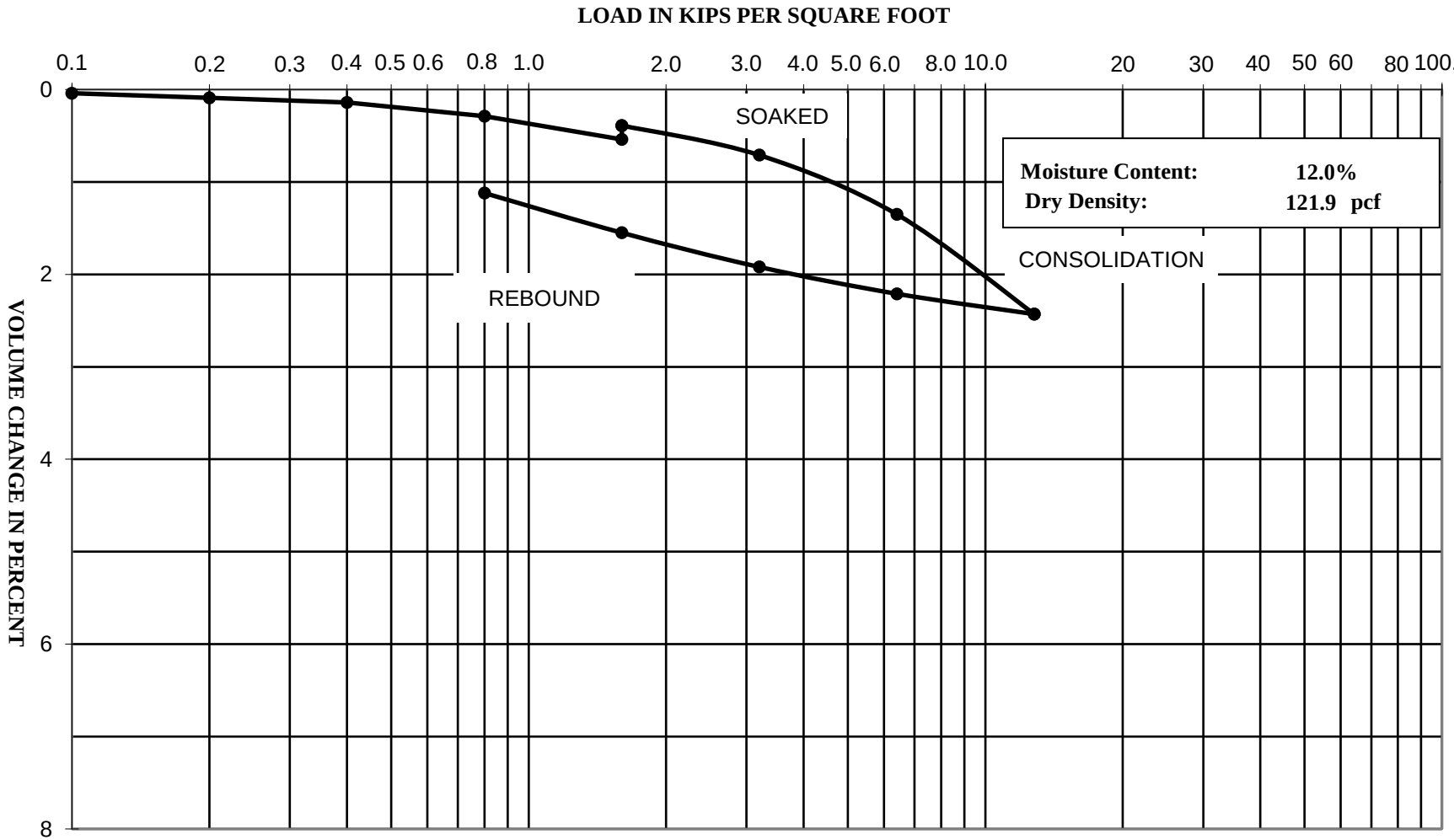
APPENDIX

B

APPENDIX B
LABORATORY TESTING

Laboratory tests were performed in accordance with generally accepted test methods of the American Society for Testing and Materials (ASTM), Caltrans, or other suggested procedures. Selected samples were tested for in-situ dry density and moisture content, corrosivity, consolidation, expansion potential, shear strength, maximum density and optimum moisture content, and grain size distribution. The results of the laboratory tests are summarized in the following figures.

CONSOLIDATION - PRESSURE TEST DATA
ASTM D2435



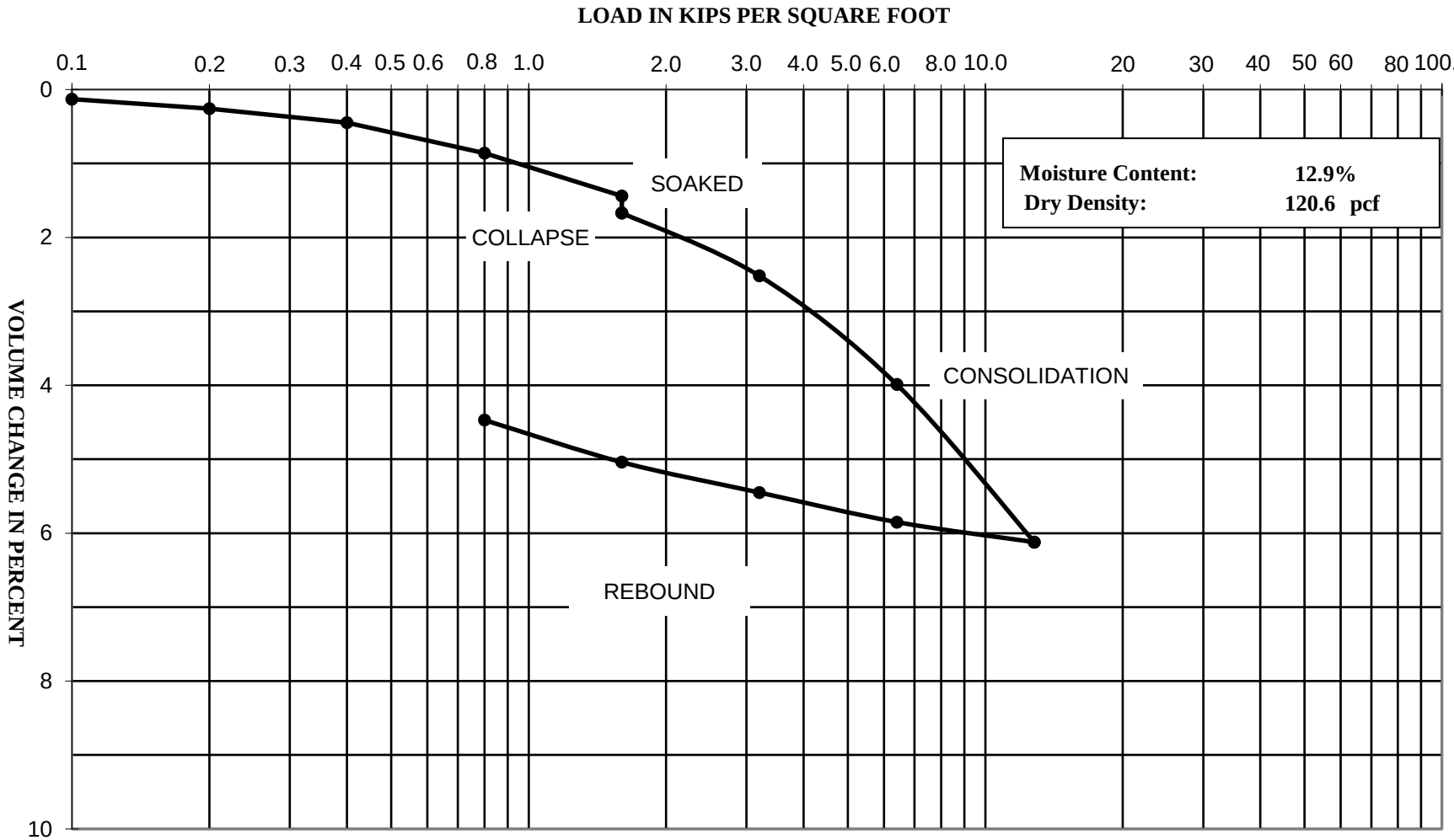
Project Name: Proposed Commercial Development - Calimesa, CA

Project Number: 3-219-1043

Boring: B-1 @ 5

SALEM engineering group, inc.

CONSOLIDATION - PRESSURE TEST DATA
ASTM D2435



Project Name: Proposed Commercial Development - Calimesa, CA

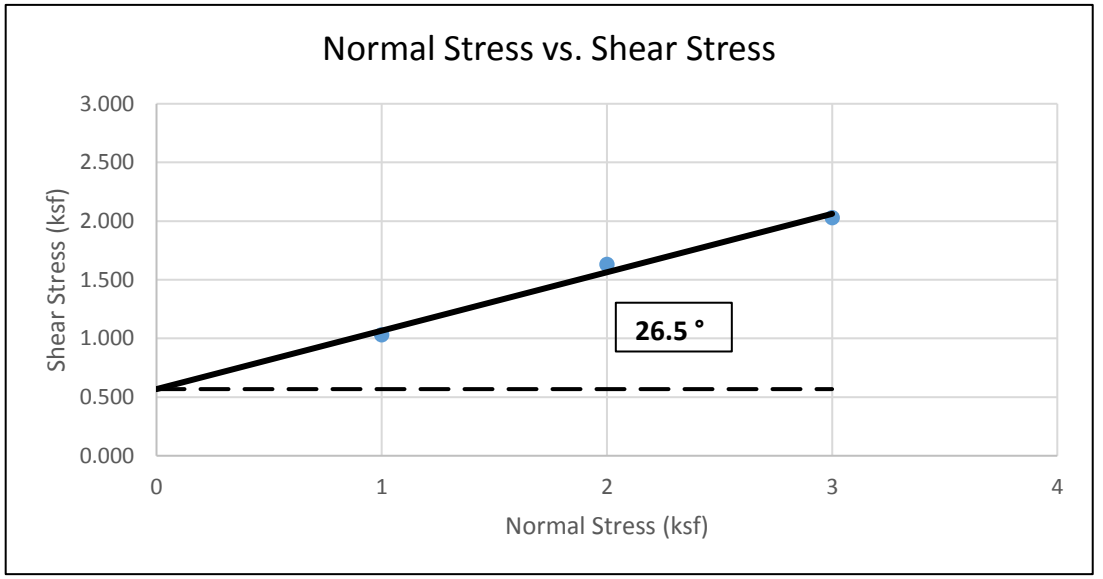
Project Number: 3-219-1043

Boring: B-3 @ 2

SALEM engineering group, inc.

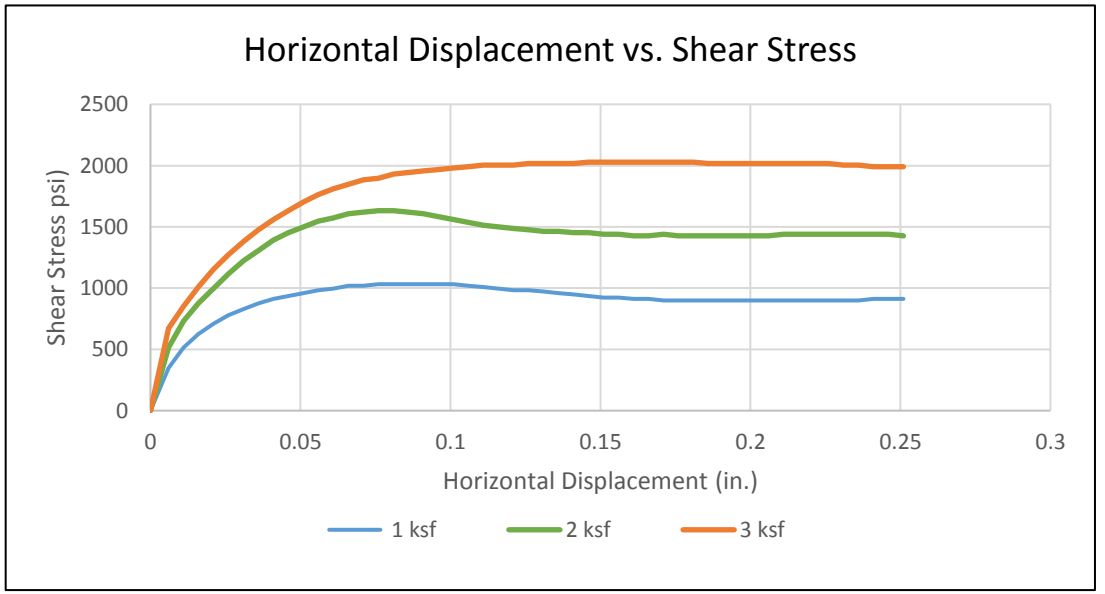
Direct Shear Test (ASTM D3080)

Project Name:	Proposed Commercial Development- Calimesa, CA
Project Number:	3-219-1043
Client:	J&T Management, Inc.
Sample Location:	B-1 @ 2'
Sample Type:	Undisturbed Ring
Soil Classification:	Sandy CLAY (CL)
Tested By:	M. Noorzay
Reviewed By:	CJ
Date:	12/18/2019
Equipment Used:	Geomatic Direct Shear Machine



	Sample 1	Sample 2	Sample 3
Normal Stress (ksf)	1.000	2.000	3.000
Shear Rate (in/min)	0.004		
Peak Shear Stress (ksf)	1.032	1.632	2.028
Residual Shear Stress (ksf)	0.000	0.000	0.000

Initial Height of Sample (in)	1.000	1.000	1.000
Height of Sample before Shear (in.)	1	1	1
Diameter of Sample (in)	2.416	2.416	2.416
Initial Moisture Content (%)	4.8		
Final Moisture Content (%)	18.6	15.4	15.1
Dry Density (pcf)	108.2	114.3	119.5

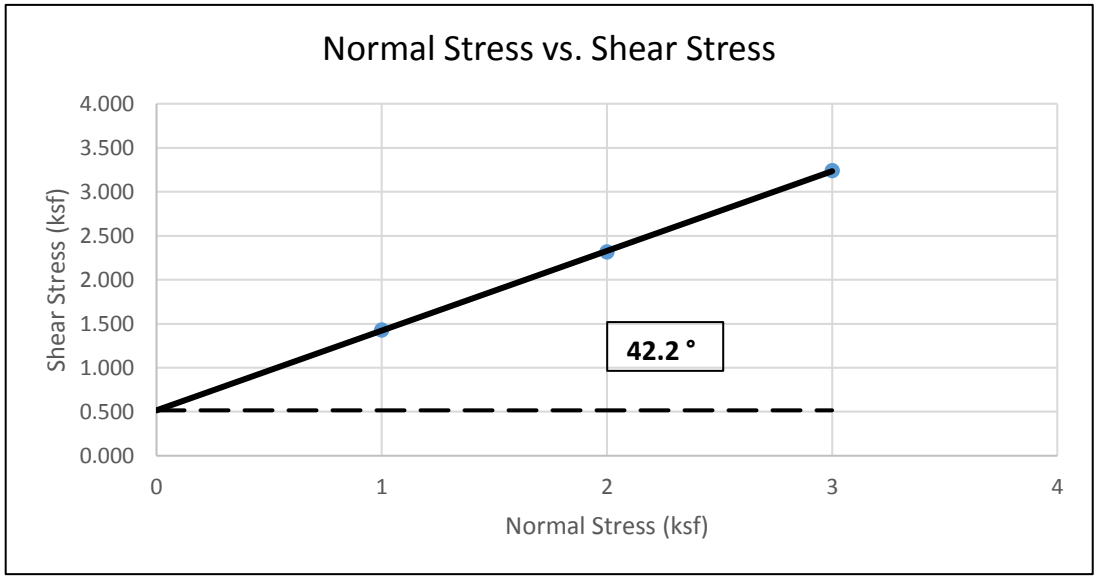


Peak Shear Strength Values	
Slope	0.50
Friction Angle	26.5
Cohesion (psf)	568

SALEM engineering group, inc.

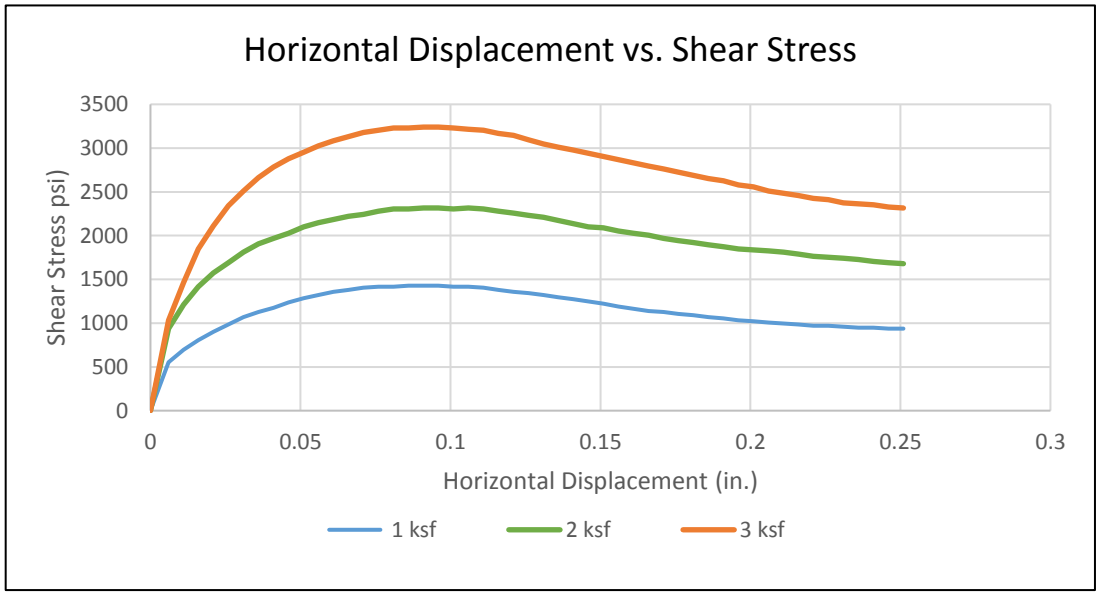
Direct Shear Test (ASTM D3080)

Project Name:	Proposed Commercial Development- Calimesa, CA
Project Number:	3-219-1043
Client:	J&T Management, Inc.
Sample Location:	B-3 @ 5'
Sample Type:	Undisturbed Ring
Soil Classification:	Clayey SAND (SC)
Tested By:	M. Noorzay
Reviewed By:	CJ
Date:	12/20/2019
Equipment Used:	Geomatic Direct Shear Machine



	Sample 1	Sample 2	Sample 3
Normal Stress (ksf)	1.000	2.000	3.000
Shear Rate (in/min)	0.004		
Peak Shear Stress (ksf)	1.428	2.316	3.240
Residual Shear Stress (ksf)	0.000	0.000	0.000

Initial Height of Sample (in)	1.000	1.000	1.000
Height of Sample before Shear (in.)	1	1	1
Diameter of Sample (in)	2.416	2.416	2.416
Initial Moisture Content (%)	10.4		
Final Moisture Content (%)	16.5	16.3	15.4
Dry Density (pcf)	117.5	121.2	123.3

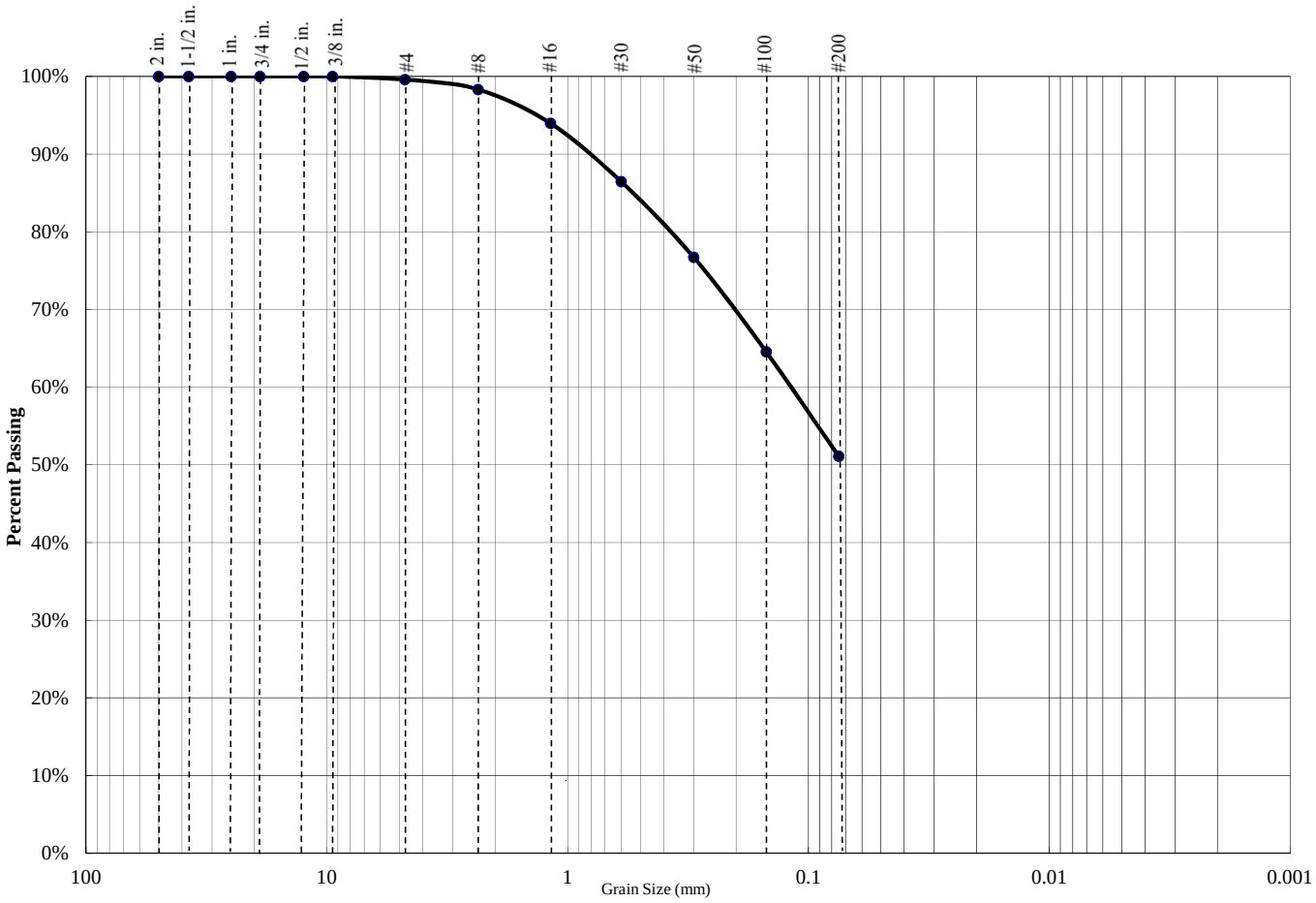


Peak Shear Strength Values	
Slope	0.91
Friction Angle	42.2
Cohesion (psf)	516

SALEM engineering group, inc.

PARTICLE SIZE DISTRIBUTION DIAGRAM

GRADATION TEST - ASTM C136



Percent Gravel	Percent Sand	Percent Silt/Clay
0%	48%	51%

Sieve Size	Percent Passing
3/4 inch	100.0%
1/2 inch	100.0%
3/8 inch	100.0%
#4	99.6%
#8	98.3%
#16	94.0%
#30	86.5%
#50	76.7%
#100	64.6%
#200	51.1%

Atterberg Limits		
PL=	LL=	PI=

Coefficients					
D_{85}=		D_{60}=		D_{50}=	
D_{30}=		D_{15}=		D_{10}=	
C_u=	N/A	C_c=	N/A		

USCS CLASSIFICATION
Sandy CLAY (CL)

Project Name: Proposed Commercial Development - Calimesa, CA

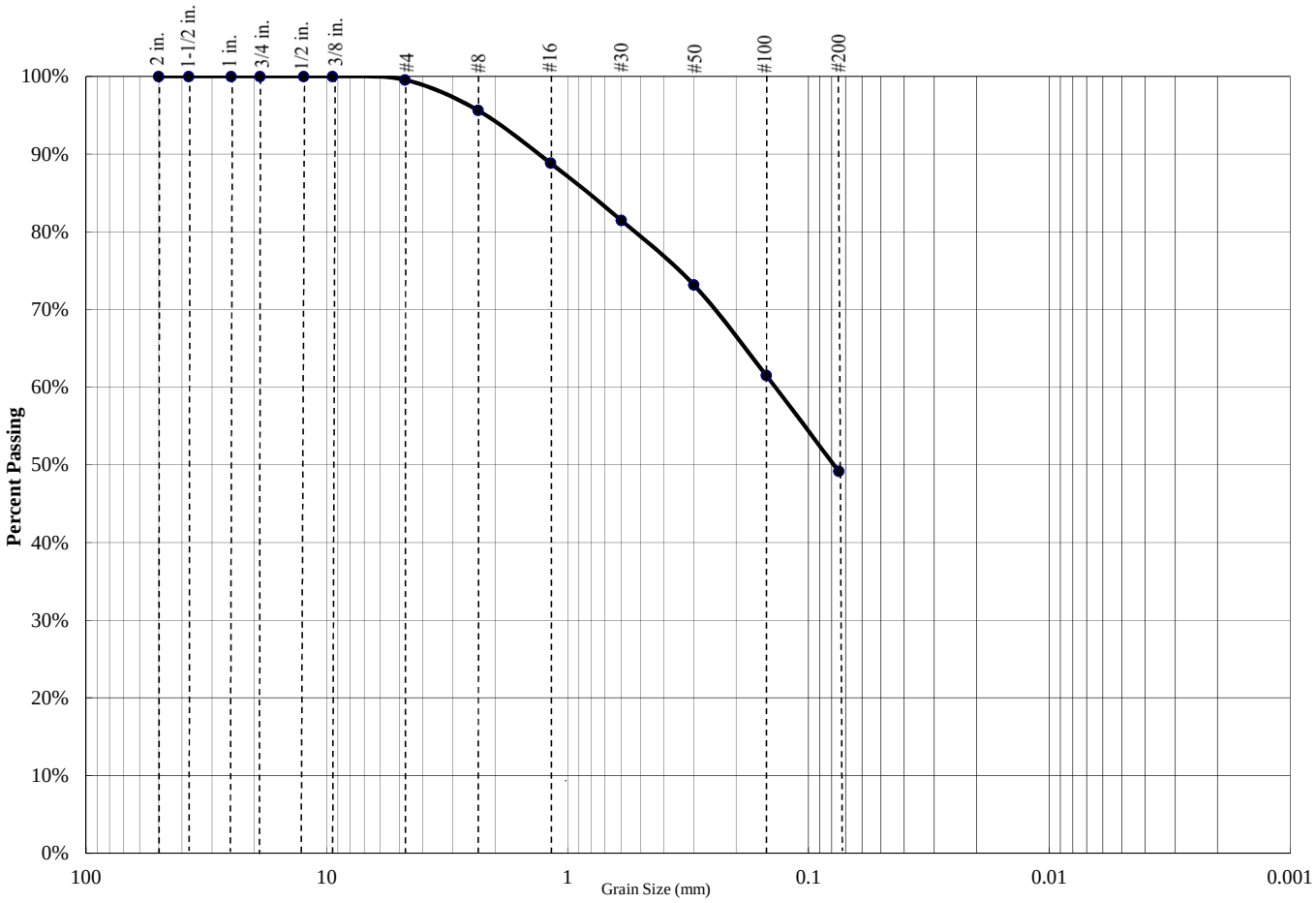
Project Number: 3-219-1043

Boring: B-1 @ 2

SALEM engineering group, inc.

PARTICLE SIZE DISTRIBUTION DIAGRAM

GRADATION TEST - ASTM C136



Percent Gravel	Percent Sand	Percent Silt/Clay
0%	51%	49%

Sieve Size	Percent Passing
3/4 inch	100.0%
1/2 inch	100.0%
3/8 inch	100.0%
#4	99.6%
#8	95.6%
#16	88.8%
#30	81.5%
#50	73.2%
#100	61.5%
#200	49.2%

Atterberg Limits		
PL=	**LL=**	**PI=**

Coefficients					
D_{85}=		**D_{60}=**		**D_{50}=**	
D_{30}=		**D_{15}=**		**D_{10}=**	
C_u=	N/A	**C_c=**	N/A		

USCS CLASSIFICATION
Clayey SAND (SC)

Project Name: Proposed Commercial Development - Calimesa, CA

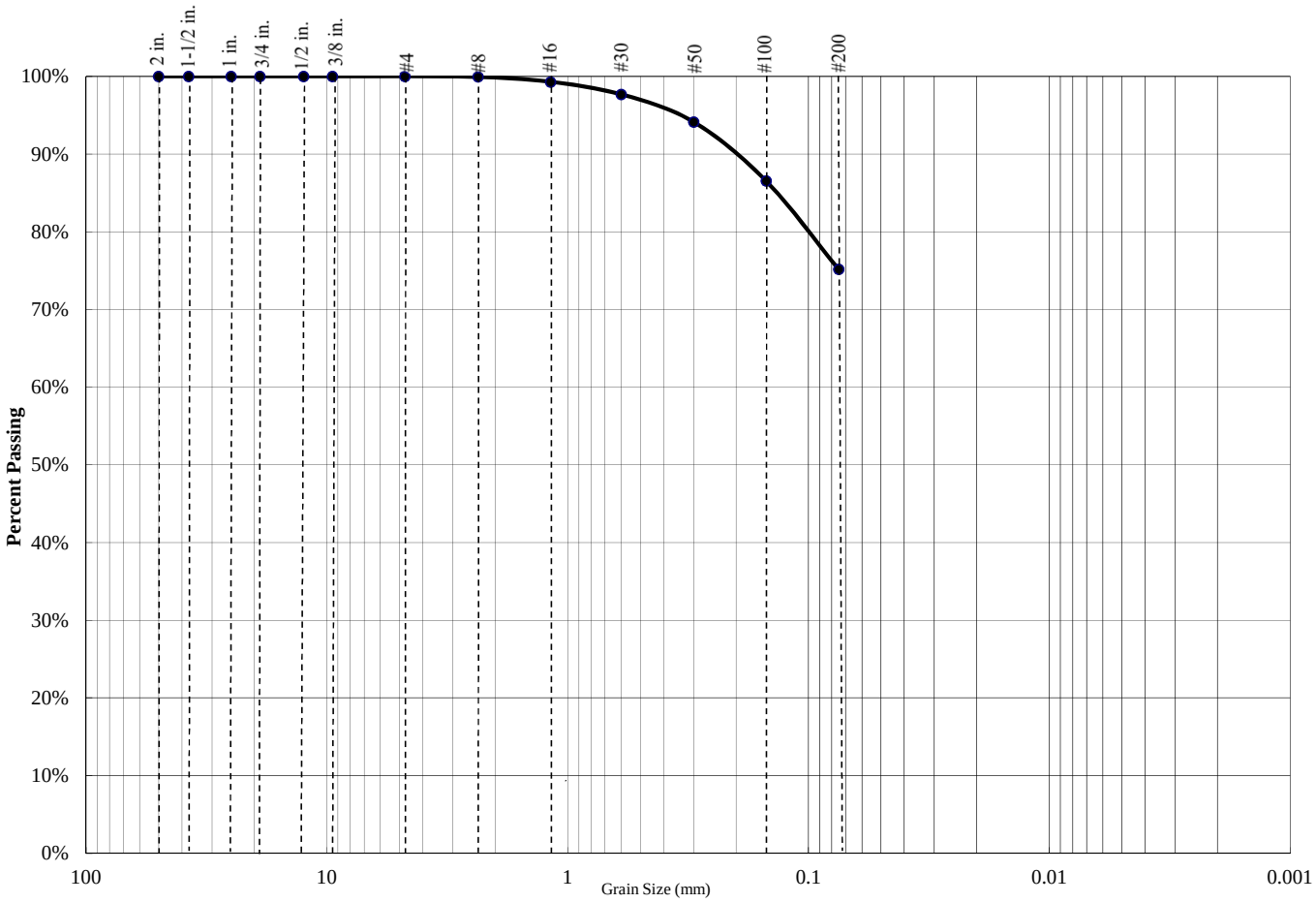
Project Number: 3-219-1043

Boring: B-1 @ 5

SALEM engineering group, inc.

PARTICLE SIZE DISTRIBUTION DIAGRAM

GRADATION TEST - ASTM C136



Percent Gravel	Percent Sand	Percent Silt/Clay
0%	25%	75%

Sieve Size	Percent Passing
3/4 inch	100.0%
1/2 inch	100.0%
3/8 inch	100.0%
#4	100.0%
#8	100.0%
#16	99.3%
#30	97.7%
#50	94.1%
#100	86.5%
#200	75.2%

Atterberg Limits		
PL=	**LL=**	**PI=**

Coefficients					
D_{85}=		**D_{60}=**		**D_{50}=**	
D_{30}=		**D_{15}=**		**D_{10}=**	
C_u=	N/A	**C_c=**	N/A		

USCS CLASSIFICATION
Clayey SILT with Sand (ML)

Project Name: Proposed Commercial Development - Calimesa, CA

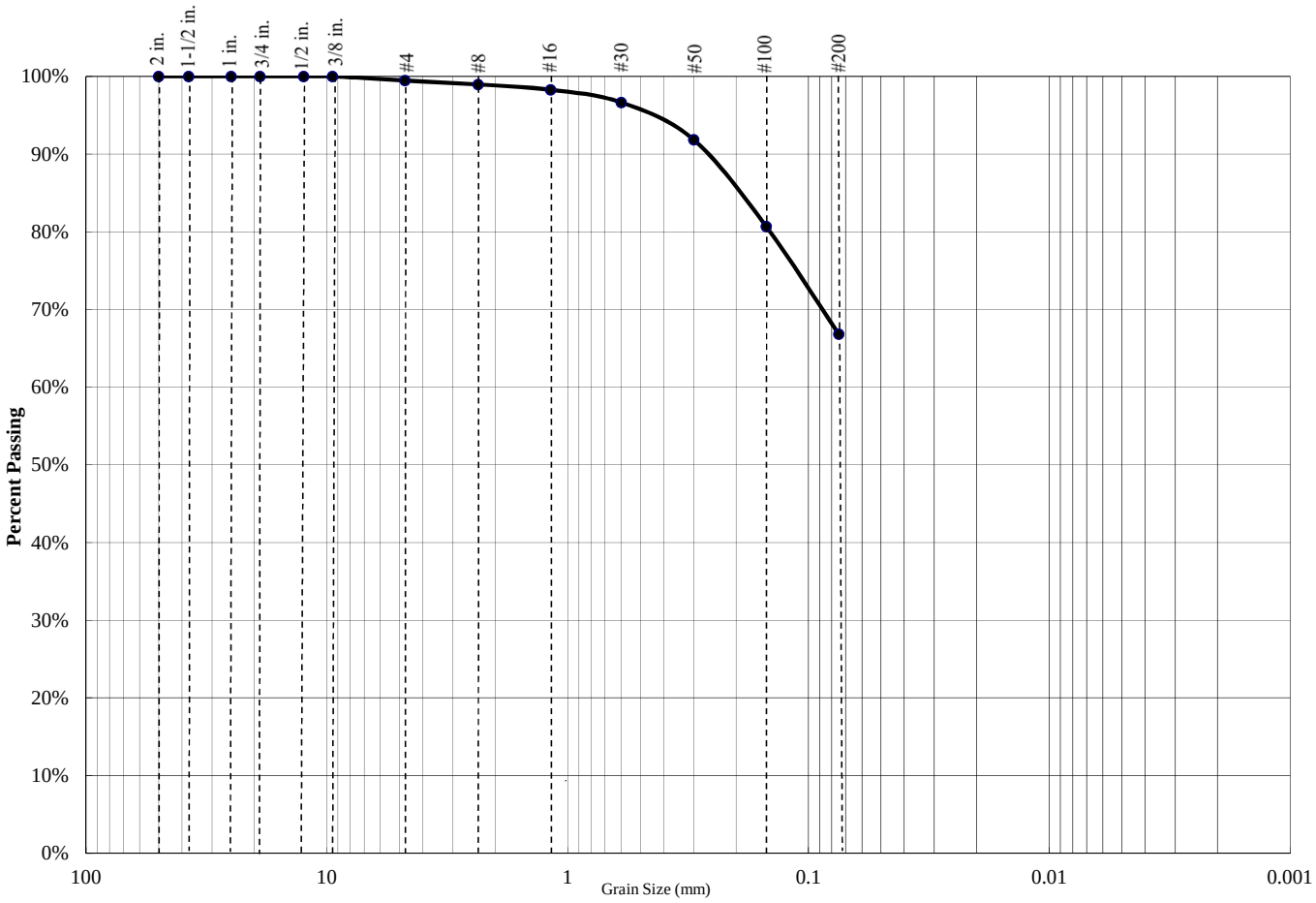
Project Number: 3-219-1043

Boring: B-1 @ 15

SALEM engineering group, inc.

PARTICLE SIZE DISTRIBUTION DIAGRAM

GRADATION TEST - ASTM C136



Percent Gravel	Percent Sand	Percent Silt/Clay
1%	33%	67%

Sieve Size	Percent Passing
3/4 inch	100.0%
1/2 inch	100.0%
3/8 inch	100.0%
#4	99.5%
#8	98.9%
#16	98.3%
#30	96.6%
#50	91.9%
#100	80.7%
#200	66.8%

Atterberg Limits		
PL=	**LL=**	**PI=**

Coefficients					
D_{85}=		**D_{60}=**		**D_{50}=**	
D_{30}=		**D_{15}=**		**D_{10}=**	
C_u=	N/A	**C_c=**	N/A		

USCS CLASSIFICATION
Sandy SILT (ML)

Project Name: Proposed Commercial Development - Calimesa, CA

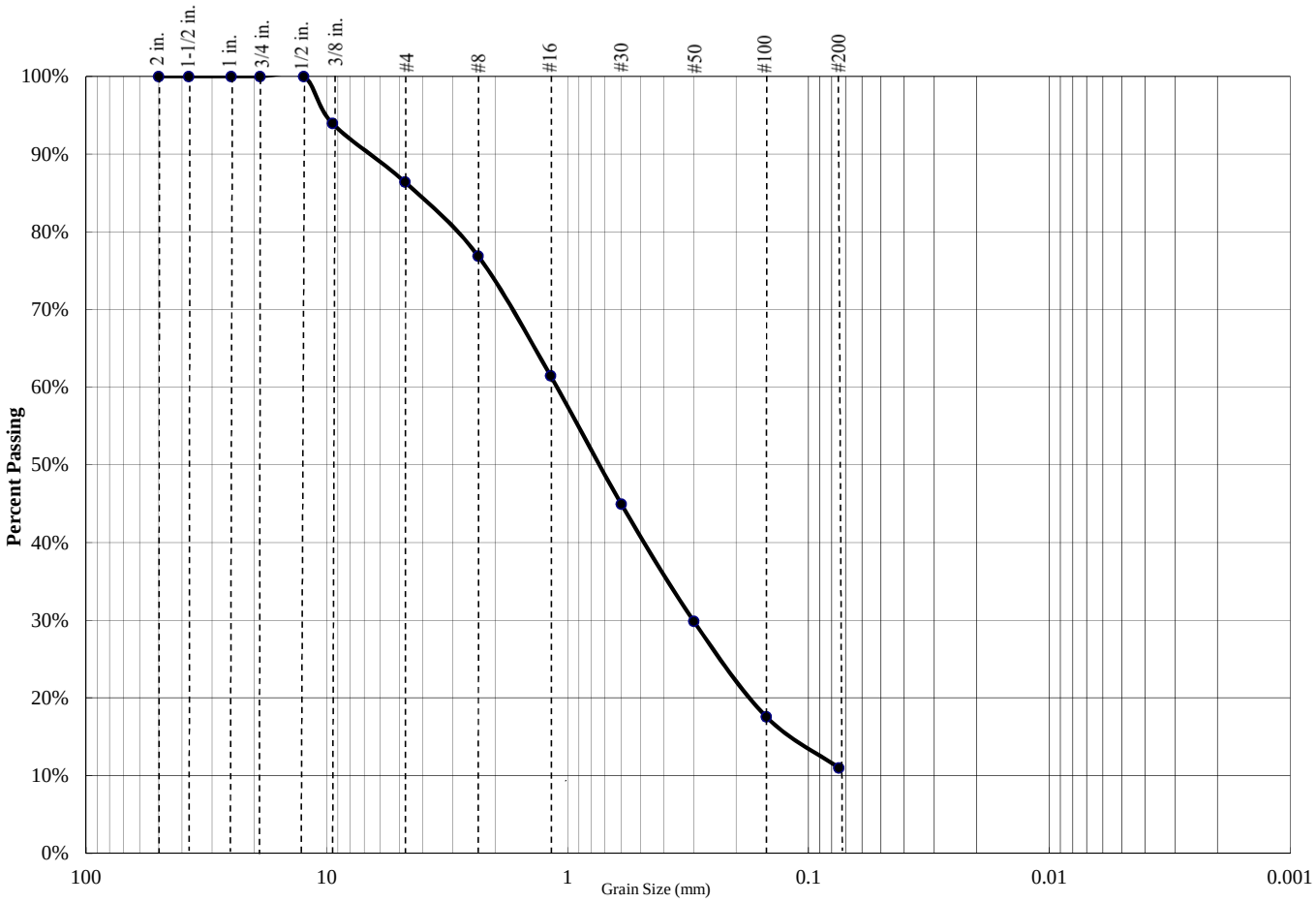
Project Number: 3-219-1043

Boring: B-1 @ 25

SALEM engineering group, inc.

PARTICLE SIZE DISTRIBUTION DIAGRAM

GRADATION TEST - ASTM C136



Percent Gravel	Percent Sand	Percent Silt/Clay
14%	75%	11%

Sieve Size	Percent Passing
3/4 inch	100.0%
1/2 inch	100.0%
3/8 inch	94.0%
#4	86.4%
#8	76.9%
#16	61.5%
#30	45.0%
#50	29.9%
#100	17.6%
#200	11.0%

Atterberg Limits		
PL=	LL=	PI=

Coefficients					
D_{85}=		D_{60}=	1.25	D_{50}=	
D_{30}=	0.3	D_{15}=		D_{10}=	0.07
C_u=	17.86	C_c=	1.03		

USCS CLASSIFICATION
Well-graded SAND with Silt (SW-SM)

Project Name: Proposed Commercial Development - Calimesa, CA

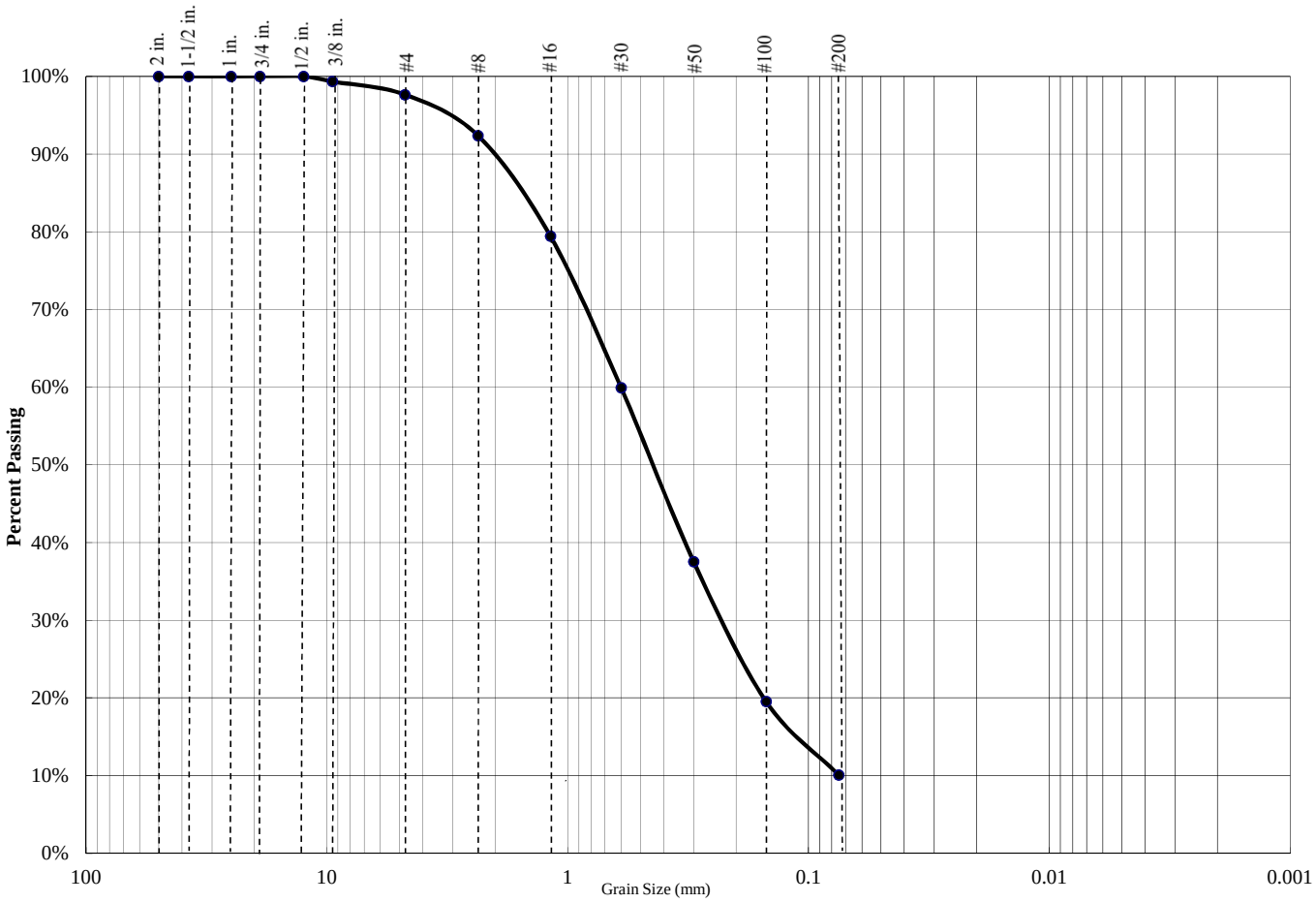
Project Number: 3-219-1043

Boring: B-1 @ 30

SALEM engineering group, inc.

PARTICLE SIZE DISTRIBUTION DIAGRAM

GRADATION TEST - ASTM C136



Percent Gravel	Percent Sand	Percent Silt/Clay
2%	88%	10%

Sieve Size	Percent Passing
3/4 inch	100.0%
1/2 inch	100.0%
3/8 inch	99.3%
#4	97.7%
#8	92.4%
#16	79.4%
#30	59.9%
#50	37.5%
#100	19.5%
#200	10.1%

Atterberg Limits		
PL=	LL=	PI=

Coefficients					
D_{85}=		D_{60}=	0.6	D_{50}=	
D_{30}=	0.25	D_{15}=		D_{10}=	0.075
C_u=	8.00	C_c=	1.39		

USCS CLASSIFICATION
Well-graded SAND with Silt (SW-SM)

Project Name: Proposed Commercial Development - Calimesa, CA

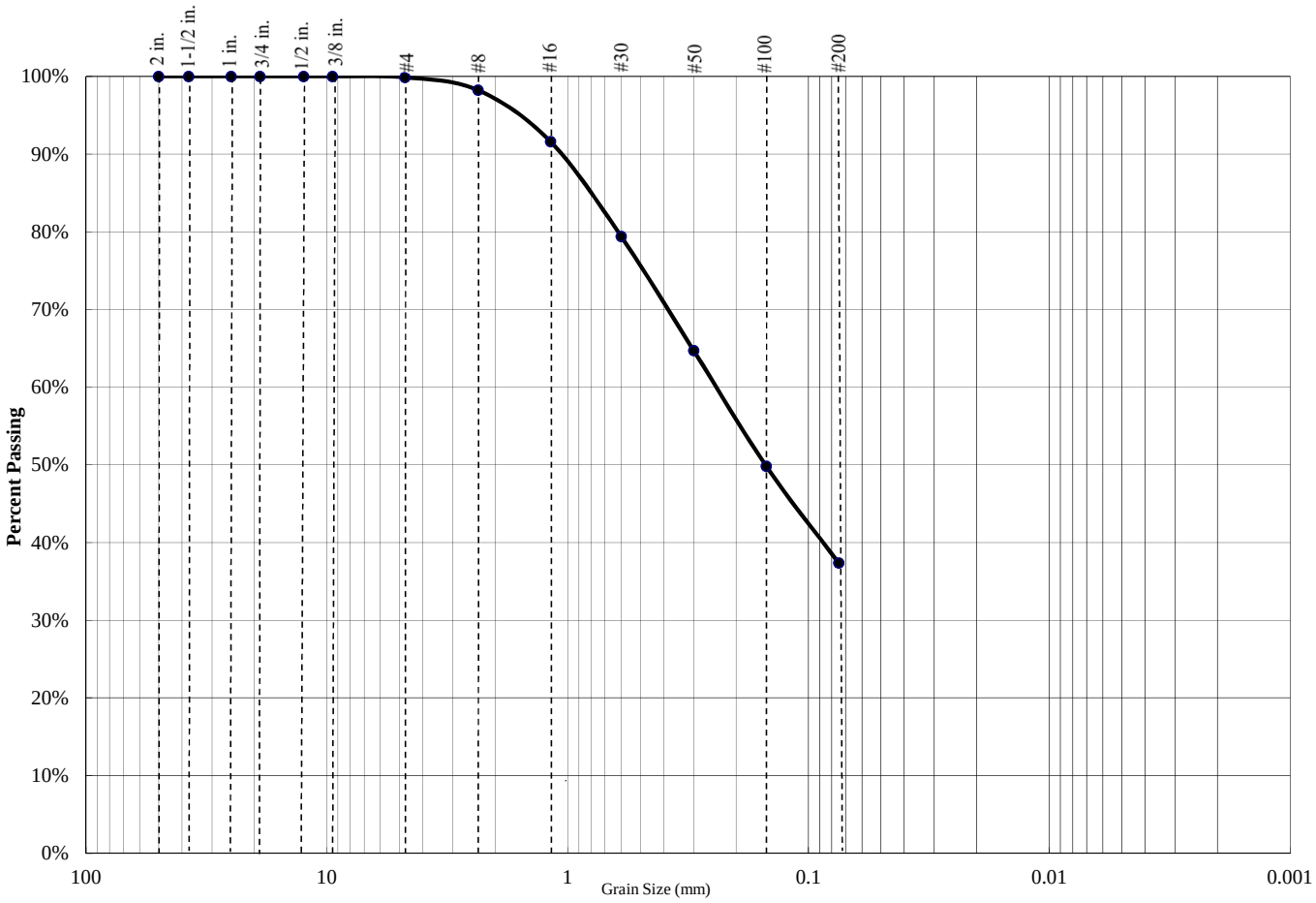
Project Number: 3-219-1043

Boring: B-1 @ 40

SALEM engineering group, inc.

PARTICLE SIZE DISTRIBUTION DIAGRAM

GRADATION TEST - ASTM C136



Percent Gravel	Percent Sand	Percent Silt/Clay
0%	62%	37%

Sieve Size	Percent Passing
3/4 inch	100.0%
1/2 inch	100.0%
3/8 inch	100.0%
#4	99.9%
#8	98.2%
#16	91.6%
#30	79.4%
#50	64.7%
#100	49.8%
#200	37.4%

Atterberg Limits		
PL=	**LL=**	**PI=**

Coefficients					
D_{85}=		**D_{60}=**		**D_{50}=**	
D_{30}=		**D_{15}=**		**D_{10}=**	
C_u=	N/A	**C_c=**	N/A		

USCS CLASSIFICATION
Silty SAND (SM)

Project Name: Proposed Commercial Development - Calimesa, CA

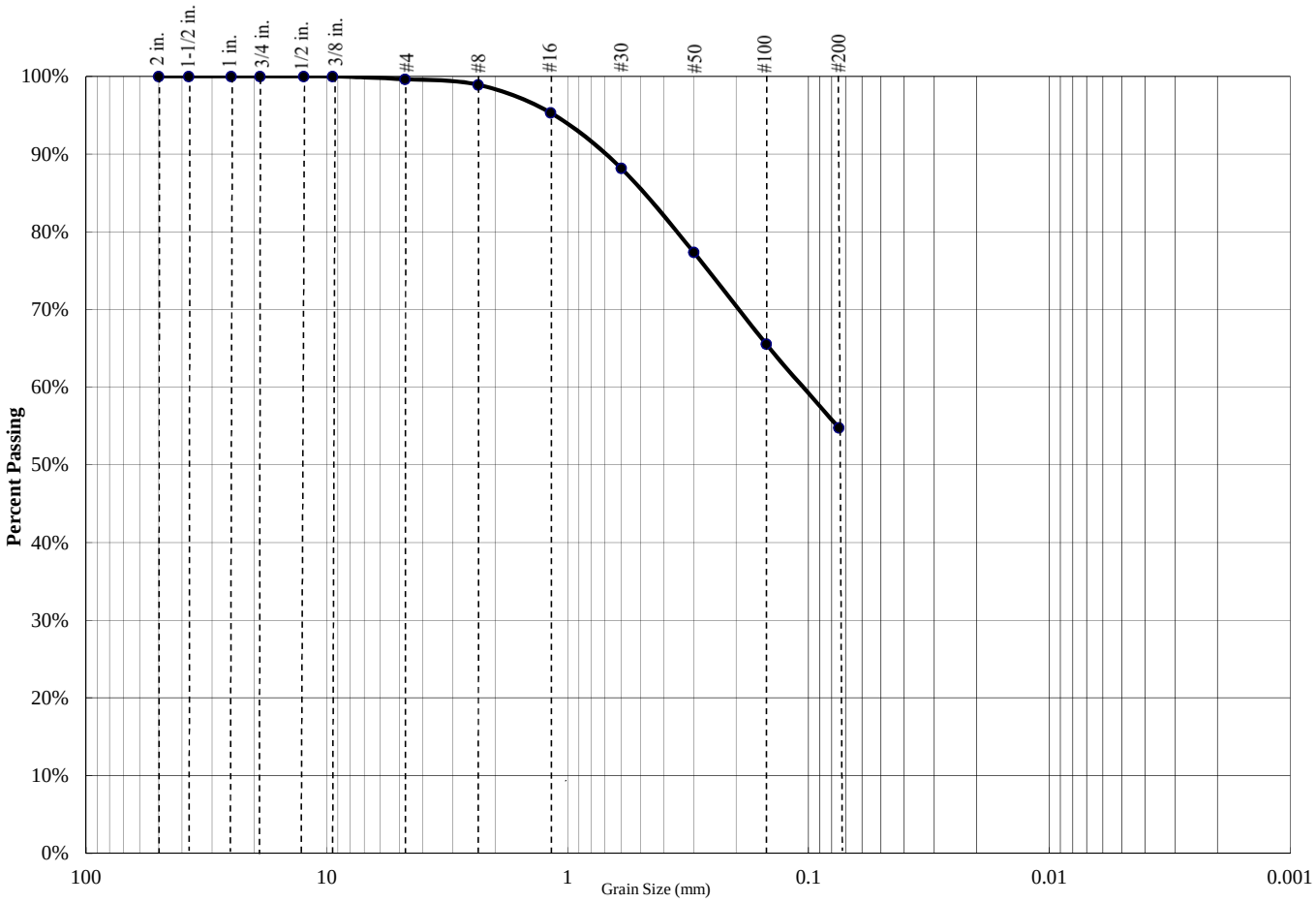
Project Number: 3-219-1043

Boring: B-1 @ 45

SALEM engineering group, inc.

PARTICLE SIZE DISTRIBUTION DIAGRAM

GRADATION TEST - ASTM C136



Percent Gravel	Percent Sand	Percent Silt/Clay
0%	45%	55%

Sieve Size	Percent Passing
3/4 inch	100.0%
1/2 inch	100.0%
3/8 inch	100.0%
#4	99.6%
#8	98.9%
#16	95.3%
#30	88.2%
#50	77.4%
#100	65.5%
#200	54.8%

Atterberg Limits		
PL=	LL=	PI=

Coefficients					
D_{85}=		D_{60}=		D_{50}=	
D_{30}=		D_{15}=		D_{10}=	
C_u=	N/A	C_c=	N/A		

USCS CLASSIFICATION
Sandy CLAY (CL)

Project Name: Proposed Commercial Development - Calimesa, CA

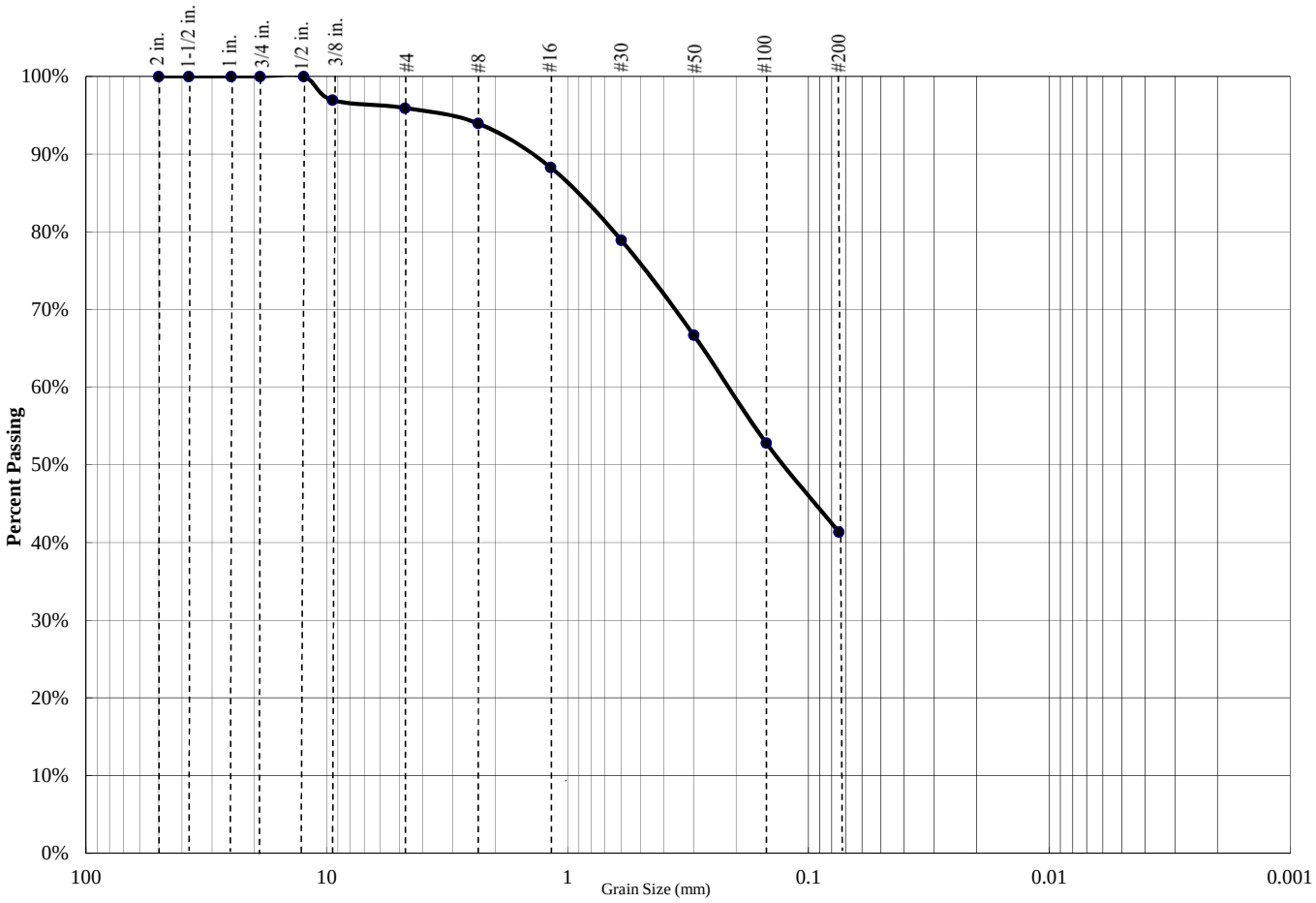
Project Number: 3-219-1043

Boring: B-3 @ 2

SALEM engineering group, inc.

PARTICLE SIZE DISTRIBUTION DIAGRAM

GRADATION TEST - ASTM C136



Percent Gravel	Percent Sand	Percent Silt/Clay
4%	55%	41%

Sieve Size	Percent Passing
3/4 inch	100.0%
1/2 inch	100.0%
3/8 inch	97.0%
#4	95.9%
#8	93.9%
#16	88.3%
#30	78.9%
#50	66.7%
#100	52.8%
#200	41.4%

Atterberg Limits		
PL=	LL=	PI=

Coefficients					
D_{85}=		D_{60}=		D_{50}=	
D_{30}=		D_{15}=		D_{10}=	
C_u=	N/A	C_c=	N/A		

USCS CLASSIFICATION
Clayey SAND (SC)

Project Name: Proposed Commercial Development - Calimesa, CA

Project Number: 3-219-1043

Boring: B-3 @ 5

SALEM engineering group, inc.

EXPANSION INDEX TEST
ASTM D4829

Project Name: Proposed Commercial Development - Calimesa, CA
Project Number: 3-219-1043
Date Sampled: 12/13/19 Date Tested: 12/20/19
Sampled By: SK Tested By: M. Noorzay
Sample Location: B-1 @ 0'-4'
Soil Description: Reddish Brown Clayey SAND (SC)

Trial #	1	2	3
Weight of Soil & Mold, g.	769.9		
Weight of Mold, g.	368.5		
Weight of Soil, g.	401.4		
Wet Density, pcf	121.1		
Weight of Moisture Sample (Wet), g.	800.0		
Weight of Moisture Sample (Dry), g.	731.3		
Moisture Content, %	9.4		
Dry Density, pcf	110.7		
Specific Gravity of Soil	2.7		
Degree of Saturation, %	48.5		

Time	Inital	30 min	1 hr	6 hrs	12 hrs	24 hrs
Dial Reading	0	0.017	0.028	--	--	0.046

Expansion Index $_{measured}$ = 46
Expansion Index $_{50}$ = 45.1

Expansion Index = 45

Expansion Potential Table	
Exp. Index	Potential Exp.
0 - 20	Very Low
21 - 50	Low
51 - 90	Medium
91 - 130	High
>130	Very High

SALEM engineering group, inc.

CHEMICAL ANALYSIS

SO_4 - Modified CTM 417 & Cl - Modified CTM 417/422

Project Name: Proposed Commercial Development - Calimesa, CA
Project Number: 3-219-1043
Date Sampled: 12/13/19 Date Tested: 12/19/19
Sampled By: SK Tested By: M. Noorzay
Soil Description: Reddish Brown Clayey SAND (SC)

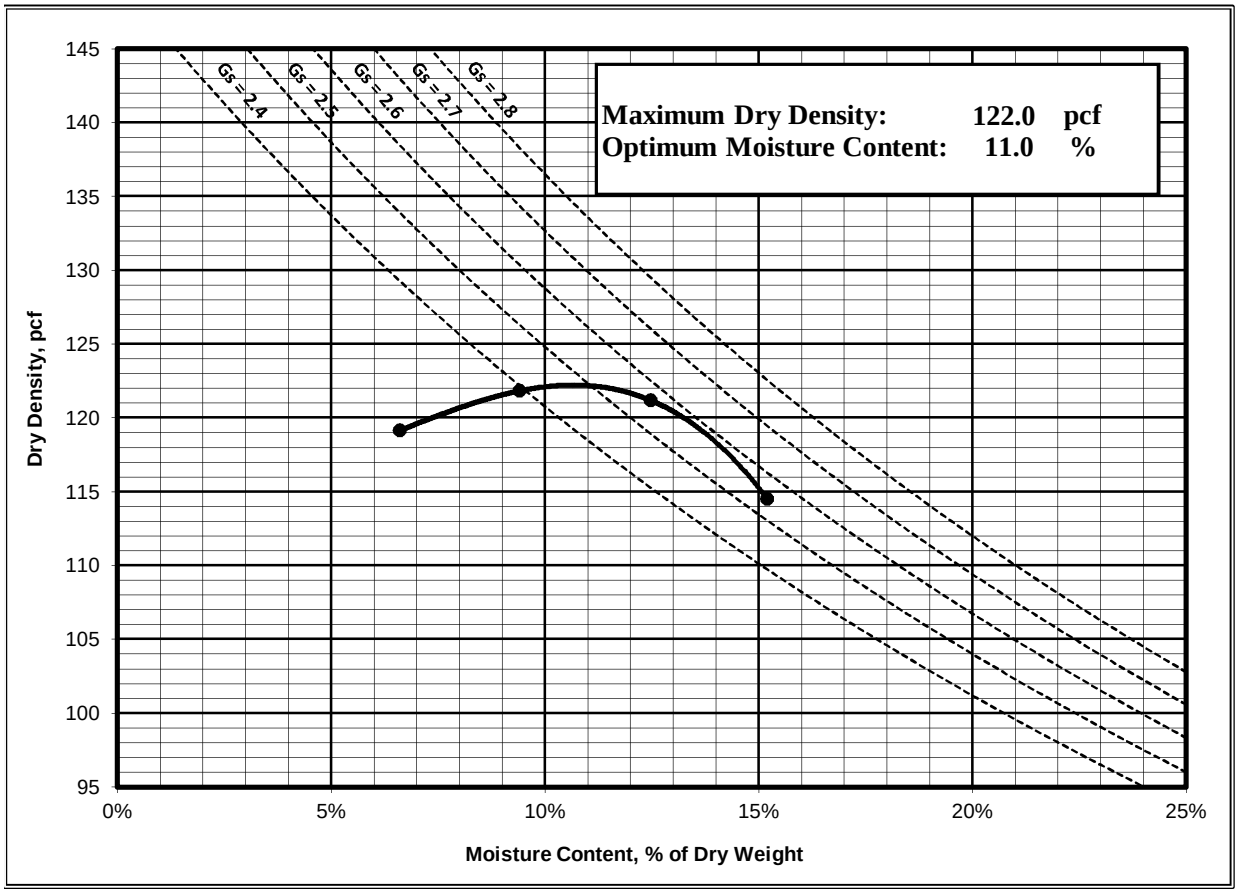
Sample Number	Sample Location	Soluble Sulfate SO_4-S	Soluble Chloride Cl	pH
1a.	B-1 @ 0'-4'	540 mg/kg	116 mg/kg	8.3
1b.	B-1 @ 0'-4'	530 mg/kg	115 mg/kg	8.3
1c.	B-1 @ 0'-4'	530 mg/kg	115 mg/kg	8.3
Average:		**533 mg/kg**	**115 mg/kg**	**8.3**

SALEM engineering group, inc.

Laboratory Compaction Curve
ASTM D1557

Project Name: Proposed Commercial Development - Calimesa, CA
Project Number: 3-219-1043
Date Sampled: 12/13/19 Date Tested: 12/19/19
Sampled By: SK Tested By: M. Noorzay
Sample Location: B-1 @ 0'-4'
Soil Description: Reddish Brown Clayey SAND (SC)
Test Method: Method A

	1	2	3	4
Weight of Moist Specimen & Mold, (g)	4178.8	4273.5	4319.0	4252.8
Weight of Compaction Mold, (g)	2258.4	2258.4	2258.4	2258.4
Weight of Moist Specimen, (g)	1920.4	2015.1	2060.6	1994.4
Volume of Mold, (ft^3)	0.0333	0.0333	0.0333	0.0333
Wet Density, (pcf)	127.0	133.3	136.3	131.9
Weight of Wet (Moisture) Sample, (g)	100.0	100.0	100.0	100.0
Weight of Dry (Moisture) Sample, (g)	93.8	91.4	88.9	86.8
Moisture Content, (%)	6.6%	9.4%	12.5%	15.2%
Dry Density, (pcf)	119.1	121.8	121.2	114.5



SALEM engineering group, inc.

APPENDIX

C

APPENDIX C
GENERAL EARTHWORK AND PAVEMENT SPECIFICATIONS

When the text of the report conflicts with the general specifications in this appendix, the recommendations in the report have precedence.

1.0 SCOPE OF WORK: These specifications and applicable plans pertain to and include all earthwork associated with the site rough grading, including, but not limited to, the furnishing of all labor, tools and equipment necessary for site clearing and grubbing, stripping, preparation of foundation materials for receiving fill, excavation, processing, placement and compaction of fill and backfill materials to the lines and grades shown on the project grading plans and disposal of excess materials.

2.0 PERFORMANCE: The Contractor shall be responsible for the satisfactory completion of all earthwork in accordance with the project plans and specifications. This work shall be inspected and tested by a representative of SALEM Engineering Group, Incorporated, hereinafter referred to as the Soils Engineer and/or Testing Agency. Attainment of design grades, when achieved, shall be certified by the project Civil Engineer. Both the Soils Engineer and the Civil Engineer are the Owner's representatives. If the Contractor should fail to meet the technical or design requirements embodied in this document and on the applicable plans, he shall make the necessary adjustments until all work is deemed satisfactory as determined by both the Soils Engineer and the Civil Engineer. No deviation from these specifications shall be made except upon written approval of the Soils Engineer, Civil Engineer, or project Architect.

No earthwork shall be performed without the physical presence or approval of the Soils Engineer. The Contractor shall notify the Soils Engineer at least 2 working days prior to the commencement of any aspect of the site earthwork.

The Contractor shall assume sole and complete responsibility for job site conditions during the course of construction of this project, including safety of all persons and property; that this requirement shall apply continuously and not be limited to normal working hours; and that the Contractor shall defend, indemnify and hold the Owner and the Engineers harmless from any and all liability, real or alleged, in connection with the performance of work on this project, except for liability arising from the sole negligence of the Owner or the Engineers.

3.0 TECHNICAL REQUIREMENTS: All compacted materials shall be densified to no less that 95 percent of relative compaction (90 percent for cohesive soils) based on ASTM D1557 Test Method (latest edition), UBC or CAL-216, or as specified in the technical portion of the Soil Engineer's report. The location and frequency of field density tests shall be determined by the Soils Engineer. The results of these tests and compliance with these specifications shall be the basis upon which satisfactory completion of work will be judged by the Soils Engineer.

4.0 SOILS AND FOUNDATION CONDITIONS: The Contractor is presumed to have visited the site and to have familiarized himself with existing site conditions and the contents of the data presented in the Geotechnical Engineering Report. The Contractor shall make his own interpretation of the data contained in the Geotechnical Engineering Report and the Contractor shall not be relieved of liability for any loss sustained as a result of any variance between conditions indicated by or deduced from said report and the actual conditions encountered during the progress of the work.

5.0 DUST CONTROL: The work includes dust control as required for the alleviation or prevention of any dust nuisance on or about the site or the borrow area, or off-site if caused by the Contractor's operation either during the performance of the earthwork or resulting from the conditions in which the Contractor leaves the site. The Contractor shall assume all liability, including court costs of codefendants, for all claims related to dust or wind-blown materials attributable to his work. Site preparation shall consist of site clearing and grubbing and preparation of foundation materials for receiving fill.

6.0 CLEARING AND GRUBBING: The Contractor shall accept the site in this present condition and shall demolish and/or remove from the area of designated project earthwork all structures, both surface and subsurface, trees, brush, roots, debris, organic matter and all other matter determined by the Soils Engineer to be deleterious. Such materials shall become the property of the Contractor and shall be removed from the site.

Tree root systems in proposed improvement areas should be removed to a minimum depth of 3 feet and to such an extent which would permit removal of all roots greater than 1 inch in diameter. Tree roots removed in parking areas may be limited to the upper 1½ feet of the ground surface. Backfill of tree root excavations is not permitted until all exposed surfaces have been inspected and the Soils Engineer is present for the proper control of backfill placement and compaction. Burning in areas which are to receive fill materials shall not be permitted.

7.0 SUBGRADE PREPARATION: Surfaces to receive Engineered Fill and/or building or slab loads shall be prepared as outlined above, scarified to a minimum of 12 inches, moisture-conditioned as necessary, and recompacted to 95 percent relative compaction (90 percent for cohesive soils).

Loose soil areas and/or areas of disturbed soil shall be moisture-conditioned as necessary and recompacted to 95 percent relative compaction (90 percent for cohesive soils). All ruts, hummocks, or other uneven surface features shall be removed by surface grading prior to placement of any fill materials. All areas which are to receive fill materials shall be approved by the Soils Engineer prior to the placement of any fill material.

8.0 EXCAVATION: All excavation shall be accomplished to the tolerance normally defined by the Civil Engineer as shown on the project grading plans. All over-excavation below the grades specified shall be backfilled at the Contractor's expense and shall be compacted in accordance with the applicable technical requirements.

9.0 FILL AND BACKFILL MATERIAL: No material shall be moved or compacted without the presence or approval of the Soils Engineer. Material from the required site excavation may be utilized for construction site fills, provided prior approval is given by the Soils Engineer. All materials utilized for constructing site fills shall be free from vegetation or other deleterious matter as determined by the Soils Engineer.

10.0 PLACEMENT, SPREADING AND COMPACTION: The placement and spreading of approved fill materials and the processing and compaction of approved fill and native materials shall be the responsibility of the Contractor. Compaction of fill materials by flooding, ponding, or jetting shall not be permitted unless specifically approved by local code, as well as the Soils Engineer. Both cut and fill shall be surface-compacted to the satisfaction of the Soils Engineer prior to final acceptance.

11.0 SEASONAL LIMITS: No fill material shall be placed, spread, or rolled while it is frozen or thawing, or during unfavorable wet weather conditions. When the work is interrupted by heavy rains, fill operations shall not be resumed until the Soils Engineer indicates that the moisture content and density of previously placed fill is as specified.

12.0 DEFINITIONS - The term "pavement" shall include asphaltic concrete surfacing, untreated aggregate base, and aggregate subbase. The term "subgrade" is that portion of the area on which surfacing, base, or subbase is to be placed.

The term "Standard Specifications": hereinafter referred to, is the most recent edition of the Standard Specifications of the State of California, Department of Transportation. The term "relative compaction" refers to the field density expressed as a percentage of the maximum laboratory density as determined by ASTM D1557 Test Method (latest edition) or California Test Method 216 (CAL-216), as applicable.

13.0 PREPARATION OF THE SUBGRADE - The Contractor shall prepare the surface of the various subgrades receiving subsequent pavement courses to the lines, grades, and dimensions given on the plans. The upper 12 inches of the soil subgrade beneath the pavement section shall be compacted to a minimum relative compaction of 95 percent based upon ASTM D1557. The finished subgrades shall be tested and approved by the Soils Engineer prior to the placement of additional pavement courses.

14.0 AGGREGATE BASE - The aggregate base material shall be spread and compacted on the prepared subgrade in conformity with the lines, grades, and dimensions shown on the plans. The aggregate base material shall conform to the requirements of Section 26 of the Standard Specifications for Class II material, ¾-inch or 1½-inches maximum size. The aggregate base material shall be compacted to a minimum relative compaction of 95 percent based upon CAL-216. The aggregate base material shall be spread in layers not exceeding 6 inches and each layer of aggregate material course shall be tested and approved by the Soils Engineer prior to the placement of successive layers.

15.0 AGGREGATE SUBBASE - The aggregate subbase shall be spread and compacted on the prepared subgrade in conformity with the lines, grades, and dimensions shown on the plans. The aggregate subbase material shall conform to the requirements of Section 25 of the Standard Specifications for Class II Subbase material. The aggregate subbase material shall be compacted to a minimum relative compaction of 95 percent based upon CAL-216, and it shall be spread and compacted in accordance with the Standard Specifications. Each layer of aggregate subbase shall be tested and approved by the Soils Engineer prior to the placement of successive layers.

16.0 ASPHALTIC CONCRETE SURFACING - Asphaltic concrete surfacing shall consist of a mixture of mineral aggregate and paving grade asphalt, mixed at a central mixing plant and spread and compacted on a prepared base in conformity with the lines, grades, and dimensions shown on the plans. The viscosity grade of the asphalt shall be PG 64-10, unless otherwise stipulated or local conditions warrant more stringent grade. The mineral aggregate shall be Type A or B, ½ inch maximum size, medium grading, and shall conform to the requirements set forth in Section 39 of the Standard Specifications. The drying, proportioning, and mixing of the materials shall conform to Section 39. The prime coat, spreading and compacting equipment, and spreading and compacting the mixture shall conform to the applicable chapters of Section 39, with the exception that no surface course shall be placed when the atmospheric temperature is below 50 degrees F. The surfacing shall be rolled with a combination steel-wheel and pneumatic rollers, as described in the Standard Specifications. The surface course shall be placed with an approved self-propelled mechanical spreading and finishing machine.

Appendix G

Paleontological Resources Records Search

Natural History Museum
of Los Angeles County
900 Exposition Boulevard
Los Angeles, CA 90007

tel 213.763.DINO
www.nhm.org

NATURAL HISTORY MUSEUM
LOS ANGELES COUNTY

Vertebrate Paleontology Section
Telephone: (213) 763-3325

e-mail: smcleod@nhm.org

28 January 2020

Dudek
605 Third Street
Encinitas, CA 92024

Attn: Sarah Siren, Senior Paleontologist

re: Vertebrate Paleontology Records Check for paleontological resources for the proposed RV Fueling Station and Retail Project, Dudek Project # 12214, in the City of Calimesa, Riverside County, project area

Dear Sarah:

I have conducted a thorough search of our paleontology collection records for the locality and specimen data for the proposed RV Fueling Station and Retail Project, Dudek Project # 12214, in the City of Calimesa, Riverside County, project area as outlined on the portion of the Yucaipa USGS topographic quadrangle map that you sent to me via e-mail on 9 January 2020. We do not have any fossil vertebrate localities that lie directly within the proposed project area boundaries, but we do have localities somewhat nearby from sedimentary deposits similar to those that may occur in the proposed project area, either at the surface or at depth.

In the entire proposed project area there are surface deposits of older Quaternary Alluvium, derived as alluvial fan deposits from the San Timoteo Badlands just to the south. Our closest vertebrate fossil locality from somewhat similar older Quaternary deposits is LACM 4540, almost due south of the proposed project area on the northeastern side of the San Jacinto Valley just west of Jack Rabbit Trail, that produced a specimen of fossil horse, *Equus*. Our next closest older Quaternary locality is LACM 8062, almost due west of the proposed project area west of Mira Loma, that produced fossil specimens of undetermined elephant, Proboscidea, bear, *Ursus*, dog, *Canis dirus*, horse, *Equus*, camel, *Camelops*, and bison, *Bison*, at shallow but unstated depth. Slightly farther west-southwest of the proposed project area our older Quaternary

locality LACM 7811 produced a fossil specimen of coachwhip, *Masticophis flagellum*, at a depth of 9 to 11 feet below the surface.

Nearby less elevated terrain is geologically mapped as having exposures of the Plio-Pleistocene San Timoteo Formation, and that rock unit probably underlies the older Quaternary deposits in the proposed project area. We have a series of localities from the San Timoteo Formation, LACM (CIT) 133, LACM (CIT) 515 and LACM 7618-7622, all south of the proposed project area in the San Timoteo Badlands on both sides of the Moreno Valley Freeway (Highway 60). These localities all produced specimens of fossil horse, *Equus*, and camel, Camelidae.

Very shallow excavations in the older Quaternary Alluvium found at the surface in the proposed project area are unlikely to uncover any significant vertebrate fossils. Deeper excavations that extend down into older sedimentary deposits, however, may well encounter significant fossil vertebrate remains. Any substantial excavations in the proposed project area, therefore, should be monitored closely to quickly and professionally recover any fossil remains discovered while not impeding development. Also, sediment samples should be collected and processed to determine the small fossil potential in the proposed project area. Any fossils recovered during mitigation should be deposited in an accredited and permanent scientific institution for the benefit of current and future generations.

This records search covers only the vertebrate paleontology records of the Natural History Museum of Los Angeles County. It is not intended to be a thorough paleontological survey of the proposed project area covering other institutional records, a literature survey, or any potential on-site survey.

Sincerely,

Samuel A. McLeod

Samuel A. McLeod, Ph.D.
Vertebrate Paleontology

enclosure: invoice

Appendix H.1

Noise Technical Memo

605 THIRD STREET
ENCINITAS, CALIFORNIA 92024
T 760.942.5147 F 760.632.0164

MEMORANDUM

To:	Claudia Grajeda J & T Management, Inc. 139 Radio Road *Corona, CA 92879*
From:	Mark Storm, INCE Bd. Cert.
Subject:	Noise Analysis for the 7th Street and County Line Road RV Fueling and Retail Project
Date:	2 December 2019
Attachment(s):	A: Acoustic Terminology and Definitions B: Construction Noise Model Input and Output Data C: Traffic Noise Model (v. 2.5) Input and Output Data D: Operational Noise Model Input and Output Data

Dudek is pleased to submit this noise impact assessment to assist the City of Calimesa (City) with initial environmental planning requirements for the proposed 7th Street and County Line Road RV Fueling and Retail Project (project).

This memorandum estimates potential noise and vibration impacts from construction and operation of the project in accordance with the California Environmental Quality Act (CEQA) Guidelines.

The contents and organization of this memorandum are as follows: project description, environmental setting, regulatory setting, noise and vibration impacts assessment, conclusions, and references cited. Attachment A provides a glossary of common acoustical terms that should help acquaint the reader with metrics and descriptors used herein to present and discuss results of the noise impact assessment for the proposed project.

1 Project Description

The Project includes the construction of 3,000 square feet of coffee/donut shop and a recreational vehicle (RV) fueling facility on a 1.3-acre site, which is currently unoccupied as seen in Figure 1, Project Location. Right-turn in-only access to the Project site would be provided on County Line Lane via two protected driveways.

2 Environmental Setting

2.1 Noise Characteristics and Terminology

Pressure fluctuations, traveling as waves through air from a source, exert a force perceived by the human ear as sound. Sound pressure level (often referred to generally as “sound level” or “noise level”) is expressed by way of a logarithmic scale in decibels (dB) that represent magnitude of these air pressure waves with respect to the

threshold of average human hearing. The human ear is more sensitive to middle and higher frequencies (those usually associated with speech) of the audible spectrum, especially when the noise levels are quieter; thus, to accommodate for this phenomenon, a decibel weighting system was developed to mimic this human hearing frequency response. The frequency weighting called the "A" scale is typically used for quantifying typical environmental sound levels that de-emphasizes the low frequency components of the sound in a manner similar to the response of an average healthy human ear. An A-weighted sound level is thus described in units of "dBA" and distinguishes the value from a "flat" or unweighted dB value. In a manner similar to the scaling of temperature on a thermometer, Table 1 provides examples of common indoor and outdoor sound sources having A-weighted levels that "line-up" with the listed dB values.

Table 1: Typical Sound Levels in the Environment and Industry

Common Outdoor Activities	Noise Level (dB)	Common Indoor Activities
—	110	Rock band
Jet flyover at 300 meters (1,000 feet)	100	—
Gas lawn mower at 1 meter (3 feet)	90	—
Diesel truck at 15 meters (50 feet), at 80 kph (50 mph)	80	Food blender at 1 meter (3 feet)
		Garbage disposal at 1 meter (3 feet)
Noisy urban area, daytime	70	Vacuum cleaner at 3 meters (10 feet)
gas lawn mower at 30 meters (100 feet)		
Commercial area	60	Normal speech at 1 meter (3 feet)
Heavy traffic at 90 meters (300 feet)		
Quiet urban daytime	50	Large business office
		Dishwasher, next room
Quiet urban nighttime	40	Theater, large conference room (background)
Quiet suburban nighttime	30	Library
Quiet rural night time	20	Bedroom at night, concert hall (background)
—	10	Broadcast/recording studio
Lowest threshold of human hearing	0	Lowest threshold of human hearing

Source: Caltrans 2013a.
Notes: kph = kilometers per hour; mph = miles per hour

SOURCE: ESRI 2018

DUDEK

0 250 500 Feet
0 70 140 Meters
1:6,000

FIGURE 1

Project Location

RV Station Project

The equivalent noise level L_{eq}, also referred to as the energy-average sound level, is a single number representing the fluctuating sound level in decibels (dB) over a specified period of time. It is a sound-energy average of the fluctuating level and is equal to a constant unchanging sound of that dB level. Community noise sources vary continuously, being the product of many noise sources at various distances, all of which in aggregate tend to constitute a relatively stable background sound environment. This background, added to perceptibly dominant acoustical contributors (i.e., those that are the loudest and/or closest to the listener position) makes the overall "ambient" sound that a sound level meter can detect with its microphone and quantify as a dB level.

Noise levels are generally higher during the daytime and early evening when traffic (including airplanes), commercial, and industrial activity is the greatest. However, noise sources experienced during nighttime hours when background levels are generally lower can be potentially more conspicuous and irritating to the receiver. In order to evaluate noise in a way that considers periodic fluctuations experienced throughout the day and night, a concept termed "community noise equivalent level" (CNEL) was developed. The CNEL scale represents a time-weighted 24-hour average noise level based on the A-weighted equivalent (L_{eq}) sound level. But more than merely a 24-hour L_{eq}, CNEL accounts for the increased noise sensitivity during the evening hours (7 p.m. to 10 p.m.) and nighttime hours (10 p.m. to 7 a.m.) by adding 5 dB to the hourly average sound levels occurring during the evening hours and 10 dB to the hourly average sound levels occurring during nighttime hours.

2.1.2 Exterior Noise Distance Attenuation

Noise sources are largely classified in two forms: 1) point sources, such as stationary equipment or a group of construction vehicles and equipment working within a spatially limited area at a given time; and 2) line sources, such as a roadway with a large number of pass-by sources (motor vehicles). Sound generated by a point source typically diminishes (attenuates) at a rate of 6.0 dBA for each doubling of distance from the source to the receptor at acoustically "hard" sites and at a rate of 7.5 dBA for each doubling of distance from source to receptor at acoustically "soft" sites. These attenuation rates would also be expected for sound propagation away from a horizontal area source, which can be approximated as a single point such as the geographic center of the area. By comparison, sound generated by a line source (such as a roadway) typically attenuates at a rate of 3.0 dBA for each doubling of distance from the source to the receptor at acoustically "hard" sites and at a rate of 4.5 dBA for each doubling of distance from source to receptor at acoustically "soft" sites.

Sound levels can also be attenuated by man-made or natural barriers. For the purpose of a sound attenuation discussion, hard, smooth, or otherwise acoustically reflective surfaces do not provide any excess ground-effect attenuation and are characteristic of sealed asphalt roads, bodies of water, and hard-packed soils. An acoustically soft or absorptive surface, on the other hand, is exemplified by fresh-fallen snow, tilled soils, or thickly-vegetated ground cover.

2.1.3 Vibration

Vibration is an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. Vibration can be a serious concern, causing buildings to shake and rumbling sounds to be heard. In contrast to noise, vibration is not a common environmental problem. It is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads. Some

common sources of vibration are trains, buses on rough roads, and construction activities, such as blasting, pile driving, and heavy earthmoving equipment.

Several different descriptors are used to quantify vibration. Peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. PPV is most frequently used to describe vibration impacts to buildings and is usually measured in inches per second (ips). The root mean square (RMS) amplitude is most frequently used to describe the effect of vibration on the human body and is defined as the average of the squared amplitude of the signal. Decibel notation (VdB) is commonly used to describe RMS amplitude with respect to a reference quantity. The decibel notation acts to compress, and thus make more convenient for presentation and discussion purposes, the range of numbers required to describe vibration.

High levels of vibration may cause risk of or actual damage to buildings. However, most people consider vibration to be an annoyance that can affect concentration or disturb sleep. In addition, high levels of vibration can interfere with processes or equipment that are highly sensitive to vibration (e.g., electron microscopes). Most perceptible indoor vibration is caused by sources within buildings, such as operation of mechanical equipment, movement of people, or slamming of doors. Typical outdoor sources of perceptible vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If the roadway is smooth, which means there are little or no bumps that could cause a slight wheel drop or other force impulse, the vibration from traffic is rarely perceptible.

2.1.4 Sensitive Receptors

Noise- and vibration-sensitive land uses are locations where people reside or where the presence of unwanted sound and/or vibration could adversely affect the use of the land. Residences, schools, hospitals, guest lodging, libraries, and some passive recreation areas would be considered noise and vibration sensitive and may warrant unique measures for protection from intruding noise.

Sensitive receptors near the project site include existing single-family residential uses to the south, west, and north, the closest of which are located approximately 65 feet from the project site boundary. These sensitive receptors represent the nearest residential land uses with the potential to be impacted by construction and operation of the proposed project. Additional sensitive receptors are located farther from the project site in the surrounding community and would be less impacted by noise and vibration levels than the above-listed sensitive receptors.

3 Regulatory Setting

City of Calimesa, General Plan

The City of Calimesa General Plan (August 2014) defines noise levels under 60 dBA CNEL as being completely compatible with residential use and levels between 60 and 70 dBA CNEL as tentatively compatible. The General Plan also includes the following noise goals and policies:

- Goal N-1. Ensure that all land uses are protected from excessive and unwanted noise.
- Goal N-2. Prevent and mitigate the adverse impacts of excessive noise exposure on the residents, employees, visitors, and noise-sensitive uses in Calimesa.
- Policy N-4. Encourage noise-tolerant land uses such as commercial or industrial development to locate in areas already committed to land uses that are noise-producing.

- Policy N-5. Ensure that noise-sensitive uses do not encroach into areas needed by noise-generating uses.
- Policy N-7. Consider the following uses to be sensitive to noise and vibration, and discourage these uses in areas where existing or projected future noise levels would be in excess of 65 dBA CNEL and/or vibration would be more than 0.0787 peak particle velocity (inches per second): schools; hospitals; rest homes; long-term care facilities; mental care facilities; residential uses; libraries; passive recreation uses; and places of worship.
- Policy N-31. Ensure that construction activities are regulated to establish hours of operation in order to prevent and/or mitigate the generation of excessive or adverse noise impacts on surrounding areas.
- Policy N-32. Require that all construction equipment be kept properly tuned and use noise reduction features (e.g., mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer.

City of Calimesa, Municipal Code

The City has developed standards for noise in its Noise Ordinance. Per the Municipal Code, noise from operations at any zone cannot exceed the exterior noise limit of another zone, as measured at the property line. The ordinance states that single and low-density residential zones (including R-I, R-T, R-2, RR, and SP) shall not be subject to noise levels , greater than 50 dB; multi-family residential uses (including R-3, SP, and PRD) to noise levels greater than 55 dB; commercial uses to levels greater than 60 dB; and manufacturing .uses to levels greater than 70 dB. It also states that from 10 p.m. to 7 a.m., single family and low residential zones should have ambient noise levels no greater than 40 dB, and multi-family zones an ambient noise level no greater than 45 dB.

Municipal Code Section 8.15.080(A) prohibits the operation of any single or a combination of powered construction equipment at any construction site at the following intervals: before 7 AM or after 7 PM on weekdays; before 10 AM or after 5 PM on Saturdays, Sundays, and federal holidays. When January 1st, July 4th, or December 25th fall on a Sunday, no construction equipment shall be operated before 10 AM and after 5 PM on the following Monday.

No construction equipment is allowed to cause noise in excess of 75 dBA for more than eight hours during any 24-hour period when measured at a residential property line or more than 78 dBA over 4 hours. No intermittent construction noise is allowed over 84 dBA L_{eq} (1-hour) or over 90 dBA L_{25} during any 15-minute period is also prohibited.

4 Thresholds of Significance

The following significance criteria are based on Appendix G of the California Environmental Quality Act Guidelines (14 CCR 15000 et seq.) and will be used to determine the significance of potential noise impacts. Impacts related to noise would be significant if the proposed project would result in the following:

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. Expose people residing or working in the project area to excessive noise levels (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 2 miles of a public airport or public use airport)

The following Section 5 considers each of these three significance criteria, evaluating potential impacts with respect to relevant regulations, standards, and guidance that have been introduced in Section 3.

5 Impact Discussion

a) Would the project result in 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?

Short-Term Construction

Construction activities would occur during the City's allowable hours of operation. The noise levels generated by construction equipment would vary depending upon factors such as the type and specific model of the equipment, the operation being performed and the condition of the equipment. The average sound level of the construction activity also depends upon the amount of time that the equipment operates and the intensity of the construction during the time period. Construction would involve several phases including grading, foundation, canopy and retail work, and site work. The typical maximum noise levels for various pieces of construction equipment at a distance of 50 feet are presented in Table 2. Project construction equipment would include standard equipment such as front end loaders, excavators, water trucks, cement trucks, pavers, rollers, and miscellaneous trucks. The highest noise levels from project construction are predicted to occur during foundation activities when noise levels from construction would be as high as 75 dBA L_{eq} at the nearest existing residences, approximately 65 feet away. At typical distances (which includes equipment operation distributed across the site, not just at the closest point to adjacent residences), construction noise would range from approximately 63 to 68 dBA L_{eq}.

Table 2. Typical Construction Equipment Maximum Noise Levels

Equipment Type	Typical Equipment (L_{max}, dBA at 50 Feet)
Air compressor	78
Backhoe	78
Concrete pump truck	81
Grader	85
Crane	81
Dump Truck	76
Dozer	82
Generator	72
Front End Loader	79
Paver	77
Pneumatic tools	85
Water pump	77

Source: DOT 2006.
Note: L_{max} = maximum sound level; dBA = A-weighted decibels.

A Microsoft Excel–based noise prediction model emulating and using reference data from the Federal Highway Administration Roadway Construction Noise Model (RCNM) (FHWA 2008) was used to estimate construction noise levels at the nearest occupied noise-sensitive land use. (Although the RCNM was funded and promulgated by the Federal Highway Administration, it is often used for non-roadway projects, because the same types of construction equipment used for roadway projects are often used for other types of construction.) Input variables for the predictive modeling consist of the equipment type and number of each (e.g., two graders, a loader, a tractor), the duty cycle for each piece of equipment (e.g., percentage of time within a specific time period, such as an hour, when the equipment is expected to operate at full power or capacity and thus make noise at a level comparable to what is presented in Table 2), and the distance from the noise-sensitive receiver to the construction zone. The predictive model also considers how many hours that equipment may be on site and operating (or idling) within an established work shift. Conservatively, no topographical or structural shielding was assumed in the modeling. The RCNM has default duty-cycle values for the various pieces of equipment, which were derived from an extensive study of typical construction activity patterns. Those default duty-cycle values were used for this noise analysis, which is detailed in Attachment B, Construction Noise Model Input and Output Data, and produce the predicted results displayed in Table 3.

Table 3
Construction Noise Modeling Summary Results

Construction Phase	Predicted 8-hour L_{eq} (dBA)	
	Nearest Receiver to Project Property Line (65')	*Nearest Receiver to Project Geographic Center (200')*
Grading	73	63
Foundation	75	68
Canopy and Retail Work	74	64
Site work	75	65

Two predicted levels appear in Table 3 for each construction phase: 1) construction noise received by the nearest receiver when a portion of the anticipated construction equipment onsite (e.g., front-end loader) is working at the closest edge of the project boundary to the adjacent receiver, such as at the limits of grading or paving; and 2) construction noise from all expected equipment onsite, with an average location defined by the geographic center of the project site. Although the higher predicted construction noise levels are with respect to activities on or near the project boundary, these levels still would not exceed the City's 75 dBA $L_{eq\ 8hr}$ noise level criterion. Construction work would be intermittent and temporary. Therefore, temporary construction-related noise impacts would be less than significant.

Long-Term Operational

Increase of Off-Site Roadway Traffic Noise

The proposed project would result in the contribution of additional vehicle trips on local arterial roadways (i.e., County Line Lane), which could result in increased traffic noise levels at adjacent noise-sensitive land uses. Attachment C, Traffic Noise Model (v. 2.5) Input and Output Data, contains a spreadsheet with traffic volume data (average daily trips, ADT) for County Line Lane based on the Traffic Impact Assessment prepared for the

proposed project (Ganddini 2019). In particular, the proposed project would generate 1500 ADTs along County line Lane. Potential noise effects from vehicular traffic were assessed using the Federal Highway Administration's Traffic Noise Model version 2.5 (FHWA 2004). Information used in the model included the roadway geometry, posted traffic speeds, and traffic volumes for the following scenarios: existing (year 2019), existing plus project, existing plus ambient without project, existing plus ambient plus cumulative plus project, buildout (2023), and buildout plus project.

The City's Noise Element establishes a policy for exterior use areas of sensitive land uses to be protected from high noise levels. The Noise Element sets 65 dBA CNEL for the outdoor (i.e., exterior use) areas and 45 dBA CNEL for interior areas (e.g., residential indoor space) as the upper limit for normally acceptable levels. In addition, for the purposes of this noise analysis, traffic-related noise impacts are considered significant when they cause an increase of 3 dB or more from existing noise levels. An increase or decrease in noise level of at least 3 dB is required before any noticeable change in community response would be expected (Caltrans 2013a).

Traffic noise levels were modeled at representative noise-sensitive receivers M1 through M5, as shown in Figure 2, Modeled Receiver Locations. The receivers were modeled to be 5 feet above the local ground elevation. The noise model results are summarized in Table 4.

Table 4. Off-site Roadway Traffic Noise Modeling Results

Modeled Receiver Tag (Location Description)	Exisiting (2019) Noise Level	Exisiting with project Noise Level	Existing plus ambient Noise Level	Existing plus Cumulative and project Noise Level	Year 2023 without Project Noise Level	Year 2023 with Project Noise Level	Maximum Project-Related Noise Level Increase
	(dBA CNEL)	(dBA CNEL)	(dBA CNEL)	(dBA CNEL)	(dBA CNEL)	(dBA CNEL)	(dB)
M1 Nearest Resident	61.4	62.8	61.4	63.1	62.9	63.7	1.7
M2 Eastern Property line	63.7	63.9	63.7	64	63.8	64.1	0.3
M3 Southern Property line	62.5	63.9	62.5	64.5	63.7	65	2
M4 Northern Resident	65.4	65.9	65.4	66.3	66	66.7	0.9
M5 Southern Resident	60	60.3	60	60.5	60.2	60.6	0.5

Notes: dBA = A-weighted decibel; CNEL = Community Noise Equivalent Level; dB = decibel.

Table 4 shows that at all five listed representative receivers, the addition of proposed project traffic to the roadway network would result in a CNEL increase of less than 3 dB, which is below the discernible level of

change for the average healthy human ear. Thus, a **less-than-significant impact** is expected for proposed project-related off-site traffic noise increases affecting existing residences in the vicinity.

Stationary Operations Noise

The proposed project is expected to feature "stationary" producers of noise associated with onsite operations that are distinct from the transportation noise studied in the preceding section. The assumed major onsite operating noise sources are as follows:

- The 3,000 square foot retail facility (e.g., coffee shop) would likely feature a packaged air-conditioner on its roof, which we could assume would be something like a 4-ton (refrigeration) unit resembling a Carrier CA16NA 048 having a reference sound power level of 78 dBA (76 dBA if equipped with "sound shield", Carrier 2012).

- Idling recreational vehicles (RV) idling just before and after using the fuel pumps, up to one at a time at night and idling for no more than five minutes in any hour (8.25% of the time), consistent with state law for trucks. Conservatively, a large RV is considered an idling bus with L_{max} = 75 dBA at 50 feet.

- Up to one fuel pump operates at night for no more than 20 minutes in any hour (33% of the time), and generates no more than 83 dBA at one meter.

Table 5 below shows the estimated combination of these three onsite operational noise sources and the applicable City of Calimesa noise thresholds. Attachment D, Operational Noise Model Input and Output Data, provides details of the calculated values appearing in Table 5. No exceedances with respect to the municipal standards are expected; thus, operational noise impact from stationary sources should be less than significant.

Table 5. Predicted Project Stationary Operations Noise at Nearest Sensitive Receptors

Receptor	13534 7th Place	727 County Line Lane	727 County Line Lane	948 7th Place
	(north of Site)	*(north of Site)*	*(west of Site)*	*(south of Site)*
Predicted Stationary Ops Noise Level ($L_{eq\ hour}$)	51	53	51	48
Nighttime hourly L_{eq} Limit (commercial zone)	55	55	55	55
Exceedance?	no	no	no	no

b) Would the project result in generation of excessive groundborne vibration or groundborne noise levels?

Construction activities may expose persons to excessive groundborne vibration or groundborne noise, causing a potentially significant impact. Caltrans has collected groundborne vibration information related to construction activities (Caltrans 2013b). Information from Caltrans indicates that continuous vibrations with a PPV of approximately 0.2 ips is considered annoying. For context, heavier pieces of construction equipment, such as a bulldozer that may be expected on the project site, have peak particle velocities of approximately 0.089 ips or less at a reference distance of 25 feet (DOT 2006).

Groundborne vibration attenuates rapidly, even over short distances. The attenuation of groundborne vibration as it propagates from source to receptor through intervening soils and rock strata can be estimated with expressions found in FTA and Caltrans guidance. By way of example, for a bulldozer operating on site and as close as the western project boundary (i.e., 65 feet from the nearest receiving sensitive land use) the estimated vibration velocity level would be 0.021 ips per the equation as follows (FTA 2006):

$PPV_{rcvr} = PPV_{ref} * (25/D)^{1.5} = 0.021 = 0.089 * (25/65)^{1.5}$

In the above equation, PPV_{rcvr} is the predicted vibration velocity at the receiver position, PPV_{ref} is the reference value at 25 feet from the vibration source (the bulldozer), and D is the actual horizontal distance to the receiver. Therefore, at this predicted PPV, the impact of vibration-induced annoyance to occupants of nearby existing homes would be less than significant.

Construction vibration, at sufficiently high levels, can also present a building damage risk. However, anticipated construction vibration associated with the proposed project would yield levels of 0.021 ips PPV, which do not surpass the guidance limit of 0.2 to 0.3 ips PPV for preventing damage to residential structures (Caltrans 2013b) and is well below the General Plan's threshold of 0.0787 ips PPV. Because the predicted vibration level at 65 feet is less than this threshold, the risk of vibration damage to nearby structures is considered less than significant.

Once operational, the proposed project would not be expected to feature major onsite producers of groundborne vibration. Anticipated mechanical systems like heating, ventilation, and air-conditioning units are designed and manufactured to feature rotating (fans, motors) and reciprocating (compressors) components that are well-balanced with isolated vibration within or external to the equipment casings. If one were to consider an expected RV conservatively comparable to a loaded truck, which FTA guidance indicates has a reference vibration velocity level of 0.076 ips at 25 feet, then the travel of RVs onsite or on the adjoining streets would result in vibration velocity levels at nearest occupied residences that are compliant with the City's General Plan threshold of 0.0787 ips PPV. On these bases, potential vibration impacts due to proposed project operation would be **less than significant**.

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?***

There are no private airstrips within the vicinity of the project site. The closest airport to the project site is the Redlands Municipal Airport, approximately 6.95 miles northwest of the site. According to the Airport Land Use Compatibility Plan Figure 3B, Noise Concerns: Noise, the project site is not located within any noise contours and would therefore not expose people residing or working in the project area to excessive noise levels. Impacts from aviation overflight noise exposure would be **less than significant** .

5 Conclusions

Based upon the modeled construction, traffic and operational noise, predicted sound levels are not in excess of City standards at the Project boundary with its neighbors.

We trust that this technical memorandum meets your Project needs with the City. Should you have any questions or require additional information, please do not hesitate to contact Mark Storm at (760) 479-4297, mstorm@dudek.com; or, Connor Burke at (760) 479-4272, cburke@dudek.com.

Sincerely,

Mark Storm, INCE Bd. Cert.
Acoustic Services Manager

Connor Burke
Environmental Analyst

Att. *A: Acoustic Terminology and Definitions*
B: Construction Noise Model Input and Output Data
C: Traffic Noise Model (v. 2.5) Input and Output Data
D: Operational Noise Model Input and Output Data

6 References

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Attachment A

Acoustic Terminology and Definitions

Attachment A -- Acoustic Terminology & Definitions

Term	Definition
Ambient Noise Level	The normal or existing sounds pressure level of environmental noise at a given location. The composite of noise from all sources near and far.
Decibel	dB is the unit for measuring sound pressure level, equal to 10 times the logarithm to the base 10 of the ratio of the measured sound pressure squared to a reference pressure, which is 20 micro-Pascal.
A-Weighted Sound Level	dBA is the sound pressure level in decibels as measured on a sound level meter using the A-weighted filter network. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise.
Community Noise Equivalent Level	CNEL is the A-weighted equivalent continuous sound exposure (CNEL) level for a 24-hour period with a ten dB adjustment added to sound levels occurring during nighttime hours (10 pm to 7 am) and a five dB adjustment added to the sound levels occurring during the evening hours (7 pm to 10 pm).
Day / Night Noise Equivalent Level	L_{dn} (or DNL) is the A-weighted equivalent continuous sound exposure level for a 24-hour period with a ten dB adjustment added to sound levels occurring during nighttime hours (10 pm to 7 am).
Equivalent Sound Level	L_{eq} is the sound level corresponding to a steady state sound level and containing the same total energy as a time varying signal over a given sample period.
Acoustic Center	For a source, the position where the propagating waves can be traced back to a single point of origin.

Attachment B

Construction Noise Model Input and Output Data

Project 12214 - Retail/RV Station
Nearest Sensitive Receiver to Construction Equipment *at Project Property Line*

noise level limit for construction phase, per Calimesa regs = 75
allowable hours over which Leq is to be averaged (per Calimesa regs) = 8

Construction Phase	Equipment Type (as identified in FHWA RCNM Users' Guide Table 1)	Total Equipment Qty	AUF % (from FHWA RCNM)	Reference Lmax @ 50 ft. from FHWA RCNM	Client Equipment Description, Data Source and/or Notes	Source to NSR Distance (ft.)	Distance-Adjusted Lmax	Allowable Operation Time (hours)	Allowable Operation Time (minutes)	Predicted 8-hour Leq
Grading	Front End Loader	1	40	79		65	76.7	8	480	73
							Total for Grading Phase:			**72.7**
Foundation	Flat Bed Truck	0	40	74		65	71.7	0	0	0
	Excavator	1	40	81		65	78.7	8	480	75
	Concrete Mixer Truck	0	40	79		65	76.7	0	0	0
							Total for Foundation Phase:			**74.7**
Canopy and Retail Work	Flat Bed Truck	1	40	74		65	71.7	8	480	68
	Welder / Torch	1	40	73		65	70.7	8	480	67
	Compressor (Air)	1	40	78		65	75.7	8	480	72
							Total for Canopy and Retail Work Phase:			**74.1**
Site Work	Paver	1	50	77		65	74.7	6	360	70
	Roller	1	20	80		65	77.7	8	480	71
	Flat Bed Truck	1	40	74		65	71.7	8	480	68
							Total for Site Work Phase:			**74.6**

Project 12214 - Retail/RV Station
Nearest Sensitive Receiver to Construction Equipment *at Project Acoustic (Geographic) Center*

noise level limit for construction phase, per Calimesa regs = 75
allowable hours over which Leq is to be averaged (per Calimesa regs) = 8

Construction Phase	Equipment Type (as identified in FHWA RCNM Users' Guide Table 1)	Total Equipment Qty	AUF % (from FHWA RCNM)	Reference Lmax @ 50 ft. from FHWA RCNM	Client Equipment Description, Data Source and/or Notes	Source to NSR Distance (ft.)	Distance-Adjusted Lmax	Allowable Operation Time (hours)	Allowable Operation Time (minutes)	Predicted 8-hour Leq
Grading	Front End Loader	1	40	79		200	67.0	8	480	63
							Total for Grading Phase:			**63.0**
Foundation	Flat Bed Truck	1	40	74		200	62.0	8	480	58
	Excavator	1	40	81		200	69.0	9	540	65
	Concrete Mixer Truck	1	40	79		200	67.0	8	480	63
							Total for Foundation Phase:			**67.9**
Canopy and Retail Work	Flat Bed Truck	1	40	74		200	62.0	8	480	58
	Welder / Torch	1	40	73		200	61.0	8	480	57
	Compressor (Air)	1	40	78		200	66.0	8	480	62
							Total for Canopy and Retail Work Phase:			**64.3**
Site Work	Paver	1	50	77		200	65.0	7	420	61
	Roller	1	20	80		200	68.0	8	480	61
	Flat Bed Truck	1	40	74		200	62.0	8	480	58
							Total for Site Work Phase:			**65.1**

Attachment C

Traffic Noise Model (v. 2.5) Input and Output Data

Dudek 21 November 2019
CB TNM 2.5

INPUT: ROADWAYS
PROJECT/CONTRACT: RV/Gas
RUN: Existing

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway Name	Width	Points Name	No.	Coordinates (pavement) X	Y	Z	Flow Control Control Device	Speed Constraint	Percent Vehicles Affected	Segment Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
Roadway2	16.0	point3	3	1,622,482.2	12,343,842.0	2,414.70				Average	
		point4	4	1,622,295.2	12,343,838.0	2,401.57				Average	
		point5	5	1,622,078.5	12,343,833.0	2,401.57				Average	
		point6	6	1,621,978.0	12,343,833.0	2,398.29				Average	
		point7	7	1,621,765.4	12,343,829.0	2,398.29					
Roadway3	15.0	point23	23	1,619,615.6	12,343,504.0	2,358.92				Average	
		point24	24	1,619,656.8	12,343,507.0	2,362.20				Average	
		point25	25	1,619,732.4	12,343,508.0	2,362.20				Average	
		point26	26	1,619,858.1	12,343,508.0	2,362.20				Average	
		point27	27	1,619,934.6	12,343,507.0	2,368.77				Average	
		point28	28	1,619,995.2	12,343,505.0	2,368.77				Average	
		point29	29	1,620,093.2	12,343,507.0	2,368.77				Average	
		point153	153	1,620,160.8	12,343,506.0	2,365.49					
North County Line Lane	30.0	point49	49	1,620,623.1	12,343,794.0	2,365.49				Average	
		point50	50	1,620,568.9	12,343,796.0	2,365.49				Average	
		point51	51	1,620,484.2	12,343,793.0	2,368.77				Average	
		point52	52	1,620,315.6	12,343,791.0	2,368.77				Average	
		point53	53	1,620,223.2	12,343,791.0	2,358.92				Average	
		point54	54	1,620,174.6	12,343,784.0	2,358.92				Average	
		point55	55	1,620,162.5	12,343,759.0	2,362.20				Average	
		point56	56	1,620,162.0	12,343,541.0	2,368.77					
Roadway5	30.0	point57	57	1,620,668.6	12,342,799.0	2,378.61				Average	
		point58	58	1,620,669.4	12,342,941.0	2,375.33				Average	
		point59	59	1,620,671.1	12,343,061.0	2,372.05				Average	
		point60	60	1,620,670.0	12,343,217.0	2,368.77				Average	

		point61	61	1,620,668.8	12,343,311.0	2,362.20				Average	
		point62	62	1,620,669.6	12,343,396.0	2,365.49				Average	
		point63	63	1,620,670.1	12,343,527.0	2,372.05					
Roadway6	12.0	point73	73	1,620,519.8	12,344,681.0	2,342.52				Average	
		point74	74	1,620,604.0	12,344,424.0	2,358.92				Average	
		point75	75	1,620,696.2	12,344,109.0	2,358.92				Average	
		point76	76	1,620,771.5	12,343,835.0	2,365.49				Average	
		point77	77	1,620,832.2	12,343,629.0	2,375.33					
Roadway7	12.0	point78	78	1,621,241.6	12,343,012.0	2,385.17				Average	
		point79	79	1,621,191.0	12,343,090.0	2,385.20				Average	
		point80	80	1,621,111.2	12,343,197.0	2,372.05				Average	
		point81	81	1,621,035.5	12,343,311.0	2,368.77				Average	
		point82	82	1,620,951.8	12,343,430.0	2,368.77				Average	
		point83	83	1,620,857.6	12,343,571.0	2,378.61					
Roadway8	60.0	point84	84	1,621,300.9	12,343,003.0	2,385.17				Average	
		point85	85	1,621,235.4	12,343,151.0	2,380.00				Average	
		point86	86	1,621,170.5	12,343,298.0	2,380.00				Average	
		point87	87	1,621,116.9	12,343,419.0	2,378.60				Average	
		point88	88	1,621,082.5	12,343,497.0	2,378.61				Average	
		point89	89	1,621,014.9	12,343,647.0	2,378.60					
Roadway9	60.0	point95	95	1,620,575.4	12,344,780.0	2,355.64				Average	
		point96	96	1,620,635.4	12,344,641.0	2,362.20				Average	
		point97	97	1,620,689.9	12,344,524.0	2,365.49				Average	
		point98	98	1,620,741.5	12,344,416.0	2,365.50				Average	
		point99	99	1,620,813.2	12,344,248.0	2,362.20				Average	
		point100	100	1,620,875.2	12,344,122.0	2,362.20				Average	
		point101	101	1,620,958.1	12,343,941.0	2,370.00				Average	
		point102	102	1,621,046.0	12,343,742.0	2,380.00				Average	
		point103	103	1,621,079.2	12,343,666.0	2,380.00					
Roadway10	12.0	point106	106	1,620,725.4	12,344,533.0	2,365.49				Average	
		point107	107	1,620,773.8	12,344,422.0	2,358.92				Average	
		point108	108	1,620,873.6	12,344,276.0	2,372.05				Average	
		point109	109	1,620,987.5	12,344,096.0	2,358.92				Average	
		point110	110	1,621,105.5	12,343,933.0	2,365.49				Average	
		point111	111	1,621,210.1	12,343,780.0	2,388.45					
Roadway11	12.0	point112	112	1,621,415.1	12,343,050.0	2,385.17				Average	
		point113	113	1,621,372.6	12,343,194.0	2,398.29				Average	
		point114	114	1,621,330.6	12,343,367.0	2,391.73				Average	
		point115	115	1,621,280.5	12,343,552.0	2,391.73				Average	

		point116	116	1,621,243.5	12,343,713.0	2,378.61					
Roadway12	30.0	point117	117	1,621,996.2	12,343,286.0	2,398.29				Average	
		point118	118	1,621,922.9	12,343,479.0	2,398.29				Average	
		point119	119	1,621,881.1	12,343,595.0	2,398.29				Average	
		point120	120	1,621,834.0	12,343,718.0	2,398.29				Average	
		point145	145	1,621,809.0	12,343,796.0	2,398.29					
Roadway13	30.0	point125	125	1,621,631.8	12,344,484.0	2,395.01				Average	
		point126	126	1,621,683.6	12,344,303.0	2,395.01				Average	
		point127	127	1,621,728.6	12,344,150.0	2,404.86				Average	
		point128	128	1,621,787.2	12,343,967.0	2,401.57				Average	
		point147	147	1,621,820.1	12,343,866.0	2,399.93					
County line east segment	20.0	point134	134	1,620,994.5	12,343,672.0	2,398.29				Average	
		point14	14	1,620,854.5	12,343,620.0	2,398.29				Average	
		point15	15	1,620,724.1	12,343,568.0	2,372.05				Average	
		point139	139	1,620,677.8	12,343,554.0	2,372.05					
Roadway3-2-2	16.0	point137	137	1,621,085.0	12,343,679.0	2,388.45				Average	
		point38	38	1,621,162.5	12,343,706.0	2,378.61				Average	
		point39	39	1,621,253.8	12,343,741.0	2,378.61				Average	
		point40	40	1,621,326.9	12,343,759.0	2,378.61				Average	
		point41	41	1,621,407.2	12,343,777.0	2,388.45				Average	
		point42	42	1,621,518.1	12,343,793.0	2,395.01				Average	
		point43	43	1,621,622.1	12,343,799.0	2,395.01				Average	
		point44	44	1,621,695.5	12,343,800.0	2,395.01				Average	
		point45	45	1,621,795.5	12,343,796.0	2,398.29					
County line center	12.0	point141	141	1,620,631.5	12,343,541.0	2,372.05				Average	
		point17	17	1,620,522.9	12,343,524.0	2,362.20				Average	
		point18	18	1,620,319.1	12,343,521.0	2,362.20				Average	
		point151	151	1,620,220.6	12,343,522.0	2,364.39				Average	
		point152	152	1,620,149.6	12,343,522.0	2,366.58					
Roadway3-2-2	20.0	point142	142	1,620,696.4	12,343,544.0	2,372.05				Average	
		point36	36	1,620,830.0	12,343,589.0	2,375.33				Average	
		point37	37	1,620,999.9	12,343,648.0	2,398.29					
Roadway5-2-2	30.0	point144	144	1,620,672.0	12,343,571.0	2,372.05				Average	
		point65	65	1,620,665.1	12,343,754.0	2,372.05				Average	
		point66	66	1,620,665.2	12,343,862.0	2,365.49				Average	
		point67	67	1,620,665.8	12,343,947.0	2,362.20				Average	
		point68	68	1,620,661.4	12,344,008.0	2,358.92				Average	
		point69	69	1,620,651.0	12,344,068.0	2,358.92				Average	
		point70	70	1,620,632.4	12,344,143.0	2,358.92				Average	

		point71	71	1,620,602.0	12,344,233.0	2,362.20				Average	
		point72	72	1,620,551.2	12,344,352.0	2,365.49					
Roadway13-2-2	30.0	point149	149	1,621,853.0	12,343,766.0	2,398.29				Average	
		point130	130	1,621,916.0	12,343,596.0	2,398.29				Average	
		point131	131	1,622,032.4	12,343,305.0	2,401.57					
Roadway12-2-2	30.0	point150	150	1,621,783.9	12,343,873.0	2,398.29				Average	
		point122	122	1,621,725.4	12,344,045.0	2,401.57				Average	
		point123	123	1,621,669.8	12,344,214.0	2,401.57				Average	
		point124	124	1,621,601.6	12,344,473.0	2,395.01					
county line west	12.0	point154	154	1,620,149.6	12,343,522.0	2,366.58				Average	
		point19	19	1,620,106.4	12,343,523.0	2,368.77				Average	
		point20	20	1,619,925.1	12,343,522.0	2,362.20				Average	
		point21	21	1,619,746.0	12,343,521.0	2,362.20				Average	
		point22	22	1,619,614.6	12,343,519.0	2,358.92					
Roadway3-2	15.0	point155	155	1,620,160.8	12,343,506.0	2,365.49				Average	
		point30	30	1,620,228.1	12,343,505.0	2,362.20				Average	
		point31	31	1,620,307.8	12,343,502.0	2,362.20				Average	
		point32	32	1,620,488.9	12,343,509.0	2,362.20				Average	
		point33	33	1,620,600.8	12,343,517.0	2,372.05				Average	
		point34	34	1,620,644.9	12,343,524.0	2,372.05					
I10 south	60.0	point156	156	1,621,014.9	12,343,647.0	2,378.60				Average	
		point90	90	1,620,894.5	12,343,915.0	2,365.49				Average	
		point91	91	1,620,813.2	12,344,091.0	2,365.50				Average	
		point92	92	1,620,720.5	12,344,294.0	2,365.49				Average	
		point93	93	1,620,628.2	12,344,501.0	2,365.49				Average	
		point94	94	1,620,507.8	12,344,759.0	2,360.00					
Roadway9-2	60.0	point157	157	1,621,079.2	12,343,666.0	2,380.00				Average	
		point104	104	1,621,149.8	12,343,505.0	2,380.00				Average	
		point105	105	1,621,256.8	12,343,270.0	2,385.00					
Roadway2-2	16.0	point158	158	1,621,765.4	12,343,829.0	2,398.29				Average	
		point8	8	1,621,577.1	12,343,827.0	2,395.01				Average	
		point9	9	1,621,484.1	12,343,822.0	2,395.01				Average	
		point10	10	1,621,413.2	12,343,812.0	2,388.45				Average	
		point11	11	1,621,254.1	12,343,762.0	2,378.61				Average	
		point12	12	1,621,181.6	12,343,735.0	2,378.61				Average	
		point132	132	1,621,072.5	12,343,698.0	2,388.45					
Roadway3-2-2-2	16.0	point159	159	1,621,795.5	12,343,796.0	2,398.29				Average	
		point46	46	1,622,050.4	12,343,799.0	2,401.57				Average	
		point47	47	1,622,225.6	12,343,800.0	2,401.57				Average	

		point48	48	1,622,481.5	12,343,805.0	2,414.70					

Dudek **21 November 2019**
CB **TNM 2.5**

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: **RV/Gas**
RUN: **Existing**

Roadway	Points		Segment									
Name	Name	No.	Autos		MTrucks		HTrucks		Buses		Motorcycles	
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Roadway2	point3	3	689	35	14	35	7	35	0	0	0	0
	point4	4	689	35	14	35	7	35	0	0	0	0
	point5	5	689	35	14	35	7	35	0	0	0	0
	point6	6	689	35	14	35	7	35	0	0	0	0
	point7	7										
Roadway3	point23	23	19	25	0	0	0	0	0	0	0	0
	point24	24	19	25	0	0	0	0	0	0	0	0
	point25	25	19	25	0	0	0	0	0	0	0	0
	point26	26	19	25	0	0	0	0	0	0	0	0
	point27	27	19	25	0	0	0	0	0	0	0	0
	point28	28	19	25	0	0	0	0	0	0	0	0
	point29	29	19	25	0	0	0	0	0	0	0	0
	point153	153										
North County Line Lane	point49	49	10	25	0	0	0	0	0	0	0	0
	point50	50	10	25	0	0	0	0	0	0	0	0
	point51	51	10	25	0	0	0	0	0	0	0	0
	point52	52	10	25	0	0	0	0	0	0	0	0
	point53	53	10	25	0	0	0	0	0	0	0	0
	point54	54	10	25	0	0	0	0	0	0	0	0
	point55	55	10	25	0	0	0	0	0	0	0	0
	point56	56										
Roadway5	point57	57	107	25	2	25	1	25	0	0	0	0
	point58	58	107	25	2	25	1	25	0	0	0	0

	point59	59	107	25	2	25	1	25	0	0	0	0
	point60	60	107	25	2	25	1	25	0	0	0	0
	point61	61	107	25	2	25	1	25	0	0	0	0
	point62	62	107	25	2	25	1	25	0	0	0	0
	point63	63										
Roadway6	point73	73	0	0	0	0	0	0	0	0	0	0
	point74	74	0	0	0	0	0	0	0	0	0	0
	point75	75	0	0	0	0	0	0	0	0	0	0
	point76	76	0	0	0	0	0	0	0	0	0	0
	point77	77										
Roadway7	point78	78	0	0	0	0	0	0	0	0	0	0
	point79	79	0	0	0	0	0	0	0	0	0	0
	point80	80	0	0	0	0	0	0	0	0	0	0
	point81	81	0	0	0	0	0	0	0	0	0	0
	point82	82	0	0	0	0	0	0	0	0	0	0
	point83	83										
Roadway8	point84	84	5384	70	111	70	56	70	0	0	0	0
	point85	85	5384	70	111	70	56	70	0	0	0	0
	point86	86	5384	70	111	70	56	70	0	0	0	0
	point87	87	5384	70	111	70	56	70	0	0	0	0
	point88	88	5384	70	111	70	56	70	0	0	0	0
	point89	89										
Roadway9	point95	95	5723	70	118	70	59	70	0	0	0	0
	point96	96	5723	70	118	70	59	70	0	0	0	0
	point97	97	5723	70	118	70	59	70	0	0	0	0
	point98	98	5723	70	118	70	59	70	0	0	0	0
	point99	99	5723	70	118	70	59	70	0	0	0	0
	point100	100	5723	70	118	70	59	70	0	0	0	0
	point101	101	5723	70	118	70	59	70	0	0	0	0
	point102	102	5723	70	118	70	59	70	0	0	0	0
	point103	103										
Roadway10	point106	106	0	0	0	0	0	0	0	0	0	0
	point107	107	0	0	0	0	0	0	0	0	0	0
	point108	108	0	0	0	0	0	0	0	0	0	0
	point109	109	0	0	0	0	0	0	0	0	0	0
	point110	110	0	0	0	0	0	0	0	0	0	0

	point111	111										
Roadway11	point112	112	0	0	0	0	0	0	0	0	0	0
	point113	113	0	0	0	0	0	0	0	0	0	0
	point114	114	0	0	0	0	0	0	0	0	0	0
	point115	115	0	0	0	0	0	0	0	0	0	0
	point116	116										
Roadway12	point117	117	9	35	4	35	0	0	0	0	0	0
	point118	118	9	35	4	35	0	0	0	0	0	0
	point119	119	9	35	4	35	0	0	0	0	0	0
	point120	120	9	35	4	35	0	0	0	0	0	0
	point145	145										
Roadway13	point125	125	383	35	8	35	4	35	0	0	0	0
	point126	126	383	35	8	35	4	35	0	0	0	0
	point127	127	383	35	8	35	4	35	0	0	0	0
	point128	128	383	35	8	35	4	35	0	0	0	0
	point147	147										
County line east segment	point134	134	73	35	2	35	1	35	0	0	0	0
	point14	14	73	35	2	35	1	35	0	0	0	0
	point15	15	73	35	2	35	1	35	0	0	0	0
	point139	139										
Roadway3-2-2	point137	137	768	35	16	35	8	35	0	0	0	0
	point38	38	768	35	16	35	8	35	0	0	0	0
	point39	39	768	35	16	35	8	35	0	0	0	0
	point40	40	768	35	16	35	8	35	0	0	0	0
	point41	41	768	35	16	35	8	35	0	0	0	0
	point42	42	768	35	16	35	8	35	0	0	0	0
	point43	43	768	35	16	35	8	35	0	0	0	0
	point44	44	768	35	16	35	8	35	0	0	0	0
	point45	45										
County line center	point141	141	29	25	1	25	0	0	0	0	0	0
	point17	17	29	25	1	25	0	0	0	0	0	0
	point18	18	29	25	1	25	0	0	0	0	0	0
	point151	151	29	25	1	25	0	0	0	0	0	0
	point152	152										
Roadway3-2-2	point142	142	73	35	2	35	1	35	0	0	0	0
	point36	36	73	35	2	35	1	35	0	0	0	0

	point37	37										
Roadway5-2-2	point144	144	0	0	0	0	0	0	0	0	0	0
	point65	65	0	0	0	0	0	0	0	0	0	0
	point66	66	0	0	0	0	0	0	0	0	0	0
	point67	67	0	0	0	0	0	0	0	0	0	0
	point68	68	0	0	0	0	0	0	0	0	0	0
	point69	69	0	0	0	0	0	0	0	0	0	0
	point70	70	0	0	0	0	0	0	0	0	0	0
	point71	71	0	0	0	0	0	0	0	0	0	0
	point72	72										
Roadway13-2-2	point149	149	417	35	9	35	4	35	0	0	0	0
	point130	130	417	35	9	35	4	35	0	0	0	0
	point131	131										
Roadway12-2-2	point150	150	383	35	8	35	4	35	0	0	0	0
	point122	122	383	35	8	35	4	35	0	0	0	0
	point123	123	383	35	8	35	4	35	0	0	0	0
	point124	124										
county line west	point154	154	19	25	0	0	0	0	0	0	0	0
	point19	19	19	25	0	0	0	0	0	0	0	0
	point20	20	19	25	0	0	0	0	0	0	0	0
	point21	21	19	25	0	0	0	0	0	0	0	0
	point22	22										
Roadway3-2	point155	155	29	25	1	25	0	0	0	0	0	0
	point30	30	29	25	1	25	0	0	0	0	0	0
	point31	31	29	25	1	25	0	0	0	0	0	0
	point32	32	29	25	1	25	0	0	0	0	0	0
	point33	33	29	25	1	25	0	0	0	0	0	0
	point34	34										
I10 south	point156	156	5723	70	118	70	59	70	0	0	0	0
	point90	90	5723	70	118	70	59	70	0	0	0	0
	point91	91	5723	70	118	70	59	70	0	0	0	0
	point92	92	5723	70	118	70	59	70	0	0	0	0
	point93	93	5723	70	118	70	59	70	0	0	0	0
	point94	94										
Roadway9-2	point157	157	5384	70	111	70	56	70	0	0	0	0
	point104	104	5384	70	111	70	56	70	0	0	0	0

	point105	105										
Roadway2-2	point158	158	768	35	16	35	8	35	0	0	0	0
	point8	8	768	35	16	35	8	35	0	0	0	0
	point9	9	768	35	16	35	8	35	0	0	0	0
	point10	10	768	35	16	35	8	35	0	0	0	0
	point11	11	768	35	16	35	8	35	0	0	0	0
	point12	12	768	35	16	35	8	35	0	0	0	0
	point132	132										
Roadway3-2-2-2	point159	159	689	35	14	35	7	35	0	0	0	0
	point46	46	689	35	14	35	7	35	0	0	0	0
	point47	47	689	35	14	35	7	35	0	0	0	0
	point48	48										

Dudek 21 November 2019
CB TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: RV/Gas
RUN: Existing

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria Existing LAeq1h	Impact Criteria LAeq1h	Impact Criteria Sub'l	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
M1	1	1	1,620,134.8	12,343,753.0	2,362.21	4.92	0.00	66	10.0	8.0	Y
M2	2	1	1,620,429.1	12,343,650.0	2,365.49	4.92	0.00	66	10.0	8.0	Y
M3	3	1	1,620,204.5	12,343,550.0	2,368.77	4.92	0.00	66	10.0	8.0	Y
M4	5	1	1,620,293.5	12,343,809.0	2,368.77	4.92	0.00	66	10.0	8.0	Y
M5	6	1	1,620,362.4	12,343,375.0	2,362.21	4.92	0.00	66	10.0	8.0	Y

Dudek
CB
21 November 2019
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: RV/Gas
RUN: Existing
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
M1	1	1	0.0	61.4	66	61.4	10	----	61.4	0.0	8	-8.0
M2	2	1	0.0	63.7	66	63.7	10	----	63.7	0.0	8	-8.0
M3	3	1	0.0	62.5	66	62.5	10	----	62.5	0.0	8	-8.0
M4	5	1	0.0	65.4	66	65.4	10	----	65.4	0.0	8	-8.0
M5	6	1	0.0	60.0	66	60.0	10	----	60.0	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	5	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Dudek 21 November 2019
CB TNM 2.5

INPUT: ROADWAYS
PROJECT/CONTRACT: RV/Gas
RUN: Existing + Project

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway Name	Width	Points Name	No.	Coordinates (pavement) X	Y	Z	Flow Control Control Device	Speed Constraint	Percent Vehicles Affected	Segment Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
Roadway2	16.0	point3	3	1,622,482.2	12,343,842.0	2,414.70				Average	
		point4	4	1,622,295.2	12,343,838.0	2,401.57				Average	
		point5	5	1,622,078.5	12,343,833.0	2,401.57				Average	
		point6	6	1,621,978.0	12,343,833.0	2,398.29				Average	
		point7	7	1,621,765.4	12,343,829.0	2,398.29					
Roadway3	15.0	point23	23	1,619,615.6	12,343,504.0	2,358.92				Average	
		point24	24	1,619,656.8	12,343,507.0	2,362.20				Average	
		point25	25	1,619,732.4	12,343,508.0	2,362.20				Average	
		point26	26	1,619,858.1	12,343,508.0	2,362.20				Average	
		point27	27	1,619,934.6	12,343,507.0	2,368.77				Average	
		point28	28	1,619,995.2	12,343,505.0	2,368.77				Average	
		point29	29	1,620,093.2	12,343,507.0	2,368.77				Average	
		point153	153	1,620,160.8	12,343,506.0	2,365.49					
North County Line Lane	30.0	point49	49	1,620,623.1	12,343,794.0	2,365.49				Average	
		point50	50	1,620,568.9	12,343,796.0	2,365.49				Average	
		point51	51	1,620,484.2	12,343,793.0	2,368.77				Average	
		point52	52	1,620,315.6	12,343,791.0	2,368.77				Average	
		point53	53	1,620,223.2	12,343,791.0	2,358.92				Average	
		point54	54	1,620,174.6	12,343,784.0	2,358.92				Average	
		point55	55	1,620,162.5	12,343,759.0	2,362.20				Average	
		point56	56	1,620,162.0	12,343,541.0	2,368.77					
Roadway5	30.0	point57	57	1,620,668.6	12,342,799.0	2,378.61				Average	
		point58	58	1,620,669.4	12,342,941.0	2,375.33				Average	
		point59	59	1,620,671.1	12,343,061.0	2,372.05				Average	
		point60	60	1,620,670.0	12,343,217.0	2,368.77				Average	

		point61	61	1,620,668.8	12,343,311.0	2,362.20				Average	
		point62	62	1,620,669.6	12,343,396.0	2,365.49				Average	
		point63	63	1,620,670.1	12,343,527.0	2,372.05					
Roadway6	12.0	point73	73	1,620,519.8	12,344,681.0	2,342.52				Average	
		point74	74	1,620,604.0	12,344,424.0	2,358.92				Average	
		point75	75	1,620,696.2	12,344,109.0	2,358.92				Average	
		point76	76	1,620,771.5	12,343,835.0	2,365.49				Average	
		point77	77	1,620,832.2	12,343,629.0	2,375.33					
Roadway7	12.0	point78	78	1,621,241.6	12,343,012.0	2,385.17				Average	
		point79	79	1,621,191.0	12,343,090.0	2,385.20				Average	
		point80	80	1,621,111.2	12,343,197.0	2,372.05				Average	
		point81	81	1,621,035.5	12,343,311.0	2,368.77				Average	
		point82	82	1,620,951.8	12,343,430.0	2,368.77				Average	
		point83	83	1,620,857.6	12,343,571.0	2,378.61					
Roadway8	60.0	point84	84	1,621,300.9	12,343,003.0	2,385.17				Average	
		point85	85	1,621,235.4	12,343,151.0	2,380.00				Average	
		point86	86	1,621,170.5	12,343,298.0	2,380.00				Average	
		point87	87	1,621,116.9	12,343,419.0	2,378.60				Average	
		point88	88	1,621,082.5	12,343,497.0	2,378.61				Average	
		point89	89	1,621,014.9	12,343,647.0	2,378.60					
Roadway9	60.0	point95	95	1,620,575.4	12,344,780.0	2,355.64				Average	
		point96	96	1,620,635.4	12,344,641.0	2,362.20				Average	
		point97	97	1,620,689.9	12,344,524.0	2,365.49				Average	
		point98	98	1,620,741.5	12,344,416.0	2,365.50				Average	
		point99	99	1,620,813.2	12,344,248.0	2,362.20				Average	
		point100	100	1,620,875.2	12,344,122.0	2,362.20				Average	
		point101	101	1,620,958.1	12,343,941.0	2,370.00				Average	
		point102	102	1,621,046.0	12,343,742.0	2,380.00				Average	
		point103	103	1,621,079.2	12,343,666.0	2,380.00					
Roadway10	12.0	point106	106	1,620,725.4	12,344,533.0	2,365.49				Average	
		point107	107	1,620,773.8	12,344,422.0	2,358.92				Average	
		point108	108	1,620,873.6	12,344,276.0	2,372.05				Average	
		point109	109	1,620,987.5	12,344,096.0	2,358.92				Average	
		point110	110	1,621,105.5	12,343,933.0	2,365.49				Average	
		point111	111	1,621,210.1	12,343,780.0	2,388.45					
Roadway11	12.0	point112	112	1,621,415.1	12,343,050.0	2,385.17				Average	
		point113	113	1,621,372.6	12,343,194.0	2,398.29				Average	
		point114	114	1,621,330.6	12,343,367.0	2,391.73				Average	
		point115	115	1,621,280.5	12,343,552.0	2,391.73				Average	

		point116	116	1,621,243.5	12,343,713.0	2,378.61					
Roadway12	30.0	point117	117	1,621,996.2	12,343,286.0	2,398.29				Average	
		point118	118	1,621,922.9	12,343,479.0	2,398.29				Average	
		point119	119	1,621,881.1	12,343,595.0	2,398.29				Average	
		point120	120	1,621,834.0	12,343,718.0	2,398.29				Average	
		point145	145	1,621,809.0	12,343,796.0	2,398.29					
Roadway13	30.0	point125	125	1,621,631.8	12,344,484.0	2,395.01				Average	
		point126	126	1,621,683.6	12,344,303.0	2,395.01				Average	
		point127	127	1,621,728.6	12,344,150.0	2,404.86				Average	
		point128	128	1,621,787.2	12,343,967.0	2,401.57				Average	
		point147	147	1,621,820.1	12,343,866.0	2,399.93					
County line east segment	20.0	point134	134	1,620,994.5	12,343,672.0	2,398.29				Average	
		point14	14	1,620,854.5	12,343,620.0	2,398.29				Average	
		point15	15	1,620,724.1	12,343,568.0	2,372.05				Average	
		point139	139	1,620,677.8	12,343,554.0	2,372.05					
Roadway3-2-2	16.0	point137	137	1,621,085.0	12,343,679.0	2,388.45				Average	
		point38	38	1,621,162.5	12,343,706.0	2,378.61				Average	
		point39	39	1,621,253.8	12,343,741.0	2,378.61				Average	
		point40	40	1,621,326.9	12,343,759.0	2,378.61				Average	
		point41	41	1,621,407.2	12,343,777.0	2,388.45				Average	
		point42	42	1,621,518.1	12,343,793.0	2,395.01				Average	
		point43	43	1,621,622.1	12,343,799.0	2,395.01				Average	
		point44	44	1,621,695.5	12,343,800.0	2,395.01				Average	
		point45	45	1,621,795.5	12,343,796.0	2,398.29					
County line center	12.0	point141	141	1,620,631.5	12,343,541.0	2,372.05				Average	
		point17	17	1,620,522.9	12,343,524.0	2,362.20				Average	
		point18	18	1,620,319.1	12,343,521.0	2,362.20				Average	
		point151	151	1,620,220.6	12,343,522.0	2,364.39				Average	
		point152	152	1,620,149.6	12,343,522.0	2,366.58					
Roadway3-2-2	20.0	point142	142	1,620,696.4	12,343,544.0	2,372.05				Average	
		point36	36	1,620,830.0	12,343,589.0	2,375.33				Average	
		point37	37	1,620,999.9	12,343,648.0	2,398.29					
Roadway5-2-2	30.0	point144	144	1,620,672.0	12,343,571.0	2,372.05				Average	
		point65	65	1,620,665.1	12,343,754.0	2,372.05				Average	
		point66	66	1,620,665.2	12,343,862.0	2,365.49				Average	
		point67	67	1,620,665.8	12,343,947.0	2,362.20				Average	
		point68	68	1,620,661.4	12,344,008.0	2,358.92				Average	
		point69	69	1,620,651.0	12,344,068.0	2,358.92				Average	
		point70	70	1,620,632.4	12,344,143.0	2,358.92				Average	

		point71	71	1,620,602.0	12,344,233.0	2,362.20				Average	
		point72	72	1,620,551.2	12,344,352.0	2,365.49					
Roadway13-2-2	30.0	point149	149	1,621,853.0	12,343,766.0	2,398.29				Average	
		point130	130	1,621,916.0	12,343,596.0	2,398.29				Average	
		point131	131	1,622,032.4	12,343,305.0	2,401.57					
Roadway12-2-2	30.0	point150	150	1,621,783.9	12,343,873.0	2,398.29				Average	
		point122	122	1,621,725.4	12,344,045.0	2,401.57				Average	
		point123	123	1,621,669.8	12,344,214.0	2,401.57				Average	
		point124	124	1,621,601.6	12,344,473.0	2,395.01					
county line west	12.0	point154	154	1,620,149.6	12,343,522.0	2,366.58				Average	
		point19	19	1,620,106.4	12,343,523.0	2,368.77				Average	
		point20	20	1,619,925.1	12,343,522.0	2,362.20				Average	
		point21	21	1,619,746.0	12,343,521.0	2,362.20				Average	
		point22	22	1,619,614.6	12,343,519.0	2,358.92					
Roadway3-2	15.0	point155	155	1,620,160.8	12,343,506.0	2,365.49				Average	
		point30	30	1,620,228.1	12,343,505.0	2,362.20				Average	
		point31	31	1,620,307.8	12,343,502.0	2,362.20				Average	
		point32	32	1,620,488.9	12,343,509.0	2,362.20				Average	
		point33	33	1,620,600.8	12,343,517.0	2,372.05				Average	
		point34	34	1,620,644.9	12,343,524.0	2,372.05					
I10 south	60.0	point156	156	1,621,014.9	12,343,647.0	2,378.60				Average	
		point90	90	1,620,894.5	12,343,915.0	2,365.49				Average	
		point91	91	1,620,813.2	12,344,091.0	2,365.50				Average	
		point92	92	1,620,720.5	12,344,294.0	2,365.49				Average	
		point93	93	1,620,628.2	12,344,501.0	2,365.49				Average	
		point94	94	1,620,507.8	12,344,759.0	2,360.00					
Roadway9-2	60.0	point157	157	1,621,079.2	12,343,666.0	2,380.00				Average	
		point104	104	1,621,149.8	12,343,505.0	2,380.00				Average	
		point105	105	1,621,256.8	12,343,270.0	2,385.00					
Roadway2-2	16.0	point158	158	1,621,765.4	12,343,829.0	2,398.29				Average	
		point8	8	1,621,577.1	12,343,827.0	2,395.01				Average	
		point9	9	1,621,484.1	12,343,822.0	2,395.01				Average	
		point10	10	1,621,413.2	12,343,812.0	2,388.45				Average	
		point11	11	1,621,254.1	12,343,762.0	2,378.61				Average	
		point12	12	1,621,181.6	12,343,735.0	2,378.61				Average	
		point132	132	1,621,072.5	12,343,698.0	2,388.45					
Roadway3-2-2-2	16.0	point159	159	1,621,795.5	12,343,796.0	2,398.29				Average	
		point46	46	1,622,050.4	12,343,799.0	2,401.57				Average	
		point47	47	1,622,225.6	12,343,800.0	2,401.57				Average	

		point48	48	1,622,481.5	12,343,805.0	2,414.70					

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INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: RV/Gas
RUN: Existing + Project

Roadway	Points											
Name	Name	No.	Segment									
			Autos		MTrucks		HTrucks		Buses		Motorcycles	
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Roadway2	point3	3	708	35	15	35	7	35	0	0	0	0
	point4	4	708	35	15	35	7	35	0	0	0	0
	point5	5	708	35	15	35	7	35	0	0	0	0
	point6	6	708	35	15	35	7	35	0	0	0	0
	point7	7										
Roadway3	point23	23	19	25	0	0	0	0	0	0	0	0
	point24	24	19	25	0	0	0	0	0	0	0	0
	point25	25	19	25	0	0	0	0	0	0	0	0
	point26	26	19	25	0	0	0	0	0	0	0	0
	point27	27	19	25	0	0	0	0	0	0	0	0
	point28	28	19	25	0	0	0	0	0	0	0	0
	point29	29	19	25	0	0	0	0	0	0	0	0
	point153	153										
North County Line Lane	point49	49	155	25	3	25	2	25	0	0	0	0
	point50	50	155	25	3	25	2	25	0	0	0	0
	point51	51	155	25	3	25	2	25	0	0	0	0
	point52	52	155	25	3	25	2	25	0	0	0	0
	point53	53	155	25	3	25	2	25	0	0	0	0
	point54	54	155	25	3	25	2	25	0	0	0	0
	point55	55	155	25	3	25	2	25	0	0	0	0
	point56	56										
Roadway5	point57	57	136	25	3	25	1	25	0	0	0	0
	point58	58	136	25	3	25	1	25	0	0	0	0

	point59	59	136	25	3	25	1	25	0	0	0	0
	point60	60	136	25	3	25	1	25	0	0	0	0
	point61	61	136	25	3	25	1	25	0	0	0	0
	point62	62	136	25	3	25	1	25	0	0	0	0
	point63	63										
Roadway6	point73	73	0	0	0	0	0	0	0	0	0	0
	point74	74	0	0	0	0	0	0	0	0	0	0
	point75	75	0	0	0	0	0	0	0	0	0	0
	point76	76	0	0	0	0	0	0	0	0	0	0
	point77	77										
Roadway7	point78	78	0	0	0	0	0	0	0	0	0	0
	point79	79	0	0	0	0	0	0	0	0	0	0
	point80	80	0	0	0	0	0	0	0	0	0	0
	point81	81	0	0	0	0	0	0	0	0	0	0
	point82	82	0	0	0	0	0	0	0	0	0	0
	point83	83										
Roadway8	point84	84	5384	70	111	70	56	70	0	0	0	0
	point85	85	5384	70	111	70	56	70	0	0	0	0
	point86	86	5384	70	111	70	56	70	0	0	0	0
	point87	87	5384	70	111	70	56	70	0	0	0	0
	point88	88	5384	70	111	70	56	70	0	0	0	0
	point89	89										
Roadway9	point95	95	5723	70	118	70	59	70	0	0	0	0
	point96	96	5723	70	118	70	59	70	0	0	0	0
	point97	97	5723	70	118	70	59	70	0	0	0	0
	point98	98	5723	70	118	70	59	70	0	0	0	0
	point99	99	5723	70	118	70	59	70	0	0	0	0
	point100	100	5723	70	118	70	59	70	0	0	0	0
	point101	101	5723	70	118	70	59	70	0	0	0	0
	point102	102	5723	70	118	70	59	70	0	0	0	0
	point103	103										
Roadway10	point106	106	0	0	0	0	0	0	0	0	0	0
	point107	107	0	0	0	0	0	0	0	0	0	0
	point108	108	0	0	0	0	0	0	0	0	0	0
	point109	109	0	0	0	0	0	0	0	0	0	0
	point110	110	0	0	0	0	0	0	0	0	0	0

	point111	111										
Roadway11	point112	112	0	0	0	0	0	0	0	0	0	0
	point113	113	0	0	0	0	0	0	0	0	0	0
	point114	114	0	0	0	0	0	0	0	0	0	0
	point115	115	0	0	0	0	0	0	0	0	0	0
	point116	116										
Roadway12	point117	117	437	35	9	35	5	35	0	0	0	0
	point118	118	437	35	9	35	5	35	0	0	0	0
	point119	119	437	35	9	35	5	35	0	0	0	0
	point120	120	437	35	9	35	5	35	0	0	0	0
	point145	145										
Roadway13	point125	125	398	35	8	35	4	35	0	0	0	0
	point126	126	398	35	8	35	4	35	0	0	0	0
	point127	127	398	35	8	35	4	35	0	0	0	0
	point128	128	398	35	8	35	4	35	0	0	0	0
	point147	147										
County line east segment	point134	134	218	35	5	35	2	35	0	0	0	0
	point14	14	218	35	5	35	2	35	0	0	0	0
	point15	15	218	35	5	35	2	35	0	0	0	0
	point139	139										
Roadway3-2-2	point137	137	839	35	17	35	9	35	0	0	0	0
	point38	38	839	35	17	35	9	35	0	0	0	0
	point39	39	839	35	17	35	9	35	0	0	0	0
	point40	40	839	35	17	35	9	35	0	0	0	0
	point41	41	839	35	17	35	9	35	0	0	0	0
	point42	42	839	35	17	35	9	35	0	0	0	0
	point43	43	839	35	17	35	9	35	0	0	0	0
	point44	44	839	35	17	35	9	35	0	0	0	0
	point45	45										
County line center	point141	141	160	25	3	25	2	25	0	0	0	0
	point17	17	160	25	3	25	2	25	0	0	0	0
	point18	18	160	25	3	25	2	25	0	0	0	0
	point151	151	160	25	3	25	2	25	0	0	0	0
	point152	152										
Roadway3-2-2	point142	142	218	35	5	35	2	35	0	0	0	0
	point36	36	218	35	5	35	2	35	0	0	0	0

	point37	37										
Roadway5-2-2	point144	144	0	0	0	0	0	0	0	0	0	0
	point65	65	0	0	0	0	0	0	0	0	0	0
	point66	66	0	0	0	0	0	0	0	0	0	0
	point67	67	0	0	0	0	0	0	0	0	0	0
	point68	68	0	0	0	0	0	0	0	0	0	0
	point69	69	0	0	0	0	0	0	0	0	0	0
	point70	70	0	0	0	0	0	0	0	0	0	0
	point71	71	0	0	0	0	0	0	0	0	0	0
	point72	72										
Roadway13-2-2	point149	149	437	35	9	35	5	35	0	0	0	0
	point130	130	437	35	9	35	5	35	0	0	0	0
	point131	131										
Roadway12-2-2	point150	150	398	35	8	35	4	35	0	0	0	0
	point122	122	398	35	8	35	4	35	0	0	0	0
	point123	123	398	35	8	35	4	35	0	0	0	0
	point124	124										
county line west	point154	154	19	25	0	0	0	0	0	0	0	0
	point19	19	19	25	0	0	0	0	0	0	0	0
	point20	20	19	25	0	0	0	0	0	0	0	0
	point21	21	19	25	0	0	0	0	0	0	0	0
	point22	22										
Roadway3-2	point155	155	160	25	3	25	2	25	0	0	0	0
	point30	30	160	25	3	25	2	25	0	0	0	0
	point31	31	160	25	3	25	2	25	0	0	0	0
	point32	32	160	25	3	25	2	25	0	0	0	0
	point33	33	160	25	3	25	2	25	0	0	0	0
	point34	34										
I10 south	point156	156	5723	70	118	70	59	70	0	0	0	0
	point90	90	5723	70	118	70	59	70	0	0	0	0
	point91	91	5723	70	118	70	59	70	0	0	0	0
	point92	92	5723	70	118	70	59	70	0	0	0	0
	point93	93	5723	70	118	70	59	70	0	0	0	0
	point94	94										
Roadway9-2	point157	157	5384	70	111	70	56	70	0	0	0	0
	point104	104	5384	70	111	70	56	70	0	0	0	0

	point105	105										
Roadway2-2	point158	158	839	35	17	35	9	35	0	0	0	0
	point8	8	839	35	17	35	9	35	0	0	0	0
	point9	9	839	0	17	35	9	35	0	0	0	0
	point10	10	839	35	17	35	9	35	0	0	0	0
	point11	11	839	35	17	35	9	35	0	0	0	0
	point12	12	839	35	17	35	9	35	0	0	0	0
	point132	132										
Roadway3-2-2-2	point159	159	708	35	15	35	7	35	0	0	0	0
	point46	46	708	35	15	35	7	35	0	0	0	0
	point47	47	708	35	15	35	7	35	0	0	0	0
	point48	48										

Dudek 21 November 2019
CB TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: RV/Gas
RUN: Existing + Project

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria: Existing LAeq1h	Impact Criteria LAeq1h	Impact Criteria Sub'l	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
M1	1	1	1,620,134.8	12,343,753.0	2,362.21	4.92	0.00	66	10.0	8.0	Y
M2	2	1	1,620,429.1	12,343,650.0	2,365.49	4.92	0.00	66	10.0	8.0	Y
M3	3	1	1,620,204.5	12,343,550.0	2,368.77	4.92	0.00	66	10.0	8.0	Y
M4	5	1	1,620,293.5	12,343,809.0	2,368.77	4.92	0.00	66	10.0	8.0	Y
M5	6	1	1,620,362.4	12,343,375.0	2,362.21	4.92	0.00	66	10.0	8.0	Y

Dudek
CB

21 November 2019
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: RV/Gas
RUN: Existing + Project
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
M1	1	1	0.0	62.8	66	62.8	10	----	62.8	0.0	8	-8.0
M2	2	1	0.0	63.9	66	63.9	10	----	63.9	0.0	8	-8.0
M3	3	1	0.0	63.9	66	63.9	10	----	63.9	0.0	8	-8.0
M4	5	1	0.0	65.9	66	65.9	10	----	65.9	0.0	8	-8.0
M5	6	1	0.0	60.3	66	60.3	10	----	60.3	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	5	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Dudek					**21 November 2019**						
CB					**TNM 2.5**						
INPUT: ROADWAYS							**Average pavement type shall be used unless**				
PROJECT/CONTRACT:	**RV/Gas**						**a State highway agency substantiates the use**				
RUN:	**Existing + Ambient**						**of a different type with the approval of FHWA**				
Roadway		**Points**									
Name	**Width**	**Name**	**No.**	**Coordinates (pavement)**			**Flow Control**			**Segment**	
				X	**Y**	**Z**	**Control Device**	**Speed Constraint**	**Percent Vehicles Affected**	**Pvmt Type**	**On Struct?**
	ft			ft	ft	ft		mph	%		
Roadway2	16.0	point3	3	1,622,482.2	12,343,842.0	2,414.70				Average	
		point4	4	1,622,295.2	12,343,838.0	2,401.57				Average	
		point5	5	1,622,078.5	12,343,833.0	2,401.57				Average	
		point6	6	1,621,978.0	12,343,833.0	2,398.29				Average	
		point7	7	1,621,765.4	12,343,829.0	2,398.29					
Roadway3	15.0	point23	23	1,619,615.6	12,343,504.0	2,358.92				Average	
		point24	24	1,619,656.8	12,343,507.0	2,362.20				Average	
		point25	25	1,619,732.4	12,343,508.0	2,362.20				Average	
		point26	26	1,619,858.1	12,343,508.0	2,362.20				Average	
		point27	27	1,619,934.6	12,343,507.0	2,368.77				Average	
		point28	28	1,619,995.2	12,343,505.0	2,368.77				Average	
		point29	29	1,620,093.2	12,343,507.0	2,368.77				Average	
		point153	153	1,620,160.8	12,343,506.0	2,365.49					
North County Line Lane	30.0	point49	49	1,620,623.1	12,343,794.0	2,365.49				Average	
		point50	50	1,620,568.9	12,343,796.0	2,365.49				Average	
		point51	51	1,620,484.2	12,343,793.0	2,368.77				Average	
		point52	52	1,620,315.6	12,343,791.0	2,368.77				Average	
		point53	53	1,620,223.2	12,343,791.0	2,358.92				Average	
		point54	54	1,620,174.6	12,343,784.0	2,358.92				Average	
		point55	55	1,620,162.5	12,343,759.0	2,362.20				Average	
		point56	56	1,620,162.0	12,343,541.0	2,368.77					
Roadway5	30.0	point57	57	1,620,668.6	12,342,799.0	2,378.61				Average	
		point58	58	1,620,669.4	12,342,941.0	2,375.33				Average	
		point59	59	1,620,671.1	12,343,061.0	2,372.05				Average	
		point60	60	1,620,670.0	12,343,217.0	2,368.77				Average	

		point61	61	1,620,668.8	12,343,311.0	2,362.20				Average	
		point62	62	1,620,669.6	12,343,396.0	2,365.49				Average	
		point63	63	1,620,670.1	12,343,527.0	2,372.05					
Roadway6	12.0	point73	73	1,620,519.8	12,344,681.0	2,342.52				Average	
		point74	74	1,620,604.0	12,344,424.0	2,358.92				Average	
		point75	75	1,620,696.2	12,344,109.0	2,358.92				Average	
		point76	76	1,620,771.5	12,343,835.0	2,365.49				Average	
		point77	77	1,620,832.2	12,343,629.0	2,375.33					
Roadway7	12.0	point78	78	1,621,241.6	12,343,012.0	2,385.17				Average	
		point79	79	1,621,191.0	12,343,090.0	2,385.20				Average	
		point80	80	1,621,111.2	12,343,197.0	2,372.05				Average	
		point81	81	1,621,035.5	12,343,311.0	2,368.77				Average	
		point82	82	1,620,951.8	12,343,430.0	2,368.77				Average	
		point83	83	1,620,857.6	12,343,571.0	2,378.61					
Roadway8	60.0	point84	84	1,621,300.9	12,343,003.0	2,385.17				Average	
		point85	85	1,621,235.4	12,343,151.0	2,380.00				Average	
		point86	86	1,621,170.5	12,343,298.0	2,380.00				Average	
		point87	87	1,621,116.9	12,343,419.0	2,378.60				Average	
		point88	88	1,621,082.5	12,343,497.0	2,378.61				Average	
		point89	89	1,621,014.9	12,343,647.0	2,378.60					
Roadway9	60.0	point95	95	1,620,575.4	12,344,780.0	2,355.64				Average	
		point96	96	1,620,635.4	12,344,641.0	2,362.20				Average	
		point97	97	1,620,689.9	12,344,524.0	2,365.49				Average	
		point98	98	1,620,741.5	12,344,416.0	2,365.50				Average	
		point99	99	1,620,813.2	12,344,248.0	2,362.20				Average	
		point100	100	1,620,875.2	12,344,122.0	2,362.20				Average	
		point101	101	1,620,958.1	12,343,941.0	2,370.00				Average	
		point102	102	1,621,046.0	12,343,742.0	2,380.00				Average	
		point103	103	1,621,079.2	12,343,666.0	2,380.00					
Roadway10	12.0	point106	106	1,620,725.4	12,344,533.0	2,365.49				Average	
		point107	107	1,620,773.8	12,344,422.0	2,358.92				Average	
		point108	108	1,620,873.6	12,344,276.0	2,372.05				Average	
		point109	109	1,620,987.5	12,344,096.0	2,358.92				Average	
		point110	110	1,621,105.5	12,343,933.0	2,365.49				Average	
		point111	111	1,621,210.1	12,343,780.0	2,388.45					
Roadway11	12.0	point112	112	1,621,415.1	12,343,050.0	2,385.17				Average	
		point113	113	1,621,372.6	12,343,194.0	2,398.29				Average	
		point114	114	1,621,330.6	12,343,367.0	2,391.73				Average	
		point115	115	1,621,280.5	12,343,552.0	2,391.73				Average	

		point116	116	1,621,243.5	12,343,713.0	2,378.61					
Roadway12	30.0	point117	117	1,621,996.2	12,343,286.0	2,398.29				Average	
		point118	118	1,621,922.9	12,343,479.0	2,398.29				Average	
		point119	119	1,621,881.1	12,343,595.0	2,398.29				Average	
		point120	120	1,621,834.0	12,343,718.0	2,398.29				Average	
		point145	145	1,621,809.0	12,343,796.0	2,398.29					
Roadway13	30.0	point125	125	1,621,631.8	12,344,484.0	2,395.01				Average	
		point126	126	1,621,683.6	12,344,303.0	2,395.01				Average	
		point127	127	1,621,728.6	12,344,150.0	2,404.86				Average	
		point128	128	1,621,787.2	12,343,967.0	2,401.57				Average	
		point147	147	1,621,820.1	12,343,866.0	2,399.93					
County line east segment	20.0	point134	134	1,620,994.5	12,343,672.0	2,398.29				Average	
		point14	14	1,620,854.5	12,343,620.0	2,398.29				Average	
		point15	15	1,620,724.1	12,343,568.0	2,372.05				Average	
		point139	139	1,620,677.8	12,343,554.0	2,372.05					
Roadway3-2-2	16.0	point137	137	1,621,085.0	12,343,679.0	2,388.45				Average	
		point38	38	1,621,162.5	12,343,706.0	2,378.61				Average	
		point39	39	1,621,253.8	12,343,741.0	2,378.61				Average	
		point40	40	1,621,326.9	12,343,759.0	2,378.61				Average	
		point41	41	1,621,407.2	12,343,777.0	2,388.45				Average	
		point42	42	1,621,518.1	12,343,793.0	2,395.01				Average	
		point43	43	1,621,622.1	12,343,799.0	2,395.01				Average	
		point44	44	1,621,695.5	12,343,800.0	2,395.01				Average	
		point45	45	1,621,795.5	12,343,796.0	2,398.29					
County line center	12.0	point141	141	1,620,631.5	12,343,541.0	2,372.05				Average	
		point17	17	1,620,522.9	12,343,524.0	2,362.20				Average	
		point18	18	1,620,319.1	12,343,521.0	2,362.20				Average	
		point151	151	1,620,220.6	12,343,522.0	2,364.39				Average	
		point152	152	1,620,149.6	12,343,522.0	2,366.58					
Roadway3-2-2	20.0	point142	142	1,620,696.4	12,343,544.0	2,372.05				Average	
		point36	36	1,620,830.0	12,343,589.0	2,375.33				Average	
		point37	37	1,620,999.9	12,343,648.0	2,398.29					
Roadway5-2-2	30.0	point144	144	1,620,672.0	12,343,571.0	2,372.05				Average	
		point65	65	1,620,665.1	12,343,754.0	2,372.05				Average	
		point66	66	1,620,665.2	12,343,862.0	2,365.49				Average	
		point67	67	1,620,665.8	12,343,947.0	2,362.20				Average	
		point68	68	1,620,661.4	12,344,008.0	2,358.92				Average	
		point69	69	1,620,651.0	12,344,068.0	2,358.92				Average	
		point70	70	1,620,632.4	12,344,143.0	2,358.92				Average	

		point71	71	1,620,602.0	12,344,233.0	2,362.20				Average	
		point72	72	1,620,551.2	12,344,352.0	2,365.49					
Roadway13-2-2	30.0	point149	149	1,621,853.0	12,343,766.0	2,398.29				Average	
		point130	130	1,621,916.0	12,343,596.0	2,398.29				Average	
		point131	131	1,622,032.4	12,343,305.0	2,401.57					
Roadway12-2-2	30.0	point150	150	1,621,783.9	12,343,873.0	2,398.29				Average	
		point122	122	1,621,725.4	12,344,045.0	2,401.57				Average	
		point123	123	1,621,669.8	12,344,214.0	2,401.57				Average	
		point124	124	1,621,601.6	12,344,473.0	2,395.01					
county line west	12.0	point154	154	1,620,149.6	12,343,522.0	2,366.58				Average	
		point19	19	1,620,106.4	12,343,523.0	2,368.77				Average	
		point20	20	1,619,925.1	12,343,522.0	2,362.20				Average	
		point21	21	1,619,746.0	12,343,521.0	2,362.20				Average	
		point22	22	1,619,614.6	12,343,519.0	2,358.92					
Roadway3-2	15.0	point155	155	1,620,160.8	12,343,506.0	2,365.49				Average	
		point30	30	1,620,228.1	12,343,505.0	2,362.20				Average	
		point31	31	1,620,307.8	12,343,502.0	2,362.20				Average	
		point32	32	1,620,488.9	12,343,509.0	2,362.20				Average	
		point33	33	1,620,600.8	12,343,517.0	2,372.05				Average	
		point34	34	1,620,644.9	12,343,524.0	2,372.05					
I10 south	60.0	point156	156	1,621,014.9	12,343,647.0	2,378.60				Average	
		point90	90	1,620,894.5	12,343,915.0	2,365.49				Average	
		point91	91	1,620,813.2	12,344,091.0	2,365.50				Average	
		point92	92	1,620,720.5	12,344,294.0	2,365.49				Average	
		point93	93	1,620,628.2	12,344,501.0	2,365.49				Average	
		point94	94	1,620,507.8	12,344,759.0	2,360.00					
Roadway9-2	60.0	point157	157	1,621,079.2	12,343,666.0	2,380.00				Average	
		point104	104	1,621,149.8	12,343,505.0	2,380.00				Average	
		point105	105	1,621,256.8	12,343,270.0	2,385.00					
Roadway2-2	16.0	point158	158	1,621,765.4	12,343,829.0	2,398.29				Average	
		point8	8	1,621,577.1	12,343,827.0	2,395.01				Average	
		point9	9	1,621,484.1	12,343,822.0	2,395.01				Average	
		point10	10	1,621,413.2	12,343,812.0	2,388.45				Average	
		point11	11	1,621,254.1	12,343,762.0	2,378.61				Average	
		point12	12	1,621,181.6	12,343,735.0	2,378.61				Average	
		point132	132	1,621,072.5	12,343,698.0	2,388.45					
Roadway3-2-2-2	16.0	point159	159	1,621,795.5	12,343,796.0	2,398.29				Average	
		point46	46	1,622,050.4	12,343,799.0	2,401.57				Average	
		point47	47	1,622,225.6	12,343,800.0	2,401.57				Average	

		point48	48	1,622,481.5	12,343,805.0	2,414.70					

Dudek				**21 November 2019**								
CB				**TNM 2.5**								
INPUT: TRAFFIC FOR LAeq1h Volumes												
PROJECT/CONTRACT:	**RV/Gas**											
RUN:	**Existing + Ambient**											
Roadway	**Points**											
Name	**Name**	**No.**	**Segment**									
			Autos		**MTrucks**		**HTrucks**		**Buses**		**Motorcycles**	
			V	**S**	**V**	**S**	**V**	**S**	**V**	**S**	**V**	**S**
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Roadway2	point3	3	718	35	15	35	7	35	0	0	0	0
	point4	4	718	35	15	35	7	35	0	0	0	0
	point5	5	718	35	15	35	7	35	0	0	0	0
	point6	6	718	35	15	35	7	35	0	0	0	0
	point7	7										
Roadway3	point23	23	19	25	0	0	0	0	0	0	0	0
	point24	24	19	25	0	0	0	0	0	0	0	0
	point25	25	19	25	0	0	0	0	0	0	0	0
	point26	26	19	25	0	0	0	0	0	0	0	0
	point27	27	19	25	0	0	0	0	0	0	0	0
	point28	28	19	25	0	0	0	0	0	0	0	0
	point29	29	19	25	0	0	0	0	0	0	0	0
	point153	153										
North County Line Lane	point49	49	10	25	0	0	0	0	0	0	0	0
	point50	50	10	25	0	0	0	0	0	0	0	0
	point51	51	10	25	0	0	0	0	0	0	0	0
	point52	52	10	25	0	0	0	0	0	0	0	0
	point53	53	10	25	0	0	0	0	0	0	0	0
	point54	54	10	25	0	0	0	0	0	0	0	0
	point55	55	10	25	0	0	0	0	0	0	0	0
	point56	56										
Roadway5	point57	57	107	25	2	25	1	25	0	0	0	0
	point58	58	107	25	2	25	1	25	0	0	0	0

	point59	59	107	25	2	25	1	25	0	0	0	0
	point60	60	107	25	2	25	1	25	0	0	0	0
	point61	61	107	25	2	25	1	25	0	0	0	0
	point62	62	107	25	2	25	1	25	0	0	0	0
	point63	63										
Roadway6	point73	73	0	0	0	0	0	0	0	0	0	0
	point74	74	0	0	0	0	0	0	0	0	0	0
	point75	75	0	0	0	0	0	0	0	0	0	0
	point76	76	0	0	0	0	0	0	0	0	0	0
	point77	77										
Roadway7	point78	78	0	0	0	0	0	0	0	0	0	0
	point79	79	0	0	0	0	0	0	0	0	0	0
	point80	80	0	0	0	0	0	0	0	0	0	0
	point81	81	0	0	0	0	0	0	0	0	0	0
	point82	82	0	0	0	0	0	0	0	0	0	0
	point83	83										
Roadway8	point84	84	5384	70	111	70	56	70	0	0	0	0
	point85	85	5384	70	111	70	56	70	0	0	0	0
	point86	86	5384	70	111	70	56	70	0	0	0	0
	point87	87	5384	70	111	70	56	70	0	0	0	0
	point88	88	5384	70	111	70	56	70	0	0	0	0
	point89	89										
Roadway9	point95	95	5723	70	118	70	59	70	0	0	0	0
	point96	96	5723	70	118	70	59	70	0	0	0	0
	point97	97	5723	70	118	70	59	70	0	0	0	0
	point98	98	5723	70	118	70	59	70	0	0	0	0
	point99	99	5723	70	118	70	59	70	0	0	0	0
	point100	100	5723	70	118	70	59	70	0	0	0	0
	point101	101	5723	70	118	70	59	70	0	0	0	0
	point102	102	5723	70	118	70	59	70	0	0	0	0
	point103	103										
Roadway10	point106	106	0	0	0	0	0	0	0	0	0	0
	point107	107	0	0	0	0	0	0	0	0	0	0
	point108	108	0	0	0	0	0	0	0	0	0	0
	point109	109	0	0	0	0	0	0	0	0	0	0
	point110	110	0	0	0	0	0	0	0	0	0	0

	point111	111										
Roadway11	point112	112	0	0	0	0	0	0	0	0	0	0
	point113	113	0	0	0	0	0	0	0	0	0	0
	point114	114	0	0	0	0	0	0	0	0	0	0
	point115	115	0	0	0	0	0	0	0	0	0	0
	point116	116										
Roadway12	point117	117	427	35	9	35	5	35	0	0	0	0
	point118	118	427	35	9	35	5	35	0	0	0	0
	point119	119	427	35	9	35	5	35	0	0	0	0
	point120	120	427	35	9	35	5	35	0	0	0	0
	point145	145										
Roadway13	point125	125	398	35	8	35	4	35	0	0	0	0
	point126	126	398	35	8	35	4	35	0	0	0	0
	point127	127	398	35	8	35	4	35	0	0	0	0
	point128	128	398	35	8	35	4	35	0	0	0	0
	point147	147										
County line east segment	point134	134	78	35	2	35	1	35	0	0	0	0
	point14	14	78	35	2	35	1	35	0	0	0	0
	point15	15	78	35	2	35	1	35	0	0	0	0
	point139	139										
Roadway3-2-2	point137	137	815	35	17	35	8	35	0	0	0	0
	point38	38	815	35	17	35	8	35	0	0	0	0
	point39	39	815	35	17	35	8	35	0	0	0	0
	point40	40	815	35	17	35	8	35	0	0	0	0
	point41	41	815	35	17	35	8	35	0	0	0	0
	point42	42	815	35	17	35	8	35	0	0	0	0
	point43	43	815	35	17	35	8	35	0	0	0	0
	point44	44	815	35	17	35	8	35	0	0	0	0
	point45	45										
County line center	point141	141	29	25	0	0	0	0	0	0	0	0
	point17	17	29	25	0	0	0	0	0	0	0	0
	point18	18	29	25	0	0	0	0	0	0	0	0
	point151	151	29	25	0	0	0	0	0	0	0	0
	point152	152										
Roadway3-2-2	point142	142	78	35	2	35	1	35	0	0	0	0
	point36	36	78	35	2	35	1	35	0	0	0	0

	point37	37										
Roadway5-2-2	point144	144	0	0	0	0	0	0	0	0	0	0
	point65	65	0	0	0	0	0	0	0	0	0	0
	point66	66	0	0	0	0	0	0	0	0	0	0
	point67	67	0	0	0	0	0	0	0	0	0	0
	point68	68	0	0	0	0	0	0	0	0	0	0
	point69	69	0	0	0	0	0	0	0	0	0	0
	point70	70	0	0	0	0	0	0	0	0	0	0
	point71	71	0	0	0	0	0	0	0	0	0	0
	point72	72										
Roadway13-2-2	point149	149	427	35	9	35	5	35	0	0	0	0
	point130	130	427	35	9	35	5	35	0	0	0	0
	point131	131										
Roadway12-2-2	point150	150	398	35	8	35	4	35	0	0	0	0
	point122	122	398	35	8	35	4	35	0	0	0	0
	point123	123	398	35	8	35	4	35	0	0	0	0
	point124	124										
county line west	point154	154	19	25	0	0	0	0	0	0	0	0
	point19	19	19	25	0	0	0	0	0	0	0	0
	point20	20	19	25	0	0	0	0	0	0	0	0
	point21	21	19	25	0	0	0	0	0	0	0	0
	point22	22										
Roadway3-2	point155	155	29	25	0	0	0	0	0	0	0	0
	point30	30	29	25	0	0	0	0	0	0	0	0
	point31	31	29	25	0	0	0	0	0	0	0	0
	point32	32	29	25	0	0	0	0	0	0	0	0
	point33	33	29	25	0	0	0	0	0	0	0	0
	point34	34										
I10 south	point156	156	5723	70	118	70	59	70	0	0	0	0
	point90	90	5723	70	118	70	59	70	0	0	0	0
	point91	91	5723	70	118	70	59	70	0	0	0	0
	point92	92	5723	70	118	70	59	70	0	0	0	0
	point93	93	5723	70	118	70	59	70	0	0	0	0
	point94	94										
Roadway9-2	point157	157	5384	70	111	70	56	70	0	0	0	0
	point104	104	5384	70	111	70	56	70	0	0	0	0

	point105	105										
Roadway2-2	point158	158	815	35	17	35	8	35	0	0	0	0
	point8	8	815	35	17	35	8	35	0	0	0	0
	point9	9	815	35	17	35	8	35	0	0	0	0
	point10	10	815	35	17	35	8	35	0	0	0	0
	point11	11	815	35	17	35	8	35	0	0	0	0
	point12	12	815	35	17	35	8	35	0	0	0	0
	point132	132										
Roadway3-2-2-2	point159	159	718	35	15	35	7	35	0	0	0	0
	point46	46	718	35	15	35	7	35	0	0	0	0
	point47	47	718	35	15	35	7	35	0	0	0	0
	point48	48										

Dudek 21 November 2019
CB TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: RV/Gas
RUN: Existing + Ambient

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria Existing LAeq1h	Impact Criteria LAeq1h	Impact Criteria Sub'l	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
M1	1	1	1,620,134.8	12,343,753.0	2,362.21	4.92	0.00	66	10.0	8.0	Y
M2	2	1	1,620,429.1	12,343,650.0	2,365.49	4.92	0.00	66	10.0	8.0	Y
M3	3	1	1,620,204.5	12,343,550.0	2,368.77	4.92	0.00	66	10.0	8.0	Y
M4	5	1	1,620,293.5	12,343,809.0	2,368.77	4.92	0.00	66	10.0	8.0	Y
M5	6	1	1,620,362.4	12,343,375.0	2,362.21	4.92	0.00	66	10.0	8.0	Y

Dudek
CB

21 November 2019
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: RV/Gas
RUN: Existing + Ambient
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
M1	1	1	0.0	61.4	66	61.4	10	----	61.4	0.0	8	-8.0
M2	2	1	0.0	63.7	66	63.7	10	----	63.7	0.0	8	-8.0
M3	3	1	0.0	62.5	66	62.5	10	----	62.5	0.0	8	-8.0
M4	5	1	0.0	65.4	66	65.4	10	----	65.4	0.0	8	-8.0
M5	6	1	0.0	60.0	66	60.0	10	----	60.0	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	5	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Dudek					**21 November 2019**						
CB					**TNM 2.5**						
INPUT: ROADWAYS							**Average pavement type shall be used unless**				
PROJECT/CONTRACT:	**RV/Gas**						**a State highway agency substantiates the use**				
RUN:	**Existing + Ambient + Project**						**of a different type with the approval of FHWA**				
Roadway		**Points**									
Name	**Width**	**Name**	**No.**	**Coordinates (pavement)**			**Flow Control**			**Segment**	
				X	**Y**	**Z**	**Control Device**	**Speed Constraint**	**Percent Vehicles Affected**	**Pvmt Type**	**On Struct?**
	ft			ft	ft	ft		mph	%		
Roadway2	16.0	point3	3	1,622,482.2	12,343,842.0	2,414.70				Average	
		point4	4	1,622,295.2	12,343,838.0	2,401.57				Average	
		point5	5	1,622,078.5	12,343,833.0	2,401.57				Average	
		point6	6	1,621,978.0	12,343,833.0	2,398.29				Average	
		point7	7	1,621,765.4	12,343,829.0	2,398.29					
Roadway3	15.0	point23	23	1,619,615.6	12,343,504.0	2,358.92				Average	
		point24	24	1,619,656.8	12,343,507.0	2,362.20				Average	
		point25	25	1,619,732.4	12,343,508.0	2,362.20				Average	
		point26	26	1,619,858.1	12,343,508.0	2,362.20				Average	
		point27	27	1,619,934.6	12,343,507.0	2,368.77				Average	
		point28	28	1,619,995.2	12,343,505.0	2,368.77				Average	
		point29	29	1,620,093.2	12,343,507.0	2,368.77				Average	
		point153	153	1,620,160.8	12,343,506.0	2,365.49					
North County Line Lane	30.0	point49	49	1,620,623.1	12,343,794.0	2,365.49				Average	
		point50	50	1,620,568.9	12,343,796.0	2,365.49				Average	
		point51	51	1,620,484.2	12,343,793.0	2,368.77				Average	
		point52	52	1,620,315.6	12,343,791.0	2,368.77				Average	
		point53	53	1,620,223.2	12,343,791.0	2,358.92				Average	
		point54	54	1,620,174.6	12,343,784.0	2,358.92				Average	
		point55	55	1,620,162.5	12,343,759.0	2,362.20				Average	
		point56	56	1,620,162.0	12,343,541.0	2,368.77					
Roadway5	30.0	point57	57	1,620,668.6	12,342,799.0	2,378.61				Average	
		point58	58	1,620,669.4	12,342,941.0	2,375.33				Average	
		point59	59	1,620,671.1	12,343,061.0	2,372.05				Average	
		point60	60	1,620,670.0	12,343,217.0	2,368.77				Average	

		point61	61	1,620,668.8	12,343,311.0	2,362.20				Average	
		point62	62	1,620,669.6	12,343,396.0	2,365.49				Average	
		point63	63	1,620,670.1	12,343,527.0	2,372.05					
Roadway6	12.0	point73	73	1,620,519.8	12,344,681.0	2,342.52				Average	
		point74	74	1,620,604.0	12,344,424.0	2,358.92				Average	
		point75	75	1,620,696.2	12,344,109.0	2,358.92				Average	
		point76	76	1,620,771.5	12,343,835.0	2,365.49				Average	
		point77	77	1,620,832.2	12,343,629.0	2,375.33					
Roadway7	12.0	point78	78	1,621,241.6	12,343,012.0	2,385.17				Average	
		point79	79	1,621,191.0	12,343,090.0	2,385.20				Average	
		point80	80	1,621,111.2	12,343,197.0	2,372.05				Average	
		point81	81	1,621,035.5	12,343,311.0	2,368.77				Average	
		point82	82	1,620,951.8	12,343,430.0	2,368.77				Average	
		point83	83	1,620,857.6	12,343,571.0	2,378.61					
Roadway8	60.0	point84	84	1,621,300.9	12,343,003.0	2,385.17				Average	
		point85	85	1,621,235.4	12,343,151.0	2,380.00				Average	
		point86	86	1,621,170.5	12,343,298.0	2,380.00				Average	
		point87	87	1,621,116.9	12,343,419.0	2,378.60				Average	
		point88	88	1,621,082.5	12,343,497.0	2,378.61				Average	
		point89	89	1,621,014.9	12,343,647.0	2,378.60					
Roadway9	60.0	point95	95	1,620,575.4	12,344,780.0	2,355.64				Average	
		point96	96	1,620,635.4	12,344,641.0	2,362.20				Average	
		point97	97	1,620,689.9	12,344,524.0	2,365.49				Average	
		point98	98	1,620,741.5	12,344,416.0	2,365.50				Average	
		point99	99	1,620,813.2	12,344,248.0	2,362.20				Average	
		point100	100	1,620,875.2	12,344,122.0	2,362.20				Average	
		point101	101	1,620,958.1	12,343,941.0	2,370.00				Average	
		point102	102	1,621,046.0	12,343,742.0	2,380.00				Average	
		point103	103	1,621,079.2	12,343,666.0	2,380.00					
Roadway10	12.0	point106	106	1,620,725.4	12,344,533.0	2,365.49				Average	
		point107	107	1,620,773.8	12,344,422.0	2,358.92				Average	
		point108	108	1,620,873.6	12,344,276.0	2,372.05				Average	
		point109	109	1,620,987.5	12,344,096.0	2,358.92				Average	
		point110	110	1,621,105.5	12,343,933.0	2,365.49				Average	
		point111	111	1,621,210.1	12,343,780.0	2,388.45					
Roadway11	12.0	point112	112	1,621,415.1	12,343,050.0	2,385.17				Average	
		point113	113	1,621,372.6	12,343,194.0	2,398.29				Average	
		point114	114	1,621,330.6	12,343,367.0	2,391.73				Average	
		point115	115	1,621,280.5	12,343,552.0	2,391.73				Average	

		point116	116	1,621,243.5	12,343,713.0	2,378.61					
Roadway12	30.0	point117	117	1,621,996.2	12,343,286.0	2,398.29				Average	
		point118	118	1,621,922.9	12,343,479.0	2,398.29				Average	
		point119	119	1,621,881.1	12,343,595.0	2,398.29				Average	
		point120	120	1,621,834.0	12,343,718.0	2,398.29				Average	
		point145	145	1,621,809.0	12,343,796.0	2,398.29					
Roadway13	30.0	point125	125	1,621,631.8	12,344,484.0	2,395.01				Average	
		point126	126	1,621,683.6	12,344,303.0	2,395.01				Average	
		point127	127	1,621,728.6	12,344,150.0	2,404.86				Average	
		point128	128	1,621,787.2	12,343,967.0	2,401.57				Average	
		point147	147	1,621,820.1	12,343,866.0	2,399.93					
County line east segment	20.0	point134	134	1,620,994.5	12,343,672.0	2,398.29				Average	
		point14	14	1,620,854.5	12,343,620.0	2,398.29				Average	
		point15	15	1,620,724.1	12,343,568.0	2,372.05				Average	
		point139	139	1,620,677.8	12,343,554.0	2,372.05					
Roadway3-2-2	16.0	point137	137	1,621,085.0	12,343,679.0	2,388.45				Average	
		point38	38	1,621,162.5	12,343,706.0	2,378.61				Average	
		point39	39	1,621,253.8	12,343,741.0	2,378.61				Average	
		point40	40	1,621,326.9	12,343,759.0	2,378.61				Average	
		point41	41	1,621,407.2	12,343,777.0	2,388.45				Average	
		point42	42	1,621,518.1	12,343,793.0	2,395.01				Average	
		point43	43	1,621,622.1	12,343,799.0	2,395.01				Average	
		point44	44	1,621,695.5	12,343,800.0	2,395.01				Average	
		point45	45	1,621,795.5	12,343,796.0	2,398.29					
County line center	12.0	point141	141	1,620,631.5	12,343,541.0	2,372.05				Average	
		point17	17	1,620,522.9	12,343,524.0	2,362.20				Average	
		point18	18	1,620,319.1	12,343,521.0	2,362.20				Average	
		point151	151	1,620,220.6	12,343,522.0	2,364.39				Average	
		point152	152	1,620,149.6	12,343,522.0	2,366.58					
Roadway3-2-2	20.0	point142	142	1,620,696.4	12,343,544.0	2,372.05				Average	
		point36	36	1,620,830.0	12,343,589.0	2,375.33				Average	
		point37	37	1,620,999.9	12,343,648.0	2,398.29					
Roadway5-2-2	30.0	point144	144	1,620,672.0	12,343,571.0	2,372.05				Average	
		point65	65	1,620,665.1	12,343,754.0	2,372.05				Average	
		point66	66	1,620,665.2	12,343,862.0	2,365.49				Average	
		point67	67	1,620,665.8	12,343,947.0	2,362.20				Average	
		point68	68	1,620,661.4	12,344,008.0	2,358.92				Average	
		point69	69	1,620,651.0	12,344,068.0	2,358.92				Average	
		point70	70	1,620,632.4	12,344,143.0	2,358.92				Average	

		point71	71	1,620,602.0	12,344,233.0	2,362.20				Average	
		point72	72	1,620,551.2	12,344,352.0	2,365.49					
Roadway13-2-2	30.0	point149	149	1,621,853.0	12,343,766.0	2,398.29				Average	
		point130	130	1,621,916.0	12,343,596.0	2,398.29				Average	
		point131	131	1,622,032.4	12,343,305.0	2,401.57					
Roadway12-2-2	30.0	point150	150	1,621,783.9	12,343,873.0	2,398.29				Average	
		point122	122	1,621,725.4	12,344,045.0	2,401.57				Average	
		point123	123	1,621,669.8	12,344,214.0	2,401.57				Average	
		point124	124	1,621,601.6	12,344,473.0	2,395.01					
county line west	12.0	point154	154	1,620,149.6	12,343,522.0	2,366.58				Average	
		point19	19	1,620,106.4	12,343,523.0	2,368.77				Average	
		point20	20	1,619,925.1	12,343,522.0	2,362.20				Average	
		point21	21	1,619,746.0	12,343,521.0	2,362.20				Average	
		point22	22	1,619,614.6	12,343,519.0	2,358.92					
Roadway3-2	15.0	point155	155	1,620,160.8	12,343,506.0	2,365.49				Average	
		point30	30	1,620,228.1	12,343,505.0	2,362.20				Average	
		point31	31	1,620,307.8	12,343,502.0	2,362.20				Average	
		point32	32	1,620,488.9	12,343,509.0	2,362.20				Average	
		point33	33	1,620,600.8	12,343,517.0	2,372.05				Average	
		point34	34	1,620,644.9	12,343,524.0	2,372.05					
I10 south	60.0	point156	156	1,621,014.9	12,343,647.0	2,378.60				Average	
		point90	90	1,620,894.5	12,343,915.0	2,365.49				Average	
		point91	91	1,620,813.2	12,344,091.0	2,365.50				Average	
		point92	92	1,620,720.5	12,344,294.0	2,365.49				Average	
		point93	93	1,620,628.2	12,344,501.0	2,365.49				Average	
		point94	94	1,620,507.8	12,344,759.0	2,360.00					
Roadway9-2	60.0	point157	157	1,621,079.2	12,343,666.0	2,380.00				Average	
		point104	104	1,621,149.8	12,343,505.0	2,380.00				Average	
		point105	105	1,621,256.8	12,343,270.0	2,385.00					
Roadway2-2	16.0	point158	158	1,621,765.4	12,343,829.0	2,398.29				Average	
		point8	8	1,621,577.1	12,343,827.0	2,395.01				Average	
		point9	9	1,621,484.1	12,343,822.0	2,395.01				Average	
		point10	10	1,621,413.2	12,343,812.0	2,388.45				Average	
		point11	11	1,621,254.1	12,343,762.0	2,378.61				Average	
		point12	12	1,621,181.6	12,343,735.0	2,378.61				Average	
		point132	132	1,621,072.5	12,343,698.0	2,388.45					
Roadway3-2-2-2	16.0	point159	159	1,621,795.5	12,343,796.0	2,398.29				Average	
		point46	46	1,622,050.4	12,343,799.0	2,401.57				Average	
		point47	47	1,622,225.6	12,343,800.0	2,401.57				Average	

		point48	48	1,622,481.5	12,343,805.0	2,414.70					

Dudek				**21 November 2019**								
CB				**TNM 2.5**								
INPUT: TRAFFIC FOR LAeq1h Volumes												
PROJECT/CONTRACT:	**RV/Gas**											
RUN:	**Existing + Ambient + Project**											
Roadway	**Points**											
Name	**Name**	**No.**	**Segment**									
			Autos		**MTrucks**		**HTrucks**		**Buses**		**Motorcycles**	
			V	**S**	**V**	**S**	**V**	**S**	**V**	**S**	**V**	**S**
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Roadway2	point3	3	737	35	15	35	8	35	0	0	0	0
	point4	4	737	35	15	35	8	35	0	0	0	0
	point5	5	737	35	15	35	8	35	0	0	0	0
	point6	6	737	35	15	35	8	35	0	0	0	0
	point7	7										
Roadway3	point23	23	19	25	0	0	0	0	0	0	0	0
	point24	24	19	25	0	0	0	0	0	0	0	0
	point25	25	19	25	0	0	0	0	0	0	0	0
	point26	26	19	25	0	0	0	0	0	0	0	0
	point27	27	19	25	0	0	0	0	0	0	0	0
	point28	28	19	25	0	0	0	0	0	0	0	0
	point29	29	19	25	0	0	0	0	0	0	0	0
	point153	153										
North County Line Lane	point49	49	155	25	3	25	2	25	0	0	0	0
	point50	50	155	25	3	25	2	25	0	0	0	0
	point51	51	155	25	3	25	2	25	0	0	0	0
	point52	52	155	25	3	25	2	25	0	0	0	0
	point53	53	155	25	3	25	2	25	0	0	0	0
	point54	54	155	25	3	25	2	25	0	0	0	0
	point55	55	155	25	3	25	2	25	0	0	0	0
	point56	56										
Roadway5	point57	57	136	25	3	25	1	25	0	0	0	0
	point58	58	136	25	3	25	1	25	0	0	0	0

	point59	59	136	25	3	25	1	25	0	0	0	0
	point60	60	136	25	3	25	1	25	0	0	0	0
	point61	61	136	25	3	25	1	25	0	0	0	0
	point62	62	136	25	3	25	1	25	0	0	0	0
	point63	63										
Roadway6	point73	73	0	0	0	0	0	0	0	0	0	0
	point74	74	0	0	0	0	0	0	0	0	0	0
	point75	75	0	0	0	0	0	0	0	0	0	0
	point76	76	0	0	0	0	0	0	0	0	0	0
	point77	77										
Roadway7	point78	78	0	0	0	0	0	0	0	0	0	0
	point79	79	0	0	0	0	0	0	0	0	0	0
	point80	80	0	0	0	0	0	0	0	0	0	0
	point81	81	0	0	0	0	0	0	0	0	0	0
	point82	82	0	0	0	0	0	0	0	0	0	0
	point83	83										
Roadway8	point84	84	5384	70	111	70	56	70	0	0	0	0
	point85	85	5384	70	111	70	56	70	0	0	0	0
	point86	86	5384	70	111	70	56	70	0	0	0	0
	point87	87	5384	70	111	70	56	70	0	0	0	0
	point88	88	5384	70	111	70	56	70	0	0	0	0
	point89	89										
Roadway9	point95	95	5723	70	118	70	59	70	0	0	0	0
	point96	96	5723	70	118	70	59	70	0	0	0	0
	point97	97	5723	70	118	70	59	70	0	0	0	0
	point98	98	5723	70	118	70	59	70	0	0	0	0
	point99	99	5723	70	118	70	59	70	0	0	0	0
	point100	100	5723	70	118	70	59	70	0	0	0	0
	point101	101	5723	70	118	70	59	70	0	0	0	0
	point102	102	5723	70	118	70	59	70	0	0	0	0
	point103	103										
Roadway10	point106	106	0	0	0	0	0	0	0	0	0	0
	point107	107	0	0	0	0	0	0	0	0	0	0
	point108	108	0	0	0	0	0	0	0	0	0	0
	point109	109	0	0	0	0	0	0	0	0	0	0
	point110	110	0	0	0	0	0	0	0	0	0	0

	point111	111										
Roadway11	point112	112	0	0	0	0	0	0	0	0	0	0
	point113	113	0	0	0	0	0	0	0	0	0	0
	point114	114	0	0	0	0	0	0	0	0	0	0
	point115	115	0	0	0	0	0	0	0	0	0	0
	point116	116										
Roadway12	point117	117	446	35	9	35	5	35	0	0	0	0
	point118	118	446	35	9	35	5	35	0	0	0	0
	point119	119	446	35	9	35	5	35	0	0	0	0
	point120	120	446	35	9	35	5	35	0	0	0	0
	point145	145										
Roadway13	point125	125	412	35	9	35	4	35	0	0	0	0
	point126	126	412	35	9	35	4	35	0	0	0	0
	point127	127	412	35	9	35	4	35	0	0	0	0
	point128	128	412	35	9	35	4	35	0	0	0	0
	point147	147										
County line east segment	point134	134	223	35	5	35	2	35	0	0	0	0
	point14	14	223	35	5	35	2	35	0	0	0	0
	point15	15	223	35	5	35	2	35	0	0	0	0
	point139	139										
Roadway3-2-2	point137	137	868	35	18	35	9	35	0	0	0	0
	point38	38	868	35	18	35	9	35	0	0	0	0
	point39	39	868	35	18	35	9	35	0	0	0	0
	point40	40	868	35	18	35	9	35	0	0	0	0
	point41	41	868	35	18	35	9	35	0	0	0	0
	point42	42	868	35	18	35	9	35	0	0	0	0
	point43	43	868	35	18	35	9	35	0	0	0	0
	point44	44	868	35	18	35	9	35	0	0	0	0
	point45	45										
County line center	point141	141	160	25	3	25	2	25	0	0	0	0
	point17	17	160	25	3	25	2	25	0	0	0	0
	point18	18	160	25	3	25	2	25	0	0	0	0
	point151	151	160	25	3	25	2	25	0	0	0	0
	point152	152										
Roadway3-2-2	point142	142	223	35	5	35	2	35	0	0	0	0
	point36	36	223	35	5	35	2	35	0	0	0	0

	point37	37										
Roadway5-2-2	point144	144	0	0	0	0	0	0	0	0	0	0
	point65	65	0	0	0	0	0	0	0	0	0	0
	point66	66	0	0	0	0	0	0	0	0	0	0
	point67	67	0	0	0	0	0	0	0	0	0	0
	point68	68	0	0	0	0	0	0	0	0	0	0
	point69	69	0	0	0	0	0	0	0	0	0	0
	point70	70	0	0	0	0	0	0	0	0	0	0
	point71	71	0	0	0	0	0	0	0	0	0	0
	point72	72										
Roadway13-2-2	point149	149	446	35	9	35	5	35	0	0	0	0
	point130	130	446	35	9	35	5	35	0	0	0	0
	point131	131										
Roadway12-2-2	point150	150	412	35	9	35	4	35	0	0	0	0
	point122	122	412	35	9	35	4	35	0	0	0	0
	point123	123	412	35	9	35	4	35	0	0	0	0
	point124	124										
county line west	point154	154	19	25	0	0	0	0	0	0	0	0
	point19	19	19	25	0	0	0	0	0	0	0	0
	point20	20	19	25	0	0	0	0	0	0	0	0
	point21	21	19	25	0	0	0	0	0	0	0	0
	point22	22										
Roadway3-2	point155	155	160	25	3	25	2	25	0	0	0	0
	point30	30	160	25	3	25	2	25	0	0	0	0
	point31	31	160	25	3	25	2	25	0	0	0	0
	point32	32	160	25	3	25	2	25	0	0	0	0
	point33	33	160	25	3	25	2	25	0	0	0	0
	point34	34										
I10 south	point156	156	5723	70	118	70	59	70	0	0	0	0
	point90	90	5723	70	118	70	59	70	0	0	0	0
	point91	91	5723	70	118	70	59	70	0	0	0	0
	point92	92	5723	70	118	70	59	70	0	0	0	0
	point93	93	5723	70	118	70	59	70	0	0	0	0
	point94	94										
Roadway9-2	point157	157	5384	70	111	70	56	70	0	0	0	0
	point104	104	5384	70	111	70	56	70	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes **RV/Gas**

	point105	105										
Roadway2-2	point158	158	868	35	18	35	9	35	0	0	0	0
	point8	8	868	35	18	35	9	35	0	0	0	0
	point9	9	868	35	18	35	9	35	0	0	0	0
	point10	10	868	35	18	35	9	35	0	0	0	0
	point11	11	868	35	18	35	9	35	0	0	0	0
	point12	12	868	35	18	35	9	35	0	0	0	0
	point132	132										
Roadway3-2-2-2	point159	159	737	35	15	35	8	35	0	0	0	0
	point46	46	737	35	15	35	8	35	0	0	0	0
	point47	47	737	35	15	35	8	35	0	0	0	0
	point48	48										

Dudek 21 November 2019
CB TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: RV/Gas
RUN: Existing + Ambient + Project

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria Existing LAeq1h	Impact Criteria LAeq1h	Impact Criteria Sub'l	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
M1	1	1	1,620,134.8	12,343,753.0	2,362.21	4.92	0.00	66	10.0	8.0	Y
M2	2	1	1,620,429.1	12,343,650.0	2,365.49	4.92	0.00	66	10.0	8.0	Y
M3	3	1	1,620,204.5	12,343,550.0	2,368.77	4.92	0.00	66	10.0	8.0	Y
M4	5	1	1,620,293.5	12,343,809.0	2,368.77	4.92	0.00	66	10.0	8.0	Y
M5	6	1	1,620,362.4	12,343,375.0	2,362.21	4.92	0.00	66	10.0	8.0	Y

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21 November 2019
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: RV/Gas
RUN: Existing + Ambient + Project
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
M1	1	1	0.0	62.8	66	62.8	10	----	62.8	0.0	8	-8.0
M2	2	1	0.0	63.9	66	63.9	10	----	63.9	0.0	8	-8.0
M3	3	1	0.0	63.9	66	63.9	10	----	63.9	0.0	8	-8.0
M4	5	1	0.0	65.9	66	65.9	10	----	65.9	0.0	8	-8.0
M5	6	1	0.0	60.3	66	60.3	10	----	60.3	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	5	0.0	0.0	0.0
All Impacted	0	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Dudek					**21 November 2019**						
CB					**TNM 2.5**						
INPUT: ROADWAYS							**Average pavement type shall be used unless**				
PROJECT/CONTRACT:	**RV/Gas**						**a State highway agency substantiates the use**				
RUN:	**Existing + Ambient + Project + Cumulative**						**of a different type with the approval of FHWA**				
Roadway		**Points**									
Name	**Width**	**Name**	**No.**	**Coordinates (pavement)**			**Flow Control**			**Segment**	
				X	**Y**	**Z**	**Control Device**	**Speed Constraint**	**Percent Vehicles Affected**	**Pvmt Type**	**On Struct?**
	ft			ft	ft	ft		mph	%		
Roadway2	16.0	point3	3	1,622,482.2	12,343,842.0	2,414.70				Average	
		point4	4	1,622,295.2	12,343,838.0	2,401.57				Average	
		point5	5	1,622,078.5	12,343,833.0	2,401.57				Average	
		point6	6	1,621,978.0	12,343,833.0	2,398.29				Average	
		point7	7	1,621,765.4	12,343,829.0	2,398.29					
Roadway3	15.0	point23	23	1,619,615.6	12,343,504.0	2,358.92				Average	
		point24	24	1,619,656.8	12,343,507.0	2,362.20				Average	
		point25	25	1,619,732.4	12,343,508.0	2,362.20				Average	
		point26	26	1,619,858.1	12,343,508.0	2,362.20				Average	
		point27	27	1,619,934.6	12,343,507.0	2,368.77				Average	
		point28	28	1,619,995.2	12,343,505.0	2,368.77				Average	
		point29	29	1,620,093.2	12,343,507.0	2,368.77				Average	
		point153	153	1,620,160.8	12,343,506.0	2,365.49					
North County Line Lane	30.0	point49	49	1,620,623.1	12,343,794.0	2,365.49				Average	
		point50	50	1,620,568.9	12,343,796.0	2,365.49				Average	
		point51	51	1,620,484.2	12,343,793.0	2,368.77				Average	
		point52	52	1,620,315.6	12,343,791.0	2,368.77				Average	
		point53	53	1,620,223.2	12,343,791.0	2,358.92				Average	
		point54	54	1,620,174.6	12,343,784.0	2,358.92				Average	
		point55	55	1,620,162.5	12,343,759.0	2,362.20				Average	
		point56	56	1,620,162.0	12,343,541.0	2,368.77					
Roadway5	30.0	point57	57	1,620,668.6	12,342,799.0	2,378.61				Average	
		point58	58	1,620,669.4	12,342,941.0	2,375.33				Average	
		point59	59	1,620,671.1	12,343,061.0	2,372.05				Average	
		point60	60	1,620,670.0	12,343,217.0	2,368.77				Average	

		point61	61	1,620,668.8	12,343,311.0	2,362.20				Average	
		point62	62	1,620,669.6	12,343,396.0	2,365.49				Average	
		point63	63	1,620,670.1	12,343,527.0	2,372.05					
Roadway6	12.0	point73	73	1,620,519.8	12,344,681.0	2,342.52				Average	
		point74	74	1,620,604.0	12,344,424.0	2,358.92				Average	
		point75	75	1,620,696.2	12,344,109.0	2,358.92				Average	
		point76	76	1,620,771.5	12,343,835.0	2,365.49				Average	
		point77	77	1,620,832.2	12,343,629.0	2,375.33					
Roadway7	12.0	point78	78	1,621,241.6	12,343,012.0	2,385.17				Average	
		point79	79	1,621,191.0	12,343,090.0	2,385.20				Average	
		point80	80	1,621,111.2	12,343,197.0	2,372.05				Average	
		point81	81	1,621,035.5	12,343,311.0	2,368.77				Average	
		point82	82	1,620,951.8	12,343,430.0	2,368.77				Average	
		point83	83	1,620,857.6	12,343,571.0	2,378.61					
Roadway8	60.0	point84	84	1,621,300.9	12,343,003.0	2,385.17				Average	
		point85	85	1,621,235.4	12,343,151.0	2,380.00				Average	
		point86	86	1,621,170.5	12,343,298.0	2,380.00				Average	
		point87	87	1,621,116.9	12,343,419.0	2,378.60				Average	
		point88	88	1,621,082.5	12,343,497.0	2,378.61				Average	
		point89	89	1,621,014.9	12,343,647.0	2,378.60					
Roadway9	60.0	point95	95	1,620,575.4	12,344,780.0	2,355.64				Average	
		point96	96	1,620,635.4	12,344,641.0	2,362.20				Average	
		point97	97	1,620,689.9	12,344,524.0	2,365.49				Average	
		point98	98	1,620,741.5	12,344,416.0	2,365.50				Average	
		point99	99	1,620,813.2	12,344,248.0	2,362.20				Average	
		point100	100	1,620,875.2	12,344,122.0	2,362.20				Average	
		point101	101	1,620,958.1	12,343,941.0	2,370.00				Average	
		point102	102	1,621,046.0	12,343,742.0	2,380.00				Average	
		point103	103	1,621,079.2	12,343,666.0	2,380.00					
Roadway10	12.0	point106	106	1,620,725.4	12,344,533.0	2,365.49				Average	
		point107	107	1,620,773.8	12,344,422.0	2,358.92				Average	
		point108	108	1,620,873.6	12,344,276.0	2,372.05				Average	
		point109	109	1,620,987.5	12,344,096.0	2,358.92				Average	
		point110	110	1,621,105.5	12,343,933.0	2,365.49				Average	
		point111	111	1,621,210.1	12,343,780.0	2,388.45					
Roadway11	12.0	point112	112	1,621,415.1	12,343,050.0	2,385.17				Average	
		point113	113	1,621,372.6	12,343,194.0	2,398.29				Average	
		point114	114	1,621,330.6	12,343,367.0	2,391.73				Average	
		point115	115	1,621,280.5	12,343,552.0	2,391.73				Average	

		point116	116	1,621,243.5	12,343,713.0	2,378.61					
Roadway12	30.0	point117	117	1,621,996.2	12,343,286.0	2,398.29				Average	
		point118	118	1,621,922.9	12,343,479.0	2,398.29				Average	
		point119	119	1,621,881.1	12,343,595.0	2,398.29				Average	
		point120	120	1,621,834.0	12,343,718.0	2,398.29				Average	
		point145	145	1,621,809.0	12,343,796.0	2,398.29					
Roadway13	30.0	point125	125	1,621,631.8	12,344,484.0	2,395.01				Average	
		point126	126	1,621,683.6	12,344,303.0	2,395.01				Average	
		point127	127	1,621,728.6	12,344,150.0	2,404.86				Average	
		point128	128	1,621,787.2	12,343,967.0	2,401.57				Average	
		point147	147	1,621,820.1	12,343,866.0	2,399.93					
County line east segment	20.0	point134	134	1,620,994.5	12,343,672.0	2,398.29				Average	
		point14	14	1,620,854.5	12,343,620.0	2,398.29				Average	
		point15	15	1,620,724.1	12,343,568.0	2,372.05				Average	
		point139	139	1,620,677.8	12,343,554.0	2,372.05					
Roadway3-2-2	16.0	point137	137	1,621,085.0	12,343,679.0	2,388.45				Average	
		point38	38	1,621,162.5	12,343,706.0	2,378.61				Average	
		point39	39	1,621,253.8	12,343,741.0	2,378.61				Average	
		point40	40	1,621,326.9	12,343,759.0	2,378.61				Average	
		point41	41	1,621,407.2	12,343,777.0	2,388.45				Average	
		point42	42	1,621,518.1	12,343,793.0	2,395.01				Average	
		point43	43	1,621,622.1	12,343,799.0	2,395.01				Average	
		point44	44	1,621,695.5	12,343,800.0	2,395.01				Average	
		point45	45	1,621,795.5	12,343,796.0	2,398.29					
County line center	12.0	point141	141	1,620,631.5	12,343,541.0	2,372.05				Average	
		point17	17	1,620,522.9	12,343,524.0	2,362.20				Average	
		point18	18	1,620,319.1	12,343,521.0	2,362.20				Average	
		point151	151	1,620,220.6	12,343,522.0	2,364.39				Average	
		point152	152	1,620,149.6	12,343,522.0	2,366.58					
Roadway3-2-2	20.0	point142	142	1,620,696.4	12,343,544.0	2,372.05				Average	
		point36	36	1,620,830.0	12,343,589.0	2,375.33				Average	
		point37	37	1,620,999.9	12,343,648.0	2,398.29					
Roadway5-2-2	30.0	point144	144	1,620,672.0	12,343,571.0	2,372.05				Average	
		point65	65	1,620,665.1	12,343,754.0	2,372.05				Average	
		point66	66	1,620,665.2	12,343,862.0	2,365.49				Average	
		point67	67	1,620,665.8	12,343,947.0	2,362.20				Average	
		point68	68	1,620,661.4	12,344,008.0	2,358.92				Average	
		point69	69	1,620,651.0	12,344,068.0	2,358.92				Average	
		point70	70	1,620,632.4	12,344,143.0	2,358.92				Average	

		point71	71	1,620,602.0	12,344,233.0	2,362.20				Average	
		point72	72	1,620,551.2	12,344,352.0	2,365.49					
Roadway13-2-2	30.0	point149	149	1,621,853.0	12,343,766.0	2,398.29				Average	
		point130	130	1,621,916.0	12,343,596.0	2,398.29				Average	
		point131	131	1,622,032.4	12,343,305.0	2,401.57					
Roadway12-2-2	30.0	point150	150	1,621,783.9	12,343,873.0	2,398.29				Average	
		point122	122	1,621,725.4	12,344,045.0	2,401.57				Average	
		point123	123	1,621,669.8	12,344,214.0	2,401.57				Average	
		point124	124	1,621,601.6	12,344,473.0	2,395.01					
county line west	12.0	point154	154	1,620,149.6	12,343,522.0	2,366.58				Average	
		point19	19	1,620,106.4	12,343,523.0	2,368.77				Average	
		point20	20	1,619,925.1	12,343,522.0	2,362.20				Average	
		point21	21	1,619,746.0	12,343,521.0	2,362.20				Average	
		point22	22	1,619,614.6	12,343,519.0	2,358.92					
Roadway3-2	15.0	point155	155	1,620,160.8	12,343,506.0	2,365.49				Average	
		point30	30	1,620,228.1	12,343,505.0	2,362.20				Average	
		point31	31	1,620,307.8	12,343,502.0	2,362.20				Average	
		point32	32	1,620,488.9	12,343,509.0	2,362.20				Average	
		point33	33	1,620,600.8	12,343,517.0	2,372.05				Average	
		point34	34	1,620,644.9	12,343,524.0	2,372.05					
I10 south	60.0	point156	156	1,621,014.9	12,343,647.0	2,378.60				Average	
		point90	90	1,620,894.5	12,343,915.0	2,365.49				Average	
		point91	91	1,620,813.2	12,344,091.0	2,365.50				Average	
		point92	92	1,620,720.5	12,344,294.0	2,365.49				Average	
		point93	93	1,620,628.2	12,344,501.0	2,365.49				Average	
		point94	94	1,620,507.8	12,344,759.0	2,360.00					
Roadway9-2	60.0	point157	157	1,621,079.2	12,343,666.0	2,380.00				Average	
		point104	104	1,621,149.8	12,343,505.0	2,380.00				Average	
		point105	105	1,621,256.8	12,343,270.0	2,385.00					
Roadway2-2	16.0	point158	158	1,621,765.4	12,343,829.0	2,398.29				Average	
		point8	8	1,621,577.1	12,343,827.0	2,395.01				Average	
		point9	9	1,621,484.1	12,343,822.0	2,395.01				Average	
		point10	10	1,621,413.2	12,343,812.0	2,388.45				Average	
		point11	11	1,621,254.1	12,343,762.0	2,378.61				Average	
		point12	12	1,621,181.6	12,343,735.0	2,378.61				Average	
		point132	132	1,621,072.5	12,343,698.0	2,388.45					
Roadway3-2-2-2	16.0	point159	159	1,621,795.5	12,343,796.0	2,398.29				Average	
		point46	46	1,622,050.4	12,343,799.0	2,401.57				Average	
		point47	47	1,622,225.6	12,343,800.0	2,401.57				Average	

		point48	48	1,622,481.5	12,343,805.0	2,414.70					

Dudek				**21 November 2019**								
CB				**TNM 2.5**								
INPUT: TRAFFIC FOR LAeq1h Volumes												
PROJECT/CONTRACT:	**RV/Gas**											
RUN:	**Existing + Ambient + Project + Cumulative**											
Roadway	**Points**											
Name	**Name**	**No.**	**Segment**									
			Autos		**MTrucks**		**HTrucks**		**Buses**		**Motorcycles**	
			V	**S**	**V**	**S**	**V**	**S**	**V**	**S**	**V**	**S**
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Roadway2	point3	3	829	35	17	35	9	35	0	0	0	0
	point4	4	829	35	17	35	9	35	0	0	0	0
	point5	5	829	35	17	35	9	35	0	0	0	0
	point6	6	829	35	17	35	9	35	0	0	0	0
	point7	7										
Roadway3	point23	23	34	25	1	25	0	0	0	0	0	0
	point24	24	34	25	1	25	0	0	0	0	0	0
	point25	25	34	25	1	25	0	0	0	0	0	0
	point26	26	34	25	1	25	0	0	0	0	0	0
	point27	27	34	25	1	25	0	0	0	0	0	0
	point28	28	34	25	1	25	0	0	0	0	0	0
	point29	29	34	25	1	25	0	0	0	0	0	0
	point153	153										
North County Line Lane	point49	49	223	25	5	25	2	25	0	0	0	0
	point50	50	223	25	5	25	2	25	0	0	0	0
	point51	51	223	25	5	25	2	25	0	0	0	0
	point52	52	223	25	5	25	2	25	0	0	0	0
	point53	53	223	25	5	25	2	25	0	0	0	0
	point54	54	223	25	5	25	2	25	0	0	0	0
	point55	55	223	25	5	25	2	25	0	0	0	0
	point56	56										
Roadway5	point57	57	165	25	3	25	2	25	0	0	0	0
	point58	58	165	25	3	25	2	25	0	0	0	0

	point59	59	165	25	3	25	2	25	0	0	0	0
	point60	60	165	25	3	25	2	25	0	0	0	0
	point61	61	165	25	3	25	2	25	0	0	0	0
	point62	62	165	25	3	25	2	25	0	0	0	0
	point63	63										
Roadway6	point73	73	0	0	0	0	0	0	0	0	0	0
	point74	74	0	0	0	0	0	0	0	0	0	0
	point75	75	0	0	0	0	0	0	0	0	0	0
	point76	76	0	0	0	0	0	0	0	0	0	0
	point77	77										
Roadway7	point78	78	0	0	0	0	0	0	0	0	0	0
	point79	79	0	0	0	0	0	0	0	0	0	0
	point80	80	0	0	0	0	0	0	0	0	0	0
	point81	81	0	0	0	0	0	0	0	0	0	0
	point82	82	0	0	0	0	0	0	0	0	0	0
	point83	83										
Roadway8	point84	84	5384	70	111	70	56	70	0	0	0	0
	point85	85	5384	70	111	70	56	70	0	0	0	0
	point86	86	5384	70	111	70	56	70	0	0	0	0
	point87	87	5384	70	111	70	56	70	0	0	0	0
	point88	88	5384	70	111	70	56	70	0	0	0	0
	point89	89										
Roadway9	point95	95	5723	70	118	70	59	70	0	0	0	0
	point96	96	5723	70	118	70	59	70	0	0	0	0
	point97	97	5723	70	118	70	59	70	0	0	0	0
	point98	98	5723	70	118	70	59	70	0	0	0	0
	point99	99	5723	70	118	70	59	70	0	0	0	0
	point100	100	5723	70	118	70	59	70	0	0	0	0
	point101	101	5723	70	118	70	59	70	0	0	0	0
	point102	102	5723	70	118	70	59	70	0	0	0	0
	point103	103										
Roadway10	point106	106	0	0	0	0	0	0	0	0	0	0
	point107	107	0	0	0	0	0	0	0	0	0	0
	point108	108	0	0	0	0	0	0	0	0	0	0
	point109	109	0	0	0	0	0	0	0	0	0	0
	point110	110	0	0	0	0	0	0	0	0	0	0

	point111	111										
Roadway11	point112	112	0	0	0	0	0	0	0	0	0	0
	point113	113	0	0	0	0	0	0	0	0	0	0
	point114	114	0	0	0	0	0	0	0	0	0	0
	point115	115	0	0	0	0	0	0	0	0	0	0
	point116	116										
Roadway12	point117	117	466	35	10	35	5	35	0	0	0	0
	point118	118	466	35	10	35	5	35	0	0	0	0
	point119	119	466	35	10	35	5	35	0	0	0	0
	point120	120	466	35	10	35	5	35	0	0	0	0
	point145	145										
Roadway13	point125	125	446	35	9	35	5	35	0	0	0	0
	point126	126	446	35	9	35	5	35	0	0	0	0
	point127	127	446	35	9	35	5	35	0	0	0	0
	point128	128	446	35	9	35	5	35	0	0	0	0
	point147	147										
County line east segment	point134	134	335	35	7	35	3	35	0	0	0	0
	point14	14	335	35	7	35	3	35	0	0	0	0
	point15	15	335	35	7	35	3	35	0	0	0	0
	point139	139										
Roadway3-2-2	point137	137	965	35	20	35	10	35	0	0	0	0
	point38	38	965	35	20	35	10	35	0	0	0	0
	point39	39	965	35	20	35	10	35	0	0	0	0
	point40	40	965	35	20	35	10	35	0	0	0	0
	point41	41	965	35	20	35	10	35	0	0	0	0
	point42	42	965	35	20	35	10	35	0	0	0	0
	point43	43	965	35	20	35	10	35	0	0	0	0
	point44	44	965	35	20	35	10	35	0	0	0	0
	point45	45										
County line center	point141	141	286	25	6	25	2	25	0	0	0	0
	point17	17	286	25	6	25	2	25	0	0	0	0
	point18	18	286	25	6	25	2	25	0	0	0	0
	point151	151	286	25	6	25	2	25	0	0	0	0
	point152	152										
Roadway3-2-2	point142	142	335	35	7	35	3	35	0	0	0	0
	point36	36	335	35	7	35	3	35	0	0	0	0

	point37	37										
Roadway5-2-2	point144	144	0	0	0	0	0	0	0	0	0	0
	point65	65	0	0	0	0	0	0	0	0	0	0
	point66	66	0	0	0	0	0	0	0	0	0	0
	point67	67	0	0	0	0	0	0	0	0	0	0
	point68	68	0	0	0	0	0	0	0	0	0	0
	point69	69	0	0	0	0	0	0	0	0	0	0
	point70	70	0	0	0	0	0	0	0	0	0	0
	point71	71	0	0	0	0	0	0	0	0	0	0
	point72	72										
Roadway13-2-2	point149	149	466	35	10	35	5	35	0	0	0	0
	point130	130	466	35	10	35	5	35	0	0	0	0
	point131	131										
Roadway12-2-2	point150	150	446	35	9	35	5	35	0	0	0	0
	point122	122	446	35	9	35	5	35	0	0	0	0
	point123	123	446	35	9	35	5	35	0	0	0	0
	point124	124										
county line west	point154	154	34	25	1	25	0	0	0	0	0	0
	point19	19	34	25	1	25	0	0	0	0	0	0
	point20	20	34	25	1	25	0	0	0	0	0	0
	point21	21	34	25	1	25	0	0	0	0	0	0
	point22	22										
Roadway3-2	point155	155	286	25	6	25	2	25	0	0	0	0
	point30	30	286	25	6	25	2	25	0	0	0	0
	point31	31	286	25	6	25	2	25	0	0	0	0
	point32	32	286	25	6	25	2	25	0	0	0	0
	point33	33	286	25	6	25	2	25	0	0	0	0
	point34	34										
I10 south	point156	156	5723	70	118	70	59	70	0	0	0	0
	point90	90	5723	70	118	70	59	70	0	0	0	0
	point91	91	5723	70	118	70	59	70	0	0	0	0
	point92	92	5723	70	118	70	59	70	0	0	0	0
	point93	93	5723	70	118	70	59	70	0	0	0	0
	point94	94										
Roadway9-2	point157	157	5384	70	111	70	56	70	0	0	0	0
	point104	104	5384	70	111	70	56	70	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes **RV/Gas**

	point105	105										
Roadway2-2	point158	158	965	35	20	35	10	35	0	0	0	0
	point8	8	965	35	20	35	10	35	0	0	0	0
	point9	9	965	35	20	35	10	35	0	0	0	0
	point10	10	965	35	20	35	10	35	0	0	0	0
	point11	11	965	35	20	35	10	35	0	0	0	0
	point12	12	965	35	20	35	10	35	0	0	0	0
	point132	132										
Roadway3-2-2-2	point159	159	829	35	17	35	9	35	0	0	0	0
	point46	46	829	35	17	35	9	35	0	0	0	0
	point47	47	829	35	17	35	9	35	0	0	0	0
	point48	48										

Dudek 21 November 2019
CB TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: RV/Gas
RUN: Existing + Ambient + Project + Cumulative

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria Existing LAeq1h	Impact Criteria LAeq1h	Impact Criteria Sub'l	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
M1	1	1	1,620,134.8	12,343,753.0	2,362.21	4.92	0.00	66	10.0	8.0	Y
M2	2	1	1,620,429.1	12,343,650.0	2,365.49	4.92	0.00	66	10.0	8.0	Y
M3	3	1	1,620,204.5	12,343,550.0	2,368.77	4.92	0.00	66	10.0	8.0	Y
M4	5	1	1,620,293.5	12,343,809.0	2,368.77	4.92	0.00	66	10.0	8.0	Y
M5	6	1	1,620,362.4	12,343,375.0	2,362.21	4.92	0.00	66	10.0	8.0	Y

Dudek
CB
21 November 2019
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: RV/Gas
RUN: Existing + Ambient + Project + Cumulative
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
M1	1	1	0.0	63.1	66	63.1	10	----	63.1	0.0	8	-8.0
M2	2	1	0.0	64.0	66	64.0	10	----	64.0	0.0	8	-8.0
M3	3	1	0.0	64.5	66	64.5	10	----	64.5	0.0	8	-8.0
M4	5	1	0.0	66.3	66	66.3	10	Snd Lvl	66.3	0.0	8	-8.0
M5	6	1	0.0	60.5	66	60.5	10	----	60.5	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	5	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Dudek					**21 November 2019**						
CB					**TNM 2.5**						
INPUT: ROADWAYS							**Average pavement type shall be used unless**				
PROJECT/CONTRACT:	**RV/Gas**						**a State highway agency substantiates the use**				
RUN:	**Year 2023 No project**						**of a different type with the approval of FHWA**				
Roadway		**Points**									
Name	**Width**	**Name**	**No.**	**Coordinates (pavement)**			**Flow Control**			**Segment**	
				X	**Y**	**Z**	**Control Device**	**Speed Constraint**	**Percent Vehicles Affected**	**Pvmt Type**	**On Struct?**
	ft			ft	ft	ft		mph	%		
Roadway2	16.0	point3	3	1,622,482.2	12,343,842.0	2,414.70				Average	
		point4	4	1,622,295.2	12,343,838.0	2,401.57				Average	
		point5	5	1,622,078.5	12,343,833.0	2,401.57				Average	
		point6	6	1,621,978.0	12,343,833.0	2,398.29				Average	
		point7	7	1,621,765.4	12,343,829.0	2,398.29					
Roadway3	15.0	point23	23	1,619,615.6	12,343,504.0	2,358.92				Average	
		point24	24	1,619,656.8	12,343,507.0	2,362.20				Average	
		point25	25	1,619,732.4	12,343,508.0	2,362.20				Average	
		point26	26	1,619,858.1	12,343,508.0	2,362.20				Average	
		point27	27	1,619,934.6	12,343,507.0	2,368.77				Average	
		point28	28	1,619,995.2	12,343,505.0	2,368.77				Average	
		point29	29	1,620,093.2	12,343,507.0	2,368.77				Average	
		point153	153	1,620,160.8	12,343,506.0	2,365.49					
North County Line Lane	30.0	point49	49	1,620,623.1	12,343,794.0	2,365.49				Average	
		point50	50	1,620,568.9	12,343,796.0	2,365.49				Average	
		point51	51	1,620,484.2	12,343,793.0	2,368.77				Average	
		point52	52	1,620,315.6	12,343,791.0	2,368.77				Average	
		point53	53	1,620,223.2	12,343,791.0	2,358.92				Average	
		point54	54	1,620,174.6	12,343,784.0	2,358.92				Average	
		point55	55	1,620,162.5	12,343,759.0	2,362.20				Average	
		point56	56	1,620,162.0	12,343,541.0	2,368.77					
Roadway5	30.0	point57	57	1,620,668.6	12,342,799.0	2,378.61				Average	
		point58	58	1,620,669.4	12,342,941.0	2,375.33				Average	
		point59	59	1,620,671.1	12,343,061.0	2,372.05				Average	
		point60	60	1,620,670.0	12,343,217.0	2,368.77				Average	

		point61	61	1,620,668.8	12,343,311.0	2,362.20				Average	
		point62	62	1,620,669.6	12,343,396.0	2,365.49				Average	
		point63	63	1,620,670.1	12,343,527.0	2,372.05					
Roadway6	12.0	point73	73	1,620,519.8	12,344,681.0	2,342.52				Average	
		point74	74	1,620,604.0	12,344,424.0	2,358.92				Average	
		point75	75	1,620,696.2	12,344,109.0	2,358.92				Average	
		point76	76	1,620,771.5	12,343,835.0	2,365.49				Average	
		point77	77	1,620,832.2	12,343,629.0	2,375.33					
Roadway7	12.0	point78	78	1,621,241.6	12,343,012.0	2,385.17				Average	
		point79	79	1,621,191.0	12,343,090.0	2,385.20				Average	
		point80	80	1,621,111.2	12,343,197.0	2,372.05				Average	
		point81	81	1,621,035.5	12,343,311.0	2,368.77				Average	
		point82	82	1,620,951.8	12,343,430.0	2,368.77				Average	
		point83	83	1,620,857.6	12,343,571.0	2,378.61					
Roadway8	60.0	point84	84	1,621,300.9	12,343,003.0	2,385.17				Average	
		point85	85	1,621,235.4	12,343,151.0	2,380.00				Average	
		point86	86	1,621,170.5	12,343,298.0	2,380.00				Average	
		point87	87	1,621,116.9	12,343,419.0	2,378.60				Average	
		point88	88	1,621,082.5	12,343,497.0	2,378.61				Average	
		point89	89	1,621,014.9	12,343,647.0	2,378.60					
Roadway9	60.0	point95	95	1,620,575.4	12,344,780.0	2,355.64				Average	
		point96	96	1,620,635.4	12,344,641.0	2,362.20				Average	
		point97	97	1,620,689.9	12,344,524.0	2,365.49				Average	
		point98	98	1,620,741.5	12,344,416.0	2,365.50				Average	
		point99	99	1,620,813.2	12,344,248.0	2,362.20				Average	
		point100	100	1,620,875.2	12,344,122.0	2,362.20				Average	
		point101	101	1,620,958.1	12,343,941.0	2,370.00				Average	
		point102	102	1,621,046.0	12,343,742.0	2,380.00				Average	
		point103	103	1,621,079.2	12,343,666.0	2,380.00					
Roadway10	12.0	point106	106	1,620,725.4	12,344,533.0	2,365.49				Average	
		point107	107	1,620,773.8	12,344,422.0	2,358.92				Average	
		point108	108	1,620,873.6	12,344,276.0	2,372.05				Average	
		point109	109	1,620,987.5	12,344,096.0	2,358.92				Average	
		point110	110	1,621,105.5	12,343,933.0	2,365.49				Average	
		point111	111	1,621,210.1	12,343,780.0	2,388.45					
Roadway11	12.0	point112	112	1,621,415.1	12,343,050.0	2,385.17				Average	
		point113	113	1,621,372.6	12,343,194.0	2,398.29				Average	
		point114	114	1,621,330.6	12,343,367.0	2,391.73				Average	
		point115	115	1,621,280.5	12,343,552.0	2,391.73				Average	

		point116	116	1,621,243.5	12,343,713.0	2,378.61					
Roadway12	30.0	point117	117	1,621,996.2	12,343,286.0	2,398.29				Average	
		point118	118	1,621,922.9	12,343,479.0	2,398.29				Average	
		point119	119	1,621,881.1	12,343,595.0	2,398.29				Average	
		point120	120	1,621,834.0	12,343,718.0	2,398.29				Average	
		point145	145	1,621,809.0	12,343,796.0	2,398.29					
Roadway13	30.0	point125	125	1,621,631.8	12,344,484.0	2,395.01				Average	
		point126	126	1,621,683.6	12,344,303.0	2,395.01				Average	
		point127	127	1,621,728.6	12,344,150.0	2,404.86				Average	
		point128	128	1,621,787.2	12,343,967.0	2,401.57				Average	
		point147	147	1,621,820.1	12,343,866.0	2,399.93					
County line east segment	20.0	point134	134	1,620,994.5	12,343,672.0	2,398.29				Average	
		point14	14	1,620,854.5	12,343,620.0	2,398.29				Average	
		point15	15	1,620,724.1	12,343,568.0	2,372.05				Average	
		point139	139	1,620,677.8	12,343,554.0	2,372.05					
Roadway3-2-2	16.0	point137	137	1,621,085.0	12,343,679.0	2,388.45				Average	
		point38	38	1,621,162.5	12,343,706.0	2,378.61				Average	
		point39	39	1,621,253.8	12,343,741.0	2,378.61				Average	
		point40	40	1,621,326.9	12,343,759.0	2,378.61				Average	
		point41	41	1,621,407.2	12,343,777.0	2,388.45				Average	
		point42	42	1,621,518.1	12,343,793.0	2,395.01				Average	
		point43	43	1,621,622.1	12,343,799.0	2,395.01				Average	
		point44	44	1,621,695.5	12,343,800.0	2,395.01				Average	
		point45	45	1,621,795.5	12,343,796.0	2,398.29					
County line center	12.0	point141	141	1,620,631.5	12,343,541.0	2,372.05				Average	
		point17	17	1,620,522.9	12,343,524.0	2,362.20				Average	
		point18	18	1,620,319.1	12,343,521.0	2,362.20				Average	
		point151	151	1,620,220.6	12,343,522.0	2,364.39				Average	
		point152	152	1,620,149.6	12,343,522.0	2,366.58					
Roadway3-2-2	20.0	point142	142	1,620,696.4	12,343,544.0	2,372.05				Average	
		point36	36	1,620,830.0	12,343,589.0	2,375.33				Average	
		point37	37	1,620,999.9	12,343,648.0	2,398.29					
Roadway5-2-2	30.0	point144	144	1,620,672.0	12,343,571.0	2,372.05				Average	
		point65	65	1,620,665.1	12,343,754.0	2,372.05				Average	
		point66	66	1,620,665.2	12,343,862.0	2,365.49				Average	
		point67	67	1,620,665.8	12,343,947.0	2,362.20				Average	
		point68	68	1,620,661.4	12,344,008.0	2,358.92				Average	
		point69	69	1,620,651.0	12,344,068.0	2,358.92				Average	
		point70	70	1,620,632.4	12,344,143.0	2,358.92				Average	

		point71	71	1,620,602.0	12,344,233.0	2,362.20				Average	
		point72	72	1,620,551.2	12,344,352.0	2,365.49					
Roadway13-2-2	30.0	point149	149	1,621,853.0	12,343,766.0	2,398.29				Average	
		point130	130	1,621,916.0	12,343,596.0	2,398.29				Average	
		point131	131	1,622,032.4	12,343,305.0	2,401.57					
Roadway12-2-2	30.0	point150	150	1,621,783.9	12,343,873.0	2,398.29				Average	
		point122	122	1,621,725.4	12,344,045.0	2,401.57				Average	
		point123	123	1,621,669.8	12,344,214.0	2,401.57				Average	
		point124	124	1,621,601.6	12,344,473.0	2,395.01					
county line west	12.0	point154	154	1,620,149.6	12,343,522.0	2,366.58				Average	
		point19	19	1,620,106.4	12,343,523.0	2,368.77				Average	
		point20	20	1,619,925.1	12,343,522.0	2,362.20				Average	
		point21	21	1,619,746.0	12,343,521.0	2,362.20				Average	
		point22	22	1,619,614.6	12,343,519.0	2,358.92					
Roadway3-2	15.0	point155	155	1,620,160.8	12,343,506.0	2,365.49				Average	
		point30	30	1,620,228.1	12,343,505.0	2,362.20				Average	
		point31	31	1,620,307.8	12,343,502.0	2,362.20				Average	
		point32	32	1,620,488.9	12,343,509.0	2,362.20				Average	
		point33	33	1,620,600.8	12,343,517.0	2,372.05				Average	
		point34	34	1,620,644.9	12,343,524.0	2,372.05					
I10 south	60.0	point156	156	1,621,014.9	12,343,647.0	2,378.60				Average	
		point90	90	1,620,894.5	12,343,915.0	2,365.49				Average	
		point91	91	1,620,813.2	12,344,091.0	2,365.50				Average	
		point92	92	1,620,720.5	12,344,294.0	2,365.49				Average	
		point93	93	1,620,628.2	12,344,501.0	2,365.49				Average	
		point94	94	1,620,507.8	12,344,759.0	2,360.00					
Roadway9-2	60.0	point157	157	1,621,079.2	12,343,666.0	2,380.00				Average	
		point104	104	1,621,149.8	12,343,505.0	2,380.00				Average	
		point105	105	1,621,256.8	12,343,270.0	2,385.00					
Roadway2-2	16.0	point158	158	1,621,765.4	12,343,829.0	2,398.29				Average	
		point8	8	1,621,577.1	12,343,827.0	2,395.01				Average	
		point9	9	1,621,484.1	12,343,822.0	2,395.01				Average	
		point10	10	1,621,413.2	12,343,812.0	2,388.45				Average	
		point11	11	1,621,254.1	12,343,762.0	2,378.61				Average	
		point12	12	1,621,181.6	12,343,735.0	2,378.61				Average	
		point132	132	1,621,072.5	12,343,698.0	2,388.45					
Roadway3-2-2-2	16.0	point159	159	1,621,795.5	12,343,796.0	2,398.29				Average	
		point46	46	1,622,050.4	12,343,799.0	2,401.57				Average	
		point47	47	1,622,225.6	12,343,800.0	2,401.57				Average	

		point48	48	1,622,481.5	12,343,805.0	2,414.70					
Roadway34	12.0	point160	160	1,620,159.0	12,343,494.0	2,362.20				Average	
		point161	161	1,620,162.9	12,343,080.0	2,362.20					

Dudek **21 November 2019**
CB **TNM 2.5**

INPUT: TRAFFIC FOR LAeq1h Volumes
PROJECT/CONTRACT: **RV/Gas**
RUN: **Year 2023 No project**

Roadway	Points		Segment									
Name	Name	No.	Autos		MTrucks		HTrucks		Buses		Motorcycles	
			V	S	V	S	V	S	V	S	V	S
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Roadway2	point3	3	781	35	16	35	8	35	0	0	0	0
	point4	4	781	35	16	35	8	35	0	0	0	0
	point5	5	781	35	16	35	8	35	0	0	0	0
	point6	6	781	35	16	35	8	35	0	0	0	0
	point7	7										
Roadway3	point23	23	34	25	1	25	0	0	0	0	0	0
	point24	24	34	25	1	25	0	0	0	0	0	0
	point25	25	34	25	1	25	0	0	0	0	0	0
	point26	26	34	25	1	25	0	0	0	0	0	0
	point27	27	34	25	1	25	0	0	0	0	0	0
	point28	28	34	25	1	25	0	0	0	0	0	0
	point29	29	34	25	1	25	0	0	0	0	0	0
	point153	153										
North County Line Lane	point49	49	175	25	4	25	2	25	0	0	0	0
	point50	50	175	25	4	25	2	25	0	0	0	0
	point51	51	175	25	4	25	2	25	0	0	0	0
	point52	52	175	25	4	25	2	25	0	0	0	0
	point53	53	175	25	4	25	2	25	0	0	0	0
	point54	54	175	25	4	25	2	25	0	0	0	0
	point55	55	175	25	4	25	2	25	0	0	0	0
	point56	56										
Roadway5	point57	57	107	25	2	25	1	25	0	0	0	0
	point58	58	107	25	2	25	1	25	0	0	0	0

	point59	59	107	25	2	25	1	25	0	0	0	0
	point60	60	107	25	2	25	1	25	0	0	0	0
	point61	61	107	25	2	25	1	25	0	0	0	0
	point62	62	107	25	2	25	1	25	0	0	0	0
	point63	63										
Roadway6	point73	73	0	0	0	0	0	0	0	0	0	0
	point74	74	0	0	0	0	0	0	0	0	0	0
	point75	75	0	0	0	0	0	0	0	0	0	0
	point76	76	0	0	0	0	0	0	0	0	0	0
	point77	77										
Roadway7	point78	78	0	0	0	0	0	0	0	0	0	0
	point79	79	0	0	0	0	0	0	0	0	0	0
	point80	80	0	0	0	0	0	0	0	0	0	0
	point81	81	0	0	0	0	0	0	0	0	0	0
	point82	82	0	0	0	0	0	0	0	0	0	0
	point83	83										
Roadway8	point84	84	5384	70	111	70	56	70	0	0	0	0
	point85	85	5384	70	111	70	56	70	0	0	0	0
	point86	86	5384	70	111	70	56	70	0	0	0	0
	point87	87	5384	70	111	70	56	70	0	0	0	0
	point88	88	5384	70	111	70	56	70	0	0	0	0
	point89	89										
Roadway9	point95	95	5723	70	118	70	59	70	0	0	0	0
	point96	96	5723	70	118	70	59	70	0	0	0	0
	point97	97	5723	70	118	70	59	70	0	0	0	0
	point98	98	5723	70	118	70	59	70	0	0	0	0
	point99	99	5723	70	118	70	59	70	0	0	0	0
	point100	100	5723	70	118	70	59	70	0	0	0	0
	point101	101	5723	70	118	70	59	70	0	0	0	0
	point102	102	5723	70	118	70	59	70	0	0	0	0
	point103	103										
Roadway10	point106	106	0	0	0	0	0	0	0	0	0	0
	point107	107	0	0	0	0	0	0	0	0	0	0
	point108	108	0	0	0	0	0	0	0	0	0	0
	point109	109	0	0	0	0	0	0	0	0	0	0
	point110	110	0	0	0	0	0	0	0	0	0	0

	point111	111										
Roadway11	point112	112	0	0	0	0	0	0	0	0	0	0
	point113	113	0	0	0	0	0	0	0	0	0	0
	point114	114	0	0	0	0	0	0	0	0	0	0
	point115	115	0	0	0	0	0	0	0	0	0	0
	point116	116										
Roadway12	point117	117	437	35	9	35	5	35	0	0	0	0
	point118	118	437	35	9	35	5	35	0	0	0	0
	point119	119	437	35	9	35	5	35	0	0	0	0
	point120	120	437	35	9	35	5	35	0	0	0	0
	point145	145										
Roadway13	point125	125	417	35	9	35	4	35	0	0	0	0
	point126	126	417	35	9	35	4	35	0	0	0	0
	point127	127	417	35	9	35	4	35	0	0	0	0
	point128	128	417	35	9	35	4	35	0	0	0	0
	point147	147										
County line east segment	point134	134	184	35	4	35	2	35	0	0	0	0
	point14	14	184	35	4	35	2	35	0	0	0	0
	point15	15	184	35	4	35	2	35	0	0	0	0
	point139	139										
Roadway3-2-2	point137	137	883	35	18	35	9	35	0	0	0	0
	point38	38	883	35	18	35	9	35	0	0	0	0
	point39	39	883	35	18	35	9	35	0	0	0	0
	point40	40	883	35	18	35	9	35	0	0	0	0
	point41	41	883	35	18	35	9	35	0	0	0	0
	point42	42	883	35	18	35	9	35	0	0	0	0
	point43	43	883	35	18	35	9	35	0	0	0	0
	point44	44	883	35	18	35	9	35	0	0	0	0
	point45	45										
County line center	point141	141	141	25	3	25	1	25	0	0	0	0
	point17	17	141	25	3	25	1	25	0	0	0	0
	point18	18	141	25	3	25	1	25	0	0	0	0
	point151	151	141	25	3	25	1	25	0	0	0	0
	point152	152										
Roadway3-2-2	point142	142	184	35	4	35	2	35	0	0	0	0
	point36	36	184	35	4	35	2	35	0	0	0	0

	point37	37										
Roadway5-2-2	point144	144	0	0	0	0	0	0	0	0	0	0
	point65	65	0	0	0	0	0	0	0	0	0	0
	point66	66	0	0	0	0	0	0	0	0	0	0
	point67	67	0	0	0	0	0	0	0	0	0	0
	point68	68	0	0	0	0	0	0	0	0	0	0
	point69	69	0	0	0	0	0	0	0	0	0	0
	point70	70	0	0	0	0	0	0	0	0	0	0
	point71	71	0	0	0	0	0	0	0	0	0	0
	point72	72										
Roadway13-2-2	point149	149	437	35	9	35	5	35	0	0	0	0
	point130	130	437	35	9	35	5	35	0	0	0	0
	point131	131										
Roadway12-2-2	point150	150	417	35	9	35	4	35	0	0	0	0
	point122	122	417	35	9	35	4	35	0	0	0	0
	point123	123	417	35	9	35	4	35	0	0	0	0
	point124	124										
county line west	point154	154	34	25	1	25	0	0	0	0	0	0
	point19	19	34	25	1	25	0	0	0	0	0	0
	point20	20	34	25	1	25	0	0	0	0	0	0
	point21	21	34	25	1	25	0	0	0	0	0	0
	point22	22										
Roadway3-2	point155	155	141	25	3	25	1	25	0	0	0	0
	point30	30	141	25	3	25	1	25	0	0	0	0
	point31	31	141	25	3	25	1	25	0	0	0	0
	point32	32	141	25	3	25	1	25	0	0	0	0
	point33	33	141	25	3	25	1	25	0	0	0	0
	point34	34										
I10 south	point156	156	5723	70	118	70	59	70	0	0	0	0
	point90	90	5723	70	118	70	59	70	0	0	0	0
	point91	91	5723	70	118	70	59	70	0	0	0	0
	point92	92	5723	70	118	70	59	70	0	0	0	0
	point93	93	5723	70	118	70	59	70	0	0	0	0
	point94	94										
Roadway9-2	point157	157	5384	70	111	70	56	70	0	0	0	0
	point104	104	5384	70	111	70	56	70	0	0	0	0

INPUT: TRAFFIC FOR LAeq1h Volumes **RV/Gas**

	point105	105										
Roadway2-2	point158	158	883	35	18	35	9	35	0	0	0	0
	point8	8	883	35	18	35	9	35	0	0	0	0
	point9	9	883	35	18	35	9	35	0	0	0	0
	point10	10	883	35	18	35	9	35	0	0	0	0
	point11	11	883	35	18	35	9	35	0	0	0	0
	point12	12	883	35	18	35	9	35	0	0	0	0
	point132	132										
Roadway3-2-2-2	point159	159	781	35	16	35	8	35	0	0	0	0
	point46	46	781	35	16	35	8	35	0	0	0	0
	point47	47	781	35	16	35	8	35	0	0	0	0
	point48	48										
Roadway34	point160	160	19	25	0	0	0	0	0	0	0	0
	point161	161										

Dudek 21 November 2019
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INPUT: RECEIVERS
PROJECT/CONTRACT: RV/Gas
RUN: Year 2023 No project

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria: Existing LAeq1h	Impact Criteria LAeq1h	Impact Criteria Sub'l	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
M1	1	1	1,620,134.8	12,343,753.0	2,362.21	4.92	0.00	66	10.0	8.0	Y
M2	2	1	1,620,429.1	12,343,650.0	2,365.49	4.92	0.00	66	10.0	8.0	Y
M3	3	1	1,620,204.5	12,343,550.0	2,368.77	4.92	0.00	66	10.0	8.0	Y
M4	5	1	1,620,293.5	12,343,809.0	2,368.77	4.92	0.00	66	10.0	8.0	Y
M5	6	1	1,620,362.4	12,343,375.0	2,362.21	4.92	0.00	66	10.0	8.0	Y

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CB

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TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: RV/Gas
RUN: Year 2023 No project
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
M1	1	1	0.0	62.9	66	62.9	10	----	62.9	0.0	8	-8.0
M2	2	1	0.0	63.8	66	63.8	10	----	63.8	0.0	8	-8.0
M3	3	1	0.0	63.7	66	63.7	10	----	63.7	0.0	8	-8.0
M4	5	1	0.0	66.0	66	66.0	10	Snd Lvl	66.0	0.0	8	-8.0
M5	6	1	0.0	60.2	66	60.2	10	----	60.2	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	5	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

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INPUT: ROADWAYS
PROJECT/CONTRACT: RV/Gas
RUN: Year 2023 With project

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with the approval of FHWA

Roadway Name	Width	Points Name	No.	Coordinates (pavement) X	Y	Z	Flow Control Control Device	Speed Constraint	Percent Vehicles Affected	Segment Pvmt Type	On Struct?
	ft			ft	ft	ft		mph	%		
Roadway2	16.0	point3	3	1,622,482.2	12,343,842.0	2,414.70				Average	
		point4	4	1,622,295.2	12,343,838.0	2,401.57				Average	
		point5	5	1,622,078.5	12,343,833.0	2,401.57				Average	
		point6	6	1,621,978.0	12,343,833.0	2,398.29				Average	
		point7	7	1,621,765.4	12,343,829.0	2,398.29					
Roadway3	15.0	point23	23	1,619,615.6	12,343,504.0	2,358.92				Average	
		point24	24	1,619,656.8	12,343,507.0	2,362.20				Average	
		point25	25	1,619,732.4	12,343,508.0	2,362.20				Average	
		point26	26	1,619,858.1	12,343,508.0	2,362.20				Average	
		point27	27	1,619,934.6	12,343,507.0	2,368.77				Average	
		point28	28	1,619,995.2	12,343,505.0	2,368.77				Average	
		point29	29	1,620,093.2	12,343,507.0	2,368.77				Average	
		point153	153	1,620,160.8	12,343,506.0	2,365.49					
North County Line Lane	30.0	point49	49	1,620,623.1	12,343,794.0	2,365.49				Average	
		point50	50	1,620,568.9	12,343,796.0	2,365.49				Average	
		point51	51	1,620,484.2	12,343,793.0	2,368.77				Average	
		point52	52	1,620,315.6	12,343,791.0	2,368.77				Average	
		point53	53	1,620,223.2	12,343,791.0	2,358.92				Average	
		point54	54	1,620,174.6	12,343,784.0	2,358.92				Average	
		point55	55	1,620,162.5	12,343,759.0	2,362.20				Average	
		point56	56	1,620,162.0	12,343,541.0	2,368.77					
Roadway5	30.0	point57	57	1,620,668.6	12,342,799.0	2,378.61				Average	
		point58	58	1,620,669.4	12,342,941.0	2,375.33				Average	
		point59	59	1,620,671.1	12,343,061.0	2,372.05				Average	
		point60	60	1,620,670.0	12,343,217.0	2,368.77				Average	

		point61	61	1,620,668.8	12,343,311.0	2,362.20				Average	
		point62	62	1,620,669.6	12,343,396.0	2,365.49				Average	
		point63	63	1,620,670.1	12,343,527.0	2,372.05					
Roadway6	12.0	point73	73	1,620,519.8	12,344,681.0	2,342.52				Average	
		point74	74	1,620,604.0	12,344,424.0	2,358.92				Average	
		point75	75	1,620,696.2	12,344,109.0	2,358.92				Average	
		point76	76	1,620,771.5	12,343,835.0	2,365.49				Average	
		point77	77	1,620,832.2	12,343,629.0	2,375.33					
Roadway7	12.0	point78	78	1,621,241.6	12,343,012.0	2,385.17				Average	
		point79	79	1,621,191.0	12,343,090.0	2,385.20				Average	
		point80	80	1,621,111.2	12,343,197.0	2,372.05				Average	
		point81	81	1,621,035.5	12,343,311.0	2,368.77				Average	
		point82	82	1,620,951.8	12,343,430.0	2,368.77				Average	
		point83	83	1,620,857.6	12,343,571.0	2,378.61					
Roadway8	60.0	point84	84	1,621,300.9	12,343,003.0	2,385.17				Average	
		point85	85	1,621,235.4	12,343,151.0	2,380.00				Average	
		point86	86	1,621,170.5	12,343,298.0	2,380.00				Average	
		point87	87	1,621,116.9	12,343,419.0	2,378.60				Average	
		point88	88	1,621,082.5	12,343,497.0	2,378.61				Average	
		point89	89	1,621,014.9	12,343,647.0	2,378.60					
Roadway9	60.0	point95	95	1,620,575.4	12,344,780.0	2,355.64				Average	
		point96	96	1,620,635.4	12,344,641.0	2,362.20				Average	
		point97	97	1,620,689.9	12,344,524.0	2,365.49				Average	
		point98	98	1,620,741.5	12,344,416.0	2,365.50				Average	
		point99	99	1,620,813.2	12,344,248.0	2,362.20				Average	
		point100	100	1,620,875.2	12,344,122.0	2,362.20				Average	
		point101	101	1,620,958.1	12,343,941.0	2,370.00				Average	
		point102	102	1,621,046.0	12,343,742.0	2,380.00				Average	
		point103	103	1,621,079.2	12,343,666.0	2,380.00					
Roadway10	12.0	point106	106	1,620,725.4	12,344,533.0	2,365.49				Average	
		point107	107	1,620,773.8	12,344,422.0	2,358.92				Average	
		point108	108	1,620,873.6	12,344,276.0	2,372.05				Average	
		point109	109	1,620,987.5	12,344,096.0	2,358.92				Average	
		point110	110	1,621,105.5	12,343,933.0	2,365.49				Average	
		point111	111	1,621,210.1	12,343,780.0	2,388.45					
Roadway11	12.0	point112	112	1,621,415.1	12,343,050.0	2,385.17				Average	
		point113	113	1,621,372.6	12,343,194.0	2,398.29				Average	
		point114	114	1,621,330.6	12,343,367.0	2,391.73				Average	
		point115	115	1,621,280.5	12,343,552.0	2,391.73				Average	

		point116	116	1,621,243.5	12,343,713.0	2,378.61					
Roadway12	30.0	point117	117	1,621,996.2	12,343,286.0	2,398.29				Average	
		point118	118	1,621,922.9	12,343,479.0	2,398.29				Average	
		point119	119	1,621,881.1	12,343,595.0	2,398.29				Average	
		point120	120	1,621,834.0	12,343,718.0	2,398.29				Average	
		point145	145	1,621,809.0	12,343,796.0	2,398.29					
Roadway13	30.0	point125	125	1,621,631.8	12,344,484.0	2,395.01				Average	
		point126	126	1,621,683.6	12,344,303.0	2,395.01				Average	
		point127	127	1,621,728.6	12,344,150.0	2,404.86				Average	
		point128	128	1,621,787.2	12,343,967.0	2,401.57				Average	
		point147	147	1,621,820.1	12,343,866.0	2,399.93					
County line east segment	20.0	point134	134	1,620,994.5	12,343,672.0	2,398.29				Average	
		point14	14	1,620,854.5	12,343,620.0	2,398.29				Average	
		point15	15	1,620,724.1	12,343,568.0	2,372.05				Average	
		point139	139	1,620,677.8	12,343,554.0	2,372.05					
Roadway3-2-2	16.0	point137	137	1,621,085.0	12,343,679.0	2,388.45				Average	
		point38	38	1,621,162.5	12,343,706.0	2,378.61				Average	
		point39	39	1,621,253.8	12,343,741.0	2,378.61				Average	
		point40	40	1,621,326.9	12,343,759.0	2,378.61				Average	
		point41	41	1,621,407.2	12,343,777.0	2,388.45				Average	
		point42	42	1,621,518.1	12,343,793.0	2,395.01				Average	
		point43	43	1,621,622.1	12,343,799.0	2,395.01				Average	
		point44	44	1,621,695.5	12,343,800.0	2,395.01				Average	
		point45	45	1,621,795.5	12,343,796.0	2,398.29					
County line center	12.0	point141	141	1,620,631.5	12,343,541.0	2,372.05				Average	
		point17	17	1,620,522.9	12,343,524.0	2,362.20				Average	
		point18	18	1,620,319.1	12,343,521.0	2,362.20				Average	
		point151	151	1,620,220.6	12,343,522.0	2,364.39				Average	
		point152	152	1,620,149.6	12,343,522.0	2,366.58					
Roadway3-2-2	20.0	point142	142	1,620,696.4	12,343,544.0	2,372.05				Average	
		point36	36	1,620,830.0	12,343,589.0	2,375.33				Average	
		point37	37	1,620,999.9	12,343,648.0	2,398.29					
Roadway5-2-2	30.0	point144	144	1,620,672.0	12,343,571.0	2,372.05				Average	
		point65	65	1,620,665.1	12,343,754.0	2,372.05				Average	
		point66	66	1,620,665.2	12,343,862.0	2,365.49				Average	
		point67	67	1,620,665.8	12,343,947.0	2,362.20				Average	
		point68	68	1,620,661.4	12,344,008.0	2,358.92				Average	
		point69	69	1,620,651.0	12,344,068.0	2,358.92				Average	
		point70	70	1,620,632.4	12,344,143.0	2,358.92				Average	

		point71	71	1,620,602.0	12,344,233.0	2,362.20				Average	
		point72	72	1,620,551.2	12,344,352.0	2,365.49					
Roadway13-2-2	30.0	point149	149	1,621,853.0	12,343,766.0	2,398.29				Average	
		point130	130	1,621,916.0	12,343,596.0	2,398.29				Average	
		point131	131	1,622,032.4	12,343,305.0	2,401.57					
Roadway12-2-2	30.0	point150	150	1,621,783.9	12,343,873.0	2,398.29				Average	
		point122	122	1,621,725.4	12,344,045.0	2,401.57				Average	
		point123	123	1,621,669.8	12,344,214.0	2,401.57				Average	
		point124	124	1,621,601.6	12,344,473.0	2,395.01					
county line west	12.0	point154	154	1,620,149.6	12,343,522.0	2,366.58				Average	
		point19	19	1,620,106.4	12,343,523.0	2,368.77				Average	
		point20	20	1,619,925.1	12,343,522.0	2,362.20				Average	
		point21	21	1,619,746.0	12,343,521.0	2,362.20				Average	
		point22	22	1,619,614.6	12,343,519.0	2,358.92					
Roadway3-2	15.0	point155	155	1,620,160.8	12,343,506.0	2,365.49				Average	
		point30	30	1,620,228.1	12,343,505.0	2,362.20				Average	
		point31	31	1,620,307.8	12,343,502.0	2,362.20				Average	
		point32	32	1,620,488.9	12,343,509.0	2,362.20				Average	
		point33	33	1,620,600.8	12,343,517.0	2,372.05				Average	
		point34	34	1,620,644.9	12,343,524.0	2,372.05					
I10 south	60.0	point156	156	1,621,014.9	12,343,647.0	2,378.60				Average	
		point90	90	1,620,894.5	12,343,915.0	2,365.49				Average	
		point91	91	1,620,813.2	12,344,091.0	2,365.50				Average	
		point92	92	1,620,720.5	12,344,294.0	2,365.49				Average	
		point93	93	1,620,628.2	12,344,501.0	2,365.49				Average	
		point94	94	1,620,507.8	12,344,759.0	2,360.00					
Roadway9-2	60.0	point157	157	1,621,079.2	12,343,666.0	2,380.00				Average	
		point104	104	1,621,149.8	12,343,505.0	2,380.00				Average	
		point105	105	1,621,256.8	12,343,270.0	2,385.00					
Roadway2-2	16.0	point158	158	1,621,765.4	12,343,829.0	2,398.29				Average	
		point8	8	1,621,577.1	12,343,827.0	2,395.01				Average	
		point9	9	1,621,484.1	12,343,822.0	2,395.01				Average	
		point10	10	1,621,413.2	12,343,812.0	2,388.45				Average	
		point11	11	1,621,254.1	12,343,762.0	2,378.61				Average	
		point12	12	1,621,181.6	12,343,735.0	2,378.61				Average	
		point132	132	1,621,072.5	12,343,698.0	2,388.45					
Roadway3-2-2-2	16.0	point159	159	1,621,795.5	12,343,796.0	2,398.29				Average	
		point46	46	1,622,050.4	12,343,799.0	2,401.57				Average	
		point47	47	1,622,225.6	12,343,800.0	2,401.57				Average	

		point48	48	1,622,481.5	12,343,805.0	2,414.70					
Roadway34	12.0	point160	160	1,620,159.0	12,343,494.0	2,362.20				Average	
		point161	161	1,620,162.9	12,343,080.0	2,362.20					

Dudek				**21 November 2019**								
CB				**TNM 2.5**								
INPUT: TRAFFIC FOR LAeq1h Volumes												
PROJECT/CONTRACT:	**RV/Gas**											
RUN:	**Year 2023 With project**											
Roadway	**Points**											
Name	**Name**	**No.**	**Segment**									
			Autos		**MTrucks**		**HTrucks**		**Buses**		**Motorcycles**	
			V	**S**	**V**	**S**	**V**	**S**	**V**	**S**	**V**	**S**
			veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph	veh/hr	mph
Roadway2	point3	3	854	35	18	35	9	35	0	0	0	0
	point4	4	854	35	18	35	9	35	0	0	0	0
	point5	5	854	35	18	35	9	35	0	0	0	0
	point6	6	854	35	18	35	9	35	0	0	0	0
	point7	7										
Roadway3	point23	23	39	25	1	25	0	0	0	0	0	0
	point24	24	39	25	1	25	0	0	0	0	0	0
	point25	25	39	25	1	25	0	0	0	0	0	0
	point26	26	39	25	1	25	0	0	0	0	0	0
	point27	27	39	25	1	25	0	0	0	0	0	0
	point28	28	39	25	1	25	0	0	0	0	0	0
	point29	29	39	25	1	25	0	0	0	0	0	0
	point153	153										
North County Line Lane	point49	49	330	25	7	25	3	25	0	0	0	0
	point50	50	330	25	7	25	3	25	0	0	0	0
	point51	51	330	25	7	25	3	25	0	0	0	0
	point52	52	330	25	7	25	3	25	0	0	0	0
	point53	53	330	25	7	25	3	25	0	0	0	0
	point54	54	330	25	7	25	3	25	0	0	0	0
	point55	55	330	25	7	25	3	25	0	0	0	0
	point56	56										
Roadway5	point57	57	165	25	3	25	2	25	0	0	0	0
	point58	58	165	25	3	25	2	25	0	0	0	0

	point59	59	165	25	3	25	2	25	0	0	0	0
	point60	60	165	25	3	25	2	25	0	0	0	0
	point61	61	165	25	3	25	2	25	0	0	0	0
	point62	62	165	25	3	25	2	25	0	0	0	0
	point63	63										
Roadway6	point73	73	0	0	0	0	0	0	0	0	0	0
	point74	74	0	0	0	0	0	0	0	0	0	0
	point75	75	0	0	0	0	0	0	0	0	0	0
	point76	76	0	0	0	0	0	0	0	0	0	0
	point77	77										
Roadway7	point78	78	0	0	0	0	0	0	0	0	0	0
	point79	79	0	0	0	0	0	0	0	0	0	0
	point80	80	0	0	0	0	0	0	0	0	0	0
	point81	81	0	0	0	0	0	0	0	0	0	0
	point82	82	0	0	0	0	0	0	0	0	0	0
	point83	83										
Roadway8	point84	84	5384	70	111	70	56	70	0	0	0	0
	point85	85	5384	70	111	70	56	70	0	0	0	0
	point86	86	5384	70	111	70	56	70	0	0	0	0
	point87	87	5384	70	111	70	56	70	0	0	0	0
	point88	88	5384	70	111	70	56	70	0	0	0	0
	point89	89										
Roadway9	point95	95	5723	70	118	70	59	70	0	0	0	0
	point96	96	5723	70	118	70	59	70	0	0	0	0
	point97	97	5723	70	118	70	59	70	0	0	0	0
	point98	98	5723	70	118	70	59	70	0	0	0	0
	point99	99	5723	70	118	70	59	70	0	0	0	0
	point100	100	5723	70	118	70	59	70	0	0	0	0
	point101	101	5723	70	118	70	59	70	0	0	0	0
	point102	102	5723	70	118	70	59	70	0	0	0	0
	point103	103										
Roadway10	point106	106	0	0	0	0	0	0	0	0	0	0
	point107	107	0	0	0	0	0	0	0	0	0	0
	point108	108	0	0	0	0	0	0	0	0	0	0
	point109	109	0	0	0	0	0	0	0	0	0	0
	point110	110	0	0	0	0	0	0	0	0	0	0

	point111	111										
Roadway11	point112	112	0	0	0	0	0	0	0	0	0	0
	point113	113	0	0	0	0	0	0	0	0	0	0
	point114	114	0	0	0	0	0	0	0	0	0	0
	point115	115	0	0	0	0	0	0	0	0	0	0
	point116	116										
Roadway12	point117	117	490	35	10	35	5	35	0	0	0	0
	point118	118	490	35	10	35	5	35	0	0	0	0
	point119	119	490	35	10	35	5	35	0	0	0	0
	point120	120	490	35	10	35	5	35	0	0	0	0
	point145	145										
Roadway13	point125	125	461	35	10	35	5	35	0	0	0	0
	point126	126	461	35	10	35	5	35	0	0	0	0
	point127	127	461	35	10	35	5	35	0	0	0	0
	point128	128	461	35	10	35	5	35	0	0	0	0
	point147	147										
County line east segment	point134	134	320	35	7	35	3	35	0	0	0	0
	point14	14	320	35	7	35	3	35	0	0	0	0
	point15	15	320	35	7	35	3	35	0	0	0	0
	point139	139										
Roadway3-2-2	point137	137	999	35	21	35	10	35	0	0	0	0
	point38	38	999	35	21	35	10	35	0	0	0	0
	point39	39	999	35	21	35	10	35	0	0	0	0
	point40	40	999	35	21	35	10	35	0	0	0	0
	point41	41	999	35	21	35	10	35	0	0	0	0
	point42	42	999	35	21	35	10	35	0	0	0	0
	point43	43	999	35	21	35	10	35	0	0	0	0
	point44	44	999	35	21	35	10	35	0	0	0	0
	point45	45										
County line center	point141	141	320	25	7	25	3	25	0	0	0	0
	point17	17	320	25	7	25	3	25	0	0	0	0
	point18	18	320	25	7	25	3	25	0	0	0	0
	point151	151	320	25	7	25	3	25	0	0	0	0
	point152	152										
Roadway3-2-2	point142	142	320	35	7	35	3	35	0	0	0	0
	point36	36	320	35	7	35	3	35	0	0	0	0

	point37	37										
Roadway5-2-2	point144	144	0	0	0	0	0	0	0	0	0	0
	point65	65	0	0	0	0	0	0	0	0	0	0
	point66	66	0	0	0	0	0	0	0	0	0	0
	point67	67	0	0	0	0	0	0	0	0	0	0
	point68	68	0	0	0	0	0	0	0	0	0	0
	point69	69	0	0	0	0	0	0	0	0	0	0
	point70	70	0	0	0	0	0	0	0	0	0	0
	point71	71	0	0	0	0	0	0	0	0	0	0
	point72	72										
Roadway13-2-2	point149	149	490	35	10	35	5	35	0	0	0	0
	point130	130	490	35	10	35	5	35	0	0	0	0
	point131	131										
Roadway12-2-2	point150	150	461	35	10	35	5	35	0	0	0	0
	point122	122	461	35	10	35	5	35	0	0	0	0
	point123	123	461	35	10	35	5	35	0	0	0	0
	point124	124										
county line west	point154	154	39	25	1	25	0	0	0	0	0	0
	point19	19	39	25	1	25	0	0	0	0	0	0
	point20	20	39	25	1	25	0	0	0	0	0	0
	point21	21	39	25	1	25	0	0	0	0	0	0
	point22	22										
Roadway3-2	point155	155	320	25	7	25	3	25	0	0	0	0
	point30	30	320	25	7	25	3	25	0	0	0	0
	point31	31	320	25	7	25	3	25	0	0	0	0
	point32	32	320	25	7	25	3	25	0	0	0	0
	point33	33	320	25	7	25	3	25	0	0	0	0
	point34	34										
I10 south	point156	156	5723	70	118	70	59	70	0	0	0	0
	point90	90	5723	70	118	70	59	70	0	0	0	0
	point91	91	5723	70	118	70	59	70	0	0	0	0
	point92	92	5723	70	118	70	59	70	0	0	0	0
	point93	93	5723	70	118	70	59	70	0	0	0	0
	point94	94										
Roadway9-2	point157	157	5384	70	111	70	56	70	0	0	0	0
	point104	104	5384	70	111	70	56	70	0	0	0	0

	point105	105										
Roadway2-2	point158	158	999	35	21	35	10	35	0	0	0	0
	point8	8	999	35	21	35	10	35	0	0	0	0
	point9	9	999	35	21	35	10	35	0	0	0	0
	point10	10	999	35	21	35	10	35	0	0	0	0
	point11	11	999	35	21	35	10	35	0	0	0	0
	point12	12	999	35	21	35	10	35	0	0	0	0
	point132	132										
Roadway3-2-2-2	point159	159	854	35	18	35	9	35	0	0	0	0
	point46	46	854	35	18	35	9	35	0	0	0	0
	point47	47	854	35	18	35	9	35	0	0	0	0
	point48	48										
Roadway34	point160	160	87	25	2	25	1	25	0	0	0	0
	point161	161										

Dudek 21 November 2019
CB TNM 2.5

INPUT: RECEIVERS
PROJECT/CONTRACT: RV/Gas
RUN: Year 2023 With project

Receiver Name	No.	#DUs	Coordinates (ground) X	Y	Z	Height above Ground	Input Sound Levels and Criteria: Existing LAeq1h	Impact Criteria LAeq1h	Impact Criteria Sub'l	NR Goal	Active in Calc.
			ft	ft	ft	ft	dBA	dBA	dB	dB	
M1	1	1	1,620,134.8	12,343,753.0	2,362.21	4.92	0.00	66	10.0	8.0	Y
M2	2	1	1,620,429.1	12,343,650.0	2,365.49	4.92	0.00	66	10.0	8.0	Y
M3	3	1	1,620,204.5	12,343,550.0	2,368.77	4.92	0.00	66	10.0	8.0	Y
M4	5	1	1,620,293.5	12,343,809.0	2,368.77	4.92	0.00	66	10.0	8.0	Y
M5	6	1	1,620,362.4	12,343,375.0	2,362.21	4.92	0.00	66	10.0	8.0	Y

Dudek
CB

21 November 2019
TNM 2.5
Calculated with TNM 2.5

RESULTS: SOUND LEVELS
PROJECT/CONTRACT: RV/Gas
RUN: Year 2023 With project
BARRIER DESIGN: INPUT HEIGHTS
ATMOSPHERICS: 68 deg F, 50% RH

Average pavement type shall be used unless a State highway agency substantiates the use of a different type with approval of FHWA.

Receiver Name	No.	#DUs	Existing LAeq1h	No Barrier LAeq1h Calculated	Crit'n	Increase over existing Calculated	Crit'n Sub'l Inc	Type Impact	With Barrier Calculated LAeq1h	Noise Reduction Calculated	Goal	Calculated minus Goal
			dBA	dBA	dBA	dB	dB		dBA	dB	dB	dB
M1	1	1	0.0	63.7	66	63.7	10	----	63.7	0.0	8	-8.0
M2	2	1	0.0	64.1	66	64.1	10	----	64.1	0.0	8	-8.0
M3	3	1	0.0	65.0	66	65.0	10	----	65.0	0.0	8	-8.0
M4	5	1	0.0	66.7	66	66.7	10	Snd Lvl	66.7	0.0	8	-8.0
M5	6	1	0.0	60.6	66	60.6	10	----	60.6	0.0	8	-8.0

Dwelling Units	# DUs	Noise Reduction Min	Avg	Max
		dB	dB	dB
All Selected	5	0.0	0.0	0.0
All Impacted	1	0.0	0.0	0.0
All that meet NR Goal	0	0.0	0.0	0.0

Attachment D

Operational Noise Model Input and Output Data

Appendix D: Operational Noise Model Input and Output Data					
	north close	north far	west	south	
Interstate-10 Noise					
estimated I-10 noise (CNEL)	74.6	72.3	70.1	71.6	
Fuel Dispensers					
total quantity	1	1	1	1	(assume up to one is in use at any one time at night)
reference level at one meter	83	83	83	83	
AUF (%)	33%	33%	33%	33%	
average distance from aggregate pumps to receptor	250	200	250	330	
LOS-blocking barrier? (5 if yes, 0 if no)	0	0	0	0	
fuel dispenser noise level (hourly Leq)	41	42	41	38	
Retail HVAC					
total quantity	1	1	1	1	
reference level at one meter	68	68	68	68	
AUF (%)	100%	100%	100%	100%	
average distance from aggregate pumps to receptor	450	320	100	340	
LOS-blocking barrier? (5 if yes, 0 if no)	0	0	0	0	
fuel dispenser noise level (hourly Leq)	25	28	38	28	
Idling RVs					
total quantity	1	1	1	1	
reference level at one meter	99	99	99	99	based on 75 at 50 feet Lmax per FTA (Table 6-7, "buses idling")
AUF (%)	8%	8%	8%	8%	CA state law limit on idling (5 minutes)
average distance from RVs to receptor	250	200	250	330	
LOS-blocking barrier? (5 if yes, 0 if no)	0	0	0	0	
RV noise level (hourly Leq)	50	52	50	48	
Total Stationary Ops Noise for any hour	51	53	51	48	

Appendix H.2

Dual Site Noise Analysis

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MEMORANDUM

To:	Kelly Lucia, Planning Manager, City of Calimesa
From:	Mark Storm, INCE Bd. Cert.
Subject:	Dual-Site Noise Analysis for 7th Street and County Line Road 76 Fueling Station Project Noise Technical Memorandum - DRAFT
Date:	26 May 2020
Attachment(s):	A: Rincon Consultants – Calimesa Air Quality and Noise Analysis (May 12, 2017)

We are pleased to present this technical memorandum summarizing the results of predicted "stationary" source noise emission for several operation scenarios associated with the above-referenced Project (76 Fueling Station Project), currently under construction, and the westerly adjoining RV Fueling Station and Retail project (RV Fueling/Retail project), proposed on the same block (bounded by West County Line Road and County Line Lane) in the City of Calimesa, California (City).

As proposed on May 14, 2020, Dudek has performed these predictive onsite operation noise analyses to evaluate the potential need for (and noise-reducing effects of) installing a noise wall along the western boundary of the RV Fueling/Retail project site, since we understand the previously prepared noise study ("Rincon Report", Rincon Consultants [2017], see Attachment A) assessed potential environmental noise impacts on the basis of a western noise-sensitive receptor (i.e., a residential land use) located on the RV Fueling/Retail project site. With implementation of the RV Fueling/Retail project, the previously analyzed sensitive receptor to the west would be demolished, and the nearest sensitive receptor to the 76 Fueling Station Project site would be on the northwestern corner of West County Line Road and County Line Lane. This analysis focuses on potential noise impacts to sensitive receptors located west of the 76 Fueling Station Project and adjacent RV Fueling/Retail project sites, based on the change in site conditions, to determine if the mitigation requiring installation of a sound barrier on the western site boundary is still applicable to reduce noise levels in compliance with City standards.

In summary and as a result of these predictive analyses, we find that noise generated by operation of the 76 Fueling Station Project would not exceed the City's daytime, evening or nighttime noise limits, and no noise barrier is needed. Upon buildout of the 76 Fueling Station Project and RV Fueling/Retail project, implementing a barrier along the western edge of the proposed commercial development would be a prudent way to help ensure aggregate noise emissions from operation of stationary onsite sound sources and idling vehicle traffic would comply with the City's applicable noise limits. Height of the barrier must be at least four feet tall, as discussed herein.

After an introduction to common acoustical terms used to frame the presentation of quantified findings herein, this document describes the methodology and predicted results for noise propagation from onsite stationary sound sources, compares the results with applicable City noise standards, then summarizes conclusions and recommendations.

1 Introduction

1.1 Noise Characteristics and Terminology

Pressure fluctuations, traveling as waves through air from a source, exert a force perceived by the human ear as sound. Sound pressure level (referred to as sound level) is expressed by way of a logarithmic scale in decibels (dB) that represent magnitude of these air pressure waves with respect to the threshold of average human hearing. The human ear is more sensitive to middle and high frequencies, especially when the noise levels are quieter; thus, to accommodate for this phenomenon, a weighting system was developed to mimic this human hearing frequency response. The frequency weighting called the "A" scale is typically used for typical environmental sound levels which de-emphasizes the low frequency components of the sound in a manner similar to the response of a human ear. This A-weighted sound level is also often referred to as the "noise level" and is referenced in units of dBA. In a manner similar to the scaling of temperature on a thermometer, Table 1 provides examples of common indoor and outdoor sound sources having A-weighted levels that "line-up" with the listed dB values.

Table 1. Typical Sound Levels in the Environment and Industry

Common Outdoor Activities	Noise Level (dB)	Common Indoor Activities
—	110	Rock band
Jet flyover at 300 meters (1,000 feet)	100	—
Gas lawn mower at 1 meter (3 feet)	90	—
Diesel truck at 15 meters (50 feet), at 80 kph (50 mph)	80	Food blender at 1 meter (3 feet) Garbage disposal at 1 meter (3 feet)
Noisy urban area, daytime gas lawn mower at 30 meters (100 feet)	70	Vacuum cleaner at 3 meters (10 feet)
Commercial area Heavy traffic at 90 meters (300 feet)	60	Normal speech at 1 meter (3 feet)
Quiet urban daytime	50	Large business office Dishwasher, next room
Quiet urban nighttime	40	Theater, large conference room (background)
Quiet suburban nighttime	30	Library
Quiet rural night time	20	Bedroom at night, concert hall (background)
—	10	Broadcast/recording studio
Lowest threshold of human hearing	0	Lowest threshold of human hearing

Source: Caltrans 2013.
Notes: kph = kilometers per hour; mph = miles per hour

The equivalent noise level L_{eq}, also referred to as the energy-average sound level, is a single number representing the fluctuating sound level in decibels (dB) over a specified period of time. It is a sound-energy average of the fluctuating level and is equal to a constant unchanging sound of that dB level. Community noise sources vary continuously, being the product of many noise sources at various distances, all of which in aggregate tend to constitute a relatively stable background sound environment. This background, added to perceptibly dominant acoustical contributors (i.e., those that are the loudest and/or closest to the listener position) makes the "ambient" sound that a sound level meter can detect with its microphone and quantify as a dB level.

1.2 Exterior Noise Distance Attenuation

Stationary operating equipment or slow-moving (or idling) vehicles within a spatially limited area at a given time can be considered "point sources" emitting noise that typically diminishes (attenuates) at a rate of 6.0 dBA for each doubling of distance from the source to the receptor at acoustically "hard" sites and at a rate of 7.5 dBA for each doubling of distance from source to receptor at acoustically "soft" sites. These attenuation rates would also be expected for sound propagation away from a horizontal area source, which can be approximated as a single point such as the geographic center of the area. Acoustically hard or otherwise acoustically reflective surfaces do not provide any excess ground-effect attenuation and are characteristic of sealed asphalt roads, bodies of water, and hard-packed soils. This means the attenuation experienced for hard-surface conditions is attributed only to "geometric divergence" that yields the aforementioned 6 dB per doubling of distance from a point source. An acoustically soft or absorptive surface, on the other hand, is exemplified by fresh-fallen snow, soft sand, tilled soils, or thickly-vegetated ground cover and accounts for the higher attenuation rate (7.5 dB per doubling) with increasing distance from the source of sound emission.

Sound propagation between a source and a receptor position can additionally be attenuated by the presence of path-intervening man-made or natural barriers. The amount of attenuation varies with the degree of sound path occlusion and the proximity of the barrier to the source or the receptor. The air medium that conveys sound is acoustically absorptive as well, but the added sound attenuation effect—apart from geometric divergence already introduced—is greatly dependent on acoustical frequency and typically requires large distances between a source and the receptor to be meaningful.

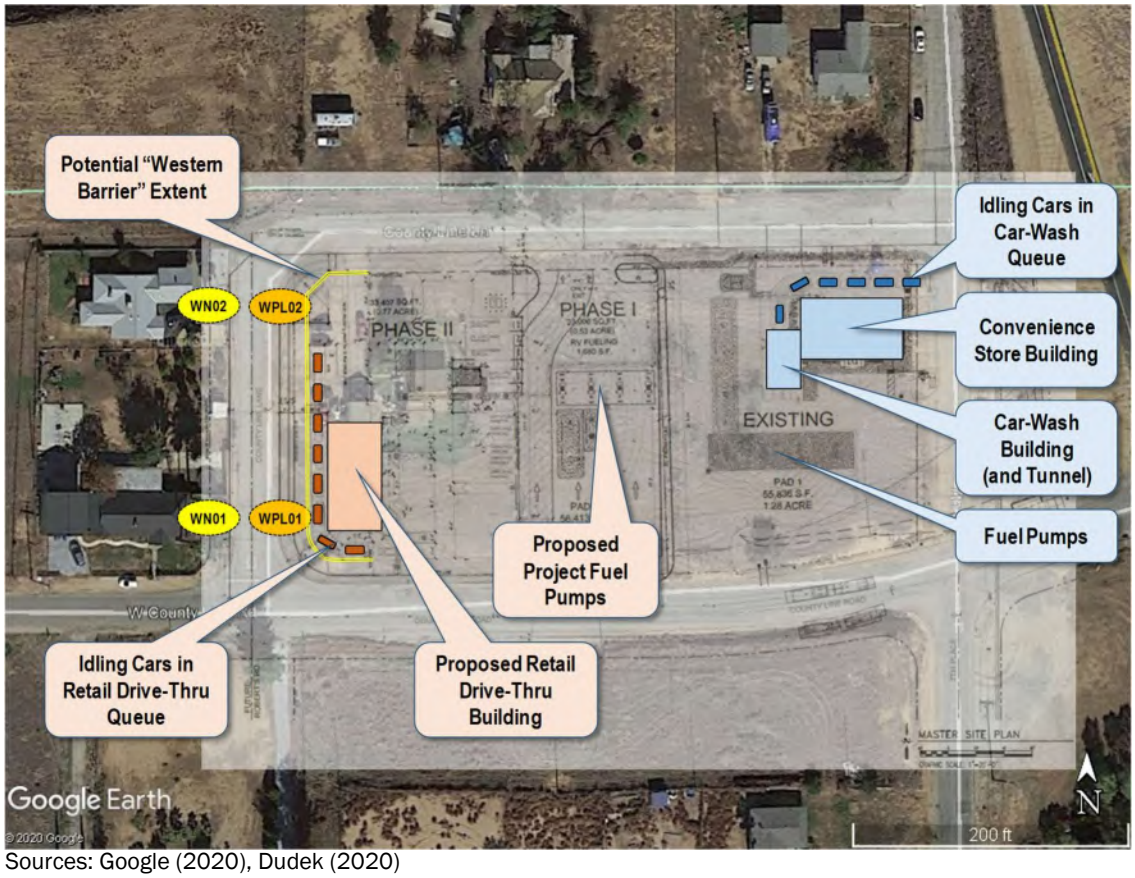
2 Methodology

A computer program called CadnaA (Computer Aided Noise Abatement) was used to predict the aggregate sound propagation from the 76 Fueling Station Project's major anticipated stationary producers of noise emissions. CadnaA is commercially available software that enables predictive sound propagation in a three-dimensional (3D) model space from multiple point, line, and area-type noise sources. The outdoor noise propagation formulas and reference data incorporated into the software code adhere to several accepted standards, including the International Organization of Standardization (ISO) Standard 9613-2, "Attenuation of Sound During Propagation Outdoors, Part 2: General Method of Calculation" (ISO 1996). In summary, the CadnaA-based noise model was setup and "run" for several distinct operation scenarios with input parameters that included the following settings:

- A ground acoustical absorption coefficient of 0.2, on a scale of zero (acoustically "hard" surfaces) to one (acoustically "soft"), to account for largely paved surfaces and some unpaved areas with vegetated landscaping.
- Single order of reflection (i.e., sound rays allowed to "bounce" off one encountered surface).
- Calm winds (i.e., speeds less than 0.5 meters per second in any direction) and 68 degrees Fahrenheit with 70 percent (%) relative humidity.
- Sound source types that include the following:
    - Points – fuel pumps, idling passenger vehicles, rooftop air-cooled condensers ("ACC" for HVAC);
    - Horizontal areas – idling recreational vehicles (RVs); and,
    - Vertical areas – car wash dryers (high-pressure blowers).
- Structures that include the following:

- Buildings – proposed "coffee/retail drive-thru", car-wash and convenience store; and,
- Barriers – short and tall noise walls.

Figure 1 presents an aerial view of the Project vicinity, overlain with a semi-transparent image of the site plans for the 76 Fueling Station Project site and adjoining RV Fueling/Retail project site. Sample model features and representative property line and neighboring-residence property line receptor positions (tagged oval locations) are also depicted.



Sources: Google (2020), Dudek (2020)

Figure 1. 76 Fueling Station Project and RV Fueling/Retail project sites and surrounding land uses.

Table 2 presents the sound power levels for the individual sources considered in the prediction model.

Table 2. Prediction Model Source Sound Power Levels (L_w)

Sound Source Type	Overall L_w (dBA)	Sound Power Levels (dBA) at Octave Band Center Frequency (OBCF, Hz)								
		31.5	63	125	250	500	1K	2K	4K	8K
5-ton ACC (e.g., Carrier 16NA60)	72	50	53	56	62	66	68	63	59	51
Idling Passenger Vehicle	87	62	66	67	81	81	82	78	69	60
Idling Recreational Vehicle	99	68	77	88	93	93	93	89	80	79
Fuel Pump	81	31	45	56	65	71	77	75	71	63
Car Wash Dryer (blower)	104	57	76	81	84	98	90	90	85	78

Source: Dudek 2020
Notes: dBA = A-weighted sound level; L_w = sound power level

The sound power levels for the car wash facility dryers (assumed to be a set of blowers suspended from the ceiling of the tunnel) yield sound pressure levels that—if unobstructed—are comparable to the predicted levels at the three distances shown in Table 8 of the Rincon Report: 73 dBA at 70 feet, 70 dBA at 100 feet, and 64 dBA at 200 feet. But if the direct sound path (a.k.a., "line of sight" [LOS]) between this loud noise source and a receptor is occluded, then the received sound pressure level will be less. For purposes of this predictive analysis, unless otherwise noted, it is assumed the dryers are installed near but still within (by a distance of 2.5 feet from the exit plane) the exit end of the car wash facility tunnel. In some cases, and for results comparison within a studied scenario, the sound source representing these dryers is located just external to the tunnel; hence, the tunnel walls do not provide sound path occlusion under such a condition.

Additional working assumptions for the sound sources appearing in Table 2 are as follows:

- 5-ton ACC and the Car Wash Dryer – operating at full duty cycle for entire hour;
- Idling Passenger Vehicle – in the queue for the coffee/retail drive-thru or the car wash facility, full hour; in the parking lot, only up to 5 minutes per hour;
- Idling Recreational Vehicle – in the RV Fueling/Retail project parking lot, up to 5 minutes per hour; and,
- Fuel Pump – only up to 20 minutes of operation/usage per hour.

Six scenario sets of onsite operation have been studied, which are detailed as follows:

A. **Typical expected daytime operation, 76 Fueling Station Project only** – Under this scenario, the RV Fueling/Retail project to the west is not yet constructed, meaning only the 76 Fueling Station Project is fully operating and handling anticipated customer traffic during daytime hours (7 a.m. to 7 p.m.) and include the following sound sources:

   - Six (6) idling passenger cars in the queue for the car wash facility;
   - Operating car wash facility, represented by blower noise on the southern exit side of the tunnel;
   - One operating rooftop ACC for the convenience store;
   - Four (4) fuel pumps – four on the 76 Fueling Station Project site; and,
   - One (1) idling passenger car in a parking stall at the convenience store.

   All listed sound sources are operating concurrently and continuously over the duration of a full hour. Three cases were modeled for this scenario and its conditions, representing different possible noise reduction features as follows:

   1. No noise walls;
   2. Short wall (4' tall) along western edge of overall site; and,
   3. Taller wall (8' tall) along western edge of overall site.

B. **Typical expected nighttime operation, 76 Fueling Station Project only** – Under this scenario, the RV Fueling/Retail project to the west is not yet constructed, meaning only the 76 Fueling Station Project site convenience store is handling anticipated customer traffic during nighttime hours (7 p.m. to 7 a.m.) and includes the following sound sources:

- No operating car wash facility (and no queue);
- One operating rooftop ACC for the convenience store;
- Two (2) fuel pumps on the RV Fueling/Retail project site; and,
- One (1) idling passenger car – one in a parking stall at the convenience store.

All listed sound sources are operating concurrently and continuously over the duration of a full hour. Three cases were modeled for this scenario and its conditions, representing different possible noise reduction features as follows:

1. No noise walls;
2. Short wall (4' tall) along western edge of overall site; and,
3. Taller wall (8' tall) along western edge of overall site.

C. **Typical expected daytime operation, 76 Fueling Station Project and RV Fueling/Retail project** – Under this scenario, both the 76 Fueling Station Project and the RV Fueling/Retail project are fully operating and handling anticipated customer traffic during daytime hours and include the following sound sources:

- Eight (8) idling passenger cars in the queue for the coffee/retail drive-thru;
- Six (6) idling passenger cars in the queue for the car wash facility;
- Operating car wash facility, represented by blower noise on the southern exit side of the tunnel;
- Two (2) rooftop air-cooled condensing units (ACC) serving air-conditioning needs (about four tons of refrigeration each) – one for the coffee/retail shop, the other for the convenience store;
- Eight (8) fuel pumps – four on at RV Fueling/Retail project site, four at 76 Fueling Station Project site;
- Two (2) idling passenger cars – one in a parking stall for the coffee/retail shop, the other at the convenience store; and,
- An idling RV at a RV Fueling/Retail project site fuel pump.

All listed sound sources are operating concurrently and continuously over the duration of a full hour. Three cases were modeled for this scenario and its conditions, representing different possible noise reduction features as follows:

1. No noise walls;
2. Short wall (4' tall) along western edge of overall site; and,
3. Taller wall (8' tall) along western edge of overall site.

D. **Typical expected nighttime operation, Project and RV Fueling/Retail project** – Under this scenario, the Project and RV Fueling/Retail project are operating with less customer traffic, reflecting nighttime hours and the Car-Wash is not operating and include the following sound sources:

- Two (2) idling passenger cars in the queue for the coffee/retail drive-thru;
- No operating car wash facility (and no queue);
- Two (2) ACC – one for the coffee/retail shop, the other for the convenience store;
- Four (4) fuel pumps – two on the 76 Fueling Project site, two on the RV Fueling/Retail project site;

- Two (2) idling passenger cars – one in a parking stall for the coffee/retail shop, the other at the convenience store; and,
- An idling RV at a RV Fueling/Retail project fuel pump.

All listed sound sources are operating concurrently and continuously over the duration of a full hour. Three cases were modeled for this scenario and its conditions, representing different possible noise reduction features as follows:

1. No noise walls;
2. Short wall (4' tall) along western edge of overall site; and,
3. Taller wall (8' tall) along western edge of overall site.

E. **Typical expected daytime operation, 76 Fueling Station Project plus RV Fueling/Retail project (RV station only)** – Under this scenario, the drive-through retail portion of the RV Fueling/Retail project is not yet developed. The 76 Fueling Station Project and the RV fueling station portion of the RV Fueling/Retail project are handling anticipated customer traffic during daytime hours and include the following sound sources:

- Six (6) idling passenger cars in the queue for the car wash facility;
- Operating car wash facility, represented by blower noise on the southern exit side of the tunnel;
- One operating rooftop ACC for the convenience store;
- Eight (8) fuel pumps – four on at RV Fueling/Retail project site, four at 76 Fueling Station Project site;
- One (1) idling passenger car – one in a parking stall at the convenience store; and,
- An idling RV at a Project fuel pump.

All listed sound sources are operating concurrently and continuously over the duration of a full hour. Three cases were modeled for this scenario and its conditions, representing different possible noise reduction features as follows:

1. No noise walls;
2. Short wall (4' tall) along western edge of overall site; and,
3. Taller wall (8' tall) along western edge of overall site.

F. **Typical expected nighttime operation, Project plus RV Fueling/Retail project (RV station only)** – Under this scenario, the drive-through retail portion of the RV Fueling/Retail project is not yet developed. The Project fuel station/Car-Wash and the RV fueling station portion of the RV Fueling/Retail project are operating with less customer traffic, reflecting nighttime hours and the Car-Wash is not operating (however, its adjoining convenience store is assumed to remain open) and include the following sound sources:

- No operating car wash facility (and no queue);
- One operating rooftop ACC for the convenience store;
- Four (4) fuel pumps – two on the Project site, two on the 76 Fueling Station Project site;
- One (1) idling passenger car – one in a parking stall at the convenience store; and,
- An idling RV at a RV Fueling/Retail project fuel pump.

All listed sound sources are operating concurrently and continuously over the duration of a full hour. Three cases were modeled for this scenario and its conditions, representing different possible noise reduction features as follows:

1. No noise walls;
2. Short wall (4' tall) along western edge of overall site; and,
3. Taller wall (8' tall) along western edge of overall site.

3 Regulatory Setting

Per Section 8.15.040 of the City's Municipal Code, and unless a variance has been granted per the provisions of Section 8.15.200, noise from operations produced within a commercial zone cannot exceed an hourly L_{eq} of 60 dBA during daytime hours (7 a.m. to 7 p.m.) and 55 dBA during evening (7 p.m. to 10 p.m.) and nighttime (10 p.m. to 7 a.m.) hours.

4 Prediction Results

4.1 Scenarios A & B

Table 3 presents the predicted noise levels associated with operation of the 76 Fueling Station Project at the indicated modeled receptor positions, which appear in Figure 1.

Table 3. Predicted Noise Levels – Scenarios A (daytime) & B (evening/nighttime)

Modeled Receptor Location (Tag)	City Daytime Noise Limit (dBA hourly L_{eq})	City Evening / Nighttime Noise Limit (dBA hourly L_{eq})	Predicted *Daytime* *(7 a.m. to 7 p.m.)* Operation Noise Levels (dBA L_{eq}) for Western Barrier Height (feet)*			Predicted Evening/*Nighttime* *(7 p.m. to 7 a.m.)* Operation Noise Levels (dBA L_{eq}) for Western Barrier Height (feet)*		
			0'	4'	8'	0'	4'	8'
WN01	60	55	51	51	39	28	23	21
WN02	60	55	48	46	43	28	22	20
WPL01	60	55	49	49	44	30	26	19
WPL02	60	55	49	48	42	29	24	19

Source: Dudek 2020
Notes: dBA = A-weighted sound level; L_{eq} = energy-equivalent sound level
*height of barrier top edge above grade level

Under Scenario A and B conditions, in which the RV Fueling/Retail project is not yet constructed, Table 3 shows that the City noise limits would be satisfied at both representative western property line locations without an installed barrier.

If the car wash dryers are external to the exit end of the tunnel, such that they are essentially exposed and allowed to radiate noise freely to the west, then as presented in Table 4 the predicted noise levels would be higher than those shown in Table 3 for the daytime scenario.

Table 4. Predicted Noise Levels – Scenario A (louder car wash)

Modeled Receptor Location (Tag)	City Daytime Noise Limit (dBA hourly L_{eq})	City Evening / Nighttime Noise Limit (dBA hourly L_{eq})	Dryers External Predicted *Daytime* (7 a.m. to 7 p.m.) Operation Noise Levels (dBA L_{eq}) for Western Barrier Height (feet)*			Table 3 Predicted *Daytime* (7 a.m. to 7 p.m.) Operation Noise Levels (dBA L_{eq}) for Western Barrier Height (feet)*			Dryers External – Table 3 Difference in Predicted Operation Noise Levels (dBA L_{eq}) for Western Barrier Height (feet)*		
			0'	4'	8'	0'	4'	8'	0'	4'	8'
WN01	60	55	55	49	49	51	51	39	4	-2	10
WN02	60	55	53	50	45	48	46	43	5	4	2
WPL01	60	55	56	51	48	49	49	44	7	2	4
WPL02	60	55	54	52	45	49	48	42	5	4	3

Source: Dudek 2020
Notes: dBA = A-weighted sound level; L_{eq} = energy-equivalent sound level
*height of barrier top edge above grade level

There is anywhere from a 4-7 dBA difference due to the car wash dryer placement with respect to the tunnel exit (assuming no noise barrier present), but an external car wash dryer would not cause operational noise levels under scenario A to exceed the daytime limit of 60 dBA. In addition, the car wash would not operate between the hours of 7 p.m. and 7 a.m., so placement of the car wash dryer would not affect predicted evening/nighttime operational noise levels presented in Table 3.

4.2 Scenarios C & D

Table 5 presents the predicted noise levels associated with operation of the 76 Fueling Station Project and RV Fueling/Retail project at the indicated modeled receptor positions, which appear in Figure 1.

Table 5. Predicted Noise Levels – Scenarios C (daytime) & D (evening/nighttime)

Modeled Receptor Location (Figure 1 Tag)	City Daytime Noise Limit (dBA hourly L_{eq})	City Evening / Nighttime Noise Limit (dBA hourly L_{eq})	Predicted *Daytime* (7 a.m. to 7 p.m.) Operation Noise Levels (dBA L_{eq}) for Western Barrier Height (feet)*			Predicted Evening/*Nighttime* (7 p.m. to 7 a.m.) Operation Noise Levels (dBA L_{eq}) for Western Barrier Height (feet)*		
			0'	4'	8'	0'	4'	8'
WN01	60	55	58	52	46	51	44	40
WN02	60	55	56	50	46	45	39	37
WPL01	60	55	66	59	53	59	53	47
WPL02	60	55	59	53	48	46	41	38

Source: Dudek 2020
Notes: dBA = A-weighted sound level; L_{eq} = energy-equivalent sound level
*height of barrier top edge above grade level

Under Scenario C conditions, in which both the 76 Fueling Station Project and RV Fueling/Retail project are built and fully operating, Table 5 shows that the daytime City noise limit of 60 dBA would be exceeded at one of the representative property line positions (WPL01) if a barrier was not installed along the western edge of the RV Fueling/Retail project site. With a 4'-tall barrier, the daytime limit would be satisfied.

Under Scenario D conditions, Table 5 shows that the evening and nighttime City noise limit of 55 dBA would be exceeded at one of the representative property line positions (WPL01) if a barrier is not installed along the western edge of the RV Fueling/Retail project site. With a 4'-tall barrier, the evening and nighttime limit would be satisfied.

If the car wash dryers are external to the exit end of the tunnel, such that they are essentially exposed and allowed to radiate noise freely to the west, then as presented in Table 6 the predicted noise levels would be higher than those shown in Table 5 for the daytime and evening scenarios.

Table 6. Predicted Noise Levels – Scenario C (louder car wash)

Modeled Receptor Location (Tag)	City Daytime Noise Limit (dBA hourly L_{eq})	City Evening / Nighttime Noise Limit (dBA hourly L_{eq})	Dryers External Predicted *Daytime* (7 a.m. to 7 p.m.) Operation Noise Levels (dBA L_{eq}) for Western Barrier Height (feet)*			Table 5 Predicted *Daytime* (7 a.m. to 7 p.m.) Operation Noise Levels (dBA L_{eq}) for Western Barrier Height (feet)*			Dryers External – Table 5 Difference in Predicted Operation Noise Levels (dBA L_{eq}) for Western Barrier Height (feet)*		
			0'	4'	8'	0'	4'	8'	0'	4'	8'
WN01	60	55	59	52	46	58	52	46	1	0	0
WN02	60	55	57	52	47	56	50	46	1	2	1
WPL01	60	55	66	59	53	66	59	53	0	0	0
WPL02	60	55	60	55	49	59	53	48	1	2	1

Source: Dudek 2020
Notes: dBA = A-weighted sound level; L_{eq} = energy-equivalent sound level
*height of barrier top edge above grade level

There is anywhere from a 0-2 dBA difference due to the car wash dryer placement with respect to the tunnel exit, and the results do not change the aforementioned recommendation of a barrier for Scenarios C and D.

4.2 Scenarios E & F

Table 7 presents the predicted noise levels associated with operation of the 76 Fueling Station Project and RV fueling station component of the RV Fueling/Retail project at the indicated modeled receptor positions, which appear in Figure 1.

Table 7. Predicted Noise Levels – Scenarios E (daytime) & F (evening/nighttime)

Modeled Receptor Location (Tag)	City Daytime Noise Limit (dBA hourly L_{eq})	City Evening / Nighttime Noise Limit (dBA hourly L_{eq})	Predicted *Daytime* (7 a.m. to 7 p.m.) Operation Noise Levels (dBA L_{eq}) for Western Barrier Height (feet)*			Predicted Evening/*Nighttime* (7 p.m. to 7 a.m.) Operation Noise Levels (dBA L_{eq}) for Western Barrier Height (feet)*		
			0'	4'	8'	0'	4'	8'
WN01	60	55	52	51	41	41	35	34
WN02	60	55	49	47	44	42	36	35
WPL01	60	55	50	49	44	43	38	34
WPL02	60	55	50	48	43	43	38	35

Source: Dudek 2020
Notes: dBA = A-weighted sound level; L_{eq} = energy-equivalent sound level
*height of barrier top edge above grade level

Under Scenario E and F conditions, in which the 76 Fueling Station Project and the RV fuel station portion of the RV Fueling/Retail project (i.e., the coffee/retail shop with drive-thru not erected) are built and fully operating, Table 7 shows that the City noise limits would be satisfied at both representative western property line locations without an installed barrier.

If the car wash dryers are external to the exit end of the tunnel, such that they are essentially exposed and allowed to radiate noise freely to the west, then as presented in Table 8, the predicted noise levels would be higher than those shown in Table 7 for the daytime and evening scenarios.

Table 8. Predicted Noise Levels – Scenario E (louder car wash)

Modeled Receptor Location (Tag)	City Daytime Noise Limit (dBA hourly L_{eq})	City Evening / Nighttime Noise Limit (dBA hourly L_{eq})	Dryers External Predicted *Daytime* (7 a.m. to 7 p.m.) Operation Noise Levels (dBA L_{eq}) for Western Barrier Height (feet)*			Table 7 Predicted *Daytime* (7 a.m. to 7 p.m.) Operation Noise Levels (dBA L_{eq}) for Western Barrier Height (feet)*			Dryers External – Table 7 Difference in Predicted Operation Noise Levels (dBA L_{eq}) for Western Barrier Height (feet)*		
			0'	4'	8'	0'	4'	8'	0'	4'	8'
WN01	60	55	55	49	49	52	51	41	3	-2	8
WN02	60	55	53	50	46	49	47	44	4	3	2
WPL01	60	55	57	51	48	50	49	44	7	2	4
WPL02	60	55	55	52	45	50	48	43	5	4	2

Source: Dudek 2020
Notes: dBA = A-weighted sound level; L_{eq} = energy-equivalent sound level
*height of barrier top edge above grade level

There is a 3-7 dBA difference due to the car wash dryer placement with respect to the tunnel exit (assuming no noise barrier present), but an external car wash dryer would not cause operational noise levels under scenario E to exceed the daytime noise limit of 60 dBA. In addition, the car wash would not operate between the hours of 7 p.m. and 7 a.m., so placement of the car wash dryer would not affect predicted evening/nighttime operational noise levels presented in Table 7.

5 Conclusions & Recommendations

Based on the studied scenarios, we recommended implementation of a noise barrier having a horizontal extent as shown in Figure 1, with minimum height varying with operation conditions as follows:

- Scenario C (full build-out both sites, and operation during *daytime* hours) – 4 feet;
- Scenario D (full build-out both sites, and operation during *nighttime* hours) – 4 feet;

For the other studied scenarios and conditions, the City's applicable noise limits are expected to be met at along the western extent of the proposed commercial development.

If implemented, the recommended noise barrier would need to be solid (i.e., no air gaps or cracks) and have sufficient mass and stiffness in order to exhibit a sound transmission class (STC) of 27 or better. The "apparent" or "field" STC of such a barrier, even if installed properly by the onsite contractor(s) or supplying vendor, would typically be 5 points less and thus yield an FSTC value of 22. This value is at least 10 dB greater than the highest predicted

noise reduction effect due to barrier LOS-intervention, and is thus consistent with Caltrans Technical Noise Supplement ("TeNS") guidance that states: "any material may be used for a barrier between a noise source and a noise receiver as long as it has a [transmission loss] of at least 10 dBA more than the desired noise reduction" (Caltrans 2013). The sound transmission loss (TL) is comparable to the STC rating for purposes of this discussion.

Table 5-1 from Chapter 5 of the Caltrans TeNS document lists a variety of sample wall materials and their expected TL ratings (Caltrans 2013), some of which are reproduced below in Table 9 that would meet the recommended need of STC 27. Most of the options are composed of concrete block or poured concrete forms. Table 9 also includes sample steel and wood studded wall assemblies that may be less expensive options to field-erect on the RV Fueling/Retail project site. Although the Caltrans guidance does list wooden fence varieties and a few other material options, they tend not to have sufficient TL. Any such implemented barrier would need to comply with applicable City construction codes and other non-acoustical considerations.

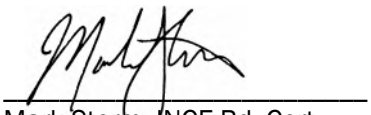
Table 9. Sample Barrier Material Options

Material	Thickness (inches)	Weight (pounds per square foot)	TL (dBA)
Concrete block, 8 by 8 by 16 inches, light weight	8	31	34
Dense concrete	4	50	40
Light concrete	4	33	36
5/8"-thick gypsum wallboard on each side of 90mm steel channel studs, glass fiber in the cavity	4.8	approx. 2-3	44
5/8"-thick gypsum wallboard on each side of 2"x"4 wooden studs	5.25	approx. 3-4	34

Sources: Caltrans 2013; NAIMA 1997; Halliwell *et al* 1998.
Notes: dBA = A-weighted decibel; TL = transmission loss

We trust that this technical memorandum meets your Project needs at this time. Should you have any questions or require additional information, please do not hesitate to contact Mark Storm at (760) 479-4297, mstorm@dudek.com.

Sincerely,



Mark Storm, INCE Bd. Cert.
Acoustic Services Manager

Att. A: Rincon Consultants – Calimesa Air Quality and Noise Analysis (May 12, 2017)

6 References

California Department of Transportation (Caltrans). 2013. Technical Noise Supplement to the Traffic Noise Analysis Protocol. September.

Halliwell *et al*. 1998. Gypsum Board Walls: Transmission Loss Data. IRC-IR-761. National Research Council Canada.

International Organization of Standardization (ISO). 1996. Standard 9613-2 (Acoustics – Attenuation of sound during propagation outdoors – Part 2: General method of calculation). Geneva.

North American Insulation Manufacturers Association (NAIMA). 1997. Sound Control for Commercial and Residential Buildings. Publication BI405.

Attachment A

Rincon Consultants – Calimesa Air Quality and Noise Analysis (May 12, 2017)

SALEM
engineering group, inc.

11650 Mission Park Drive, Suite 108
Rancho Cucamonga, California 91730
(909) 980-6455 Office
(909) 980-6435 Fax

May 15, 2017 **Job No. 3-417-0432**

Mr. Paul Loubet
J&T Management
139 Radio Road
Corona, CA 92879

Subject: **NOISE & AIR QUALITY ASSESSMENT MEMORANDUM**
Proposed Commercial Development
NWC 7th street and Countyline Road
Calimesa, California

Dear Mr. Loubert:

At your request and authorization, a Noise and Air Quality Memorandum for the above-referenced project located at the northwest intersection of 7th Street and Countyline Road in Calimesa, California (subject property) was conducted. The Noise Memorandum is an analysis of the operational and construction noise impacts of the proposed commercial development including the associated convenience store with fuel station and car wash facility. The Air Quality Memorandum includes an analysis of the emissions associated with the operational and construction of the subject property proposed development.

We appreciate the opportunity to assist you with this project. If you have any questions, or if we may be of further assistance, please do not hesitate to contact our office at (909) 980-6455.

Respectfully submitted,

SALEM Engineering Group, Inc.

Maria G. Ruvalcaba, EP
Project Manager

Rincon Consultants, Inc.
180 North Ashwood Avenue
Ventura, California 93003

805 644 4455 OFFICE AND FAX

info@rinconconsultants.com
www.rinconconsultants.com

May 12, 2017
Project No: 17-04207

Salem Engineering Group
13355 Noel Road, Suite 1100
Dallas, Texas 75240

Subject: Calimesa Air Quality and Noise Analysis

Ms. Ruvalcaba:

This memorandum evaluates potential air quality and noise impacts associated with the construction and operation of a proposed commercial development in the City of Calimesa, California. The project involves construction of a 3,200 square foot (sf) convenience store, a 1,152 sf car wash, eight gasoline fueling stations, and associated vehicle parking on an estimated 1.65-acre site. The purpose of this memorandum is to provide technical review of the project's air quality and noise impacts against applicable thresholds.

The project site is located approximately 375 feet west of Interstate 10 in Calimesa, Riverside County. The site is bordered to the north by County Line Lane. On the north side of County Line Lane is single-family residential development that is part of the City of Yucaipa. To the south, the site is bordered by West County Line Road. On the south side of West County Line Road are single family residences. To the west, the site is also adjoined by single family residences. Access to the project site would be provided via West County Line Road, County Line Lane, and 7th Place. A driveway would be provided at the southwest portion of the site from West County Line Road and at the northwest corner of the site from County Line Lane. In addition, 7th Place would provide access to the eastern portion of the site and provide additional circulation through the site, connecting West County Line Road to County Line Lane.

Air Quality

Setting

Federal and state ambient air quality standards for several criteria pollutants have been established to protect human health. The project site is in the South Coast Air Basin (SCAB), which is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east, and includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, in addition to the San Gorgonio Pass area in Riverside County. Air quality within the SCAB is primarily influenced by meteorology and a wide range of emissions sources, such as dense population centers, substantial vehicular traffic, and industry. The South Coast Air Quality Management District (SCAQMD) is the designated air quality control agency for the SCAB.

This air quality analysis conforms to the methodologies recommended in the SCAQMD's CEQA *Air Quality Handbook* (1993). The handbook includes significance thresholds for emissions, including, Reactive Organic Gases (ROGs), nitrogen oxides (NO_X), carbon monoxide (CO), sulfur oxides (SO_X),

particular matter up to ten microns (PM_{10}), and particulate matter up to 2.5 microns ($PM_{2.5}$), associated with both construction and operation of the project.

Project construction would generate diesel emissions and dust. Construction equipment that would generate criteria air pollutants includes excavators, graders, dump trucks, and loaders. Some of this equipment would be used during grading activities as well as when structures are constructed. It is assumed that all construction equipment used would be diesel-powered. The project's construction emissions were calculated using the California Emissions Estimator Model (CalEEMod) software version 2016.3.1. The construction schedule was based on CalEEMod defaults for all phases excluding architectural coating. The architectural coating phase was modified to overlap with building construction. CalEEMod defaults were also used for the number of pieces of equipment that would be used onsite during each phase of construction.

Operational emissions associated with the project were also estimated using CalEEMod. Operational emissions include mobile source emissions, energy emissions, and area source emissions. Mobile source emissions are generated by the increase in motor vehicle trips to and from the project site associated with operation of onsite development. Emissions attributed to energy use include natural gas consumption for space and water heating, in addition to emissions generated from electricity use. Area source emissions are generated by landscape maintenance equipment, consumer products, and architectural coating.

The SCAQMD recommends the following quantitative regional significance thresholds for temporary construction activities and long-term project operation within the SCAB:

Table 1 SCAQMD Thresholds

Construction Thresholds	Operational Thresholds
75 pounds per day of ROG	55 pounds per day of ROG
100 pounds per day of NO_X	55 pounds per day of NO_X
550 pounds per day of CO	550 pounds per day of CO
150 pounds per day of PM_{10}	150 pounds per day of SO_X
55 pounds per day of $PM_{2.5}$	150 pounds per day of PM_{10}
	55 pounds per day of $PM_{2.5}$

Source: SCAQMD. March 2015. Accessed May 2017 at: http://www.aqmd.gov/docs/default-source/ceqa/handbook/scaqmd-air-quality-significance-thresholds.pdf.

In addition to the above thresholds, the SCAQMD has developed Localized Significance Thresholds (LSTs) in response to the Governing Board's Environmental Justice Enhancement Initiative (1-4), which was prepared to update the CEQA *Air Quality Handbook* (1993). LSTs were developed for NO_X, CO, PM_{10} and $PM_{2.5}$ and were devised in response to concern about exposure of individuals to criteria pollutants in local communities. LSTs represent the maximum emissions from a project that will not cause or contribute to an air quality exceedance of the most stringent applicable federal or state ambient air quality standard at the nearest sensitive receptor, taking into consideration ambient concentrations in each source receptor area (SRA), distance to the sensitive receptor, and project size. LSTs have been developed for emissions within construction areas up to five acres in size. However, LSTs only apply to emissions within a fixed stationary location and are not applicable to mobile sources, such as cars on a roadway (SCAQMD 2008). As such, LSTs are typically applied only to construction emissions because the majority of operational emissions are associated with project-generated vehicle trips.

The project site is located in Source Receptor Area 28 (SRA-28) and is approximately 1.65 acres and (SCAQMD 2008). LSTs for construction on a 1.65-acre site in SRA-28 are shown in Table 2. LSTs are provided for receptors at a distance of 82 to 1,640 feet (25 to 500 meters) from the project site

boundary. The sensitive receptor closest to the project is the single-family residence located an estimated 125 feet (38 meters) north of the project site across County Line Lane. Therefore, for the purposes of this analysis, it is assumed that the receptors are located at a distance of 25 meters.

Table 2 SCAQMD LSTs for Construction (SRA-28)

Pollutant	Allowable emissions from a 1.65-acre site in SRA-28 for a receptor 25 meters away
Gradual conversion of NO_X to NO_2	209
CO	978
PM_{10}	6
$PM_{2.5}$	4

Source: SCAQMD. 2009. Accessed May 2017 at: http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/appendix-c-mass-rate-lst-look-up-tables.pdf?sfvrsn=2.

Construction Emissions

Construction would consist of grading, site preparation, building construction, paving, and architectural coating. These activities would generate temporary air pollutant emissions, including fugitive dust (PM_{10} and $PM_{2.5}$) and exhaust emissions from heavy construction vehicles and soil hauling trucks and ROGs from architectural coatings.

Table 3 summarizes the maximum daily emissions of pollutants during the entire construction period as estimated in CalEEMod. As shown in the table, emissions of ROG, NO_X, CO, SO_X, PM_{10}, and $PM_{2.5}$ would not exceed SCAQMD regional or local significance thresholds during project construction.

Table 3 Estimated Construction Emissions (lbs/day)

	Estimated Maximum Emissions (lbs/day)				
	ROG	**NO_X**	**CO**	**PM_{10}**	**$PM_{2.5}$**
2018 Maximum lbs/day	6.9	20.9	17.7	3.7	2.2
SCAQMD Thresholds	*75*	*100*	*550*	*150*	*55*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**
2018 Maximum On-site lbs/day	4.1	20.7	13.9	3.6	2.2
Local Significance Thresholds (LSTs) (On-site only)[1]	N/A[2]	*209*	*978*	*6*	*4*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**

Notes: All calculations were made using CalEEMod. See attachments for CalEEMod calculations. Demolition, Grading, Paving, Building Construction and Architectural Coating totals include worker trips, soil export hauling trips, construction vehicle emissions and fugitive dust. Numbers may not add up due to rounding. Emission data is pulled from "mitigated" results that include project design features that will be included in the project as well as project mitigation.

[1] LSTs are for a 1.65-acre project in SRA-28 within a distance of 25 meters from the site boundary.

[2] N/A = Not Applicable.

Long-Term Regional Impacts

Air Quality Management Plan (AQMP)

A project may be inconsistent with the SCAQMD AQMP if it would generate population, housing, or employment growth exceeding the forecasts used in the development of the AQMP. The 2016 AQMP relies on local city general plans and the Southern California Association of Government's (SCAG) Regional Transportation Plans (RTP) forecasts of regional population, housing and employment growth in its own projections for managing Basin air quality.

The project involves the construction of a commercial development consisting of a convenience store, car wash, gasoline fueling stations, and associated vehicle parking. The project does not include residences that would cause a direct increase in the City's population. While the project may provide new employment opportunities in Calimesa that could contribute to population growth, this contribution would be nominal. According to an employee density study prepared for SCAG in 2001, retail and service uses in Riverside County employ on average one employee per 629 sf. Based on this estimate, the project is expected to employ approximately 7 persons (1 employee/629 sf x 4,352 sf of retail and service use) (SCAG 2001). According to data from the United States Census Bureau American Community Survey, an estimated 2,806 people were employed in Calimesa between the years 2011 and 2015 (U.S. Census Bureau 2015). In its 2016 RTP/ Sustainable Community Strategy (SCS), SCAG projects that employment in the City will increase to 5,900 by 2040 – an increase of 3,094 employees (SCAG 2016). Assuming that all project employees reside in the City, the project would constitute 0.2 percent of projected City growth. Therefore, the level of population growth associated with the project was anticipated in SCAG's long-term population forecasts and would not exceed official regional population projections. The project would be consistent with the AQMP.

Carbon Monoxide (CO) Hot Spots

A CO hotspot is a localized concentration of CO that is above the state one-hour or eight-hour CO ambient air standards. Localized CO hotspots can occur at intersections with heavy peak hour traffic. Specifically, hotspots can be created at intersections where traffic levels are sufficiently high such that the local CO concentration exceeds the federal one-hour standard of 35.0 parts per million (ppm) or the federal and State eight-hour standard of 9.0 ppm (California Air Resources Board [California ARB] 2016).

The entire South Coast Air Basin is in conformance with state and federal CO standards and most air quality monitoring stations no longer monitor CO levels. The latest available data from the Riverside-Rubidoux station closest to the project site is from 2012 and the highest 8-hour concentration reported that year was 1.59 ppm, which is less than one-fifth of the 9 ppm standard. Based on this low background level and stricter vehicle emissions standards in newer cars and new technology that increases fuel economy, CO concentrations are not forecast to exceed CO even with the increase in traffic associated with the project. Localized air quality impacts related to CO hot spots would not occur.

Operational Emissions

The majority of project-related operational emissions would be due to vehicle trips to and from the site. As shown in Table 4, project-generated emissions would not exceed SCAQMD recommended thresholds for ROG, NO_X, CO, SO_X, PM_{10}, or $PM_{2.5}$.

Table 4 Estimated Operational Emissions (lbs/day)

	Estimated Emissions (lbs/day)					
Emissions Source	**ROG**	**NO_x**	**CO**	**SO_x**	**PM_{10}**	**$PM_{2.5}$**
Area	0.2	<0.1	0.3	0.0	<0.1	<0.1
Energy	<0.1	<0.1	0.5	<0.1	<0.1	0.1
Mobile	12.2	43.6	81.0	0.2	11.3	3.2
Project Total	12.4	43.6	81.8	0.2	11.3	3.2
SCAQMD Thresholds	*55*	*55*	*550*	*150*	*150*	*55*
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

See attachments for CalEEMod computer model output. Note: Numbers may not add up due to rounding.

Odors

The California Air Resource Board (ARB) *Air Quality Land Use Handbook: A Community Health Perspective* (2005) identifies land uses associated with odor complaints which include sewage treatment plants, landfills, recycling facilities, waste transfer stations, refineries, auto body shops, and livestock operations. Convenience stores, car washes, and gasoline fueling stations are not identified on this list. In addition, the project would have to comply with SCAQMD Rule 402, which prohibits the discharge of air contaminants that would cause injury, detriment, nuisance, or annoyance to the public. Furthermore, gas stations are required to include a vapor recovery system designed to capture vapors of gasoline or other fuels, so that they do not escape into the atmosphere. Therefore, the project would not generate objectionable odors that would harm adjacent sensitive receptors, including residences to the north, west, and south.

Toxic Air Contaminants (TACs)

A TAC is defined by the California ARB as an air pollutant that may cause or contribute to an increase in deaths or serious illness, or which may pose a present or potential hazard to human health. The California ARB recommends a 50-foot separation between sensitive land uses and typical gas-dispensing facilities (California ARB 2005). The project would include 8 pumping stations, which would be located approximately 175 feet from the nearest residence. Therefore, the project would not introduce sensitive receptors to a substantial source of TACs.

Noise

Noise Overview

Noise level is generally measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels to be consistent with that of human hearing response, which is most sensitive to frequencies around 4,000 Hertz and less sensitive to low frequencies (below 100 Hertz).

Sound pressure level is measured on a logarithmic scale with the 0 dBA level based on the lowest detectable sound pressure level that people can perceive. Based on the logarithmic scale, a doubling of

sound energy is equivalent to an increase of 3 dBA, and a sound that is 10 dBA lower than the ambient sound level has no additive effect on ambient noise. Because of the nature of the human ear, a sound must be about 10 dBA greater than the ambient noise level to be judged as twice as loud. In general, a 3 dBA change in the ambient noise level is noticeable to a person with normal hearing, while 1-2 dBA changes generally are not perceptible outside of a controlled environment. Noise levels typically attenuate (or drop-off) at a rate of 6 dBA per doubling of distance from a point source, such as industrial machinery. Noise levels may also be reduced by intervening structures. Typically a solid wall or berm reduces noise levels by approximately 5 to 10 dBA (Federal Transit Authority [FTA] 2006). The manner in which buildings in California are constructed generally provides for an exterior-to-interior transmission loss of about 25 dBA with closed windows and doors (FTA 2006).

One of the most frequently used noise metrics that considers both duration and sound power level is the equivalent noise level (Leq). The Leq is defined as the single steady A-weighted level that is equivalent to the same amount of energy as that contained in the actual fluctuating levels over a period of time (essentially, the average noise level). Typically, Leq is summed over a one-hour period. Lmax is the highest RMS (root mean squared) sound pressure level within the measuring period, and Lmin is the lowest RMS sound pressure level within the measuring period.

The time period in which noise occurs is also important since noise that occurs at night tends to be more disturbing than that which occurs during the day. Community noise is usually measured using Day-Night Average Level (Ldn), which is the 24-hour average noise level with a 10-dBA penalty for noise occurring during nighttime (10 PM to 7 AM) hours, or Community Noise Equivalent Level (CNEL), which is the 24-hour average noise level with a 5 dBA penalty for noise occurring from 7 PM to 10 PM and a 10 dBA penalty for noise occurring from 10 PM to 7 AM. Noise levels described by Ldn and CNEL typically do not differ by more than 1 dBA. In practice, CNEL and Ldn are often used interchangeably.

City of Calimesa Noise Standards

The City of Calimesa Municipal Code sets forth the City's standards, guidelines, and procedures concerning the regulation of operational noise. Specifically, the Code includes Chapter 8.15, Noise Abatement and Control, which regulates noise levels within the City of Calimesa. These regulations are intended to implement the goals, objectives, and policies of the General Plan, protect the public health, safety, and welfare of the City, and to control unnecessary, excessive, and/or annoying noise in the City. Section 8.15.040 of the Municipal Code sets limits on the creation of noise in exceedance of adopted exterior noise standards for the applicable zoning district over certain periods of time. Per the Municipal Code, noise from operations at any zone cannot exceed the exterior noise limit of another zone, as measured at the property line. Exterior noise standards for the City of Calimesa are shown in Table 5.

Table 5 City of Calimesa Exterior Noise Standards

Zone	Applicable Limit One-Hour Average Sound Level (in dBA Leq)	
R-1, R-T, R-2, R-R and S-P regulations with a density of five dwelling units or less per acre	Day (7 AM to 10 PM)	50
	Night (10 PM to 7 AM)	40
R-3, S-P and PRD regulations with a density of six or more dwelling units per acre	Day (7 AM to 7 PM)	55
	Evening (7 PM to 10 PM)	50
	Night (10 PM to 7 AM)	45
C-P-S, C-P, C-O	Day (7 AM to 7 PM)	60
	Evening (7 PM to 10 PM)	55
	Night (10 PM to 7 AM)	55
M	Day (7 AM to 10 PM)	70
	Night (10 PM to 7 AM)	50

Source: City of Calimesa Municipal Code, Section 8.15.040

Single-family and low-density residential zones shall not be subject to noise levels greater than 50 dBA between the hours of 7 AM and 10 PM. During nighttime hours, between 10 PM and 7 AM, single-family and low-density residential zones shall not be subject to noise levels greater than 40 dBA. Commercial zones have a maximum noise level of 60 dBA Leq between the hours of 7 AM and 7 PM and 55 dBA Leq between 7 PM and 7 AM. While the properties to the north, south, and west of the project site are all developed with residential use, the properties are zoned for commercial use. Therefore, the noise standard for commercial development is considered appropriate to determine operational noise impacts from the project.

Municipal Code Section 8.15.080(A) prohibits the operation of any single or a combination of powered construction equipment at any construction site at the following intervals: before 7 AM or after 7 PM on weekdays; before 10 AM or after 5 PM on Saturdays, Sundays, and federal holidays. When January 1st, July 4th, or December 25th fall on a Sunday, no construction equipment shall be operated before 10 AM and after 5 PM on the following Monday.

In addition, Section 8.15.080(B) of the Municipal Code prohibits the operation of equipment or a combination of equipment that would cause noise at a level in excess of 75 dBA for more than eight hours during any 24-hour period when measured at or within the property lines of any residential use. Sound levels are corrected for time duration in accordance with Table 6:

Table 6 Construction Noise Level Allowance

Total Duration in 24 Hours	Decibel Level Allowance	Total Decibel Level
Up to 15 minutes	+15	90
Up to 30 minutes	+12	87
Up to 1 hour	+9	84
Up to 2 hours	+6	81
Up to 4 hours	+3	78
Up to 8 hours	0	75

Source: City of Calimesa Municipal Code, Section 8.15.040

Construction Noise

Construction noise was estimated using the Federal Highway Administration (FHWA) Roadway Construction Noise Model (RCNM). RCNM predicts construction noise levels for a variety of construction operations based on empirical data and the application of acoustical propagation formulas. Using RCNM, construction noise levels were estimated at nearby sensitive receptors, including residences to the north, west, and south of the project site. RCNM provides reference noise levels for standard construction equipment, with an attenuation of 6 dBA per doubling of distance for stationary equipment and 3 dBA per doubling of distance for mobile equipment. The model does not take into consideration topographic variation, thus making the analysis conservative. Construction noise would be considered significant if construction occurs before 7 AM or after 7 PM on weekdays, before 10 AM or after 5 PM on weekends, and in excess of decibel standards set forth by Section 8.15.080(B) of the Calimesa Municipal Code.

Project construction would include site preparation, grading, building construction, architectural coating, and paving of the 3,200 sf convenience store, 1,152 sf car wash, eight gasoline fueling stations, and associated parking lot. Noise-sensitive uses closest to the project site include single-family residences located a minimum of 50 feet north, 50 feet west, and 150 feet south of the project site. Although the western residential property line abuts the western boundary line of the project site, the majority of construction activity would not operate along the boundary due to the limitation of space and proposed locations of the car wash, convenience market, and gas pumps. Regardless, these sensitive land uses may experience a temporary noise increase during construction activities on the project site. Table 7 shows the maximum expected noise levels at the nearest sensitive receptors (i.e., residences to the north, west, and south) based on the combined use of construction equipment anticipated to be used concurrently during each phase of construction.

Table 7 Construction Noise Levels by Phase

Construction Phase	Equipment	Estimated Noise Level at 50 feet (dBA Lmax)	Estimated Noise Level at 150 Feet (dBA Lmax)
Site Preparation	Tractor, Dozer, Grader, Backhoe	85	76
Grading	Tractor, Dozer, Grader, Backhoe	85	76
Building Construction	Crane, Generator, Tractor, Backhoe, Welder/Torch	84	75
Architectural Coating	Air Compressor (stationary)	78	68
Paving	Concrete Mixer Truck, Paver, Roller, Tractor, Backhoe	79	75

Source: Federal Highway Administration, Roadway Construction Noise Model, Version 1.1, 2008.

The noise levels presented in Table 7 represent a conservative estimate of construction noise because they assume the simultaneous use of construction equipment in the same place. In practice, equipment would be dispersed temporally and spatially on the project site. Due to spatial and equipment limitations, only a limited amount of equipment can operate near a given location at a particular time.

Construction activity would not occur before 7 AM or after 7 PM on weekends, or before 10 AM or after 5 PM on weekends per City standards. Therefore, construction noise would not disturb nearby residences during recognized hours of sleep. However, per Section 8.15.080(B) of the Municipal Code, construction noise would be significant if it exceeds the City's noise standard of 75 dBA for up to eight hours during any 24-hour period, and 78 dBA for up to four hours during any 24-hour period (see Table 6). As shown in Table 7, construction noise could be as high 85 dBA Lmax at the nearest residence. If such levels persisted for four hours or more construction noise would exceed City standards.

Long-Term Operational Noise Impacts

On-Site Operational Noise Impacts

The primary noise source in the vicinity of the project site is Interstate 10, located approximately 375 east of the site. Potential noise sources associated with operation of the project would include car wash activities, heating and ventilation (HVAC) equipment, and on-site delivery and trash trucks. As discussed above, while the project site is bordered by single family residences to the north, west, and south, the underlying land zone to the west and south is Community Commercial. The property north of the site pertains to the City of Yucaipa and its underlying zoning is Regional Commercial. As such, project operational noise would be significant if noise levels exceeded 60 dBA Leq during the daytime hours of 7 AM to 7 PM and 55 dBA Leq during the evening and nighttime hours of 7 PM to 7 AM.

The primary source of operational noise as a result of the project would be activities associated with the drive-through car wash. Car wash equipment would include spray equipment, brush systems, and drying systems. Typically, the drying phase of a car wash cycle is the loudest. Rincon Consultants determined that a carwash has a reference noise level of 77.7 dBA Leq at a distance of 40 feet through a 10-minute noise measurement taken at a distance of 40 feet from an existing car wash that included two car wash cycles, both with car drying stages. The measurement was performed in March, 2017, using an ANSI Type 2 integrating sound level meter. Because the measurement also included secondary sources of noise, including 120 passenger vehicle pass-bys and 1 heavy duty truck pass by, it is considered a conservative estimate of car wash noise.

According to the project site plan, the car wash would be located in the northwestern portion of the project site, about 70 feet from the residential property line to the west, 100 feet from the residential property line to the north, and 200 feet from the residential property line to the south. Based on a noise attenuation of 6 dBA per doubling of distance, the car wash would generate a noise of level of 73 dBA Leq at the residence to the west, 70 dBA Leq at the residence to the north, and 64 dBA Leq at the residence to the south, as shown in Table 8. Car wash noise levels would exceed the City's noise standards for daytime and nighttime noise (60 dBA Leq and 55 dBA Leq, respectively).

Table 8 Noise from Car Wash at Nearby Residential Receptors

Sensitive Receptor	Distance (ft)	Noise Level (dBA Leq)
West	70	73
North	100	70
South	200	64

Other mechanical equipment on the project site would include commercial HVAC equipment. However, commercial HVAC equipment typically has noise shielding cabinets, is placed on the roof or within mechanical equipment rooms, and is not usually a substantial source of noise impacts. Typically, the shielding and location of these units reduces noise levels to no greater than 55 dBA Lmax at 50 feet from

the source (U.S. EPA 1971). Based on the configuration of the project site, HVAC equipment would likely be located a minimum of 100 feet from the residential property line to the north, 100 feet from the residential property line to the west, and 200 feet from the residential property line to the south. Accounting for noise attenuation over distance, noise levels from HVAC equipment would be approximately 49 dBA Leq at residences to the west and north and approximately 39 dBA Leq at residences to the south. These noise levels are lower than the City's noise standards for daytime and nighttime noise (60 dBA Leq and 55 dBA Leq, respectively).

On-site activities would include the use of delivery and trash-hauling trucks, which would use available areas for loading and unloading activities, generating noise throughout. The average noise level for a single idling truck is generally 72 dBA at a distance of 25 feet. Based on the configuration of the project site and layout of proposed driveways, delivery and trash-hauling trucks would operate an estimated 100 feet from the residential property lines to the west and south and 200 feet from the residential property line to the north. Based on attenuation of 6 dBA per doubling of distance, noise levels from trucks would be 60 dBA Leq at the western and southern property lines and 54 dBA Leq at the northern property line. However, California State law prohibits trucks from idling for longer than 5 minutes and delivery and trash truck trips to the site would only be periodic sources of operational noise. These noise levels would not conflict with the City's daytime noise standards (60 dBA Leq); however, they would exceed the City's nighttime noise standard (55 dBA Leq) if delivery and trash-hauling trucks were to operate at night.

Operational noise levels at nearby receptors would be a combination of all operational activities, including the carwash, mechanical equipment, and delivery trucks. Combined noise levels at receptors to the west, north, and south are shown in Table 9.

Table 9 Total Operational Noise at Nearby Receptors

	Noise Level (dBA Leq)		
Operational Noise Source	**Residence to the West**	**Residence to the North**	**Residence to the South**
Car Wash	73	70	64
Mechanical Equipment	49	49	39
Trucks	60	54	60
Total Operational Noise	**73**	**70**	**66**

As shown in Table 9, operational noise from the project would result in noise levels of 73 dBA Leq to the west, 70 dBA Leq to the north, and 66 dBA Leq to the south. These noise levels exceed the City of Calimesa noise standards of 60 dBA Leq during the daytime and 55 dBA Leq during the nighttime for commercial property, with operation of the carwash dominating noise levels.

Offsite Roadway Noise Impacts

Potential roadway noise sources associated with operation of the project would include increased traffic on West County Line Road. Based on the ITE's trip generation rate for a service station with a convenience market and car wash, the project would generate an estimated 1,223 vehicle trips per day. However, due to the nature of the project and the proximity to Interstate 10, ITE estimates that 60% of the trips would be pass-by trips, resulting in 490 trips per day generated by the project. According to the California Department of Transportation (Caltrans) traffic volumes for all vehicles on California highways, the segment of Interstate 10 nearest to project site has an average daily volume of 104,000 vehicles (Caltrans 2015). The 490 new daily trips generated by the project would result in an increase in traffic of less than one percent. Since Interstate 10 currently dominates roadway noise in the vicinity of

the project site, an increase of vehicle trips on West County Line Road would only marginally contribute to existing traffic noise levels. In addition, the project would not create a considerable increase in through-traffic along West County Line. Patrons would be able to immediately enter and exit the site via the off- and on-ramps located an estimated 80 feet east from the project site. Therefore, the project would not generate a substantial increase in roadway noise for residences along West County Line Road and in the general vicinity of the project site.

Conclusion and Recommendation

Air Quality
Construction and operation of the project would not generate air quality impacts in excess of federal or regional thresholds. No measures would be necessary to reduce air quality impacts.

Noise

Construction Noise
Although construction equipment would not likely operate continuously throughout the day, construction noise would cause a substantial impact on nearby residences. Construction noise could be as high 85 dBA Lmax at the nearest sensitive receptor in which case construction noise would be in exceedance of City standards. The following recommendations would reduce construction noise levels to less than City standards (i.e. 75 dBA).

- **Construction Noise.** Temporary acoustic barriers (e.g. wooden sound barriers) shall be constructed along the northern, western, and eastern boundaries of the project site to reduce construction-generated noise levels at the adjacent single-family residences. The barriers shall be designed to obstruct the line-of-sight between the nearest residences and onsite construction equipment and reduce construction noise by 10 dBA.
- **Construction Equipment.** Equipment engine doors on motorized equipment shall be closed during equipment operation. When not in use, motorized construction equipment shall not be left idling. Stationary noise generating construction equipment (e.g. generators and compressors) shall be enclosed and centrally located on the project site at the greatest distance possible.

Operational Noise
Operational activities associated with the drive-through car wash would be the primary source of noise during operation of the project. Noise levels in excess of 60 dBA Leq in the daytime and 55 dBA Leq during the evening and nighttime would likely be experienced at the nearest residences located to the west, north, and south (see Table 9).The following are recommendations that would reduce exterior noise levels to below City standards:

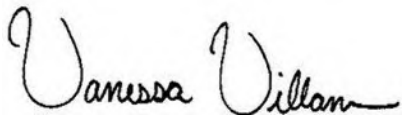
- **Sound Wall.** Construct a sound wall along the western boundary of the project site of sufficient height and width to obstruct the line-of-sight between the development and residences west of the project site. The sound wall should have sufficient height and length to achieve a 20 dB insertion loss and consist of materials with an STC of 30 or greater. Based on the United States Department of Housing and Urban Development (HUD) *The Noise Guidebook* (2009), such a sound barrier would be capable of achieving a noise reduction of 19.6 dBA. . Noise levels from car wash operations would potentially be reduced from approximately 70 dBA Leq to approximately 50 dBA Leq.

- **Hours of Operation.** Limit operational hours of the car was to 7 AM – 7 PM. These operational hours would prevent car wash operations from exceeding the nighttime noise standard of 40 dBA Leq at the nearest residential receptors.

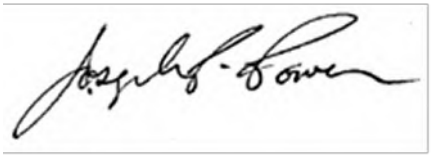
Compliance with the above recommendations would reduce noise impacts associated with project construction and operation; however, daytime operational noise from the drive-through car wash would still remain substantial.

Sincerely,

Rincon Consultants, Inc.



Vanessa Villanueva
Associate Environmental Planner



Joe Power, AICP CEP
Principal

Attachments: Reference List; California Emissions Estimator Model (CalEEMod) Winter And Summer Outputs; Roadway Construction Noise Model (RCNM) Outputs

Attachments

Reference List:

California Air Resources Board (California ARB). 2005. *Air Quality and Land Use Handbook: A Community Health Perspective*. Accessed May 2017 at: https://www.arb.ca.gov/ch/handbook.pdf.

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United States Environmental Protection Agency (U.S. EPA). 1971. *Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances*. [Document]

Calimesa Commercial Development

South Coast Air Basin, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	15.00	Space	0.13	3,100.00	0
Other Asphalt Surfaces	31.00	1000sqft	0.71	31,000.00	0
Convenience Market With Gas Pumps	6.00	1000sqft	0.14	6,000.00	0
Automobile Care Center	1.15	1000sqft	0.03	1,152.00	0
City Park	0.64	Acre	0.64	27,878.40	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	10			**Operational Year**	2019
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Calimesa Commercial Development - South Coast Air Basin, Summer

Project Characteristics - Per project location.

Land Use - Land use totals estimated using Google Earth and Site Plan. Acreage estimated to 1.65 acres.

Construction Phase - Architectural Coating overlapped with Building Construction and Paving.

Architectural Coating - Per SCAQMD Rule 1113, use of low VOC paint (50 g/L).

Vehicle Trips - City Park represents landscaping.

Area Coating - Per SCAQMD Rule 1113, use of low VOC paint (50 g/L).

Energy Use -

Construction Off-road Equipment Mitigation - Per SCAMQD 403, watering twice per day.

Area Mitigation -

Energy Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	50
tblAreaCoating	Area_EF_Nonresidential_Interior	100	50
tblAreaCoating	Area_EF_Parking	100	50
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	PhaseEndDate	12/31/2017	10/31/2018
tblConstructionPhase	PhaseEndDate	12/31/2017	10/15/2018
tblConstructionPhase	PhaseEndDate	12/31/2017	1/8/2018
tblConstructionPhase	PhaseEndDate	12/31/2017	10/29/2018
tblConstructionPhase	PhaseEndDate	12/31/2017	1/2/2018
tblConstructionPhase	PhaseStartDate	1/1/2018	10/1/2018
tblConstructionPhase	PhaseStartDate	1/1/2018	1/9/2018

tblConstructionPhase	PhaseStartDate	1/1/2018	1/3/2018
tblConstructionPhase	PhaseStartDate	1/1/2018	10/16/2018
tblLandUse	BuildingSpaceSquareFeet	1,150.00	1,152.00
tblLandUse	LandUseSquareFeet	6,000.00	3,100.00
tblLandUse	LandUseSquareFeet	1,150.00	1,152.00
tblProjectCharacteristics	OperationalYear	2018	2019
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	0.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	WD_TR	1.89	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

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	lb/day										lb/day					
2018	6.9086	20.9011	17.7710	0.0320	5.8890	1.2214	6.8420	2.9774	1.1843	3.8542	0.0000	3,031.3623	3,031.3623	0.5436	0.0000	3,043.1318
Maximum	**6.9086**	**20.9011**	**17.7710**	**0.0320**	**5.8890**	**1.2214**	**6.8420**	**2.9774**	**1.1843**	**3.8542**	**0.0000**	**3,031.3623**	**3,031.3623**	**0.5436**	**0.0000**	**3,043.1318**

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	lb/day										lb/day					
2018	6.9086	20.9011	17.7710	0.0320	2.6992	1.2214	3.6522	1.3529	1.1843	2.2296	0.0000	3,031.3623	3,031.3623	0.5436	0.0000	3,043.1318
Maximum	**6.9086**	**20.9011**	**17.7710**	**0.0320**	**2.6992**	**1.2214**	**3.6522**	**1.3529**	**1.1843**	**2.2296**	**0.0000**	**3,031.3623**	**3,031.3623**	**0.5436**	**0.0000**	**3,043.1318**

	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**	**54.16**	**0.00**	**46.62**	**54.56**	**0.00**	**42.15**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	lb/day										lb/day					
Area	0.1660	5.0000e-005	5.5500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0118	0.0118	3.0000e-005		0.0126
Energy	1.5000e-003	0.0137	0.0115	8.0000e-005		1.0400e-003	1.0400e-003		1.0400e-003	1.0400e-003		16.4026	16.4026	3.1000e-004	3.0000e-004	16.5001
Mobile	12.2139	43.5579	77.2830	0.1780	11.1020	0.2114	11.3134	2.9705	0.1983	3.1689		18,127.3519	18,127.3519	1.3506		18,161.1164
Total	**12.3815**	**43.5716**	**77.3000**	**0.1781**	**11.1020**	**0.2124**	**11.3144**	**2.9705**	**0.1994**	**3.1699**		**18,143.7663**	**18,143.7663**	**1.3509**	**3.0000e-004**	**18,177.6291**

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	lb/day										lb/day					
Area	0.1660	5.0000e-005	5.5500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0118	0.0118	3.0000e-005		0.0126
Energy	1.2600e-003	0.0115	9.6300e-003	7.0000e-005		8.7000e-004	8.7000e-004		8.7000e-004	8.7000e-004		13.7533	13.7533	2.6000e-004	2.5000e-004	13.8350
Mobile	12.2139	43.5579	77.2830	0.1780	11.1020	0.2114	11.3134	2.9705	0.1983	3.1689		18,127.3519	18,127.3519	1.3506		18,161.1164
Total	**12.3812**	**43.5694**	**77.2982**	**0.1780**	**11.1020**	**0.2123**	**11.3143**	**2.9705**	**0.1992**	**3.1698**		**18,141.1170**	**18,141.1170**	**1.3509**	**2.5000e-004**	**18,174.9640**

	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**	**0.01**	**0.00**	**0.01**	**0.00**	**0.08**	**0.00**	**0.00**	**0.09**	**0.01**	**0.00**	**0.01**	**0.01**	**0.00**	**16.67**	**0.01**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2018	1/2/2018	5	2	
2	Grading	Grading	1/3/2018	1/8/2018	5	4	
3	Building Construction	Building Construction	1/9/2018	10/15/2018	5	200	
4	Architectural Coating	Architectural Coating	10/1/2018	10/31/2018	5	10	
5	Paving	Paving	10/16/2018	10/29/2018	5	10	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0.84

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 10,728; Non-Residential Outdoor: 3,576; Striped Parking Area: 2,046 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	6.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Paving	Paving Equipment	1	8.00	132	0.36
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Building Construction	Welders	3	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
Architectural Coating	1	6.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	28.00	11.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Clean Paved Roads

3.2 Site Preparation - 2018

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	lb/day										lb/day					
Fugitive Dust					5.7996	0.0000	5.7996	2.9537	0.0000	2.9537			0.0000			0.0000
Off-Road	1.8061	20.7472	8.0808	0.0172		0.9523	0.9523		0.8761	0.8761		1,735.3630	1,735.3630	0.5402		1,748.8690
Total	**1.8061**	**20.7472**	**8.0808**	**0.0172**	**5.7996**	**0.9523**	**6.7518**	**2.9537**	**0.8761**	**3.8298**		**1,735.3630**	**1,735.3630**	**0.5402**		**1,748.8690**

3.2 Site Preparation - 2018

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	lb/day										lb/day					
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
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
Worker	0.0427	0.0308	0.4002	9.8000e-004	0.0894	7.2000e-004	0.0901	0.0237	6.6000e-004	0.0244		97.4976	97.4976	3.3300e-003		97.5809
Total	**0.0427**	**0.0308**	**0.4002**	**9.8000e-004**	**0.0894**	**7.2000e-004**	**0.0901**	**0.0237**	**6.6000e-004**	**0.0244**		**97.4976**	**97.4976**	**3.3300e-003**		**97.5809**

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	lb/day										lb/day					
Fugitive Dust					2.6098	0.0000	2.6098	1.3292	0.0000	1.3292			0.0000			0.0000
Off-Road	1.8061	20.7472	8.0808	0.0172		0.9523	0.9523		0.8761	0.8761	0.0000	1,735.3630	1,735.3630	0.5402		1,748.8690
Total	**1.8061**	**20.7472**	**8.0808**	**0.0172**	**2.6098**	**0.9523**	**3.5621**	**1.3292**	**0.8761**	**2.2052**	**0.0000**	**1,735.3630**	**1,735.3630**	**0.5402**		**1,748.8690**

3.2 Site Preparation - 2018

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	lb/day										lb/day					
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
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
Worker	0.0427	0.0308	0.4002	9.8000e-004	0.0894	7.2000e-004	0.0901	0.0237	6.6000e-004	0.0244		97.4976	97.4976	3.3300e-003		97.5809
Total	**0.0427**	**0.0308**	**0.4002**	**9.8000e-004**	**0.0894**	**7.2000e-004**	**0.0901**	**0.0237**	**6.6000e-004**	**0.0244**		**97.4976**	**97.4976**	**3.3300e-003**		**97.5809**

3.3 Grading - 2018

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	lb/day										lb/day					
Fugitive Dust					4.9143	0.0000	4.9143	2.5256	0.0000	2.5256			0.0000			0.0000
Off-Road	1.4972	17.0666	6.7630	0.0141		0.7947	0.7947		0.7311	0.7311		1,421.2605	1,421.2605	0.4425		1,432.3219
Total	**1.4972**	**17.0666**	**6.7630**	**0.0141**	**4.9143**	**0.7947**	**5.7090**	**2.5256**	**0.7311**	**3.2568**		**1,421.2605**	**1,421.2605**	**0.4425**		**1,432.3219**

3.3 Grading - 2018

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	lb/day										lb/day					
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
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
Worker	0.0427	0.0308	0.4002	9.8000e-004	0.0894	7.2000e-004	0.0901	0.0237	6.6000e-004	0.0244		97.4976	97.4976	3.3300e-003		97.5809
Total	**0.0427**	**0.0308**	**0.4002**	**9.8000e-004**	**0.0894**	**7.2000e-004**	**0.0901**	**0.0237**	**6.6000e-004**	**0.0244**		**97.4976**	**97.4976**	**3.3300e-003**		**97.5809**

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	lb/day										lb/day					
Fugitive Dust					2.2114	0.0000	2.2114	1.1365	0.0000	1.1365			0.0000			0.0000
Off-Road	1.4972	17.0666	6.7630	0.0141		0.7947	0.7947		0.7311	0.7311	0.0000	1,421.2605	1,421.2605	0.4425		1,432.3219
Total	**1.4972**	**17.0666**	**6.7630**	**0.0141**	**2.2114**	**0.7947**	**3.0061**	**1.1365**	**0.7311**	**1.8677**	**0.0000**	**1,421.2605**	**1,421.2605**	**0.4425**		**1,432.3219**

3.3 Grading - 2018

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	lb/day										lb/day					
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
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
Worker	0.0427	0.0308	0.4002	9.8000e-004	0.0894	7.2000e-004	0.0901	0.0237	6.6000e-004	0.0244		97.4976	97.4976	3.3300e-003		97.5809
Total	**0.0427**	**0.0308**	**0.4002**	**9.8000e-004**	**0.0894**	**7.2000e-004**	**0.0901**	**0.0237**	**6.6000e-004**	**0.0244**		**97.4976**	**97.4976**	**3.3300e-003**		**97.5809**

3.4 Building Construction - 2018

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	lb/day										lb/day					
Off-Road	2.5919	17.4280	13.8766	0.0220		1.0580	1.0580		1.0216	1.0216		2,030.8389	2,030.8389	0.4088		2,041.0596
Total	**2.5919**	**17.4280**	**13.8766**	**0.0220**		**1.0580**	**1.0580**		**1.0216**	**1.0216**		**2,030.8389**	**2,030.8389**	**0.4088**		**2,041.0596**

3.4 Building Construction - 2018

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	lb/day										lb/day					
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
Vendor	0.0473	1.3364	0.3392	2.8600e-003	0.0704	9.7700e-003	0.0802	0.0203	9.3400e-003	0.0296		304.7101	304.7101	0.0211		305.2363
Worker	0.1496	0.1078	1.4009	3.4300e-003	0.3130	2.5100e-003	0.3155	0.0830	2.3100e-003	0.0853		341.2416	341.2416	0.0117		341.5332
Total	**0.1969**	**1.4443**	**1.7401**	**6.2900e-003**	**0.3834**	**0.0123**	**0.3956**	**0.1033**	**0.0117**	**0.1149**		**645.9517**	**645.9517**	**0.0327**		**646.7695**

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	lb/day										lb/day					
Off-Road	2.5919	17.4280	13.8766	0.0220		1.0580	1.0580		1.0216	1.0216	0.0000	2,030.8389	2,030.8389	0.4088		2,041.0596
Total	**2.5919**	**17.4280**	**13.8766**	**0.0220**		**1.0580**	**1.0580**		**1.0216**	**1.0216**	**0.0000**	**2,030.8389**	**2,030.8389**	**0.4088**		**2,041.0596**

3.4 Building Construction - 2018

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	lb/day										lb/day					
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
Vendor	0.0473	1.3364	0.3392	2.8600e-003	0.0704	9.7700e-003	0.0802	0.0203	9.3400e-003	0.0296		304.7101	304.7101	0.0211		305.2363
Worker	0.1496	0.1078	1.4009	3.4300e-003	0.3130	2.5100e-003	0.3155	0.0830	2.3100e-003	0.0853		341.2416	341.2416	0.0117		341.5332
Total	**0.1969**	**1.4443**	**1.7401**	**6.2900e-003**	**0.3834**	**0.0123**	**0.3956**	**0.1033**	**0.0117**	**0.1149**		**645.9517**	**645.9517**	**0.0327**		**646.7695**

3.5 Architectural Coating - 2018

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	lb/day										lb/day					
Archit. Coating	3.7891					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.1171
Total	**4.0877**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.1171**

3.5 Architectural Coating - 2018

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	lb/day										lb/day					
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
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
Worker	0.0321	0.0231	0.3002	7.3000e-004	0.0671	5.4000e-004	0.0676	0.0178	5.0000e-004	0.0183		73.1232	73.1232	2.5000e-003		73.1857
Total	**0.0321**	**0.0231**	**0.3002**	**7.3000e-004**	**0.0671**	**5.4000e-004**	**0.0676**	**0.0178**	**5.0000e-004**	**0.0183**		**73.1232**	**73.1232**	**2.5000e-003**		**73.1857**

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	lb/day										lb/day					
Archit. Coating	3.7891					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.1171
Total	**4.0877**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.1171**

3.5 Architectural Coating - 2018

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	lb/day										lb/day					
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
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
Worker	0.0321	0.0231	0.3002	7.3000e-004	0.0671	5.4000e-004	0.0676	0.0178	5.0000e-004	0.0183		73.1232	73.1232	2.5000e-003		73.1857
Total	**0.0321**	**0.0231**	**0.3002**	**7.3000e-004**	**0.0671**	**5.4000e-004**	**0.0676**	**0.0178**	**5.0000e-004**	**0.0183**		**73.1232**	**73.1232**	**2.5000e-003**		**73.1857**

3.6 Paving - 2018

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	lb/day										lb/day					
Off-Road	1.0182	10.4525	8.9926	0.0135		0.6097	0.6097		0.5618	0.5618		1,346.4360	1,346.4360	0.4113		1,356.7186
Paving	0.2201					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2383**	**10.4525**	**8.9926**	**0.0135**		**0.6097**	**0.6097**		**0.5618**	**0.5618**		**1,346.4360**	**1,346.4360**	**0.4113**		**1,356.7186**

3.6 Paving - 2018

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	lb/day										lb/day					
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
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
Worker	0.0695	0.0501	0.6504	1.5900e-003	0.1453	1.1700e-003	0.1465	0.0385	1.0700e-003	0.0396		158.4336	158.4336	5.4100e-003		158.5690
Total	**0.0695**	**0.0501**	**0.6504**	**1.5900e-003**	**0.1453**	**1.1700e-003**	**0.1465**	**0.0385**	**1.0700e-003**	**0.0396**		**158.4336**	**158.4336**	**5.4100e-003**		**158.5690**

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	lb/day										lb/day					
Off-Road	1.0182	10.4525	8.9926	0.0135		0.6097	0.6097		0.5618	0.5618	0.0000	1,346.4360	1,346.4360	0.4113		1,356.7186
Paving	0.2201					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2383**	**10.4525**	**8.9926**	**0.0135**		**0.6097**	**0.6097**		**0.5618**	**0.5618**	**0.0000**	**1,346.4360**	**1,346.4360**	**0.4113**		**1,356.7186**

3.6 Paving - 2018

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	lb/day										lb/day					
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
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
Worker	0.0695	0.0501	0.6504	1.5900e-003	0.1453	1.1700e-003	0.1465	0.0385	1.0700e-003	0.0396		158.4336	158.4336	5.4100e-003		158.5690
Total	**0.0695**	**0.0501**	**0.6504**	**1.5900e-003**	**0.1453**	**1.1700e-003**	**0.1465**	**0.0385**	**1.0700e-003**	**0.0396**		**158.4336**	**158.4336**	**5.4100e-003**		**158.5690**

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	lb/day										lb/day					
Mitigated	12.2139	43.5579	77.2830	0.1780	11.1020	0.2114	11.3134	2.9705	0.1983	3.1689		18,127.3519	18,127.3519	1.3506		18,161.1164
Unmitigated	12.2139	43.5579	77.2830	0.1780	11.1020	0.2114	11.3134	2.9705	0.1983	3.1689		18,127.3519	18,127.3519	1.3506		18,161.1164

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Automobile Care Center	27.28	27.28	13.66	33,935	33,935
City Park	0.00	0.00	0.00		
Convenience Market With Gas Pumps	5,073.60	8,689.98	7092.48	3,508,809	3,508,809
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	5,100.88	8,717.26	7,106.14	3,542,744	3,542,744

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
Automobile Care Center	16.60	8.40	6.90	33.00	48.00	19.00	21	51	28
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Convenience Market With Gas	16.60	8.40	6.90	0.80	80.20	19.00	14	21	65
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.548893	0.044275	0.199565	0.124385	0.017503	0.005874	0.020174	0.028962	0.001990	0.002015	0.004673	0.000702	0.000989
Other Asphalt Surfaces	0.548893	0.044275	0.199565	0.124385	0.017503	0.005874	0.020174	0.028962	0.001990	0.002015	0.004673	0.000702	0.000989
Convenience Market With Gas Pumps	0.548893	0.044275	0.199565	0.124385	0.017503	0.005874	0.020174	0.028962	0.001990	0.002015	0.004673	0.000702	0.000989
Automobile Care Center	0.548893	0.044275	0.199565	0.124385	0.017503	0.005874	0.020174	0.028962	0.001990	0.002015	0.004673	0.000702	0.000989
City Park	0.548893	0.044275	0.199565	0.124385	0.017503	0.005874	0.020174	0.028962	0.001990	0.002015	0.004673	0.000702	0.000989

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	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	lb/day										lb/day					
NaturalGas Mitigated	1.2600e-003	0.0115	9.6300e-003	7.0000e-005		8.7000e-004	8.7000e-004		8.7000e-004	8.7000e-004		13.7533	13.7533	2.6000e-004	2.5000e-004	13.8350
NaturalGas Unmitigated	1.5000e-003	0.0137	0.0115	8.0000e-005		1.0400e-003	1.0400e-003		1.0400e-003	1.0400e-003		16.4026	16.4026	3.1000e-004	3.0000e-004	16.5001

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	lb/day										lb/day					
Automobile Care Center	102.765	1.1100e-003	0.0101	8.4600e-003	6.0000e-005		7.7000e-004	7.7000e-004		7.7000e-004	7.7000e-004		12.0900	12.0900	2.3000e-004	2.2000e-004	12.1618
City Park	0	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
Convenience Market With Gas Pumps	36.6575	4.0000e-004	3.5900e-003	3.0200e-003	2.0000e-005		2.7000e-004	2.7000e-004		2.7000e-004	2.7000e-004		4.3127	4.3127	8.0000e-005	8.0000e-005	4.3383
Other Asphalt Surfaces	0	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
Parking Lot	0	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
Total		**1.5100e-003**	**0.0137**	**0.0115**	**8.0000e-005**		**1.0400e-003**	**1.0400e-003**		**1.0400e-003**	**1.0400e-003**		**16.4026**	**16.4026**	**3.1000e-004**	**3.0000e-004**	**16.5001**

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	lb/day										lb/day					
Automobile Care Center	0.0891288	9.6000e-004	8.7400e-003	7.3400e-003	5.0000e-005		6.6000e-004	6.6000e-004		6.6000e-004	6.6000e-004		10.4857	10.4857	2.0000e-004	1.9000e-004	10.5481
City Park	0	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
Convenience Market With Gas Pumps	0.0277742	3.0000e-004	2.7200e-003	2.2900e-003	2.0000e-005		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		3.2676	3.2676	6.0000e-005	6.0000e-005	3.2870
Other Asphalt Surfaces	0	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
Parking Lot	0	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
Total		**1.2600e-003**	**0.0115**	**9.6300e-003**	**7.0000e-005**		**8.7000e-004**	**8.7000e-004**		**8.7000e-004**	**8.7000e-004**		**13.7533**	**13.7533**	**2.6000e-004**	**2.5000e-004**	**13.8350**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	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	lb/day										lb/day					
Mitigated	0.1660	5.0000e-005	5.5500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0118	0.0118	3.0000e-005		0.0126
Unmitigated	0.1660	5.0000e-005	5.5500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0118	0.0118	3.0000e-005		0.0126

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	lb/day										lb/day					
Architectural Coating	0.0104					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1551					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.3000e-004	5.0000e-005	5.5500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0118	0.0118	3.0000e-005		0.0126
Total	**0.1660**	**5.0000e-005**	**5.5500e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**		**0.0118**	**0.0118**	**3.0000e-005**		**0.0126**

6.2 Area by SubCategory

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	lb/day										lb/day					
Architectural Coating	0.0104					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1551					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.3000e-004	5.0000e-005	5.5500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0118	0.0118	3.0000e-005		0.0126
Total	**0.1660**	**5.0000e-005**	**5.5500e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**		**0.0118**	**0.0118**	**3.0000e-005**		**0.0126**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

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

Calimesa Commercial Development

South Coast Air Basin, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Parking Lot	15.00	Space	0.13	3,100.00	0
Other Asphalt Surfaces	31.00	1000sqft	0.71	31,000.00	0
Convenience Market With Gas Pumps	6.00	1000sqft	0.14	6,000.00	0
Automobile Care Center	1.15	1000sqft	0.03	1,152.00	0
City Park	0.64	Acre	0.64	27,878.40	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.2	**Precipitation Freq (Days)**	31
Climate Zone	10			**Operational Year**	2019
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	702.44	**CH4 Intensity (lb/MWhr)**	0.029	**N2O Intensity (lb/MWhr)**	0.006

1.3 User Entered Comments & Non-Default Data

Calimesa Commercial Development - South Coast Air Basin, Winter

Project Characteristics - Per project location.

Land Use - Land use totals estimated using Google Earth and Site Plan. Acreage estimated to 1.65 acres.

Construction Phase - Architectural Coating overlapped with Building Construction and Paving.

Architectural Coating - Per SCAQMD Rule 1113, use of low VOC paint (50 g/L).

Vehicle Trips - City Park represents landscaping.

Area Coating - Per SCAQMD Rule 1113, use of low VOC paint (50 g/L).

Energy Use -

Construction Off-road Equipment Mitigation - Per SCAMQD 403, watering twice per day.

Area Mitigation -

Energy Mitigation -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	100.00	50.00
tblArchitecturalCoating	EF_Nonresidential_Interior	100.00	50.00
tblArchitecturalCoating	EF_Parking	100.00	50.00
tblAreaCoating	Area_EF_Nonresidential_Exterior	100	50
tblAreaCoating	Area_EF_Nonresidential_Interior	100	50
tblAreaCoating	Area_EF_Parking	100	50
tblAreaMitigation	UseLowVOCPaintParkingCheck	False	True
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	40	0
tblConstructionPhase	PhaseEndDate	12/31/2017	10/31/2018
tblConstructionPhase	PhaseEndDate	12/31/2017	10/15/2018
tblConstructionPhase	PhaseEndDate	12/31/2017	1/8/2018
tblConstructionPhase	PhaseEndDate	12/31/2017	10/29/2018
tblConstructionPhase	PhaseEndDate	12/31/2017	1/2/2018
tblConstructionPhase	PhaseStartDate	1/1/2018	10/1/2018
tblConstructionPhase	PhaseStartDate	1/1/2018	1/9/2018

tblConstructionPhase	PhaseStartDate	1/1/2018	1/3/2018
tblConstructionPhase	PhaseStartDate	1/1/2018	10/16/2018
tblLandUse	BuildingSpaceSquareFeet	1,150.00	1,152.00
tblLandUse	LandUseSquareFeet	6,000.00	3,100.00
tblLandUse	LandUseSquareFeet	1,150.00	1,152.00
tblProjectCharacteristics	OperationalYear	2018	2019
tblVehicleTrips	CC_TL	8.40	0.00
tblVehicleTrips	CC_TTP	48.00	0.00
tblVehicleTrips	CNW_TL	6.90	0.00
tblVehicleTrips	CNW_TTP	19.00	0.00
tblVehicleTrips	CW_TL	16.60	0.00
tblVehicleTrips	CW_TTP	33.00	0.00
tblVehicleTrips	DV_TP	28.00	0.00
tblVehicleTrips	PB_TP	6.00	0.00
tblVehicleTrips	PR_TP	66.00	0.00
tblVehicleTrips	ST_TR	22.75	0.00
tblVehicleTrips	SU_TR	16.74	0.00
tblVehicleTrips	WD_TR	1.89	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

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	lb/day										lb/day					
2018	6.9281	20.9169	17.6555	0.0317	5.8890	1.2215	6.8420	2.9774	1.1844	3.8542	0.0000	2,997.5987	2,997.5987	0.5434	0.0000	3,009.3835
Maximum	**6.9281**	**20.9169**	**17.6555**	**0.0317**	**5.8890**	**1.2215**	**6.8420**	**2.9774**	**1.1844**	**3.8542**	**0.0000**	**2,997.5987**	**2,997.5987**	**0.5434**	**0.0000**	**3,009.3835**

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	lb/day										lb/day					
2018	6.9281	20.9169	17.6555	0.0317	2.6992	1.2215	3.6522	1.3529	1.1844	2.2296	0.0000	2,997.5987	2,997.5987	0.5434	0.0000	3,009.3835
Maximum	**6.9281**	**20.9169**	**17.6555**	**0.0317**	**2.6992**	**1.2215**	**3.6522**	**1.3529**	**1.1844**	**2.2296**	**0.0000**	**2,997.5987**	**2,997.5987**	**0.5434**	**0.0000**	**3,009.3835**

	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**	**54.16**	**0.00**	**46.62**	**54.56**	**0.00**	**42.15**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	lb/day										lb/day					
Area	0.1660	5.0000e-005	5.5500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0118	0.0118	3.0000e-005		0.0126
Energy	1.5000e-003	0.0137	0.0115	8.0000e-005		1.0400e-003	1.0400e-003		1.0400e-003	1.0400e-003		16.4026	16.4026	3.1000e-004	3.0000e-004	16.5001
Mobile	11.7382	43.3648	81.0048	0.1677	11.1020	0.2173	11.3193	2.9705	0.2040	3.1746		17,066.7632	17,066.7632	1.4226		17,102.3287
Total	**11.9057**	**43.3785**	**81.0218**	**0.1678**	**11.1020**	**0.2184**	**11.3204**	**2.9705**	**0.2051**	**3.1756**		**17,083.1776**	**17,083.1776**	**1.4230**	**3.0000e-004**	**17,118.8414**

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	lb/day										lb/day					
Area	0.1660	5.0000e-005	5.5500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0118	0.0118	3.0000e-005		0.0126
Energy	1.2600e-003	0.0115	9.6300e-003	7.0000e-005		8.7000e-004	8.7000e-004		8.7000e-004	8.7000e-004		13.7533	13.7533	2.6000e-004	2.5000e-004	13.8350
Mobile	11.7382	43.3648	81.0048	0.1677	11.1020	0.2173	11.3193	2.9705	0.2040	3.1746		17,066.7632	17,066.7632	1.4226		17,102.3287
Total	**11.9055**	**43.3763**	**81.0200**	**0.1678**	**11.1020**	**0.2182**	**11.3202**	**2.9705**	**0.2049**	**3.1755**		**17,080.5282**	**17,080.5282**	**1.4229**	**2.5000e-004**	**17,116.1763**

	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**	**0.01**	**0.00**	**0.01**	**0.00**	**0.08**	**0.00**	**0.00**	**0.08**	**0.01**	**0.00**	**0.02**	**0.02**	**0.00**	**16.67**	**0.02**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2018	1/2/2018	5	2	
2	Grading	Grading	1/3/2018	1/8/2018	5	4	
3	Building Construction	Building Construction	1/9/2018	10/15/2018	5	200	
4	Architectural Coating	Architectural Coating	10/1/2018	10/31/2018	5	10	
5	Paving	Paving	10/16/2018	10/29/2018	5	10	

Acres of Grading (Site Preparation Phase): 1

Acres of Grading (Grading Phase): 1.5

Acres of Paving: 0.84

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 10,728; Non-Residential Outdoor: 3,576; Striped Parking Area: 2,046 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Architectural Coating	Air Compressors	1	6.00	78	0.48
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Site Preparation	Graders	1	8.00	187	0.41
Paving	Pavers	1	6.00	130	0.42
Paving	Rollers	1	7.00	80	0.38
Grading	Rubber Tired Dozers	1	6.00	247	0.40
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Grading	Tractors/Loaders/Backhoes	1	7.00	97	0.37
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	6.00	187	0.41
Paving	Paving Equipment	1	8.00	132	0.36
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Building Construction	Welders	3	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
Architectural Coating	1	6.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	28.00	11.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Grading	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	14.70	6.90	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Clean Paved Roads

3.2 Site Preparation - 2018

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	lb/day										lb/day					
Fugitive Dust					5.7996	0.0000	5.7996	2.9537	0.0000	2.9537			0.0000			0.0000
Off-Road	1.8061	20.7472	8.0808	0.0172		0.9523	0.9523		0.8761	0.8761		1,735.3630	1,735.3630	0.5402		1,748.8690
Total	**1.8061**	**20.7472**	**8.0808**	**0.0172**	**5.7996**	**0.9523**	**6.7518**	**2.9537**	**0.8761**	**3.8298**		**1,735.3630**	**1,735.3630**	**0.5402**		**1,748.8690**

3.2 Site Preparation - 2018

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	lb/day										lb/day					
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
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
Worker	0.0469	0.0339	0.3647	9.2000e-004	0.0894	7.2000e-004	0.0901	0.0237	6.6000e-004	0.0244		91.4602	91.4602	3.1300e-003		91.5385
Total	**0.0469**	**0.0339**	**0.3647**	**9.2000e-004**	**0.0894**	**7.2000e-004**	**0.0901**	**0.0237**	**6.6000e-004**	**0.0244**		**91.4602**	**91.4602**	**3.1300e-003**		**91.5385**

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	lb/day										lb/day					
Fugitive Dust					2.6098	0.0000	2.6098	1.3292	0.0000	1.3292			0.0000			0.0000
Off-Road	1.8061	20.7472	8.0808	0.0172		0.9523	0.9523		0.8761	0.8761	0.0000	1,735.3630	1,735.3630	0.5402		1,748.8690
Total	**1.8061**	**20.7472**	**8.0808**	**0.0172**	**2.6098**	**0.9523**	**3.5621**	**1.3292**	**0.8761**	**2.2052**	**0.0000**	**1,735.3630**	**1,735.3630**	**0.5402**		**1,748.8690**

3.2 Site Preparation - 2018

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	lb/day										lb/day					
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
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
Worker	0.0469	0.0339	0.3647	9.2000e-004	0.0894	7.2000e-004	0.0901	0.0237	6.6000e-004	0.0244		91.4602	91.4602	3.1300e-003		91.5385
Total	**0.0469**	**0.0339**	**0.3647**	**9.2000e-004**	**0.0894**	**7.2000e-004**	**0.0901**	**0.0237**	**6.6000e-004**	**0.0244**		**91.4602**	**91.4602**	**3.1300e-003**		**91.5385**

3.3 Grading - 2018

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	lb/day										lb/day					
Fugitive Dust					4.9143	0.0000	4.9143	2.5256	0.0000	2.5256			0.0000			0.0000
Off-Road	1.4972	17.0666	6.7630	0.0141		0.7947	0.7947		0.7311	0.7311		1,421.2605	1,421.2605	0.4425		1,432.3219
Total	**1.4972**	**17.0666**	**6.7630**	**0.0141**	**4.9143**	**0.7947**	**5.7090**	**2.5256**	**0.7311**	**3.2568**		**1,421.2605**	**1,421.2605**	**0.4425**		**1,432.3219**

3.3 Grading - 2018

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	lb/day										lb/day					
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
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
Worker	0.0469	0.0339	0.3647	9.2000e-004	0.0894	7.2000e-004	0.0901	0.0237	6.6000e-004	0.0244		91.4602	91.4602	3.1300e-003		91.5385
Total	**0.0469**	**0.0339**	**0.3647**	**9.2000e-004**	**0.0894**	**7.2000e-004**	**0.0901**	**0.0237**	**6.6000e-004**	**0.0244**		**91.4602**	**91.4602**	**3.1300e-003**		**91.5385**

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	lb/day										lb/day					
Fugitive Dust					2.2114	0.0000	2.2114	1.1365	0.0000	1.1365			0.0000			0.0000
Off-Road	1.4972	17.0666	6.7630	0.0141		0.7947	0.7947		0.7311	0.7311	0.0000	1,421.2605	1,421.2605	0.4425		1,432.3219
Total	**1.4972**	**17.0666**	**6.7630**	**0.0141**	**2.2114**	**0.7947**	**3.0061**	**1.1365**	**0.7311**	**1.8677**	**0.0000**	**1,421.2605**	**1,421.2605**	**0.4425**		**1,432.3219**

3.3 Grading - 2018

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	lb/day										lb/day					
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
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
Worker	0.0469	0.0339	0.3647	9.2000e-004	0.0894	7.2000e-004	0.0901	0.0237	6.6000e-004	0.0244		91.4602	91.4602	3.1300e-003		91.5385
Total	**0.0469**	**0.0339**	**0.3647**	**9.2000e-004**	**0.0894**	**7.2000e-004**	**0.0901**	**0.0237**	**6.6000e-004**	**0.0244**		**91.4602**	**91.4602**	**3.1300e-003**		**91.5385**

3.4 Building Construction - 2018

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	lb/day										lb/day					
Off-Road	2.5919	17.4280	13.8766	0.0220		1.0580	1.0580		1.0216	1.0216		2,030.8389	2,030.8389	0.4088		2,041.0596
Total	**2.5919**	**17.4280**	**13.8766**	**0.0220**		**1.0580**	**1.0580**		**1.0216**	**1.0216**		**2,030.8389**	**2,030.8389**	**0.4088**		**2,041.0596**

3.4 Building Construction - 2018

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	lb/day										lb/day					
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
Vendor	0.0493	1.3393	0.3746	2.7800e-003	0.0704	9.9200e-003	0.0803	0.0203	9.4900e-003	0.0298		296.6055	296.6055	0.0225		297.1681
Worker	0.1640	0.1185	1.2766	3.2200e-003	0.3130	2.5100e-003	0.3155	0.0830	2.3100e-003	0.0853		320.1107	320.1107	0.0110		320.3848
Total	**0.2134**	**1.4578**	**1.6512**	**6.0000e-003**	**0.3834**	**0.0124**	**0.3958**	**0.1033**	**0.0118**	**0.1151**		**616.7162**	**616.7162**	**0.0335**		**617.5529**

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	lb/day										lb/day					
Off-Road	2.5919	17.4280	13.8766	0.0220		1.0580	1.0580		1.0216	1.0216	0.0000	2,030.8389	2,030.8389	0.4088		2,041.0596
Total	**2.5919**	**17.4280**	**13.8766**	**0.0220**		**1.0580**	**1.0580**		**1.0216**	**1.0216**	**0.0000**	**2,030.8389**	**2,030.8389**	**0.4088**		**2,041.0596**

3.4 Building Construction - 2018

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	lb/day										lb/day					
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
Vendor	0.0493	1.3393	0.3746	2.7800e-003	0.0704	9.9200e-003	0.0803	0.0203	9.4900e-003	0.0298		296.6055	296.6055	0.0225		297.1681
Worker	0.1640	0.1185	1.2766	3.2200e-003	0.3130	2.5100e-003	0.3155	0.0830	2.3100e-003	0.0853		320.1107	320.1107	0.0110		320.3848
Total	**0.2134**	**1.4578**	**1.6512**	**6.0000e-003**	**0.3834**	**0.0124**	**0.3958**	**0.1033**	**0.0118**	**0.1151**		**616.7162**	**616.7162**	**0.0335**		**617.5529**

3.5 Architectural Coating - 2018

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	lb/day										lb/day					
Archit. Coating	3.7891					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506		281.4485	281.4485	0.0267		282.1171
Total	**4.0877**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**		**281.4485**	**281.4485**	**0.0267**		**282.1171**

3.5 Architectural Coating - 2018

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	lb/day										lb/day					
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
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
Worker	0.0352	0.0254	0.2736	6.9000e-004	0.0671	5.4000e-004	0.0676	0.0178	5.0000e-004	0.0183		68.5952	68.5952	2.3500e-003		68.6539
Total	**0.0352**	**0.0254**	**0.2736**	**6.9000e-004**	**0.0671**	**5.4000e-004**	**0.0676**	**0.0178**	**5.0000e-004**	**0.0183**		**68.5952**	**68.5952**	**2.3500e-003**		**68.6539**

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	lb/day										lb/day					
Archit. Coating	3.7891					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2986	2.0058	1.8542	2.9700e-003		0.1506	0.1506		0.1506	0.1506	0.0000	281.4485	281.4485	0.0267		282.1171
Total	**4.0877**	**2.0058**	**1.8542**	**2.9700e-003**		**0.1506**	**0.1506**		**0.1506**	**0.1506**	**0.0000**	**281.4485**	**281.4485**	**0.0267**		**282.1171**

3.5 Architectural Coating - 2018

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	lb/day										lb/day					
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
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
Worker	0.0352	0.0254	0.2736	6.9000e-004	0.0671	5.4000e-004	0.0676	0.0178	5.0000e-004	0.0183		68.5952	68.5952	2.3500e-003		68.6539
Total	**0.0352**	**0.0254**	**0.2736**	**6.9000e-004**	**0.0671**	**5.4000e-004**	**0.0676**	**0.0178**	**5.0000e-004**	**0.0183**		**68.5952**	**68.5952**	**2.3500e-003**		**68.6539**

3.6 Paving - 2018

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	lb/day										lb/day					
Off-Road	1.0182	10.4525	8.9926	0.0135		0.6097	0.6097		0.5618	0.5618		1,346.4360	1,346.4360	0.4113		1,356.7186
Paving	0.2201					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2383**	**10.4525**	**8.9926**	**0.0135**		**0.6097**	**0.6097**		**0.5618**	**0.5618**		**1,346.4360**	**1,346.4360**	**0.4113**		**1,356.7186**

3.6 Paving - 2018

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	lb/day										lb/day					
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
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
Worker	0.0762	0.0550	0.5927	1.4900e-003	0.1453	1.1700e-003	0.1465	0.0385	1.0700e-003	0.0396		148.6228	148.6228	5.0900e-003		148.7501
Total	**0.0762**	**0.0550**	**0.5927**	**1.4900e-003**	**0.1453**	**1.1700e-003**	**0.1465**	**0.0385**	**1.0700e-003**	**0.0396**		**148.6228**	**148.6228**	**5.0900e-003**		**148.7501**

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	lb/day										lb/day					
Off-Road	1.0182	10.4525	8.9926	0.0135		0.6097	0.6097		0.5618	0.5618	0.0000	1,346.4360	1,346.4360	0.4113		1,356.7186
Paving	0.2201					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.2383**	**10.4525**	**8.9926**	**0.0135**		**0.6097**	**0.6097**		**0.5618**	**0.5618**	**0.0000**	**1,346.4360**	**1,346.4360**	**0.4113**		**1,356.7186**

3.6 Paving - 2018

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	lb/day										lb/day					
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
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
Worker	0.0762	0.0550	0.5927	1.4900e-003	0.1453	1.1700e-003	0.1465	0.0385	1.0700e-003	0.0396		148.6228	148.6228	5.0900e-003		148.7501
Total	**0.0762**	**0.0550**	**0.5927**	**1.4900e-003**	**0.1453**	**1.1700e-003**	**0.1465**	**0.0385**	**1.0700e-003**	**0.0396**		**148.6228**	**148.6228**	**5.0900e-003**		**148.7501**

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	lb/day										lb/day					
Mitigated	11.7382	43.3648	81.0048	0.1677	11.1020	0.2173	11.3193	2.9705	0.2040	3.1746		17,066.7632	17,066.7632	1.4226		17,102.3287
Unmitigated	11.7382	43.3648	81.0048	0.1677	11.1020	0.2173	11.3193	2.9705	0.2040	3.1746		17,066.7632	17,066.7632	1.4226		17,102.3287

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Automobile Care Center	27.28	27.28	13.66	33,935	33,935
City Park	0.00	0.00	0.00		
Convenience Market With Gas Pumps	5,073.60	8,689.98	7092.48	3,508,809	3,508,809
Other Asphalt Surfaces	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	5,100.88	8,717.26	7,106.14	3,542,744	3,542,744

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
Automobile Care Center	16.60	8.40	6.90	33.00	48.00	19.00	21	51	28
City Park	0.00	0.00	0.00	0.00	0.00	0.00	0	0	0
Convenience Market With Gas	16.60	8.40	6.90	0.80	80.20	19.00	14	21	65
Other Asphalt Surfaces	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0
Parking Lot	16.60	8.40	6.90	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Parking Lot	0.548893	0.044275	0.199565	0.124385	0.017503	0.005874	0.020174	0.028962	0.001990	0.002015	0.004673	0.000702	0.000989
Other Asphalt Surfaces	0.548893	0.044275	0.199565	0.124385	0.017503	0.005874	0.020174	0.028962	0.001990	0.002015	0.004673	0.000702	0.000989
Convenience Market With Gas Pumps	0.548893	0.044275	0.199565	0.124385	0.017503	0.005874	0.020174	0.028962	0.001990	0.002015	0.004673	0.000702	0.000989
Automobile Care Center	0.548893	0.044275	0.199565	0.124385	0.017503	0.005874	0.020174	0.028962	0.001990	0.002015	0.004673	0.000702	0.000989
City Park	0.548893	0.044275	0.199565	0.124385	0.017503	0.005874	0.020174	0.028962	0.001990	0.002015	0.004673	0.000702	0.000989

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

Exceed Title 24

	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	lb/day										lb/day					
NaturalGas Mitigated	1.2600e-003	0.0115	9.6300e-003	7.0000e-005		8.7000e-004	8.7000e-004		8.7000e-004	8.7000e-004		13.7533	13.7533	2.6000e-004	2.5000e-004	13.8350
NaturalGas Unmitigated	1.5000e-003	0.0137	0.0115	8.0000e-005		1.0400e-003	1.0400e-003		1.0400e-003	1.0400e-003		16.4026	16.4026	3.1000e-004	3.0000e-004	16.5001

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	lb/day										lb/day					
Automobile Care Center	102.765	1.1100e-003	0.0101	8.4600e-003	6.0000e-005		7.7000e-004	7.7000e-004		7.7000e-004	7.7000e-004		12.0900	12.0900	2.3000e-004	2.2000e-004	12.1618
City Park	0	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
Convenience Market With Gas Pumps	36.6575	4.0000e-004	3.5900e-003	3.0200e-003	2.0000e-005		2.7000e-004	2.7000e-004		2.7000e-004	2.7000e-004		4.3127	4.3127	8.0000e-005	8.0000e-005	4.3383
Other Asphalt Surfaces	0	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
Parking Lot	0	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
Total		**1.5100e-003**	**0.0137**	**0.0115**	**8.0000e-005**		**1.0400e-003**	**1.0400e-003**		**1.0400e-003**	**1.0400e-003**		**16.4026**	**16.4026**	**3.1000e-004**	**3.0000e-004**	**16.5001**

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	lb/day										lb/day					
Automobile Care Center	0.0891288	9.6000e-004	8.7400e-003	7.3400e-003	5.0000e-005		6.6000e-004	6.6000e-004		6.6000e-004	6.6000e-004		10.4857	10.4857	2.0000e-004	1.9000e-004	10.5481
City Park	0	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
Convenience Market With Gas Pumps	0.0277742	3.0000e-004	2.7200e-003	2.2900e-003	2.0000e-005		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004		3.2676	3.2676	6.0000e-005	6.0000e-005	3.2870
Other Asphalt Surfaces	0	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
Parking Lot	0	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
Total		**1.2600e-003**	**0.0115**	**9.6300e-003**	**7.0000e-005**		**8.7000e-004**	**8.7000e-004**		**8.7000e-004**	**8.7000e-004**		**13.7533**	**13.7533**	**2.6000e-004**	**2.5000e-004**	**13.8350**

6.0 Area Detail

6.1 Mitigation Measures Area

Use Low VOC Paint - Residential Interior

Use Low VOC Paint - Residential Exterior

Use Low VOC Paint - Non-Residential Interior

Use Low VOC Paint - Non-Residential Exterior

	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	lb/day										lb/day					
Mitigated	0.1660	5.0000e-005	5.5500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0118	0.0118	3.0000e-005		0.0126
Unmitigated	0.1660	5.0000e-005	5.5500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0118	0.0118	3.0000e-005		0.0126

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	lb/day										lb/day					
Architectural Coating	0.0104					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1551					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.3000e-004	5.0000e-005	5.5500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0118	0.0118	3.0000e-005		0.0126
Total	**0.1660**	**5.0000e-005**	**5.5500e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**		**0.0118**	**0.0118**	**3.0000e-005**		**0.0126**

6.2 Area by SubCategory

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	lb/day										lb/day					
Architectural Coating	0.0104					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.1551					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	5.3000e-004	5.0000e-005	5.5500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0118	0.0118	3.0000e-005		0.0126
Total	**0.1660**	**5.0000e-005**	**5.5500e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**		**0.0118**	**0.0118**	**3.0000e-005**		**0.0126**

7.0 Water Detail

7.1 Mitigation Measures Water

8.0 Waste Detail

8.1 Mitigation Measures Waste

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

Site Prep 2
Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 05/10/2017
Case Description: Site Preparation

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Residences to the North	Residential	50.0	50.0	40.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Tractor	No	40	84.0		50.0	0.0
Dozer	No	40		81.7	50.0	0.0
Grader	No	40	85.0		50.0	0.0
Backhoe	No	40		77.6	50.0	0.0

Results

Noise Limits (dBA)

Noise Limit Exceedance (dBA)

Equipment	Day		Calculated (dBA) Evening		Night		Day Leq	Day Lmax	Evening Leq	Evening Lmax	Night Leq	Night Lmax
	Lmax	Leq	Lmax	Leq	Lmax	Leq						
Tractor			84.0	80.0			N/A	N/A	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	N/A	N/A	N/A						
Dozer			81.7	77.7			N/A	N/A	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	N/A	N/A	N/A						
Grader			85.0	81.0			N/A	N/A	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	N/A	N/A	N/A						
Backhoe			77.6	73.6			N/A	N/A	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	N/A	N/A	N/A						
Total			85.0	84.9			N/A	N/A	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	N/A	N/A	N/A						

**** Receptor #2 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Resdiences to the West	Residential	50.0	50.0	40.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)

Site Prep 2

Tractor	No	40	84.0		50.0	0.0
Dozer	No	40		81.7	50.0	0.0
Grader	No	40	85.0		50.0	0.0
Backhoe	No	40		77.6	50.0	0.0

Results

Noise Limits (dBA)

Noise Limit Exceedance (dBA)

Calculated (dBA)									
Night		Day		Evening		Night		Evening	
Equipment		Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Leq	Lmax	Leq								
Tractor		84.0	80.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A								
Dozer		81.7	77.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A								
Grader		85.0	81.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A								
Backhoe		77.6	73.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A								
Total		85.0	84.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A								

**** Receptor #3 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Resdineces to the South	Residential	50.0	50.0	40.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Tractor	No	40	84.0		150.0	0.0
Dozer	No	40		81.7	150.0	0.0
Grader	No	40	85.0		150.0	0.0
Backhoe	No	40		77.6	150.0	0.0

Results

Noise Limits (dBA)

Noise Limit Exceedance (dBA)

Calculated (dBA)									
Night		Day		Evening		Night		Evening	
Equipment		Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax

Site Prep 2

	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq				
Tractor	74.5	70.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	72.1	68.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grader	75.5	71.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	68.0	64.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	75.5	75.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Grading 2
Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 05/10/2017
Case Description: Grading

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Residences to the North	Residential	50.0	50.0	40.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Tractor	No	40	84.0		50.0	0.0
Dozer	No	40		81.7	50.0	0.0
Grader	No	40	85.0		50.0	0.0
Backhoe	No	40		77.6	50.0	0.0

Results

Noise Limits (dBA)

Noise Limit Exceedance (dBA)

Equipment	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq
Tractor	84.0	80.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer	81.7	77.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grader	85.0	81.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	77.6	73.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	85.0	84.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**** Receptor #2 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Resdiences to the West	Residential	50.0	50.0	40.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)

Grading 2

Tractor	No	40	84.0		50.0	0.0
Dozer	No	40		81.7	50.0	0.0
Grader	No	40	85.0		50.0	0.0
Backhoe	No	40		77.6	50.0	0.0

Results

Noise Limits (dBA)

Noise Limit Exceedance (dBA)

Calculated (dBA)									
Day			Evening			Night			
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Tractor			84.0	80.0					
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Dozer			81.7	77.7					
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Grader			85.0	81.0					
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe			77.6	73.6					
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total			85.0	84.9					
	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**** Receptor #3 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Resdineces to the South	Residential	50.0	50.0	40.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Tractor	No	40	84.0		150.0	0.0
Dozer	No	40		81.7	150.0	0.0
Grader	No	40	85.0		150.0	0.0
Backhoe	No	40		77.6	150.0	0.0

Results

Noise Limits (dBA)

Noise Limit Exceedance (dBA)

Calculated (dBA)									
Day			Evening			Night			
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax

Grading 2

	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq			
Tractor			74.5	70.5		N/A	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
Dozer			72.1	68.1		N/A	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
Grader			75.5	71.5		N/A	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
Backhoe			68.0	64.0		N/A	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	N/A	N/A	N/A	N/A			
		Total	75.5	75.4		N/A	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	N/A	N/A	N/A	N/A			

Build Const 2
Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 05/10/2017
Case Description: Building Construction

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Residences to the North	Residential	50.0	50.0	40.0

Description	Impact Device	Usage (%)	Equipment Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	50.0	0.0
Generator	No	50		80.6	50.0	0.0
Tractor	No	40	84.0		50.0	0.0
Backhoe	No	40		77.6	50.0	0.0
Welder / Torch	No	40		74.0	50.0	0.0

Results

Noise Limits (dBA)

Noise Limit Exceedance (dBA)

Night	Day	Calculated (dBA) Evening	Night	Day Evening	Night	Evening

Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Crane			80.6	72.6			N/A	N/A	N/A	N/A	N/A	N/A
Generator			80.6	77.6			N/A	N/A	N/A	N/A	N/A	N/A
Tractor			84.0	80.0			N/A	N/A	N/A	N/A	N/A	N/A
Backhoe			77.6	73.6			N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch			74.0	70.0			N/A	N/A	N/A	N/A	N/A	N/A
Total			84.0	83.2			N/A	N/A	N/A	N/A	N/A	N/A

**** Receptor #2 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Resdiences to the West	Residential	50.0	50.0	40.0

Equipment

	Spec	Actual	Receptor	Estimated

Build Const 2

Description	Impact Device	Usage (%)	Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Crane	No	16		80.6	50.0	0.0
Generator	No	50		80.6	50.0	0.0
Tractor	No	40	84.0		50.0	0.0
Backhoe	No	40		77.6	50.0	0.0
Welder / Torch	No	40		74.0	50.0	0.0

Results

Noise Limits (dBA)

Noise Limit Exceedance (dBA)

Equipment	Calculated (dBA) Day Leq	Day Lmax	Evening Leq	Evening Lmax	Night Leq	Night Lmax	Day Leq	Day Lmax	Evening Leq	Evening Lmax	Night Leq	Night Lmax
Crane	80.6	72.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	80.6	77.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	84.0	80.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	77.6	73.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch	74.0	70.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	84.0	83.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**** Receptor #3 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Resdineces to the South	Residential	50.0	50.0	40.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Crane	No	16		80.6	150.0	0.0
Generator	No	50		80.6	150.0	0.0
Tractor	No	40	84.0		150.0	0.0
Backhoe	No	40		77.6	150.0	0.0
Welder / Torch	No	40		74.0	150.0	0.0

Results

Noise Limits (dBA)

Noise Limit Exceedance (dBA)

Build Const 2

Equipment	Calculated (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq
Crane	71.0	63.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	71.1	68.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	74.5	70.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	68.0	64.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Welder / Torch	64.5	60.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	74.5	73.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Arch Coat 2
Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 05/10/2017
Case Description: Architectural Coating

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Residences to the North	Residential	50.0	50.0	40.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	50.0	0.0

Results

Noise Limits (dBA)

Noise Limit Exceedance (dBA)

Calculated (dBA)					Day		Evening		Night			
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compressor (air)	77.7	73.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	77.7	73.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**** Receptor #2 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Residences to the West	Residential	50.0	50.0	40.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	50.0	0.0

Results

Noise Limits (dBA)

Noise Limit Exceedance (dBA)

Arch Coat 2

Equipment	Calculated (dBA) Day Leq	Day Lmax	Evening Leq	Evening Lmax	Night Leq	Night Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Compressor (air)	77.7	N/A	73.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	77.7	N/A	73.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**** Receptor #3 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Residnece to the South	Residential	50.0	50.0	40.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compressor (air)	No	40		77.7	150.0	0.0

Results

Noise Limits (dBA)

Noise Limit Exceedance (dBA)

Equipment	Calculated (dBA) Day Leq	Day Lmax	Evening Leq	Evening Lmax	Night Leq	Night Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax
Compressor (air)	68.1	N/A	64.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	68.1	N/A	64.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Paving 2
Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 05/10/2017
Case Description: Paving

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Residences to the North	Residential	50.0	50.0	40.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Mixer Truck	No	40		78.8	50.0	0.0
Paver	No	50		77.2	50.0	0.0
Roller	No	20		80.0	50.0	0.0
Tractor	No	40	84.0		50.0	0.0
Backhoe	No	40		77.6	50.0	0.0

Results

Noise Limits (dBA)

Noise Limit Exceedance (dBA)

Calculated (dBA)					Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Concrete Mixer Truck	78.8	74.8			N/A	N/A	N/A	N/A	N/A	N/A
Paver	77.2	74.2			N/A	N/A	N/A	N/A	N/A	N/A
Roller	80.0	73.0			N/A	N/A	N/A	N/A	N/A	N/A
Tractor	84.0	80.0			N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	77.6	73.6			N/A	N/A	N/A	N/A	N/A	N/A
Total	84.0	83.0			N/A	N/A	N/A	N/A	N/A	N/A

**** Receptor #2 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Resdiences to the West	Residential	50.0	50.0	40.0

Equipment

	Spec	Actual	Receptor	Estimated

Paving 2

Description	Impact Device	Usage (%)	Lmax (dBA)	Lmax (dBA)	Distance (feet)	Shielding (dBA)
Concrete Mixer Truck	No	40		78.8	50.0	0.0
Paver	No	50		77.2	50.0	0.0
Roller	No	20		80.0	50.0	0.0
Tractor	No	40	84.0		50.0	0.0
Backhoe	No	40		77.6	50.0	0.0

Results

Noise Limits (dBA)

Noise Limit Exceedance (dBA)

Night	Day	Calculated (dBA) Evening		Night		Day		Evening		Night	
Equipment		Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Concrete Mixer Truck		78.8	74.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver		77.2	74.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller		80.0	73.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor		84.0	80.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe		77.6	73.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Total	84.0	83.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**** Receptor #3 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Resdineces to the South	Residential	50.0	50.0	40.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Concrete Mixer Truck	No	40		78.8	150.0	0.0
Paver	No	50		77.2	150.0	0.0
Roller	No	20		80.0	150.0	0.0
Tractor	No	40	84.0		150.0	0.0
Backhoe	No	40		77.6	150.0	0.0

Results

Noise Limits (dBA)

Noise Limit Exceedance (dBA)

Paving 2

Equipment	Calculated (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq	Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq
Concrete Mixer Truck	69.3	65.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	67.7	64.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	70.5	63.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Tractor	74.5	70.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Backhoe	68.0	64.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	74.5	73.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Appendix I

Traffic Impact Assessment

7TH STREET & COUNTY LINE ROAD RV FUELING & RETAIL PROJECT TRAFFIC IMPACT ANALYSIS

City of Calimesa

July 29, 2020

Traffic Engineering ● Transportation Planning ● Parking ● Noise & Vibration
Air Quality ● Global Climate Change ● Health Risk Assessment

7TH STREET & COUNTY LINE ROAD RV FUELING & RETAIL PROJECT TRAFFIC IMPACT ANALYSIS

City of Calimesa

July 29, 2020

prepared by
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Tom Huang, TE

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19-0183

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EXECUTIVE SUMMARY

The purpose of this Traffic Impact Analysis is to provide an assessment of traffic operations resulting from development of the proposed 7th Street & County Line Road RV Fueling & Retail Project and to identify measures necessary to reduce potentially operational traffic deficiencies. This report analyzes traffic impacts for the anticipated project opening year in Year 2021 for Phase 1. Phase 2 will be constructed with installation of interim traffic signals at the I-10/County Line Road freeway interchange, or when Caltrans installs roundabouts at this freeway interchange.

Although this is a technical report, effort has been made to write the report clearly and concisely. A glossary is provided in Appendix A to assist the reader with technical terms related to transportation engineering.

PROJECT DESCRIPTION

The project site is located northeast of County Line Lane and County Line Road in the City of Calimesa. The currently vacant project site is proposed to be developed with 3,000 square feet of coffee/donut shop and a three (3) fueling position RV fueling facility. Full access for the project site is proposed to County Line Lane via two project driveways. All egress for the project site will occur at these two driveways on County Line Lane. The conditions of approval for the development will require County Line Lane to be constructed with a roadway cross-section width of 32 feet of pavement prior to Phase 1 occupancy. Right turn in only access for the project site is proposed to County Line Road via one project driveway. This driveway is ingress only. The proposed project is anticipated to be constructed and fully operational by year 2021 for Phase 1. Phase 2 will be constructed with installation of interim traffic signals at the I-10/County Line Road freeway interchange, or when Caltrans installs roundabouts at this freeway interchange.

This analysis has been conducted with two phases for the proposed development. Phase 1 includes construction of only the 3 fueling position RV fueling facility. Phase 2 is the complete construction of the proposed development.

EXISTING CONDITIONS

The study intersections currently operate within acceptable Levels of Service during the peak hours for Existing conditions, except for the following study intersections that currently operate at Level of Service F during the peak hours (see Table 1):

- I-10 Southbound Ramps at County Line Road – #6 (AM & PM peak hours – LOS F)
- I-10 Northbound Ramps at County Line Avenue – #7 (AM Peak Hour – LOS F)

PROJECT TRIPS

The proposed project is forecast to generate a total of approximately 2,977 daily trips, including 297 trips during the AM peak hour and 174 trips during the PM peak hour (see Table 2).

FORECAST OPERATIONS

Existing Plus Project Conditions: The study intersections are forecast to operate within acceptable Levels of Service (D or better) during the peak hours for both Phase 1 and Phase 2 Existing Plus Project conditions, except for the following study intersections that are forecast to operate at Level of Service E to F during the peak hours (see Table 4):

- I-10 Southbound Ramps at County Line Road – #6 (AM & PM peak hour – LOS F)

- I-10 Northbound Ramps at County Line Avenue – #7 (AM Peak Hour – LOS F, PM Peak Hour – LOS E (Phase 2 only))

Based upon closer evaluation presented in the following "Other Considerations" section, the proposed project is forecast to result in minimal operational deficiencies during the peak hours for Existing Plus Project Phase 1 conditions. With installation of traffic signals or roundabouts at the I-10/County Line Road freeway interchange, the proposed project is forecast to result in no operational traffic deficiencies at the study intersections for Existing Plus Project Phase 2 conditions during the AM and PM peak hours.

Existing Plus Ambient Conditions: The study intersections are forecast to operate within acceptable Levels of Service (D or better) during the peak hours for Existing Plus Ambient conditions, except for the following study intersections that are forecast to operate at Level of Service E to F during the peak hours (see Table 5):

- I-10 Southbound Ramps at County Line Road – #6 (AM & PM peak hour – LOS F)
- I-10 Northbound Ramps at County Line Avenue – #7 (AM Peak Hour – LOS F)

With installation of traffic signals or roundabouts at the I-10/County Line Road freeway interchange, the study intersections are forecast to operate within acceptable Levels of Service for Existing Plus Ambient conditions during the AM and PM peak hours.

Existing Plus Ambient Plus Project Conditions: The study intersections are forecast to operate within acceptable Levels of Service (D or better) during the peak hours for both Phase 1 and Phase 2 Existing Plus Ambient Plus Project conditions, except for the following study intersections that are forecast to operate at Level of Service E to F during the peak hours (see Table 6):

- I-10 Southbound Ramps at County Line Road – #6 (AM & PM peak hour – LOS F)
- I-10 Northbound Ramps at County Line Avenue – #7 (AM Peak Hour – LOS F, PM Peak Hour – LOS E (Phase 2 only))

Based upon closer evaluation presented in the following "Other Considerations" section, the proposed project is forecast to result in minimal operational deficiencies during the peak hours for Existing Plus Ambient Plus Project Phase 1 conditions. With installation of traffic signals or roundabouts at the I-10/County Line Road freeway interchange, the proposed project is forecast to result in no operational traffic deficiencies at the study intersections for Existing Plus Ambient Plus Project Phase 2 conditions during the AM and PM peak hours.

Existing Plus Ambient Plus Project Plus Cumulative Conditions: The study intersections are forecast to operate within acceptable Levels of Service (D or better) during the peak hours for both Phase 1 and Phase 2 Existing Plus Ambient Plus Project Plus Cumulative conditions, except for the following study intersections that are forecast to operate at Level of Service E to F during the peak hours (see Table 7):

- I-10 Southbound Ramps at County Line Road – #6 (AM & PM peak hour – LOS F)
- I-10 Northbound Ramps at County Line Avenue – #7 (AM & PM peak hour – LOS F)

With installation of traffic signals or roundabouts at the I-10/County Line Road freeway interchange, the proposed project is forecast to result in no operational traffic deficiencies at the study intersections for both Phase 1 and Phase 2 Existing Plus Ambient Plus Project Plus Cumulative conditions during the AM and PM peak hours.

OPERATIONAL IMPROVEMENTS

The following improvements are necessary to be physically constructed prior to project Phase 2 opening:

- I-10 Southbound Ramps (NS) at County Line Road (EW) – #6
  - Install a traffic signal
- I-10 Northbound Ramps (NS) at County Line Avenue (EW) – #7
  - Install a traffic signal

The City of Calimesa and California Department of Transportation (Caltrans) plan to install roundabouts at both of these ramp intersection locations. The anticipated installation of these roundabouts is Year 2026. Traffic signal installation would be an interim measure until the roundabouts are constructed, with feasibility and necessity to be determined by the City of Calimesa and Caltrans. Traffic signal installation as an interim improvement would be a condition of approval to reduce project impacts for Phase 2. A fair share analysis has been prepared for these improvements.

The I-10/County Line Road interchange is identified as a Western Riverside Council of Governments (WRCOG) Transportation Uniform Mitigation Fee (TUMF) location in the City of Calimesa. As mitigation for the potential traffic impacts, the proposed project shall contribute through the adopted traffic impact fee program for the ultimate improvements for this interchange.

VEHICLE MILES TRAVELED (VMT) ANALYSIS

Appendix G contains a VMT analysis for the proposed development.

1. INTRODUCTION

This section describes the purpose of this traffic impact analysis, project location, proposed development, and study area. Figure 1 shows the project location map and Figure 2 illustrates the project site plan. Figure 3 illustrates the project site plan with freeway interchange roundabout.

PURPOSE AND OBJECTIVES

The purpose of this Traffic Impact Analysis is to provide an assessment of traffic operations resulting from development of the proposed 7th Street & County Line Road RV Fueling & Retail Project and to identify measures necessary to reduce potentially operational traffic deficiencies. Although this is a technical report, effort has been made to write the report clearly and concisely. A glossary is provided in Appendix A to assist the reader with technical terms related to transportation engineering.

PROJECT DESCRIPTION

The project site is located northeast of County Line Lane and County Line Road in the City of Calimesa. The currently vacant project site is proposed to be developed with 3,000 square feet of coffee/donut shop and a three (3) fueling position RV fueling facility. Full access for the project site is proposed to County Line Lane via two project driveways. All egress for the project site will occur at these two driveways on County Line Lane. The conditions of approval for the development will require County Line Lane to be constructed with a roadway cross-section width of 32 feet of pavement prior to Phase 1 occupancy. Right turn in only access for the project site is proposed to County Line Road via one project driveway. This driveway is ingress only. The proposed project is anticipated to be constructed and fully operational by year 2021 for Phase 1. Phase 2 will be constructed with installation of interim traffic signals at the I-10/County Line Road freeway interchange, or when Caltrans installs roundabouts at this freeway interchange.

This analysis has been conducted with two phases for the proposed development. Phase 1 includes the addition of three (3) RV fueling positions to the adjacent gasoline station. Phase 2 consists of the 3,000 square foot coffee/donut shop for full buildout of the proposed development.

STUDY AREA

The study intersections and general scope of the analysis were determined based on coordination with the City of Calimesa. Scoping documentation is provided in Appendix B. The study area consists of the following study intersections where the proposed project is expected to contribute 50 or more peak hour trips with classification of "Collector" to "Collector" and above, that are all located within the City of Calimesa, City of Yucaipa, and Caltrans jurisdictions:

Study Intersections[1]	Jurisdiction
1. County Line Lane (NS) at County Line Road (EW)	City of Calimesa
2. Coffee Shop Access (NS) at County Line Lane (EW)	City of Calimesa/City of Yucaipa
3. RV Access (NS) at County Line Lane (EW)	City of Calimesa/City of Yucaipa
4. Coffee Shop/RV Access (NS) at County Line Road (EW)	City of Calimesa
5. 7th Place (NS) at County Line Road (EW)	City of Calimesa
6. I-10 Southbound Ramps (NS) at County Line Road (EW)	Caltrans
7. I-10 Northbound Ramps (NS) at County Line Avenue (EW)	Caltrans
8. Calimesa Boulevard (NS) at County Line Avenue (EW)	City of Calimesa/City of Yucaipa

[1] (NS) = north-south roadway; (EW) = east-west roadway

The Yucaipa Freeway Corridor Specific Plan is located north of the project site and west of the I-10 Freeway extending northwest of Live Oak Canyon Road. Based on discussions with the City of Yucaipa Planning Department, the only active project within the specific plan is an expansion of The Pumpkin Factory located adjacent to the I-10 Freeway and Live Oak Canyon Rd. Access to this facility is provided on Live Oak Canyon Road. There are no other planned or active projects within this specific plan, and there are plans to extend County Line Lane from its northern terminus through the specific plan. Since there are no construction plans for the extension of County Line Lane, and it currently terminates and services only one single-family detached residential dwelling unit, it is not anticipated that project traffic would utilize this roadway for Opening Year 2021 conditions.

The City of Calimesa and California Department of Transportation (Caltrans) plan to install roundabouts at the I-10/County Line Road freeway interchange. The anticipated installation of these roundabouts is Year 2026.

Roberts Road is planned to be constructed northbound to County Line Road creating a 4-way intersection with County Line Lane dependent on construction of the Mesa Verde Specific Plan. 7th Place between County Line Lane and County Line Road is currently closed and being vacated. 7th Place south of County Line Road will be closed with a cul-de-sac constructed at its northern terminus just south of County Line Road dependent on construction of the Mesa Verde Specific Plan.

ANALYSIS SCENARIOS

The following scenarios are analyzed during typical weekday AM and PM peak hour conditions:

- Existing Conditions
- Existing Plus Project (Phase 1 and 2) Conditions
- Existing Plus Ambient Conditions
- Existing Plus Ambient Plus Project (Phase 1 and 2) Conditions
- Existing Plus Ambient Plus Project (Phase 1 and 2) Plus Cumulative Conditions

Legend

(#) Study Intersection

Figure 1
Project Location Map

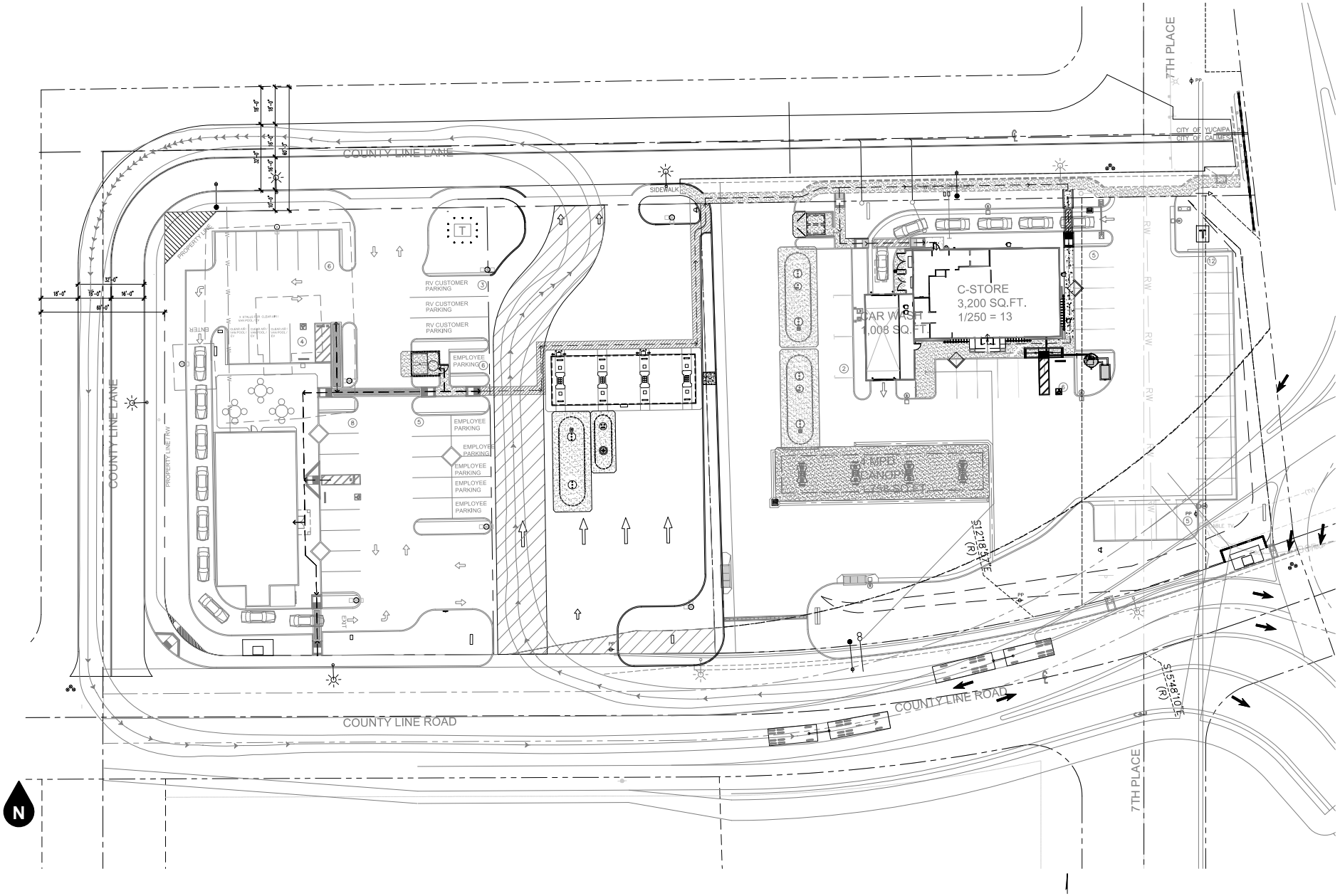


Figure 2
Site Plan

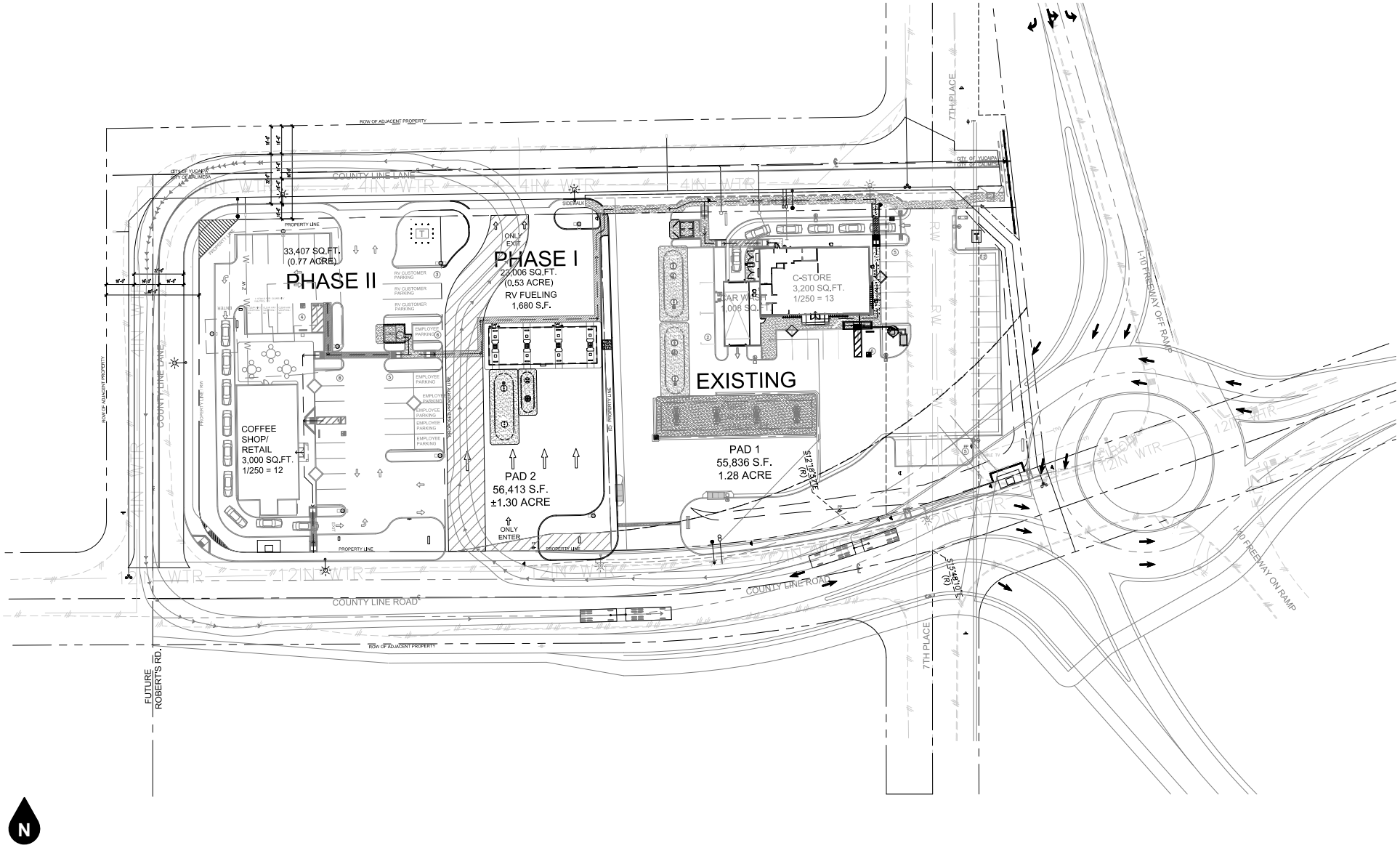


Figure 3
Site Plan - With Freeway Interchange Roudabout

2. METHODOLOGY

This section discusses the analysis methodologies used to assess transportation facility performance as adopted by the respective jurisdictional agencies.

INTERSECTION DELAY METHODOLOGY

To assess the performance of an intersection, the City of Calimesa use the intersection delay method based on procedures contained in the Highway Capacity Manual (Transportation Research Board, 6th Edition). The methodology considers the traffic volume and distribution of movements, traffic composition, geometric characteristics, and signalization details to calculate the average control delay per vehicle and corresponding Level of Service. Control delay is defined as the portion of delay attributed to the intersection traffic control (such as a traffic signal or stop sign) and includes initial deceleration, queue move-up time, stopped delay, and final acceleration delay. The intersection control delay is then correlated to Level of Service based on the following thresholds:

Level of Service	Intersection Control Delay (Seconds / Vehicle)	
	Signalized Intersection	Unsignalized Intersection
A	≤ 10.0	≤ 10.0
B	> 10.0 to ≤ 20.0	> 10.0 to ≤ 15.0
C	> 20.0 to ≤ 35.0	> 15.0 to ≤ 25.0
D	> 35.0 to ≤ 55.0	> 25.0 to ≤ 35.0
E	> 55.0 to ≤ 80.0	> 35.0 to ≤ 50.0
F	> 80.0	> 50.0

Source: Transportation Research Board, Highway Capacity Manual (6th Edition).

Level of Service is used to qualitatively describe the performance of a roadway facility, ranging from Level of Service A (free-flow conditions) to Level of Service F (extreme congestion and system failure). At intersections with traffic signal or all way stop control, Level of Service is determined by the average control delay for the overall intersection. At intersections with cross street stop control (i.e., one- or two-way stop control), Level of Service is determined by the average control delay for the worst individual movement (or movements sharing a single lane).

Intersection delay analysis was performed using the Vistro (Version 6.00-03) software in accordance with Exhibit C of the Riverside County Transportation Department Traffic Impact Analysis Preparation Guide (April 2008).

PERFORMANCE STANDARDS

City of Calimesa

The definition of an intersection deficiency has been obtained from the City of Calimesa General Plan, which states that the City has a goal of Level of Service C on City-maintained roads. However, Level of Service D may be allowed on City-maintained road segments in commercial and employment areas or any combination of major highways, urban arterials, secondary highways, or freeway ramp intersections. Therefore, Level of Service D has been considered acceptable at the off-site study intersections at or near the vicinity of the I-10 Freeway ramps and Level of Service C has been considered acceptable at all other study locations, including on-site intersections.

City of Yucaipa

The City of Yucaipa has established Level of Service C as the minimum acceptable Level of Service.

California Department of Transportation

The California Department of Transportation (Caltrans) endeavors to maintain a target Level of Service at the transition between Level of Service C and D (maximum 35 seconds of control delay). If an existing facility, or study area intersection for purposes of this analysis, operates at an unacceptable Level of Service, then the existing control delay should be maintained. The lead agency may consult with the California Department of Transportation to determine the appropriate target Level of Service if the maximum 35 seconds of control delay is not feasible.

REQUIREMENTS FOR IMPROVEMENTS

City of Calimesa

Based on the established performance standards, a potentially operational transportation impact is defined to occur if the project causes or worsens unacceptable Level of Service (E or F) at a study intersection at or near the vicinity of the I-10 Freeway Ramps, or if the project causes or worsens unacceptable Level of Service (D, E or F) at all other study intersections including on-site intersections,

City of Yucaipa

Based on the established performance standards, a potentially operational transportation impact is defined to occur if the project causes or worsens unacceptable Level of Service (D, E, or F) at a study intersection.

California Department of Transportation

Based on the established performance standards, a potentially operational transportation impact is defined to occur if the project causes or worsens unacceptable Level of Service (E or F) at a freeway ramp.

Requirements for Improvements

If a proposed project is forecast to result in a significant operational impact, improvements should be identified that will reduce the impact to a less than operational impact level. Improvements can be in many forms, including the addition of lanes, traffic control modification, or demand management measures. If no feasible improvements can be identified for an operationally impacted facility, project approval will require the City of Calimesa to adopt a statement of overriding considerations.

Direct project impacts are identified in the Existing Plus Project analysis scenario and must be improved via conditions of approval requiring the construction of any improvements necessary to meet the established Level of Service standards (or reduce the project impact to pre-project conditions). Cumulative impacts are identified in the cumulative conditions scenario and may be mitigated through the payment of various impact fees such as the County of Riverside Development Impact Fees, Road and Bridge Benefit District Fees, and the Transportation Uniform Mitigation Fees to the extent that these programs provide funding for the improvement facilities.

3. EXISTING CONDITIONS

EXISTING ROADWAY SYSTEM

Figure 4 identifies the lane geometry and intersection traffic controls for Existing conditions based on a field survey of the study area. Regional access to the project site is provided by the I-10 Freeway located approximately 0.15 miles east of the project site. Key roadways providing local circulation include County Line Lane, Roberts Road (future), 7th Place, Calimesa Boulevard, and County Line Road.

GENERAL PLAN CONTEXT

Figure 5 shows the City of Calimesa General Plan Circulation Element roadway classifications map. This figure shows the nature and extent of arterial and collector highways that are needed to adequately serve the ultimate development depicted by the Land Use Element of the General Plan. The City of Calimesa standard roadway cross-sections are illustrated on Figure 6.

Figure 7 shows the City of Yucaipa General Plan Circulation Element roadway classifications map. This figure shows the nature and extent of arterial and collector highways that are needed to adequately serve the ultimate development depicted by the Land Use Element of the General Plan.

TRANSIT SERVICE

Figure 8 shows Existing public transit facilities and routes in the project vicinity serviced by Omnitrans. As shown on Figure 8, the project vicinity is served by OmniTrans Routes 308 and 309 along County Line Road east of Calimesa Boulevard. There is a transit stop for these routes at the intersection of 5th Street and County Line Road.

Figure 9 shows Existing public transit facilities and routes in the project vicinity serviced by the City of Beaumont Transit System. As shown on Figure 9, the project vicinity is served by the City of Beaumont Transit System Commuter Link 120 along Calimesa Boulevard south of County Line Road. There is a transfer center near the Calimesa Dollar General.

BICYCLE FACILITIES

The City of Calimesa has bicycle lanes painted adjacent to existing roadways. There are no facilities in the community for bikes only; however, the City does maintain a series of multi-use trails, which accommodate bicycles as well as pedestrians. There are no on-street bicycle facilities in the study area.

EXISTING PEDESTRIAN FACILITIES

Existing pedestrian facilities adjacent to the project site are illustrated on Figure 10.

EXISTING ROADWAY VOLUMES

Figure 11 shows the Existing average daily traffic volumes. The Existing average daily traffic volumes have been obtained from the California Department of Transportation (Caltrans) Traffic Volumes on California State Highways (2017) and factored from peak hour intersection turning movement volumes using the following formula for each intersection leg:

Evening Peak Hour (Approach Volume + Exit Volume) x 12.0 = Leg Volume.

Existing peak hour traffic conditions are based upon AM peak period and PM peak period intersection turning movement counts obtained in September 2019 during typical weekday conditions when local schools were in session. The weekday AM peak period was counted between 7:00 AM and 9:00 AM and the weekday PM peak period was counted between 4:00 PM and 6:00 PM. The actual peak hour within the peak period is the four consecutive 15 minute periods with the highest total volume when all movements are added together. Thus, the weekday PM peak hour at one intersection may be 4:45 PM to 5:45 PM if those four consecutive 15 minute periods have the highest combined volume. Intersection turning movement count worksheets are provided in Appendix C.

Figure 12 and Figure 13 show the Existing AM peak hour and PM peak hour intersection turning movement volumes.

EXISTING LEVELS OF SERVICE

The intersection Levels of Service for Existing conditions have been calculated and are shown in Table 1. Existing intersection Level of Service worksheets are provided in Appendix D.

As shown in Table 1, the study intersections currently operate within acceptable Levels of Service during the peak hours for Existing conditions, except for the following study intersections that currently operate at Level of Service F during the peak hours:

- I-10 Southbound Ramps at County Line Road – #6 (AM & PM peak hour – LOS F)
- I-10 Northbound Ramps at County Line Avenue – #7 (AM Peak Hour – LOS F)

EXISTING TRAFFIC SIGNAL WARRANT ANALYSIS

The need for a traffic control signal at the currently unsignalized study intersections of I-10 Southbound Ramps at County Line Road (#6) and I-15 Northbound Ramps at County Line Avenue (#7) have been evaluated using the California Department of Transportation peak hour traffic signal warrant criteria (Warrant 3) in accordance with the California Manual on Uniform Traffic Control Devices (2014 Update). Traffic signal warrant analysis worksheets are provided in Appendix E.

The peak hour traffic signal warrant (Warrant 3) is forecast to be satisfied at the currently unsignalized study intersections of I-10 Southbound Ramps at County Line Road (#6) and I-15 Northbound Ramps at County Line Avenue (#7) for Existing conditions.

The City of Calimesa and California Department of Transportation (Caltrans) plan to install roundabouts at both of these ramp intersection locations. The anticipated installation of these roundabouts is Year 2026. Traffic signal installation would be an interim measure until the roundabouts are constructed, with feasibility and necessity to be determined by the City of Calimesa and Caltrans. Traffic signal installation as an interim improvement would be a condition of approval to reduce project impacts for Phase 2. A fair share analysis has been prepared for these improvements.

Table 1
Existing Intersection Levels of Service

Study Intersection	Jurisdiction[1]	Traffic Control[2]	AM Peak Hour		PM Peak Hour	
			Delay[3]	LOS[4]	Delay[3]	LOS[4]
1. County Line Lane at County Line Road	Calimesa	CSS	8.8	A	8.8	A
5. 7th Place at County Line Road	Calimesa	CSS	12.4	B	9.7	A
6. I-10 SB Ramps at County Line Road	Caltrans	CSS	1,074.9	F	306.7	F
7. I-10 NB Ramps at County Line Avenue	Caltrans	CSS	51.8	F	29.5	D
8. Calimesa Boulevard at County Line Avenue	Calimesa/Yucaipa	TS	12.9	B	12.3	B

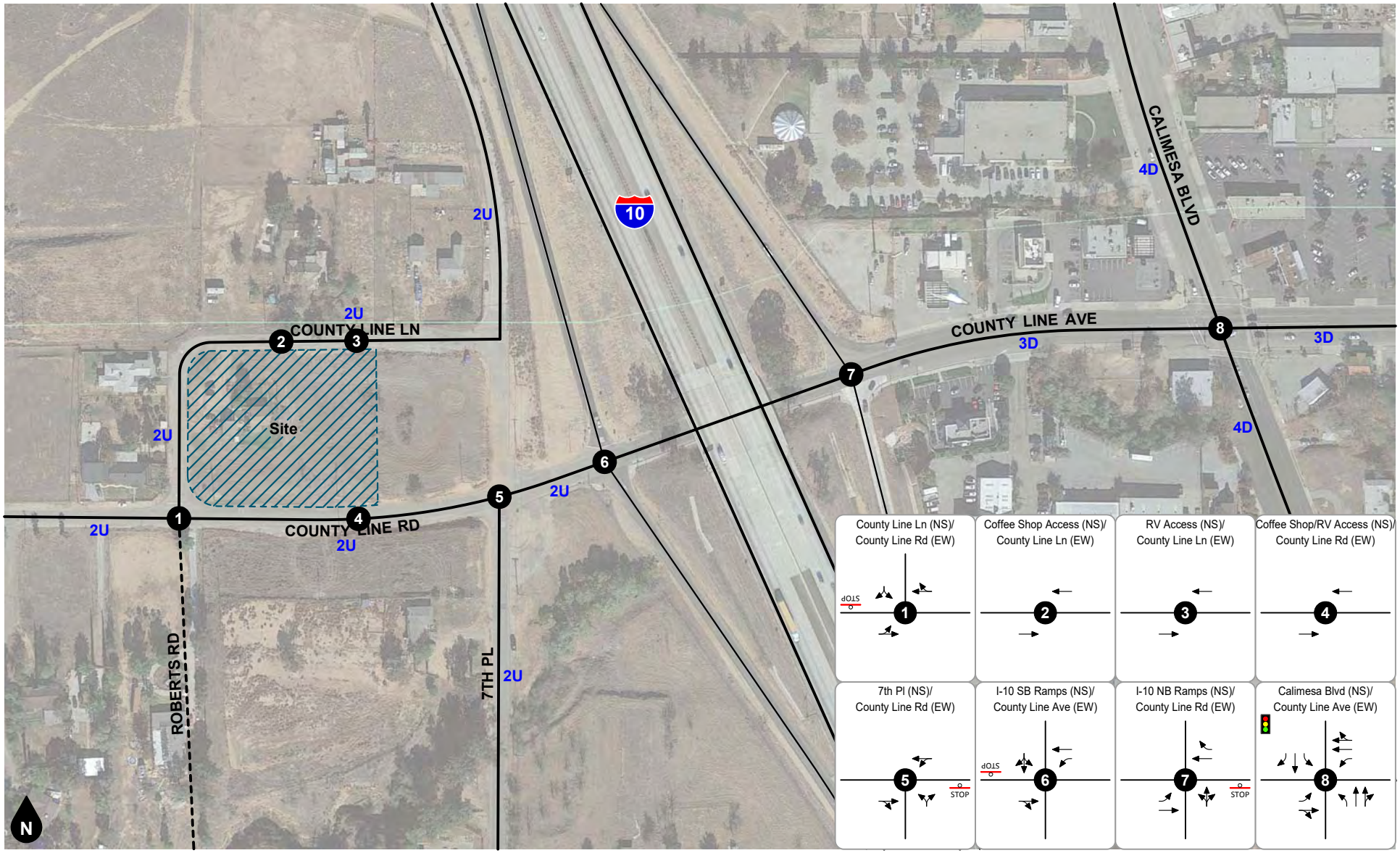
Notes:

(1) Caltrans = California Department of Transportation

(2) CSS = Cross Street Stop; TS = Traffic Signal

(3) Delay is shown in seconds/vehicle. For intersections with traffic signal or all way stop control, overall average intersection delay and LOS are shown. For intersections with cross street stop control, LOS is based on average delay of the worst individual lane (or movements sharing a lane).

(4) LOS = Level of Service



Legend

- Traffic Signal
- STOP Stop Sign
- #D #-Lane Divided Roadway
- #U #-Lane Undivided Roadway
- Existing Lane

Figure 4
Existing Lane Geometry and Intersection Traffic Controls

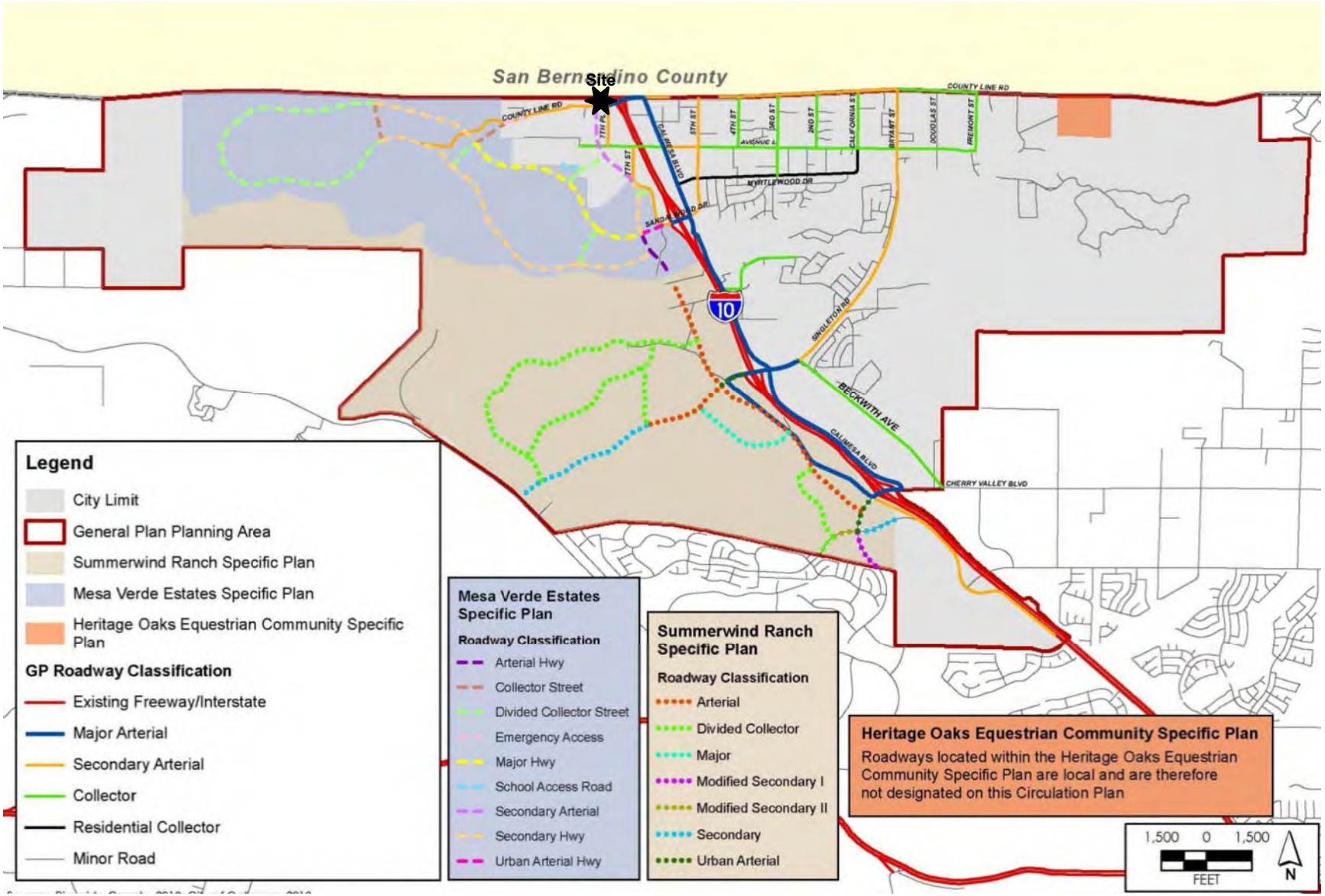


Figure 5
City of Calimesa General Plan Circulation Element

Source: City of Calimesa

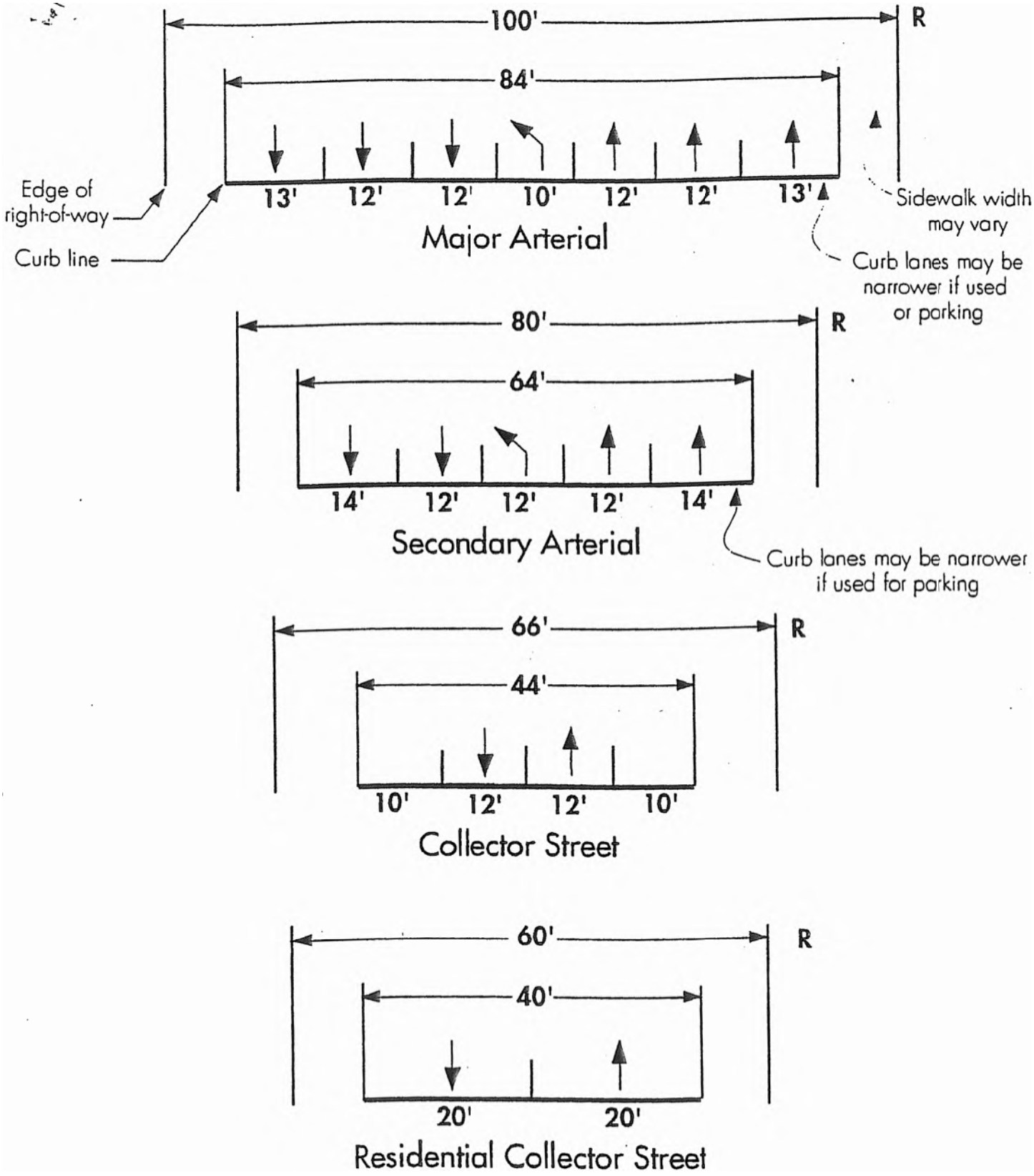


Figure 6
City of Calimesa General Plan Roadway Cross-Sections

Source: City of Calimesa

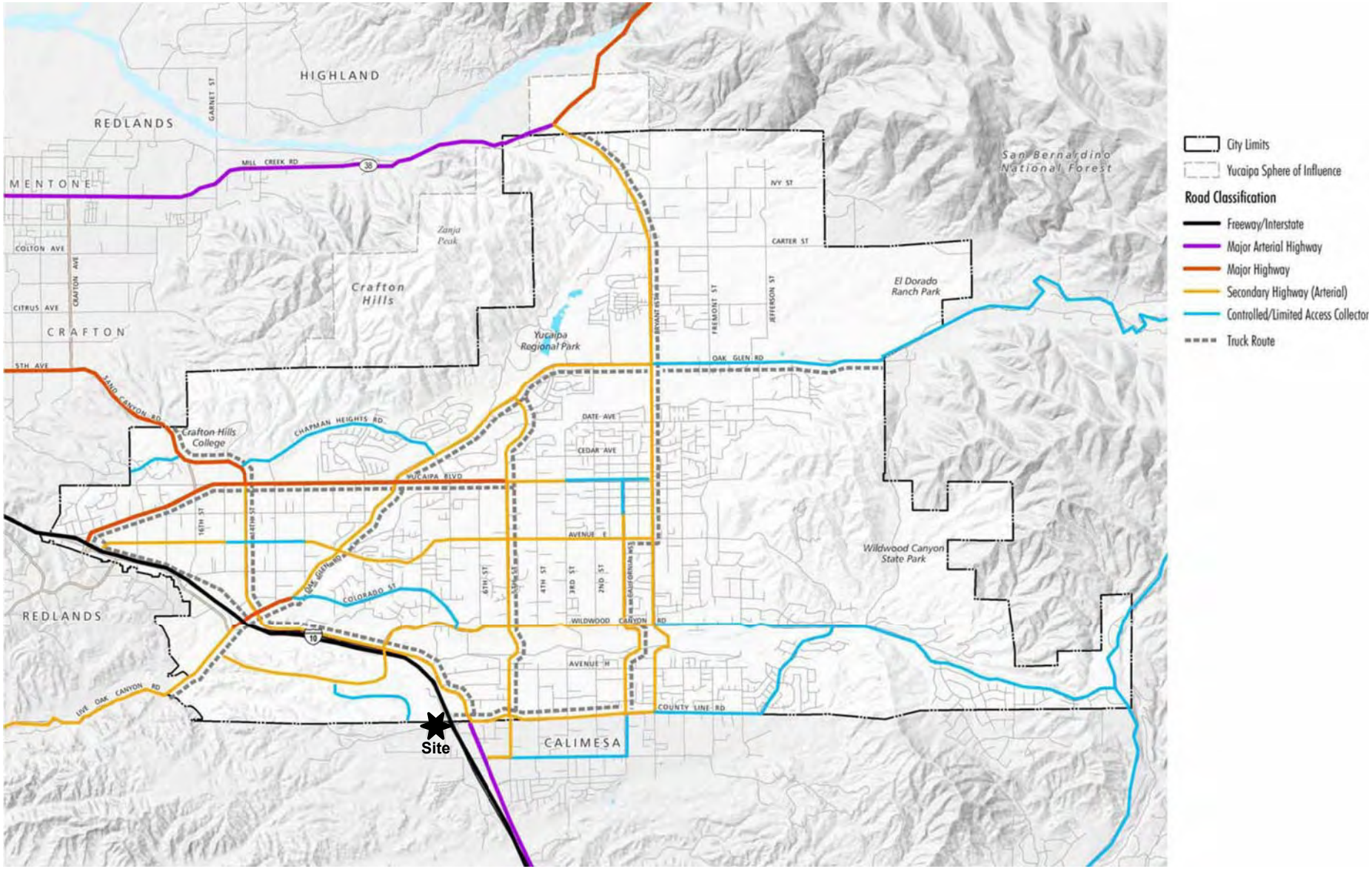
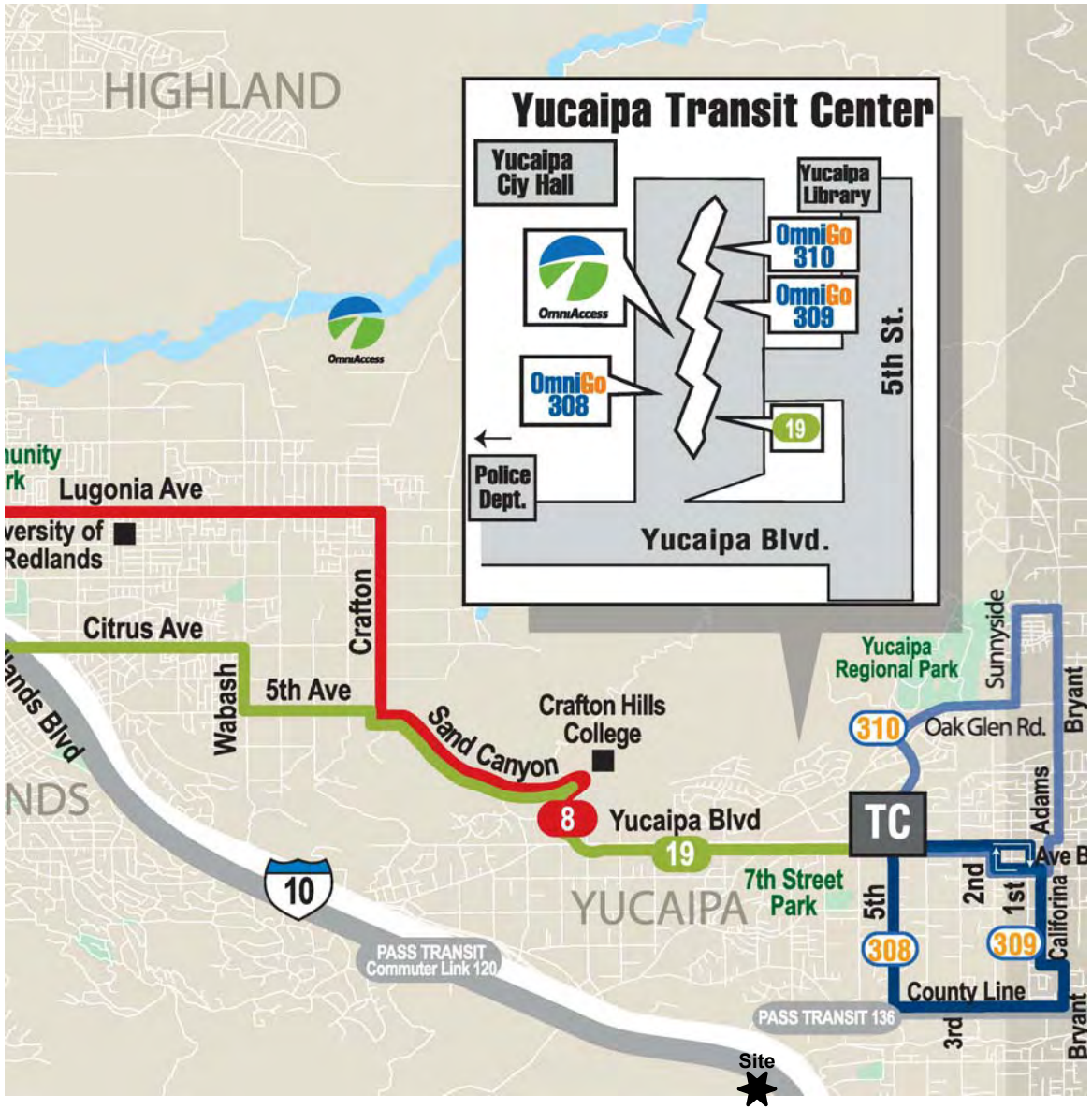


Figure 7
City of Yucaipa General Plan Circulation Element

Source: City of Yucaipa



Omnitrans Routes

Route	Route Name
sbX	Palm/Kendall - CSUSB - VA Hospital
1	ARMC – San Bernardino Del Rosa
2	Cal St – E St – Loma Linda
3/4	Baseline – Highland – San Bdno
5	South Waterman – Del Rosa – Cal State
7	N San Bdno – Sierra Way – San Bdno
8	San Bdno – Mentone – Crafton Hills College
10	Fontana – Baseline – San Bernardino
12	Fontana – Rialto - Cal State
14	Fontana – Foothill – San Bernardino
15	Fontana – San Bernardino/Highland – Redlands
19	Fontana – Colton – Redlands - Yucaipa
20	Fontana – Metrolink – Via Hemlock – Kaiser
22	North Rialto – Riverside Ave – ARMC
29	Bloomington – Valley Blvd – Kaiser
61	Fontana – Ontario Mills – ONT Airport - Pomona
66	Fontana – Foothill Blvd – Montclair
67	Chaffey College – Baseline – Fontana
80	ONT Airport - Vineyard Ave. – Chaffey College
81	Chino - Haven – Chaffey College
82	Rancho Cucamonga – Fontana – Sierra Lakes
83	Chino – Euclid Ave. – Upland
84	Chino - Mountain Ave. - Upland
85	Chino - Montclair - Chaffey College
86	S. Ontario - Campus Ave. - San Antonio Hospital
88	Chino Hills - Ramona Ave. - Montclair
215	Riverside - San Bernardino
290	San Bernardino - ARMC - Ontario Mills - Montclair
308/309/310	OmniGo Yucaipa
325	OmniGo Grand Terrace
365	OmniGo Chino/Chino Hills

Routes and schedules are subject to change without notice.

Figure 8
OmniTrans System Map

Source: OmniTrans

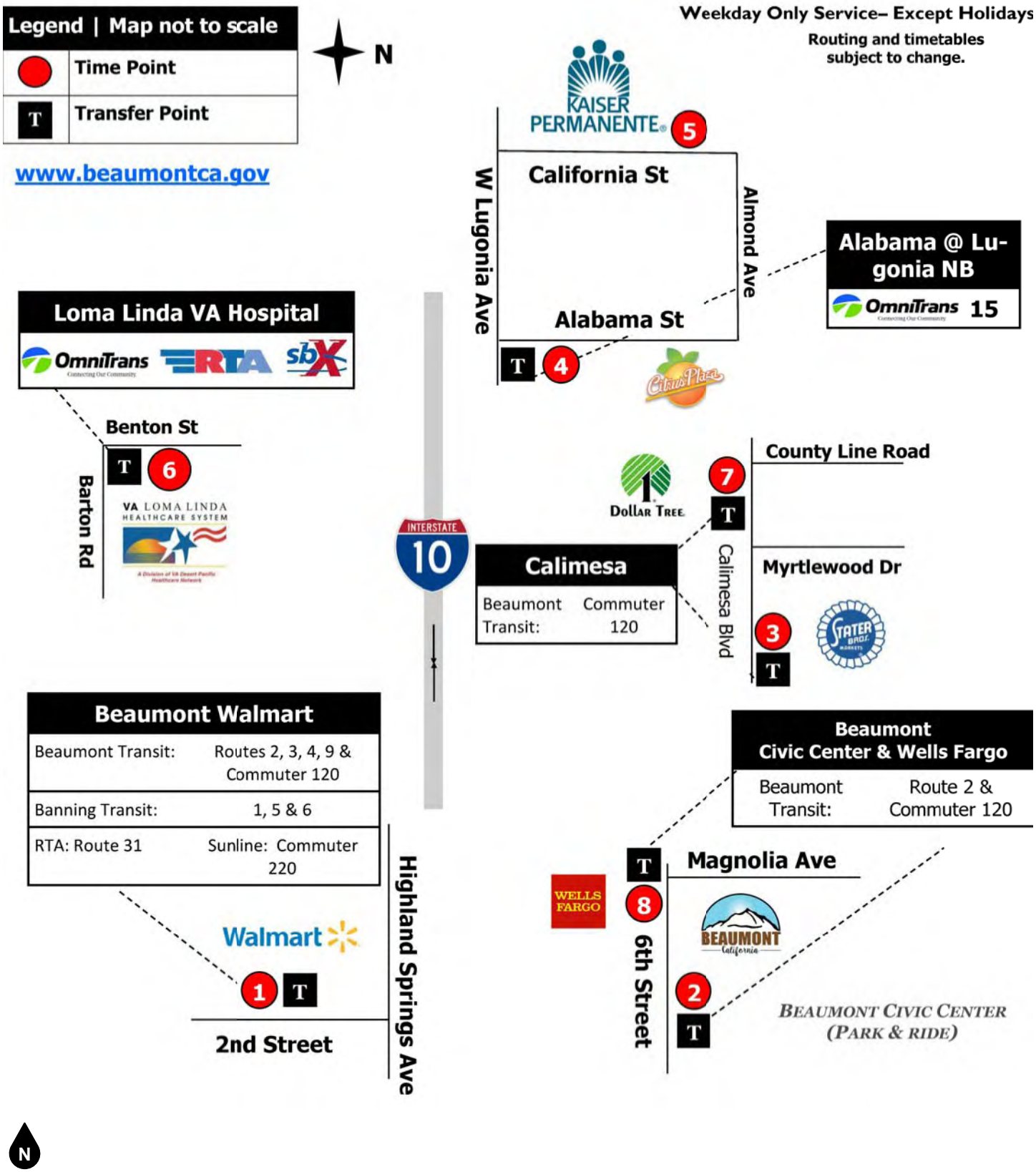
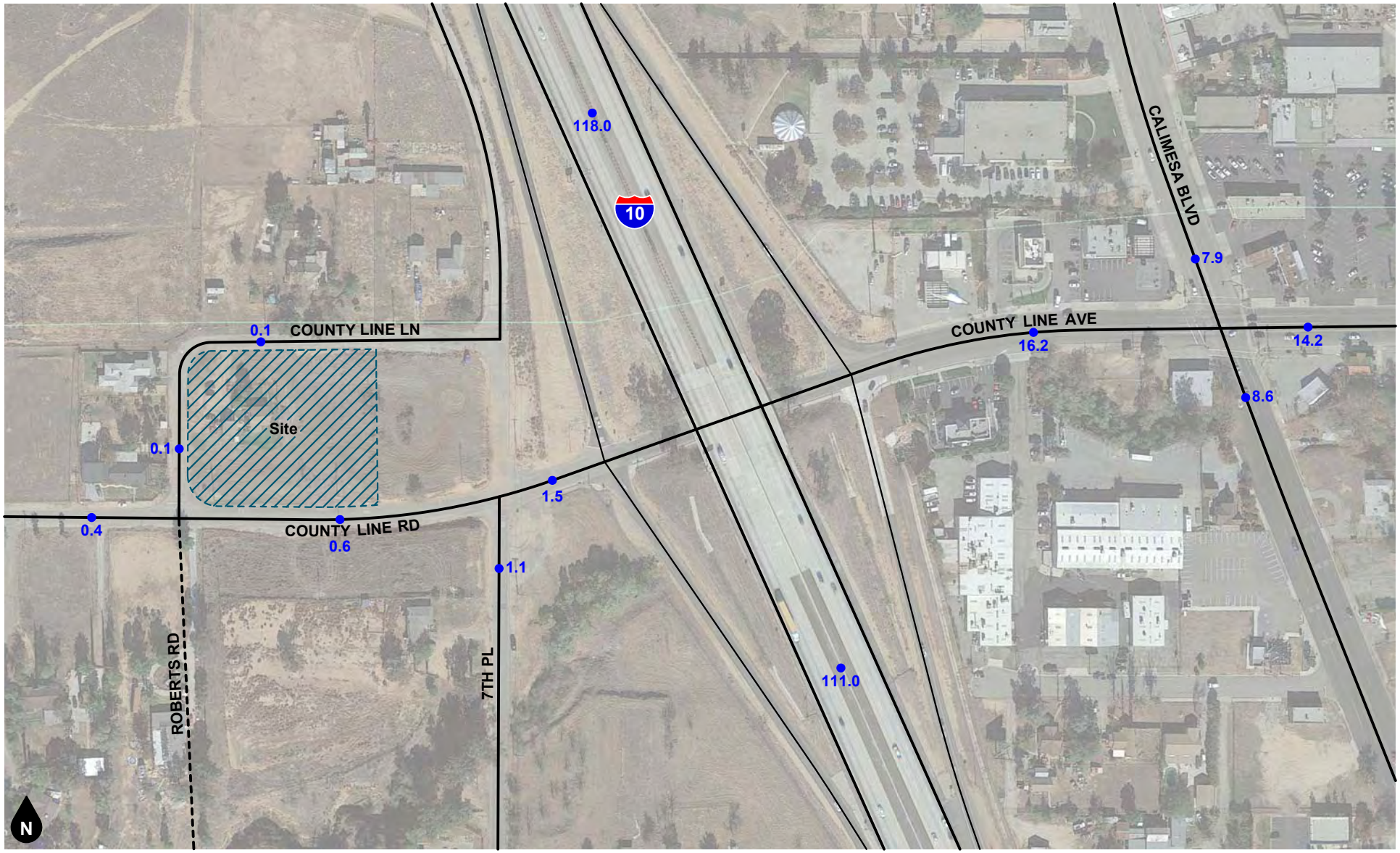


Figure 9
City of Beaumont Transit System Map

Source: City of Beaumont

Legend
- Sidewalk
- Cross Walk

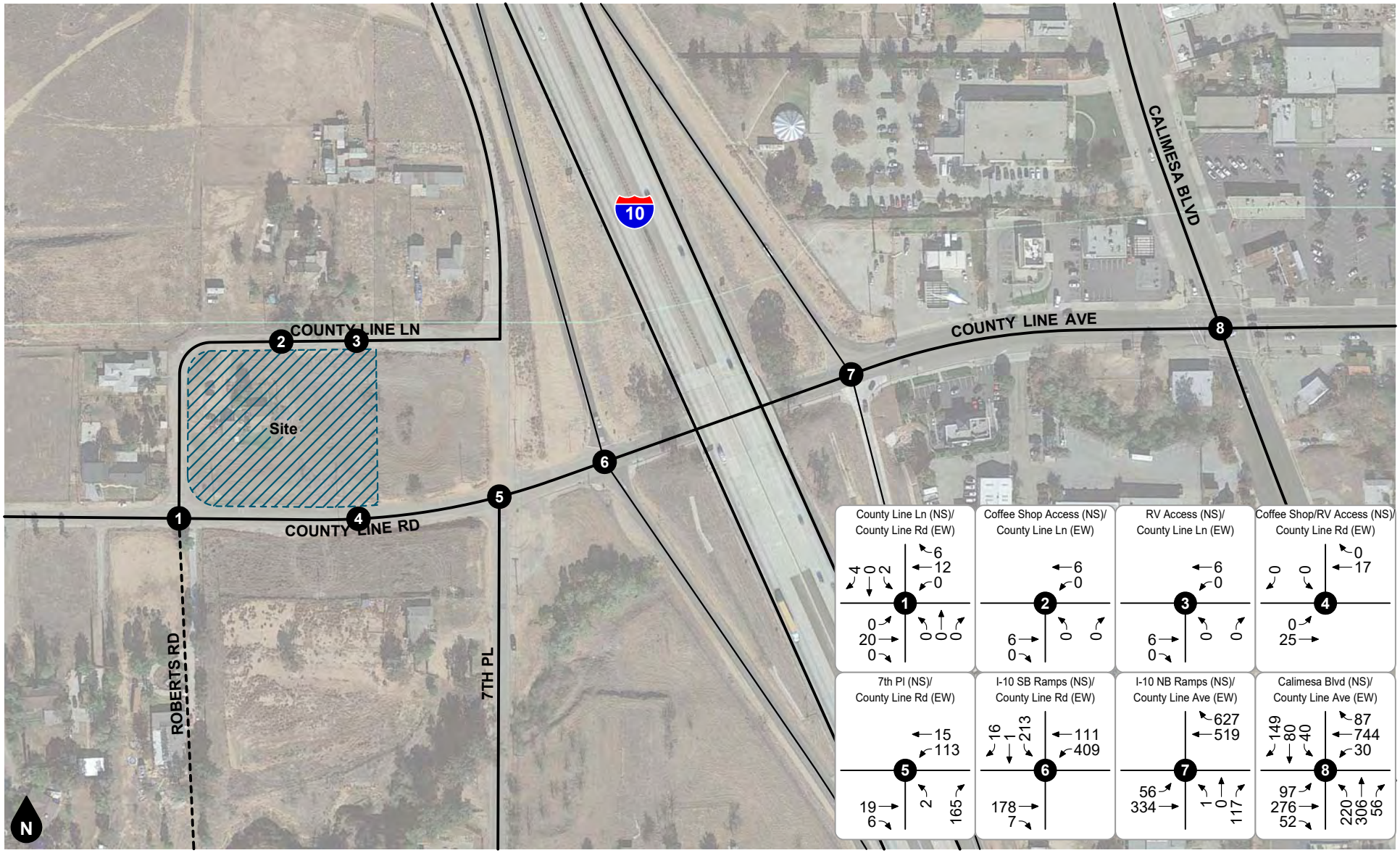
Figure 10
Existing Pedestrian Facilities



Legend

●## Vehicles Per Day (1,000's)

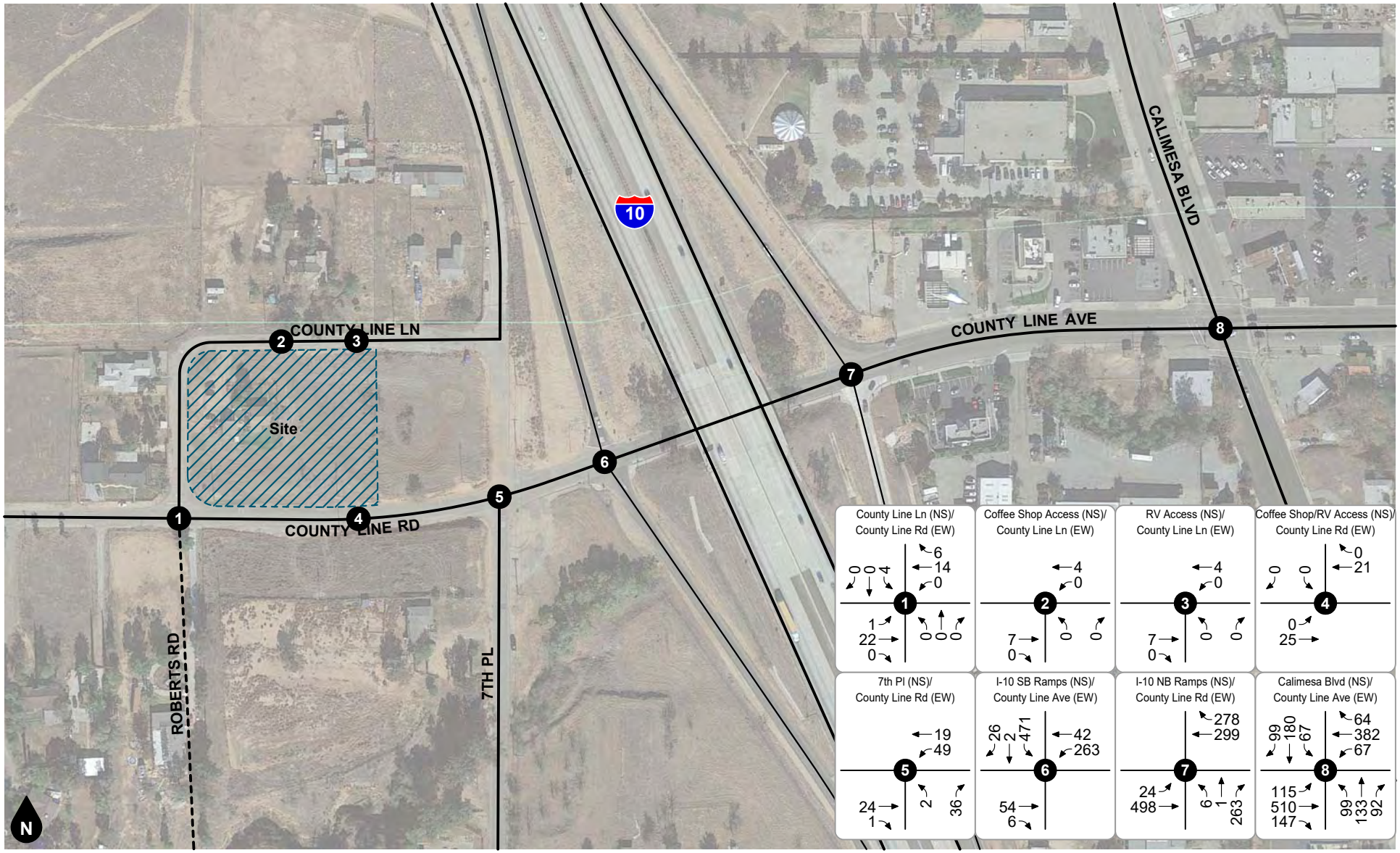
Figure 11
Existing Average Daily Traffic Volumes



Legend

Study Intersection

Figure 12
Existing AM Peak Hour Intersection Turning Movement Volumes



Legend

Study Intersection

Figure 13
Existing PM Peak Hour Intersection Turning Movement Volumes

4. PROJECT TRIP FORECASTS

This section describes how project trip generation, trip distribution, and trip assignment forecasts were developed. The forecast project volumes are illustrated on figures contained in this section.

PROJECT TRIP GENERATION

Table 2 shows the project trip generation based upon trip generation rates obtained from the Institute of Transportation Engineers, Trip Generation Manual, 10th Edition, 2017. Trip generation rates were determined for daily trips, AM peak hour inbound and outbound trips, and PM peak hour inbound and outbound trips for the proposed land use. The number of trips forecast to be generated by the proposed project are determined by multiplying the trip generation rates by the land use quantity. The currently vacant project site is proposed to be developed with 3,000 square feet of coffee/donut shop and a 3 fueling position RV fueling facility.

It is important to note this is a very conservative estimate because the ITE trip generation rates for Land Use Code 944 represent the number of trips generated per vehicle fueling position at a standard passenger car fueling pump. ITE does not current provide trip generation rates for a RV fueling facility In reality, the proposed RV fueling stations are likely to have a much lower service rate due to longer fueling times and lower demand compared to passenger cars. Furthermore, the trip generation forecast does not include reductions for pass-by trips.

As shown in Table 2, Phase 1 of the proposed project is forecast to generate a total of approximately 516 daily trips, including 30 trips during the AM peak hour and 42 trips during the PM peak hour.

As shown in Table 2, Phase 2 of the proposed project is forecast to generate a total of approximately 2,461 daily trips, including 267 trips during the AM peak hour and 132 trips during the PM peak hour.

As shown in Table 2, the proposed project (Phase 1 and Phase 2 combined) is forecast to generate a total of approximately 2,977 daily trips, including 297 trips during the AM peak hour and 174 trips during the PM peak hour.

PROJECT TRIP DISTRIBUTION AND ASSIGNMENT

Figure 14 to Figure 17 show the forecast directional outbound and inbound distribution patterns for the project generated trips. The project trip distribution patterns are based on review of existing volume data, surrounding land uses, and the local and regional roadway facilities in the project vicinity. Full access for the project site is proposed to County Line Lane via two project driveways. All egress for the project site will occur at these two driveways. Right turn in only access for the project site is proposed to County Line Road via one project driveway. This driveway is ingress only.

Based on the identified project trip generation and distributions, Project Phase 1 average daily traffic volumes for have been calculated and shown on Figure 18. Project Phase 1 AM and PM peak hour intersection turning movement volumes are depicted on Figure 19 and Figure 20, respectively. Project Phase 2 average daily traffic volumes have been calculated and shown on Figure 21. Project Phase 2 AM and PM peak hour intersection turning movement volumes are depicted on Figure 22 and Figure 23, respectively.

PROJECT DESIGN FEATURES

The proposed project shall construct the following improvements to provide project site access:

Coffee Shop Access (NS) at County Line Lane (EW) - #2

- Construct the project driveway to provide one inbound lane and one outbound lane with northbound stop-control.
- The existing eastbound lane on County Line Lane will be widened and allow shared through/right turn movements.
- The existing westbound lane on County Line Lane will be widened and allow shared through/left turn movements.
- The new northbound lane at the Coffee Shop Access will allow shared left/right turn movements.

RV Access (NS) at County Line Lane (EW) - #3

- Construct the project driveway to provide one inbound lane and one outbound lane with northbound stop-control.
- The existing eastbound lane on County Line Lane will be widened and allow shared through/right turn movements.
- The existing westbound lane on County Line Lane will be widened and allow shared through/left turn movements.
- The new northbound lane at the RV Access will allow shared left/right turn movements.

Coffee Shop/RV Access (NS) at County Line Road (EW) - #4

- Construct the project driveway to provide one inbound lane.
- The existing westbound lane on County Line Road will allow shared through/right turn movements.
- The Coffee Shop/RV Access will be restricted to right turns in only with no egress.

Table 2
Project Trip Generation - Phase 1 and Phase 2

Trip Generation Rates									
			AM Peak Hour			PM Peak Hour			Daily
Land Use	Source[1]	Units[2]	% In	% Out	Rate	% In	% Out	Rate	Rate
Coffee/Donut Shop with Drive-Thru	ITE 937	TSF	51%	49%	88.99	50%	50%	43.88	820.38
RV Fueling Facility/Gas Station	ITE 944	FP	50%	50%	10.28	50%	50%	14.03	172.01

Trips Generated									
			AM Peak Hour			PM Peak Hour			
Land Use	Quantity	Units[2]	In	Out	Total	In	Out	Total	Daily
Coffee/Donut Shop with Drive-Thru	3.000	TSF	136	131	267	66	66	132	2,461
RV Fueling Facility/Gas Station[3]	3	FP	15	15	30	21	21	42	516
Total			151	146	297	87	87	174	2,977

Notes:

(1) ITE = Institute of Transportation Engineers, Trip Generation Manual, 10th Edition, 2017; XXX= Land Use Code

(2) TSF = Thousand Square Feet; VFP = Vehicle Fueling Positions

(3) A passenger car equivalent (PCE) is a metric to assess the impact of larger vehicles, such as trucks, recreational vehicles, and buses, by converting the traffic volume of larger vehicles to an equivalent number of passenger cars. In consultation with City of Calimesa staff, the passenger car equivalent for a RV using the RV fueling facility would be 3.0. Thus, each trip generated by the RV fueling facility would be equivalent to 3 passenger cars.

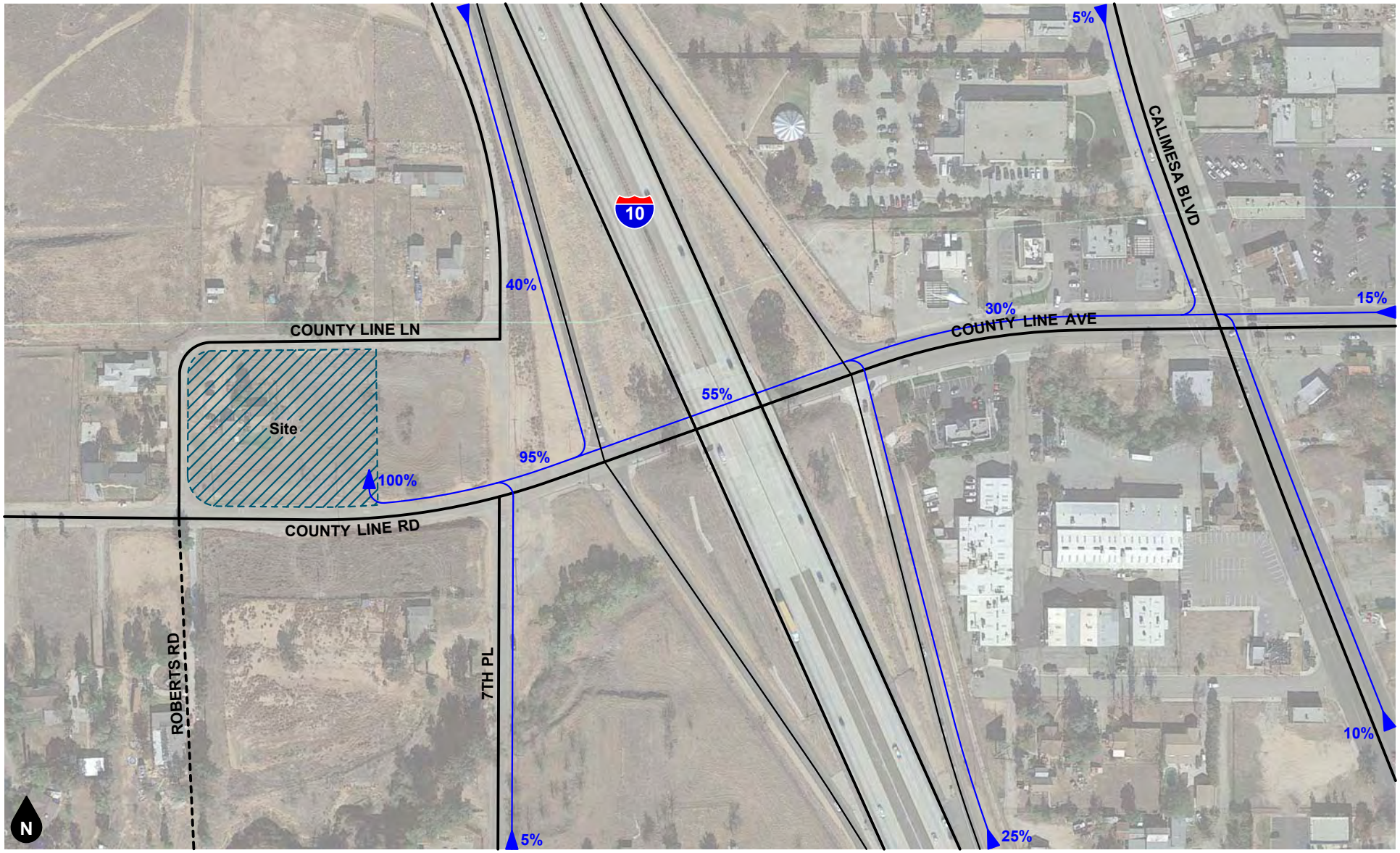
However, it is important to note that the trip generation used in this report for the RV fueling facility is a very conservative estimate because the ITE trip generation rates for Land Use Code 944 represent the number of trips generated per vehicle fueling position at a standard passenger car fueling pump. ITE does not currently provide trip generation rates for a RV fueling facility In reality, the proposed RV fueling stations are likely to have a much lower service rate due to longer fueling times and lower demand compared to passenger cars. Furthermore, the trip generation forecast does not include reductions for pass-by trips.

For these reasons, the passenger car equivalent of 3.0 was not applied to the trip generation for the RV fueling facility.

Legend

10% Percent From Project

Figure 14
Project Outbound Trip Distribution RV Fueling Facility (Phase 1)



Legend

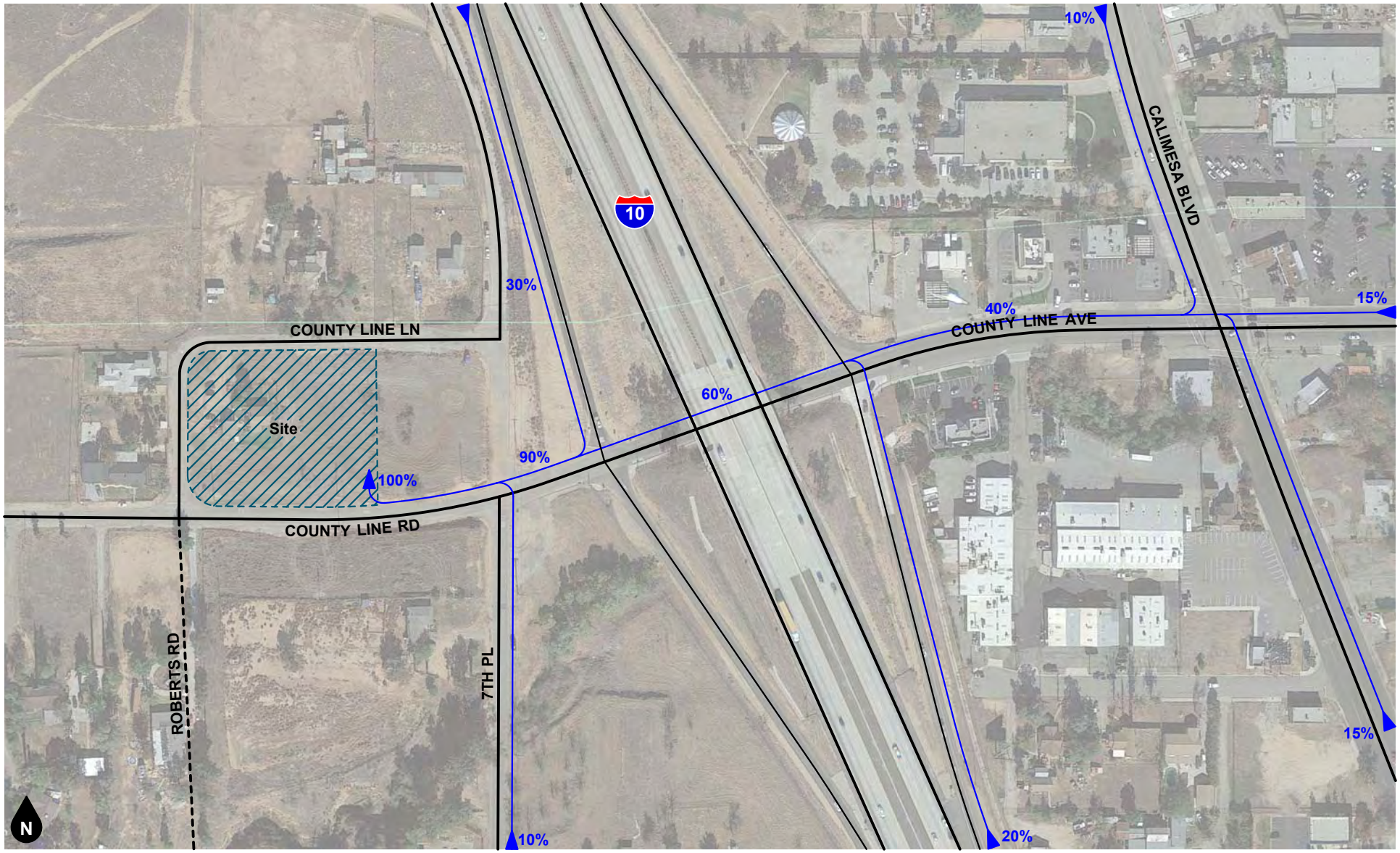
10% Percent To Project

Figure 15
Project Inbound Trip Distribution RV Fueling Facility (Phase 1)

Legend

10% Percent From Project

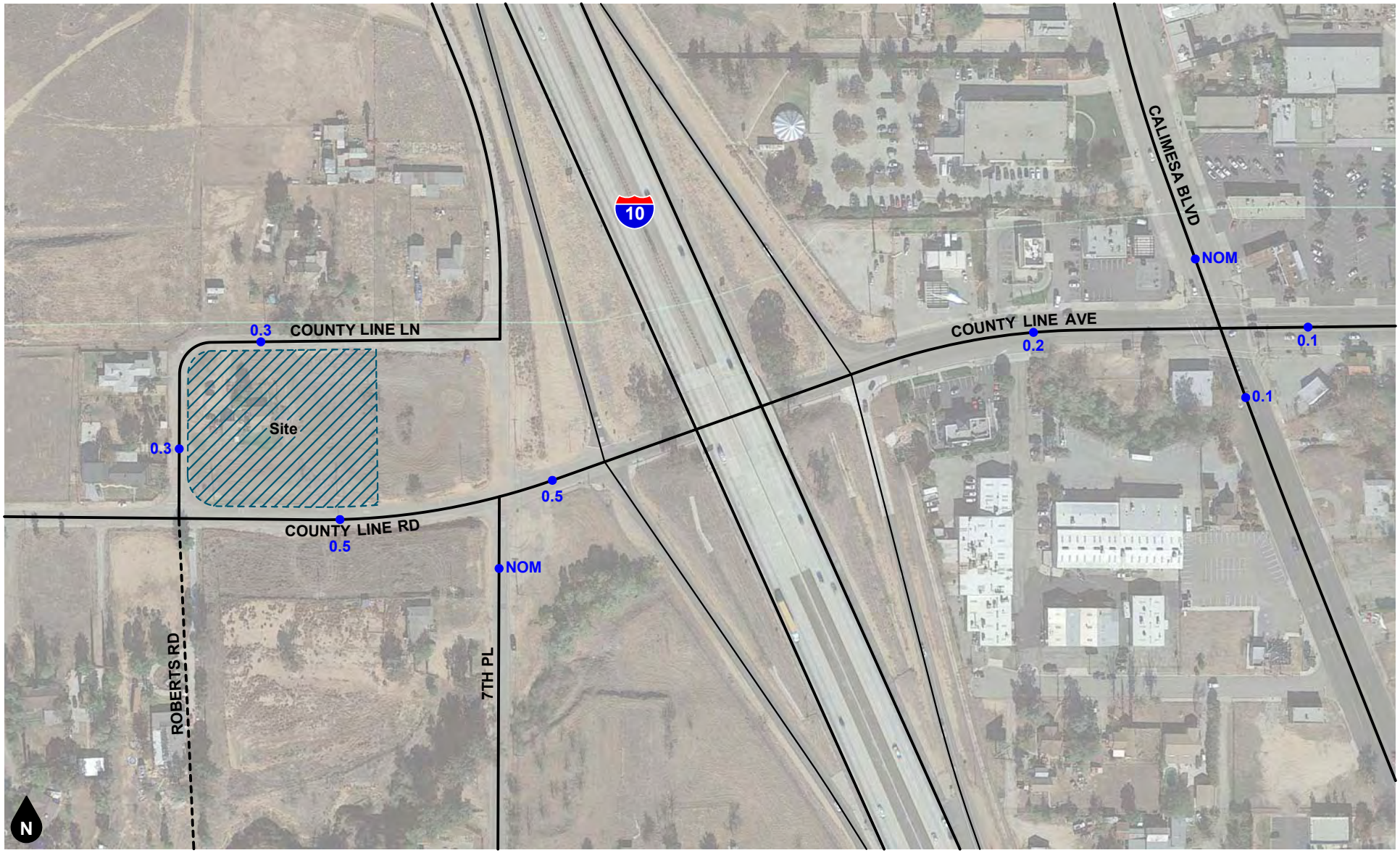
Figure 16
Project Outbound Trip Distribution
Coffee/Donut Shop with Drive-Thru (Phase 2)



Legend

10% Percent To Project

Figure 17
Project Inbound Trip Distribution
Coffee/Donut Shop with Drive-Thru (Phase 2)

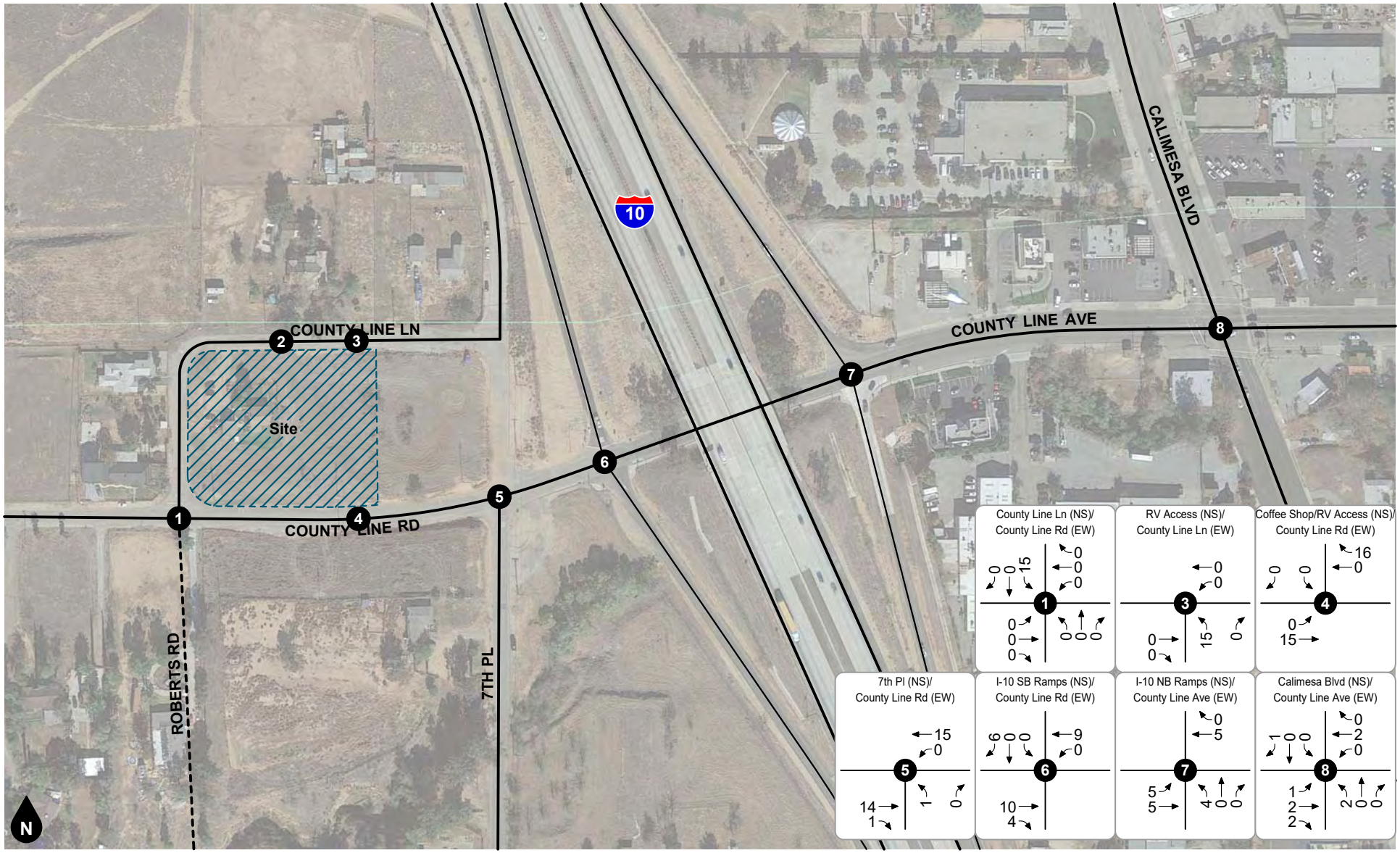


Legend

●## Vehicles Per Day (1,000's)

NOM Nominal; Less Than 50 Vehicles Per Day

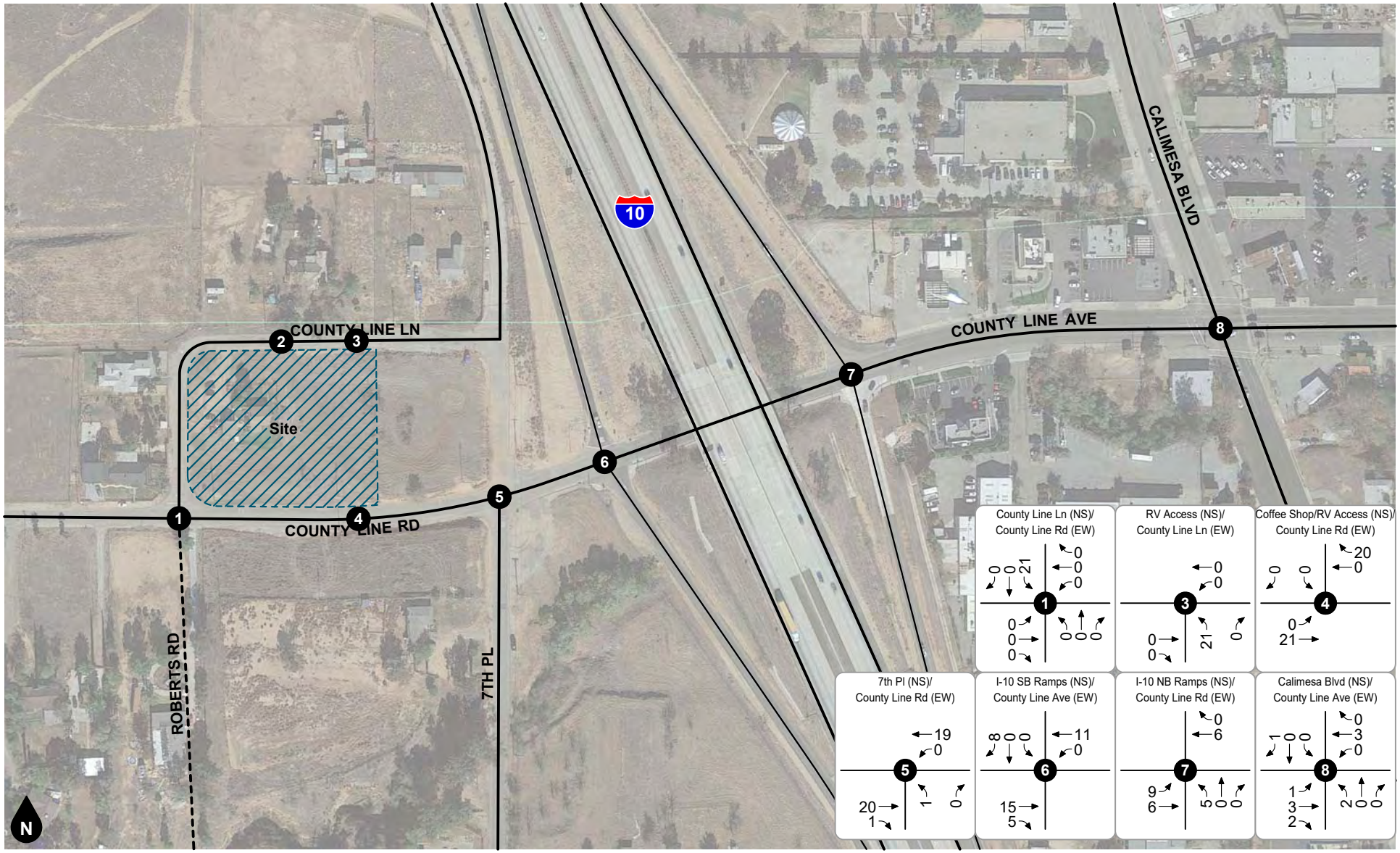
Figure 18
Project Average Daily Traffic Volumes - Phase 1



Legend

(#) Study Intersection

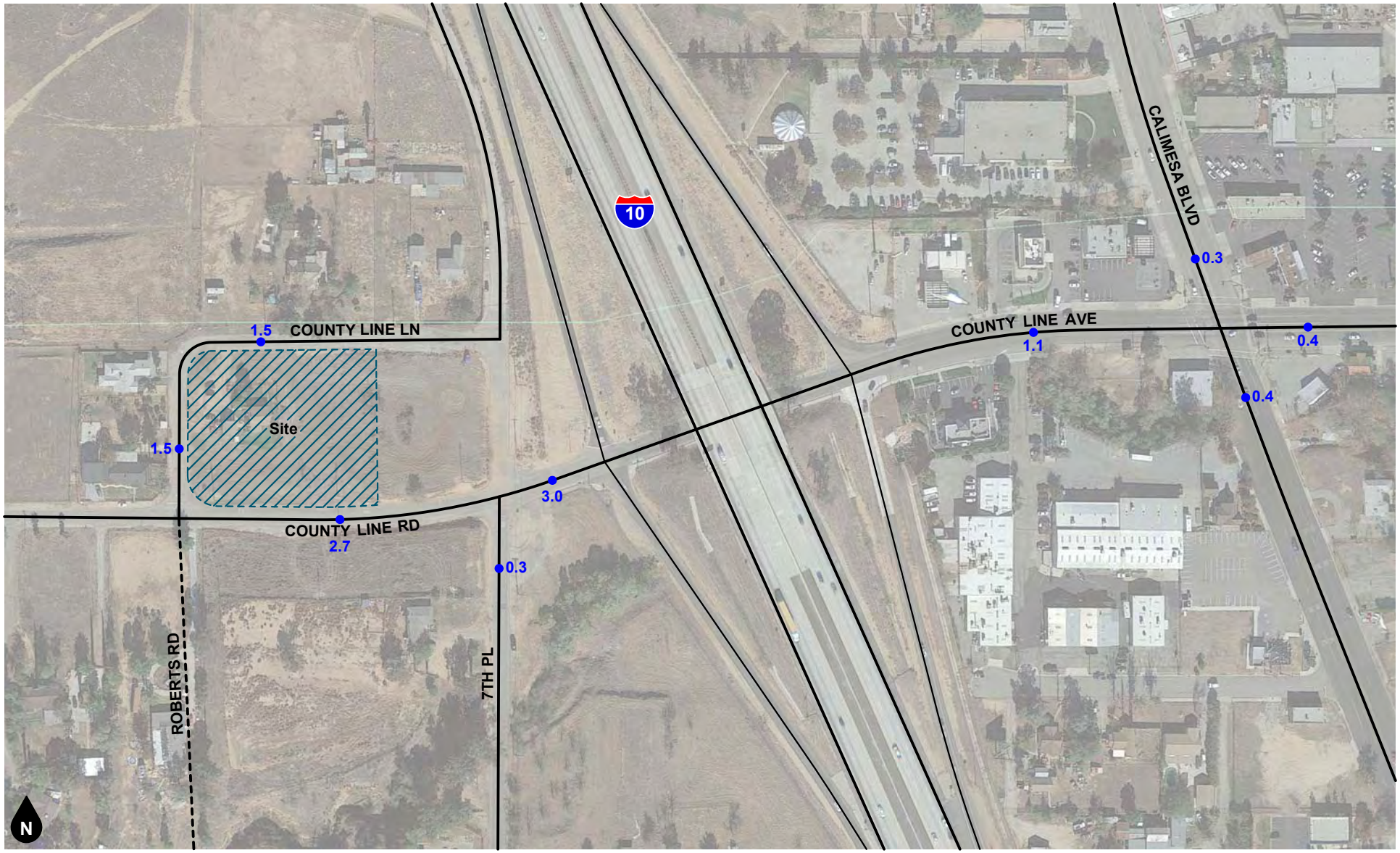
Figure 19
Project AM Peak Hour Intersection Turning Movement Volumes - Phase 1



Legend

Study Intersection

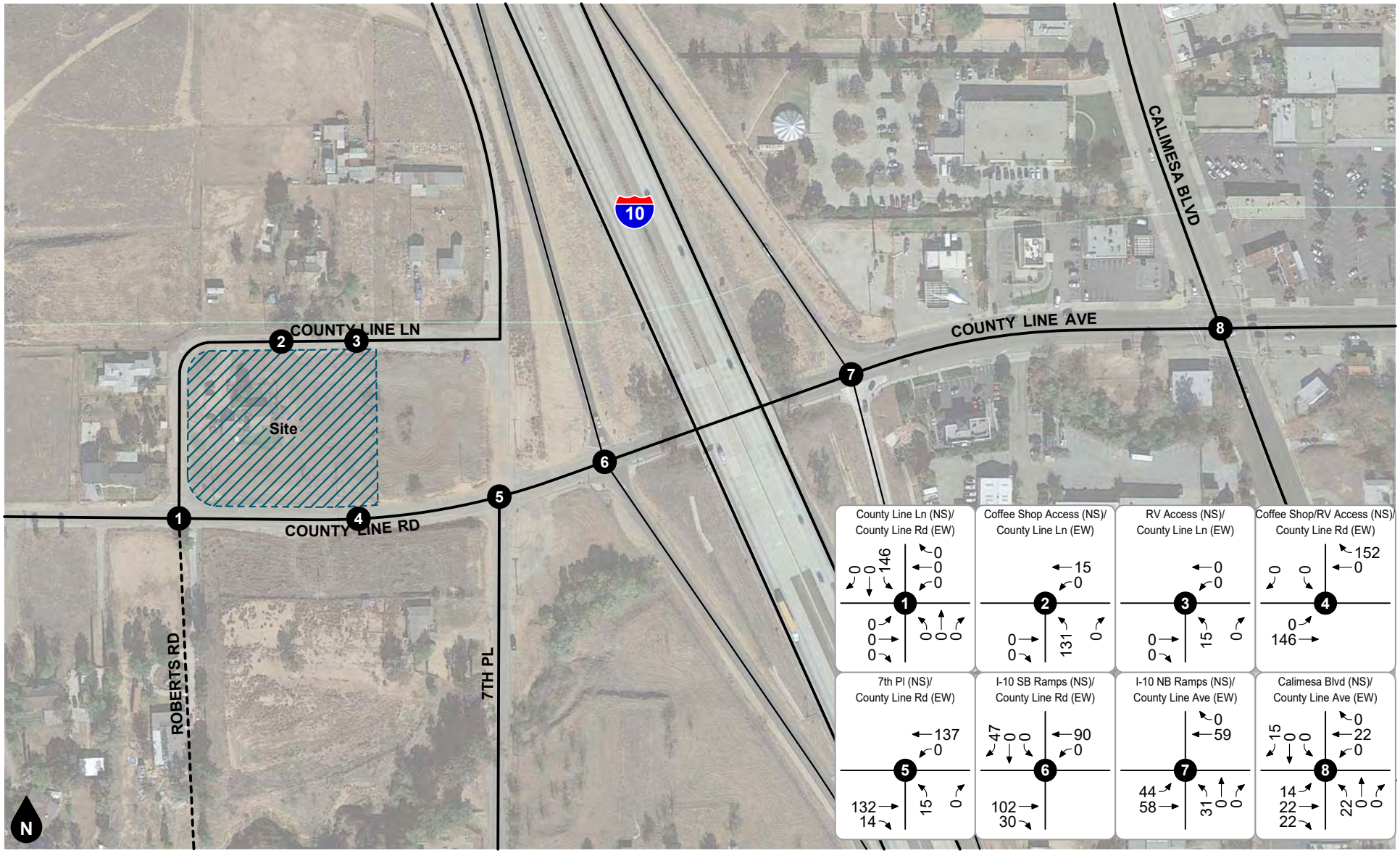
Figure 20
Project PM Peak Hour Intersection Turning Movement Volumes - Phase 1



Legend

●## Vehicles Per Day (1,000's)

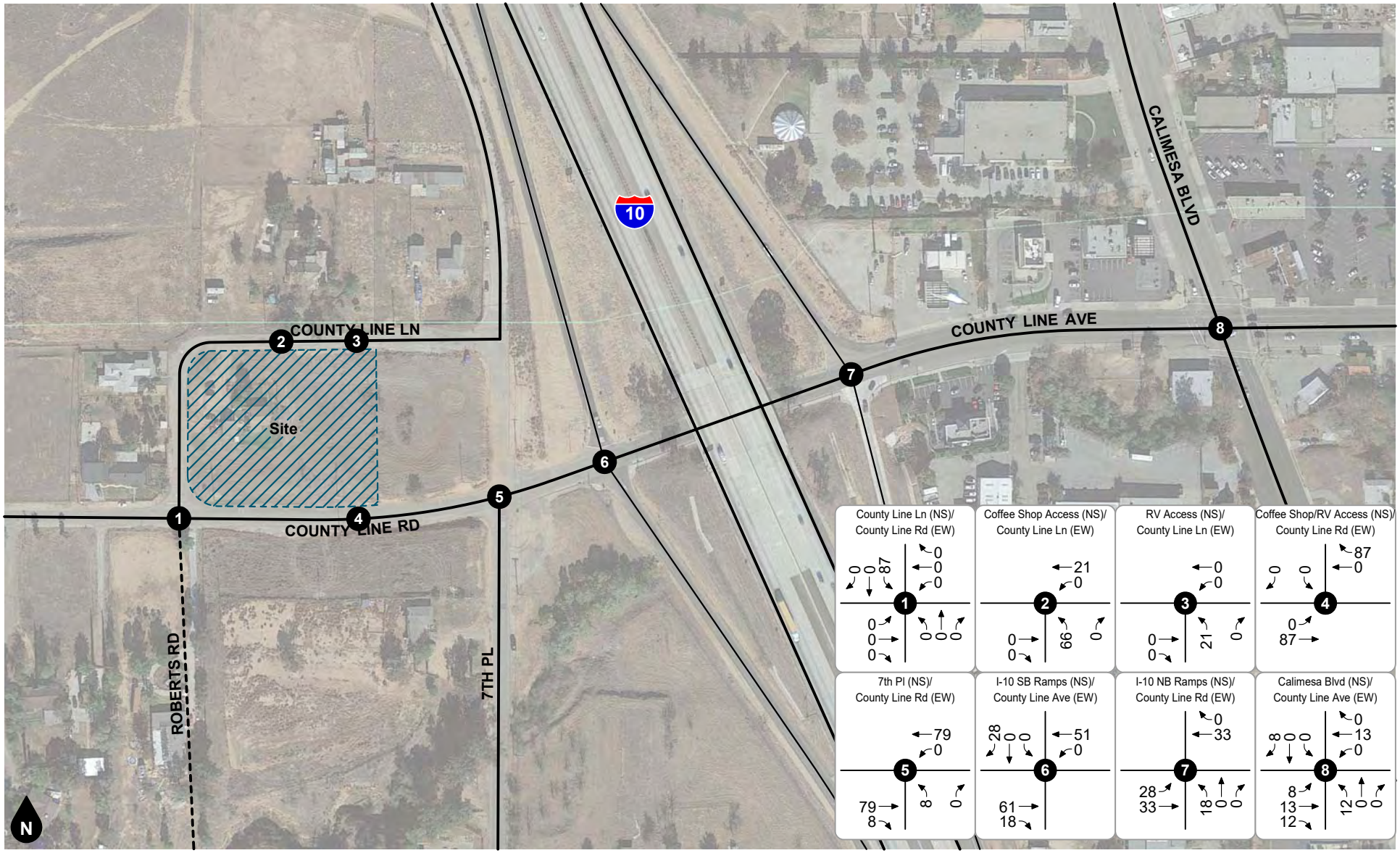
Figure 21
Project Average Daily Traffic Volumes - Phase 2



Legend

(#) Study Intersection

Figure 22
Project AM Peak Hour Intersection Turning Movement Volumes - Phase 2



Legend

Study Intersection

Figure 23
Project PM Peak Hour Intersection Turning Movement Volumes - Phase 2

5. FUTURE VOLUME FORECASTS

This section describes how future volume forecasts for each analysis scenario were developed. Forecast study area volumes are illustrated on figures contained in this section.

CUMULATIVE TRIPS

Ambient Growth Rate

To account for ambient growth on roadways, existing roadway volumes were increased by a growth rate of two percent (2%) per year over two years for Opening Year (2021) conditions. This equates to a total growth factor of approximately 1.04. The ambient growth rate was conservatively applied to all movements at the study intersections.

Other Development

To account for trips generated by future development, trips generated by pending or approved other development projects in the project vicinity were added to the study area. Table 3 shows the trip generation summary for other development projects and Figure 24 shows the other development location map.

Figure 25 shows the forecast average daily traffic volumes for the other development for Opening Year conditions. Figure 26 and Figure 27 show the forecast AM and PM peak hour intersection turning movement volumes for trips generated by other developments.

It should be noted that the Mesa Verde Specific Plan located west of the project site was not included in this analysis since the project is inactive.

ANALYSIS SCENARIO VOLUME FORECASTS

Existing Plus Project

Existing Plus Project volume forecasts were derived by adding the project generated trips to Existing volumes. Existing Plus Project average daily traffic volumes for Phase 1 are shown on Figure 28. Existing Plus Project AM and PM peak hour intersection turning movement volumes for Phase 1 are shown on Figure 29 and Figure 30.

Existing Plus Project volume forecasts were derived by adding the project generated trips to Existing volumes. Existing Plus Project average daily traffic volumes for Phase 2 are shown on Figure 31. Existing Plus Project AM and PM peak hour intersection turning movement volumes for Phase 2 are shown on Figure 32 and Figure 33.

Existing Plus Ambient

To develop Existing Plus Ambient volume forecasts, Existing volumes were combined with ambient growth. Existing Plus Ambient average daily traffic volumes are shown on Figure 34. Existing Plus Ambient AM and PM peak hour intersection turning movement volumes are shown on Figure 35 and Figure 36.

Existing Plus Ambient Plus Project

Existing Plus Ambient Plus Project volume forecasts were developed by adding project trips to the Existing Plus Ambient forecast. Existing Plus Ambient Plus Project average daily traffic volumes for Phase 1 are shown

on Figure 37. Existing Plus Ambient Plus Project AM and PM peak hour intersection turning movement volumes for Phase 1 are shown on Figure 38 and Figure 39.

Existing Plus Ambient Plus Project volume forecasts were developed by adding project trips to the Existing Plus Ambient forecast. Existing Plus Ambient Plus Project average daily traffic volumes for Phase 2 are shown on Figure 40. Existing Plus Ambient Plus Project AM and PM peak hour intersection turning movement volumes for Phase 2 are shown on Figure 41 and Figure 42.

Existing Plus Ambient Plus Project Plus Cumulative

Existing Plus Ambient Plus Project Plus Cumulative volume forecasts were developed by adding trips generated by other developments to the Existing Plus Ambient Plus Project forecast. Existing Plus Ambient Plus Project Plus Cumulative average daily traffic volumes for Phase 1 are shown on Figure 43. Existing Plus Ambient Plus Project Plus Cumulative AM and PM peak hour intersection turning movement volumes for Phase 1 are shown on Figure 44 and Figure 45.

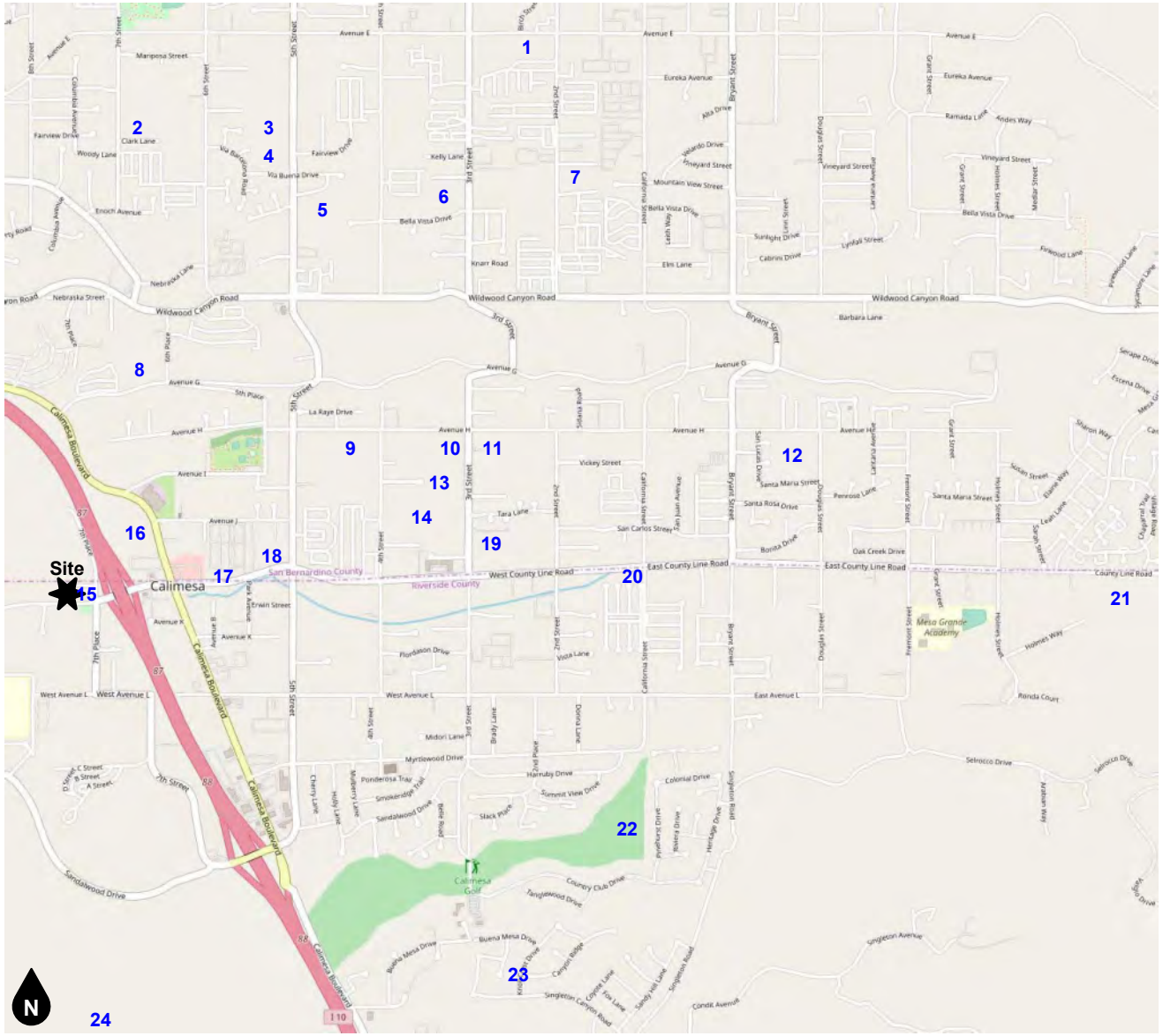
Existing Plus Ambient Plus Project Plus Cumulative volume forecasts were developed by adding trips generated by other developments to the Existing Plus Ambient Plus Project forecast. Existing Plus Ambient Plus Project Plus Cumulative average daily traffic volumes for Phase 2 are shown on Figure 46. Existing Plus Ambient Plus Project Plus Cumulative AM and PM peak hour intersection turning movement volumes for Phase 2 are shown on Figure 47 and Figure 48.

Table 3
Other Development Trip Generation

Project Name	Land Use	Quantity	Units[1]	Trips Generated[2]						
				AM Peak Hour			PM Peak Hour			
				In	Out	Total	In	Out	Total	Daily
Summerwind Specific Plan	Single-Family Detached Residential	600	DU	111	333	444	374	220	594	5,664
Heritage Oaks Specific Plan	Single-Family Detached Residential	45	DU	8	25	33	28	16	44	425
Singleton Heights	Single-Family Detached Residential	38	DU	7	21	28	24	14	38	359
JP Ranch	Single-Family Detached Residential	121	DU	22	67	89	75	44	119	1,142
Country Club Village	Mixed-Use	--	--	342	280	622	288	261	549	6,837
B&H Fuel Station & C-Store	Service Station w/ Convenience Market	8	FP	51	49	100	57	55	112	1,643
	- Pass-By Reduction (62% AM, 56% PM)			-32	-30	-62	-32	-31	-63	-125
	Subtotal			19	19	38	25	24	49	1,518
76/Circle K Fuel Station & C-Store	Mixed-Use	--	--	79	66	145	73	69	142	2,836
Rancho Citrus Business Park	Mixed-Use	--	--	93	26	119	50	126	176	1,790
18-121/CUP	Commercial Flex	37.211	TSF	9	6	15	7	8	15	463
17-103/CUP	Car Wash	1	ST	18	18	36	41	41	82	900
17-118/LUCR	Senior Attached Housing	96	DU	7	12	19	14	11	25	355
17-024/GPA/TTM 20040	Single-Family Detached Residential	29	DU	5	16	21	18	11	29	274
17-001/CUP	Apartments	26	DU	3	9	12	9	5	14	190
16-103/TTM 20048	Multi-Family	21	DU	2	7	9	7	4	11	154
16-081/CUP/TTM 17031	Condominiums	33	DU	3	12	15	12	7	19	242
14-140/CUP/TTM 19929	Condominiums	40	DU	4	14	18	14	8	22	293
14-085/TTM 19900	Single-Family Detached Residential	18	DU	3	10	13	11	7	18	170
16-162/CUP	Apartments	16	DU	2	6	8	6	3	9	117
17-127/TTM 20146, 17-127/TTM 20146	Multi-Family	30	DU	3	11	14	11	6	17	220
15-048/CUP/TTM 18167	Condominiums	57	DU	6	20	26	20	12	32	417
16-026/CUP. 15-137/ARC/TTM 17725	Condominiums	108	DU	11	38	49	38	22	60	791
14-151/CUP/ARC	Apartments	18	DU	2	6	8	6	4	10	132
17-089/LUCR	Duplex	2	DU	0	1	1	1	0	1	15
17-012/CUP	Multi-Family	14	DU	1	5	6	5	3	8	102
16-117/TTM 20031/CUP	Condominiums	68	DU	7	24	31	24	14	38	498
16-144/TTM 20066	Single-Family Detached Residential	18	DU	3	10	13	11	7	18	170
Total				770	1,062	1,832	1,192	947	2,139	26,074

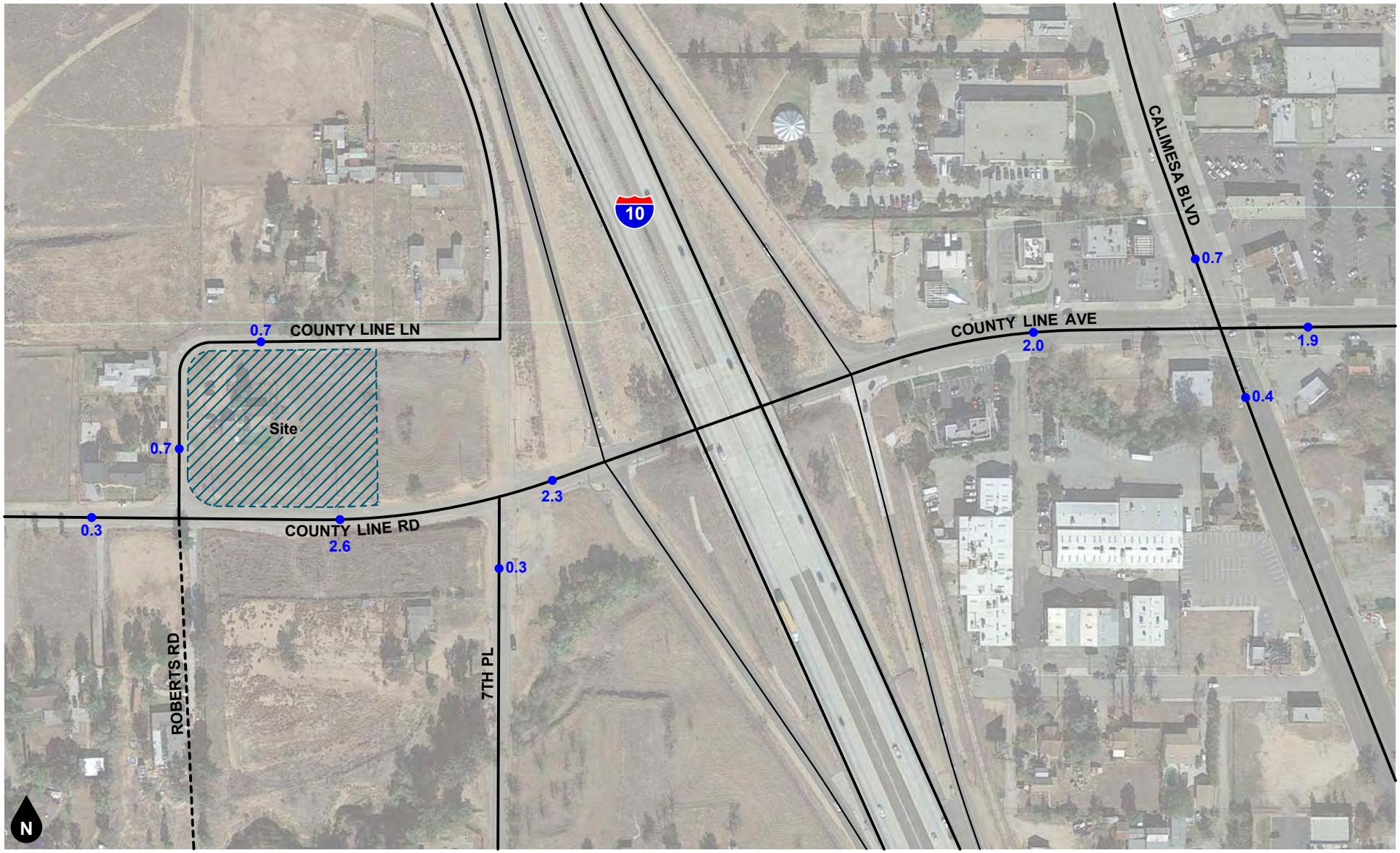
Notes:
(1) DU = Dwelling Units; FP = Fueling Positions; TSF = Thousand Square Feet; ST = Site

(2) Based on trip generation and pass-by rates from:
Institute of Transportation Engineers, Trip Generation Manual, 10th Edition, 2017;
Institute of Transportation Engineers, Trip Generation Handbook, 3rd Edition, 2017;
San Diego Association of Governments, Brief Guide of Vehicular Traffic Generation Rates for San Diego Region, April 2002.



1 16-162/CUP
2 17-001/CUP
3 16-103/TTM 20048
4 16-081/CUP/TTM 17031
5 14-140/CUP/TTM 19929
6 14-085/TTM 19900
7 17-127/TTM 20146
8 17-024/GPA/TTM 20040
9 15-048/CUP/TTM 18167
10 17-089/LUCR
11 17-012/CUP
12 16-144/TTM 20066
13 14-151/CUP/ARC
14 16-026/CUP, 15-137/ARC/TTM 17725
15 76/Circle K Fuel Station & C-Store
16 18-121/CUP
17 17-103/CUP
18 17-118/LUCR
19 16-117/TTM 20031/CUP
20 B&H Fuel Station & C-Store
21 Heritage Oaks Specific Plan
22 JP Ranch
23 Singleton Heights
24 Summerwind Specific Plan

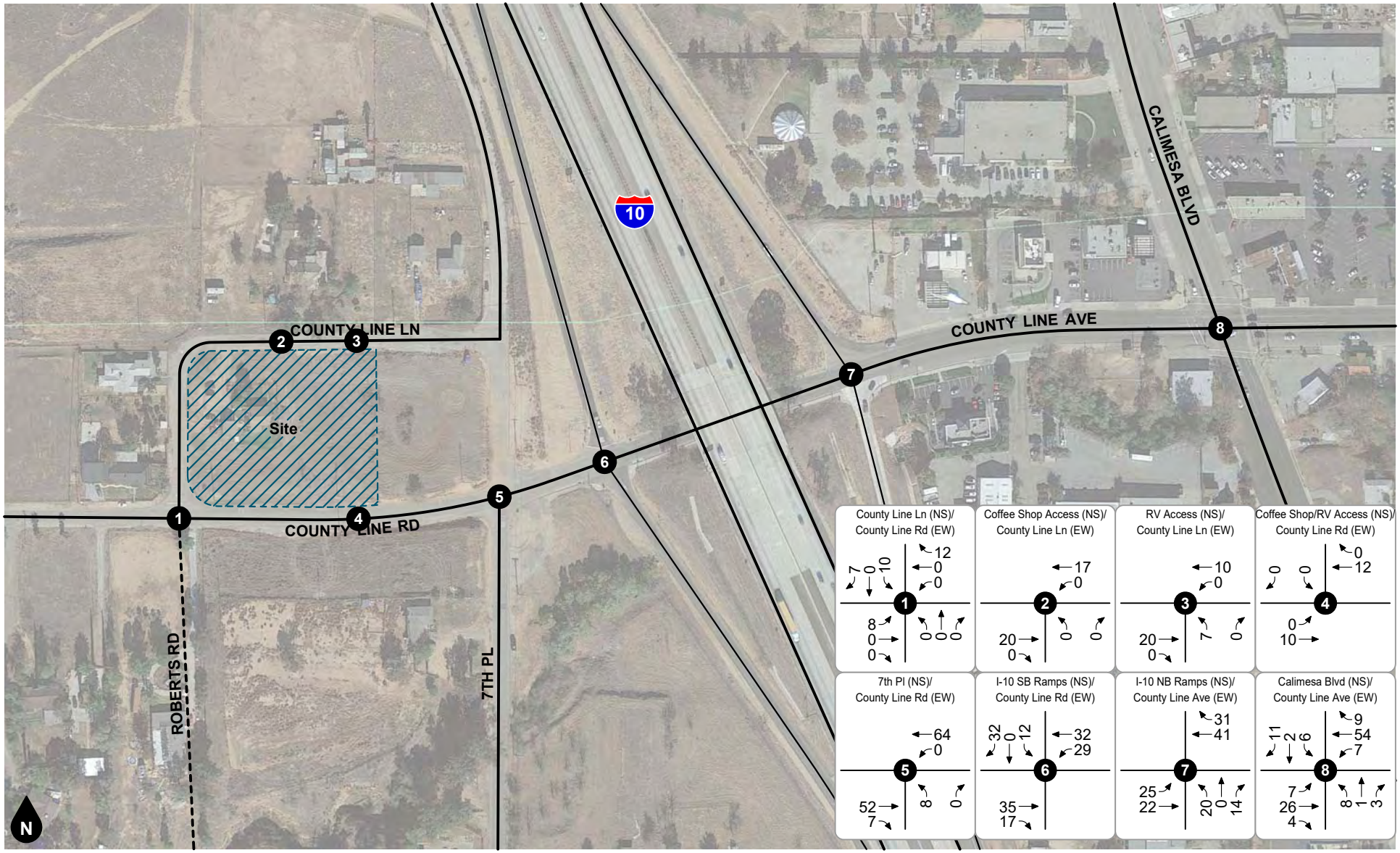
Figure 24
Other Development Location Map



Legend

●## Vehicles Per Day (1,000's)

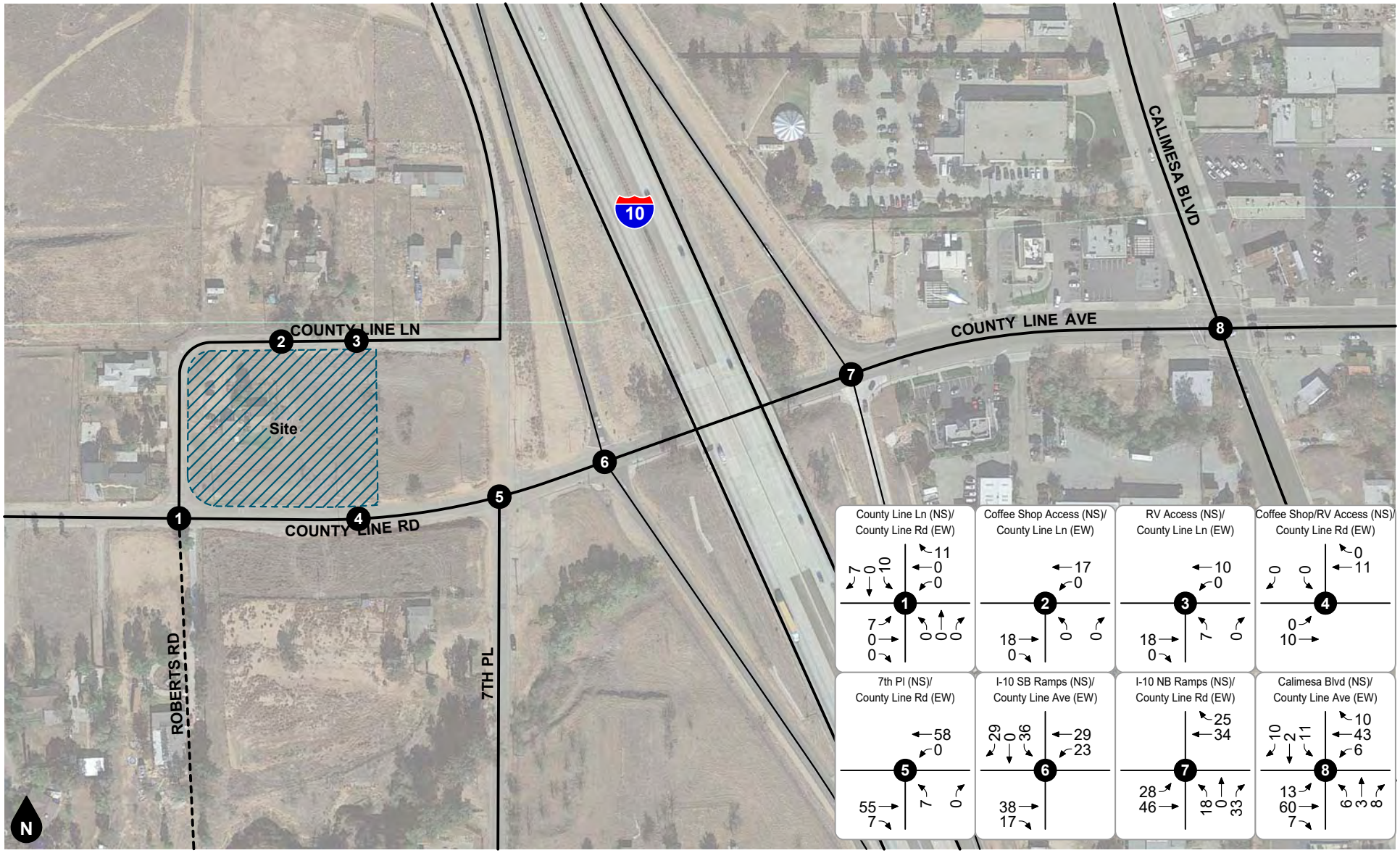
Figure 25
Other Development Average Daily Traffic Volumes



Legend

Study Intersection

Figure 26
Other Development
AM Peak Hour Intersection Turning Movement Volumes



Legend

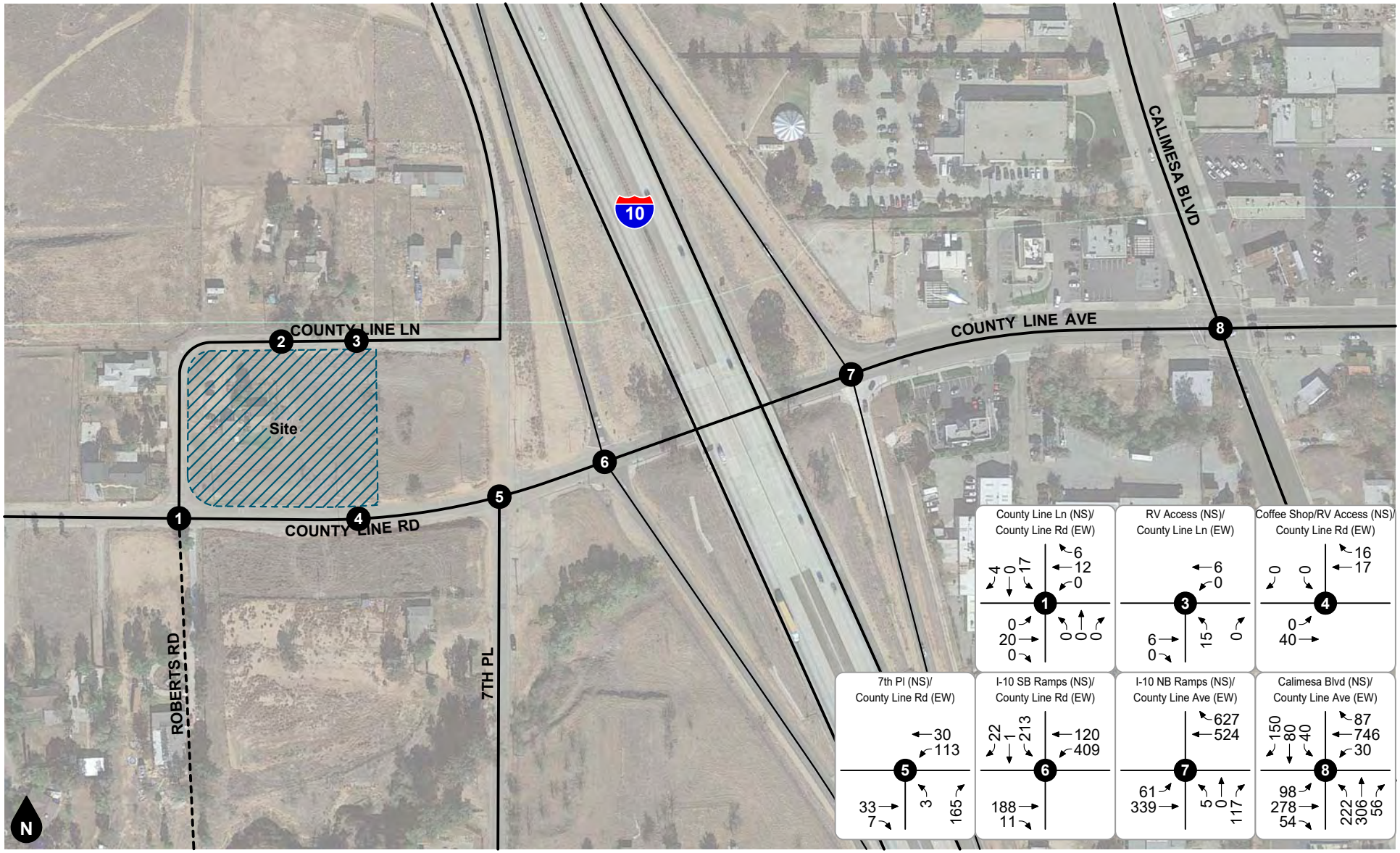
Study Intersection

Figure 27
Other Development
PM Peak Hour Intersection Turning Movement Volumes

Legend

●## Vehicles Per Day (1,000's)

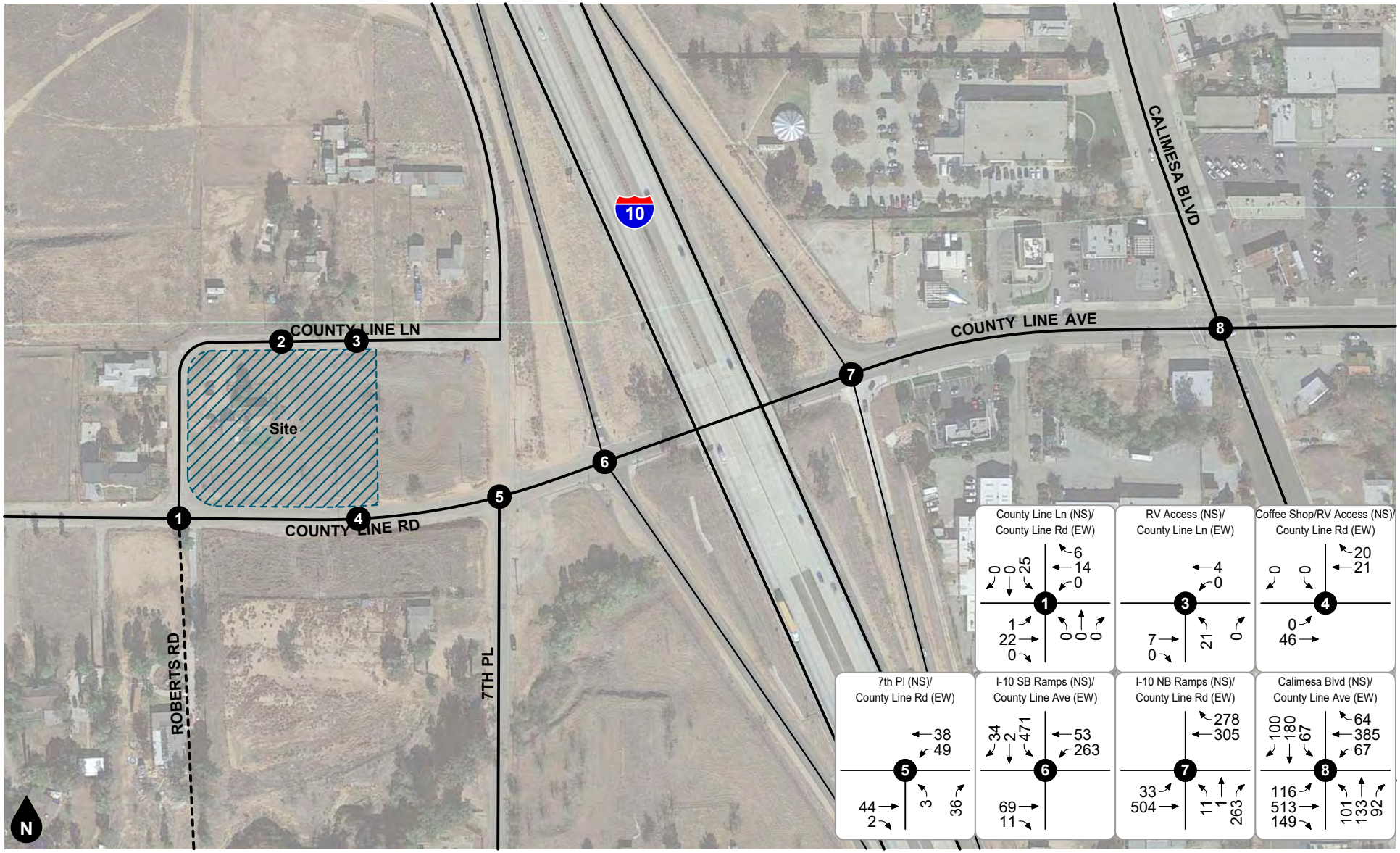
Figure 28
Existing Plus Project Average Daily Traffic Volumes - Phase 1



Legend

Study Intersection

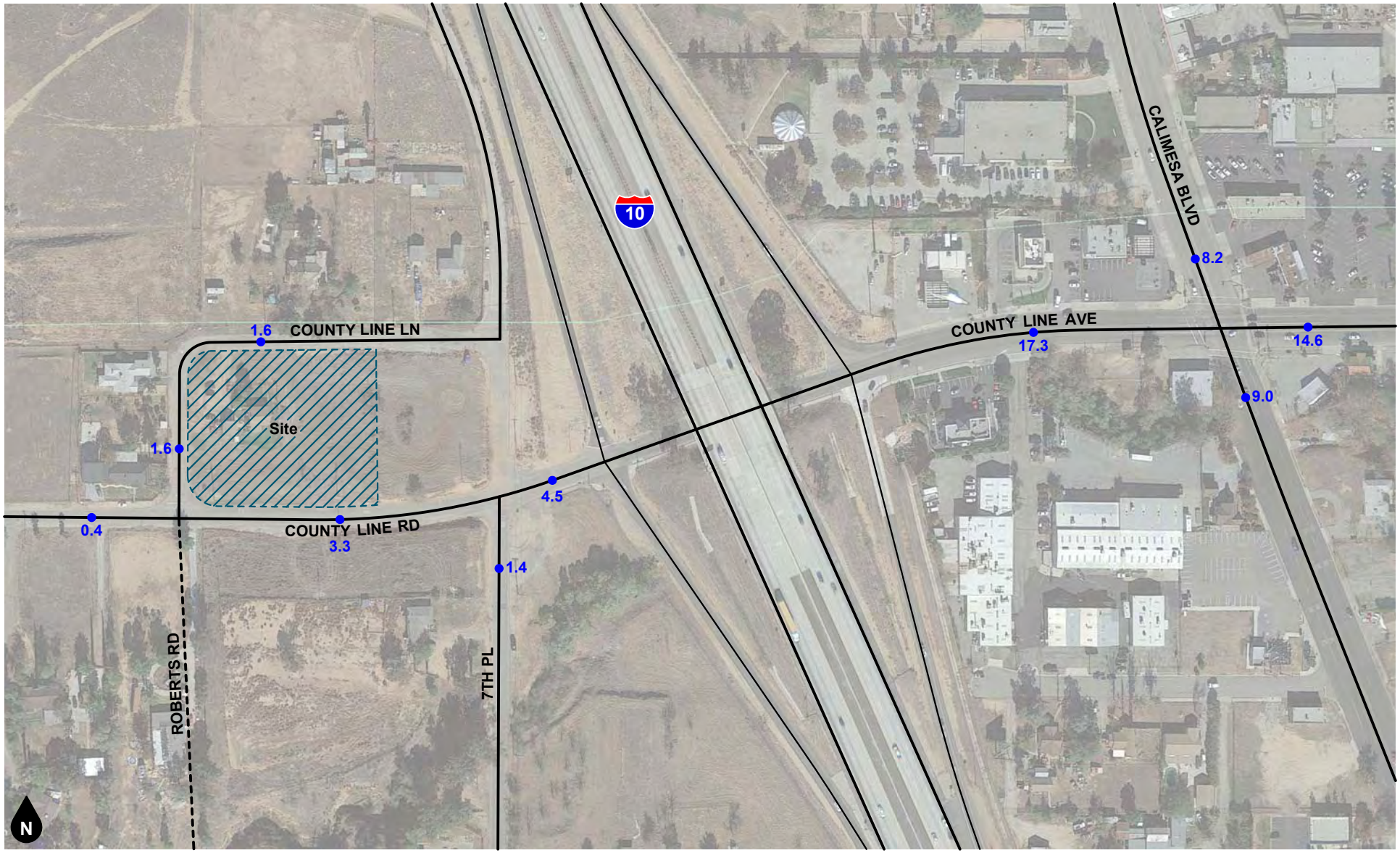
Figure 29
Existing Plus Project
AM Peak Hour Intersection Turning Movement Volumes - Phase 1



Legend

Study Intersection

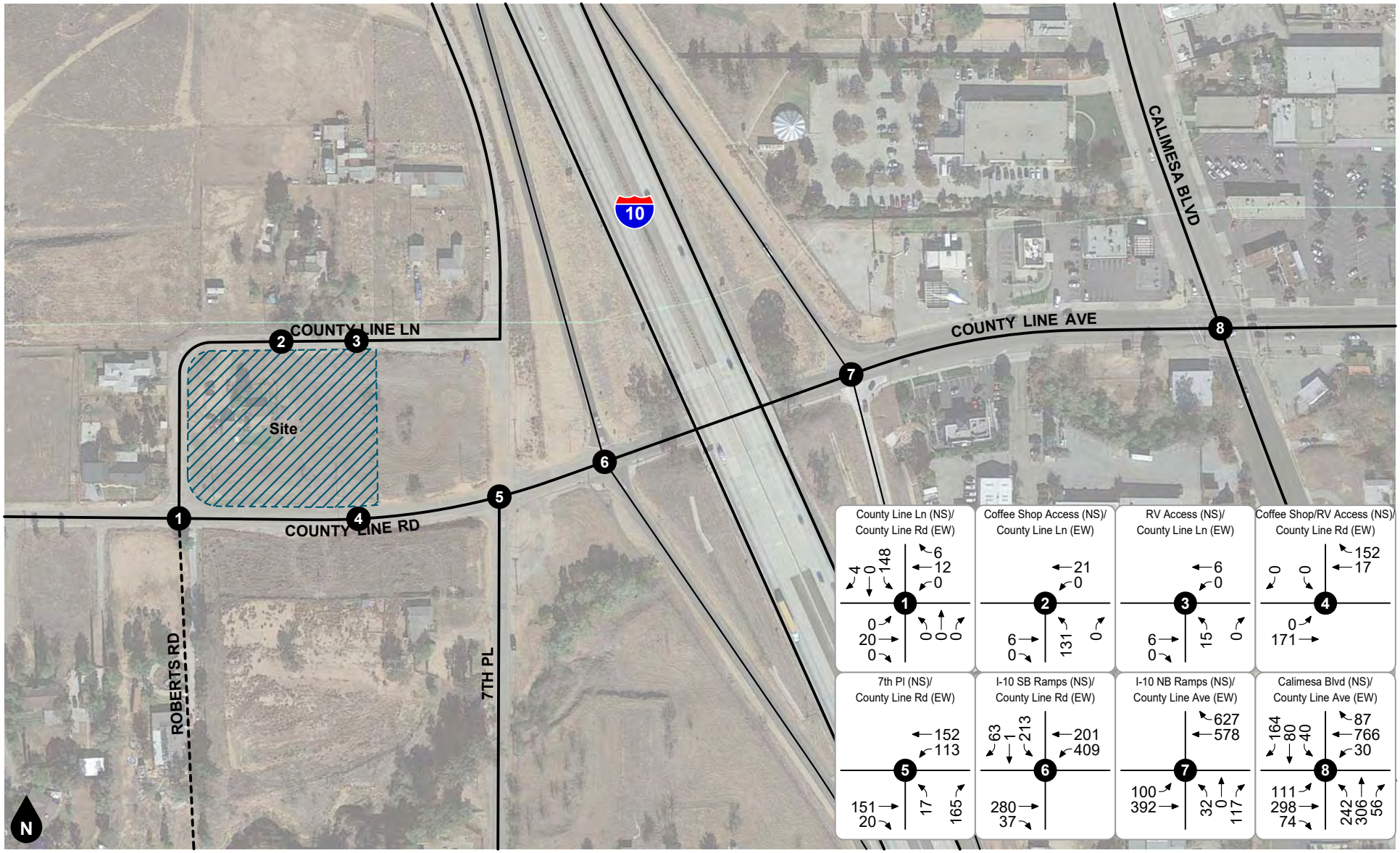
Figure 30
Existing Plus Project
PM Peak Hour Intersection Turning Movement Volumes - Phase 1



Legend

●## Vehicles Per Day (1,000's)

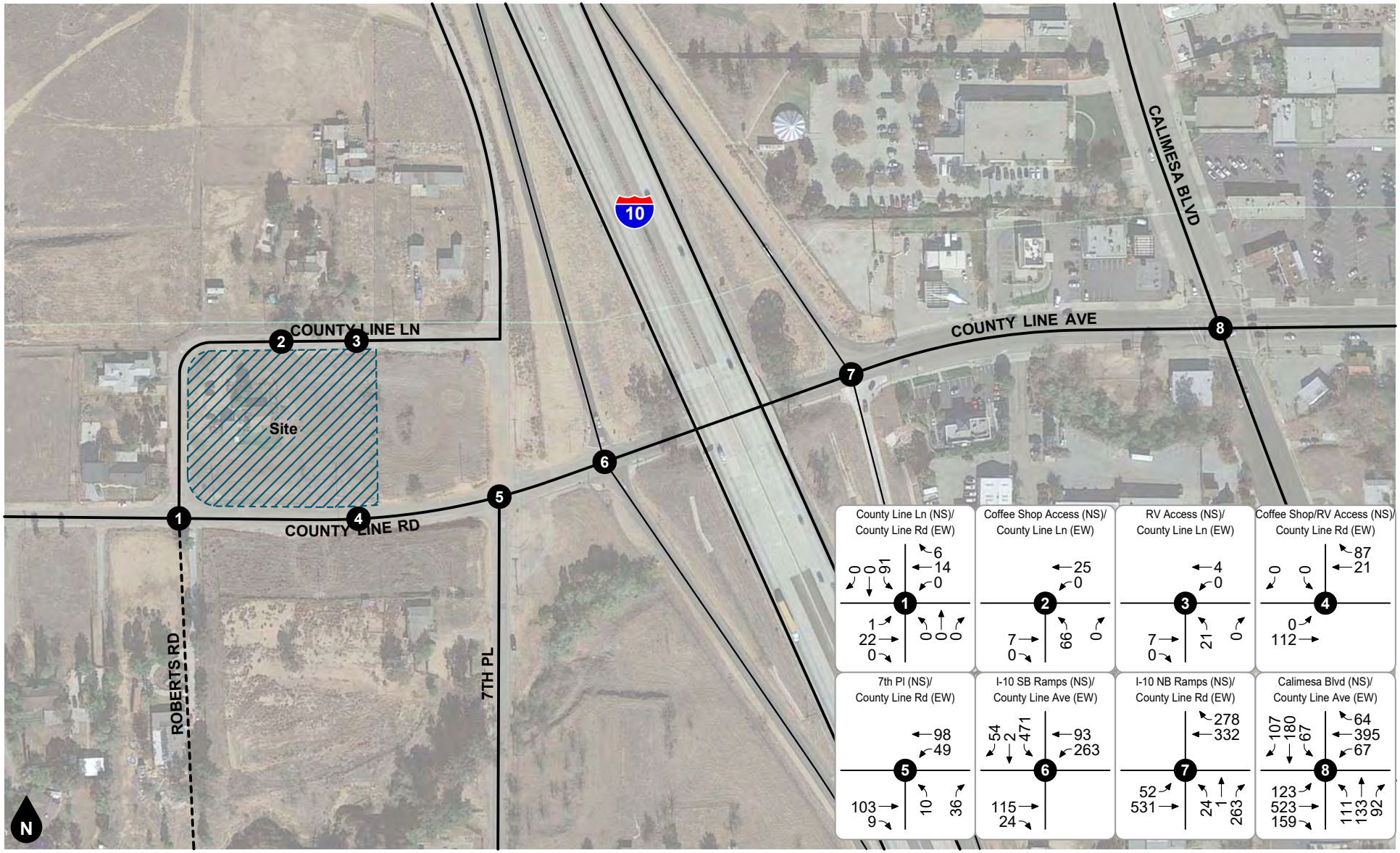
Figure 31
Existing Plus Project Average Daily Traffic Volumes - Phase 2



Legend

Study Intersection

Figure 32
Existing Plus Project
AM Peak Hour Intersection Turning Movement Volumes - Phase 2



Legend

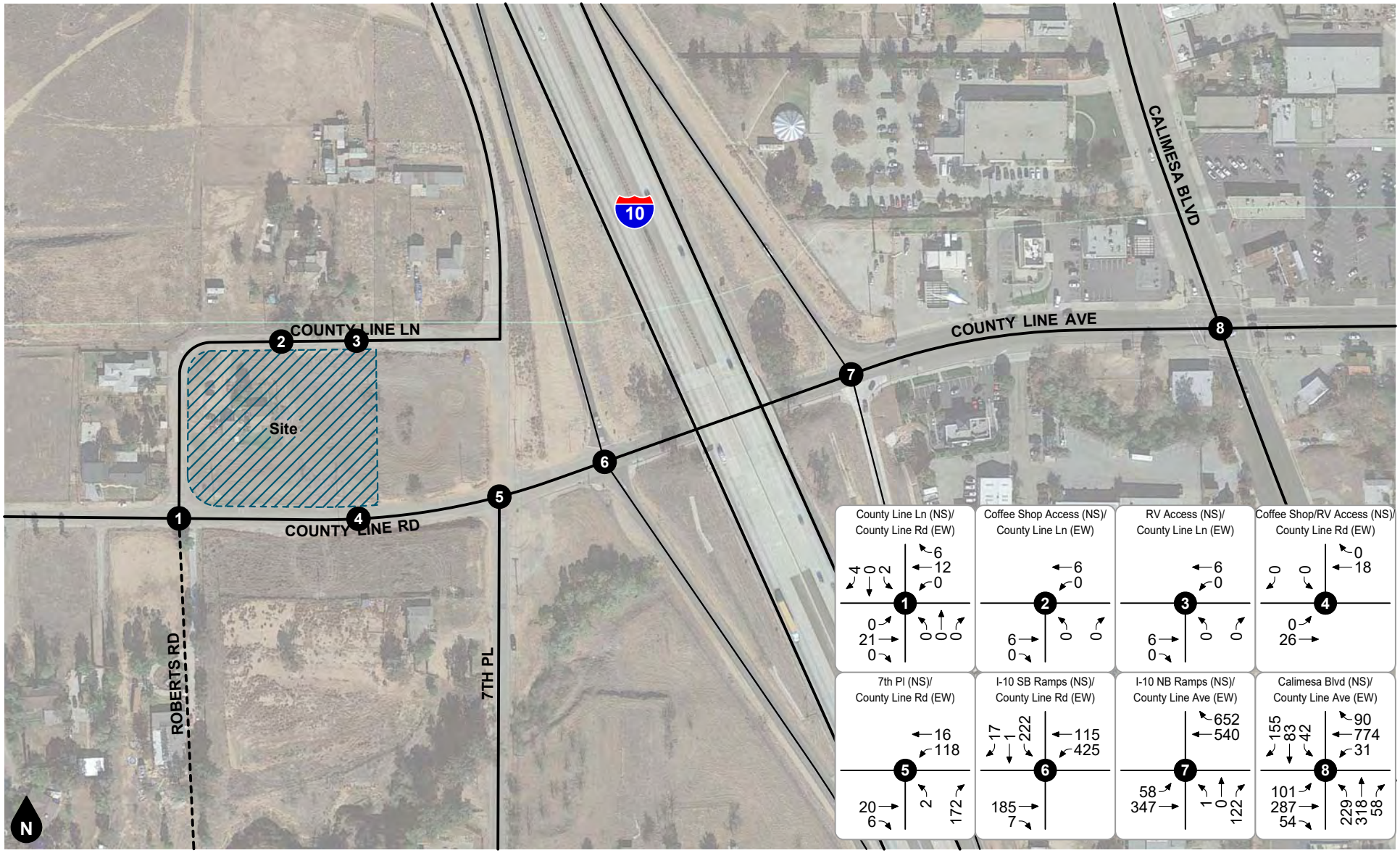
Study Intersection

Figure 33
Existing Plus Project
PM Peak Hour Intersection Turning Movement Volumes - Phase 2

Legend

●## Vehicles Per Day (1,000's)

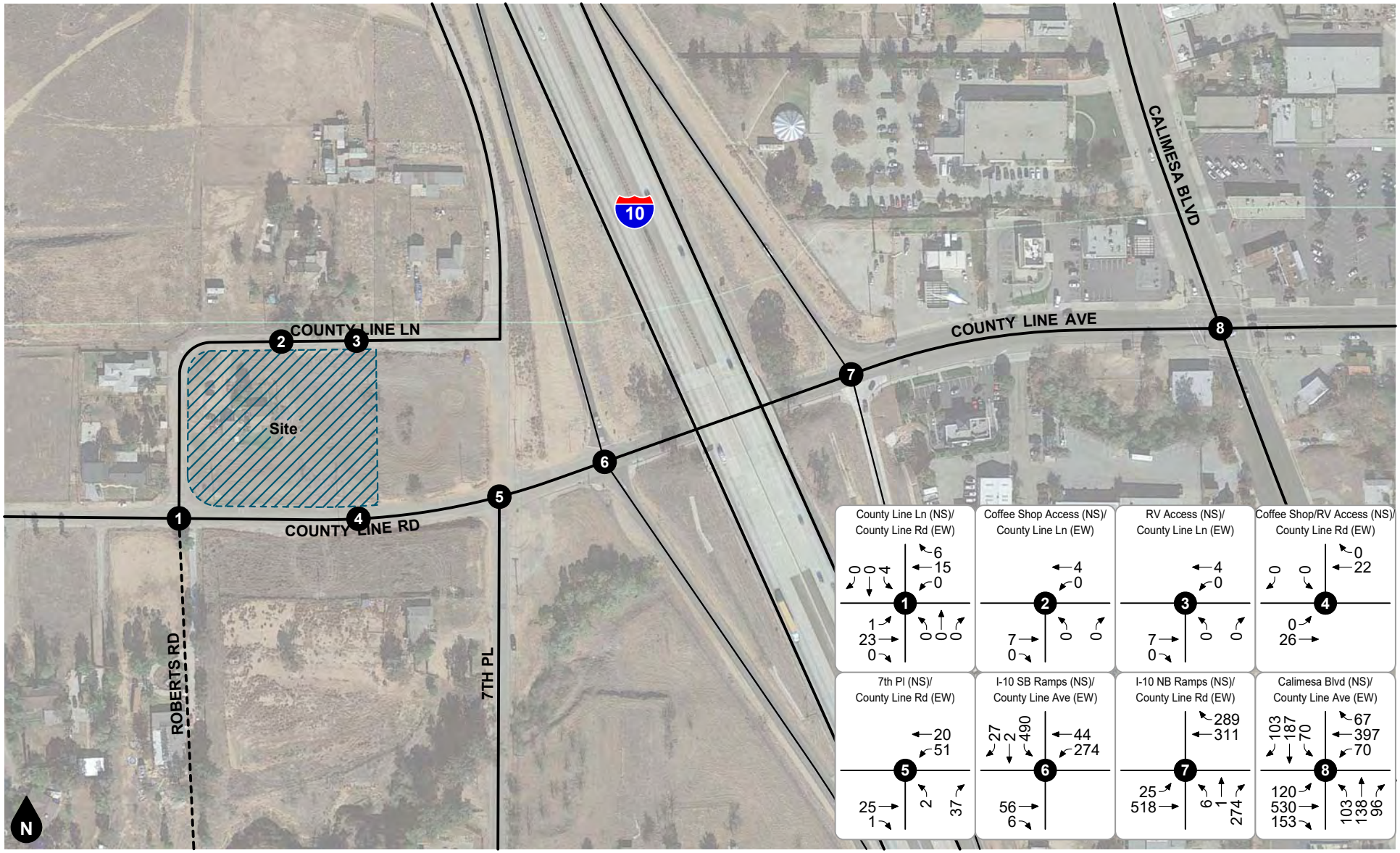
Figure 34
Existing Plus Ambient Average Daily Traffic Volumes



Legend

Study Intersection

Figure 35
Existing Plus Ambient
AM Peak Hour Intersection Turning Movement Volumes



Legend

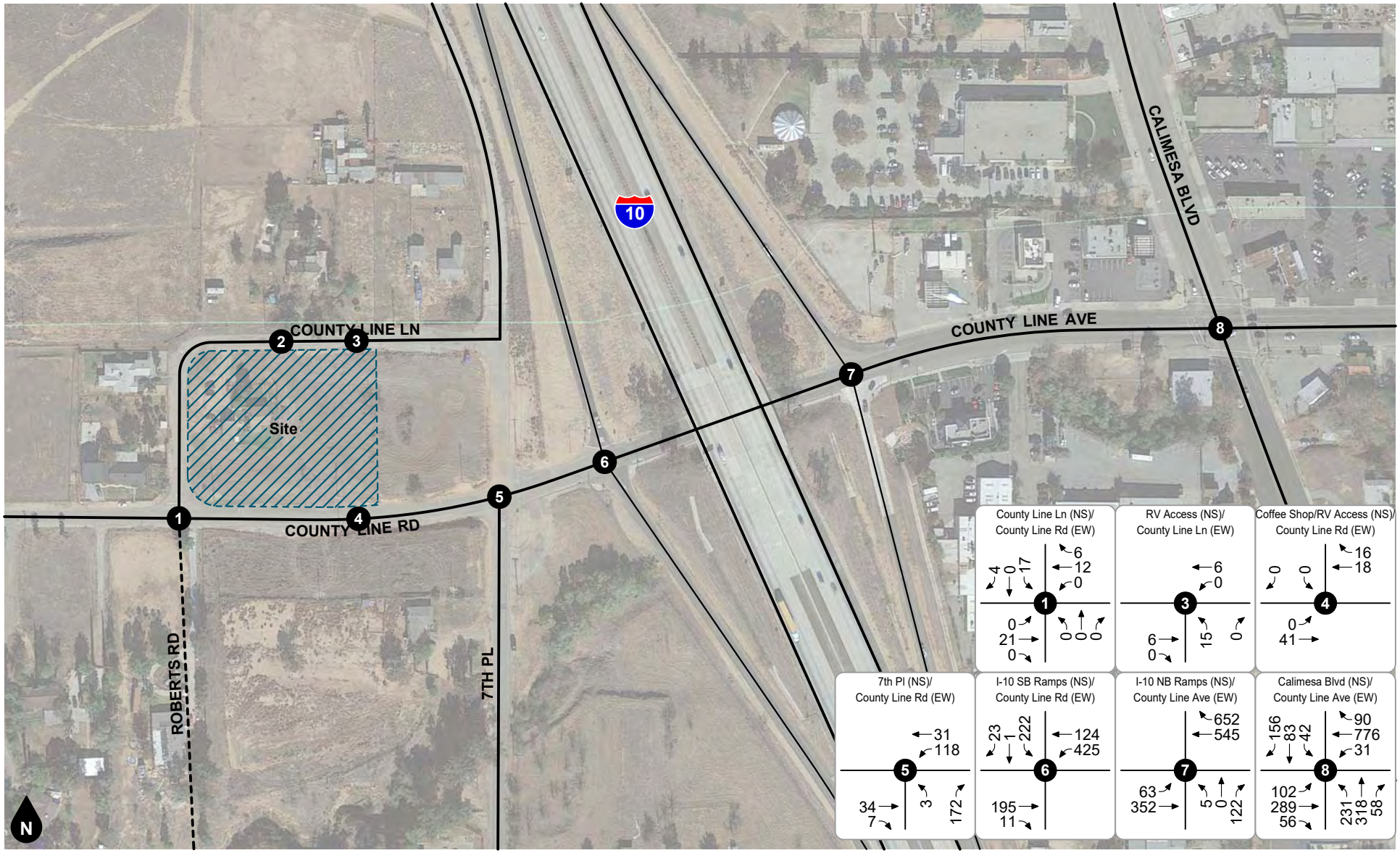
Study Intersection

Figure 36
Existing Plus Ambient
PM Peak Hour Intersection Turning Movement Volumes

Legend

●## Vehicles Per Day (1,000's)

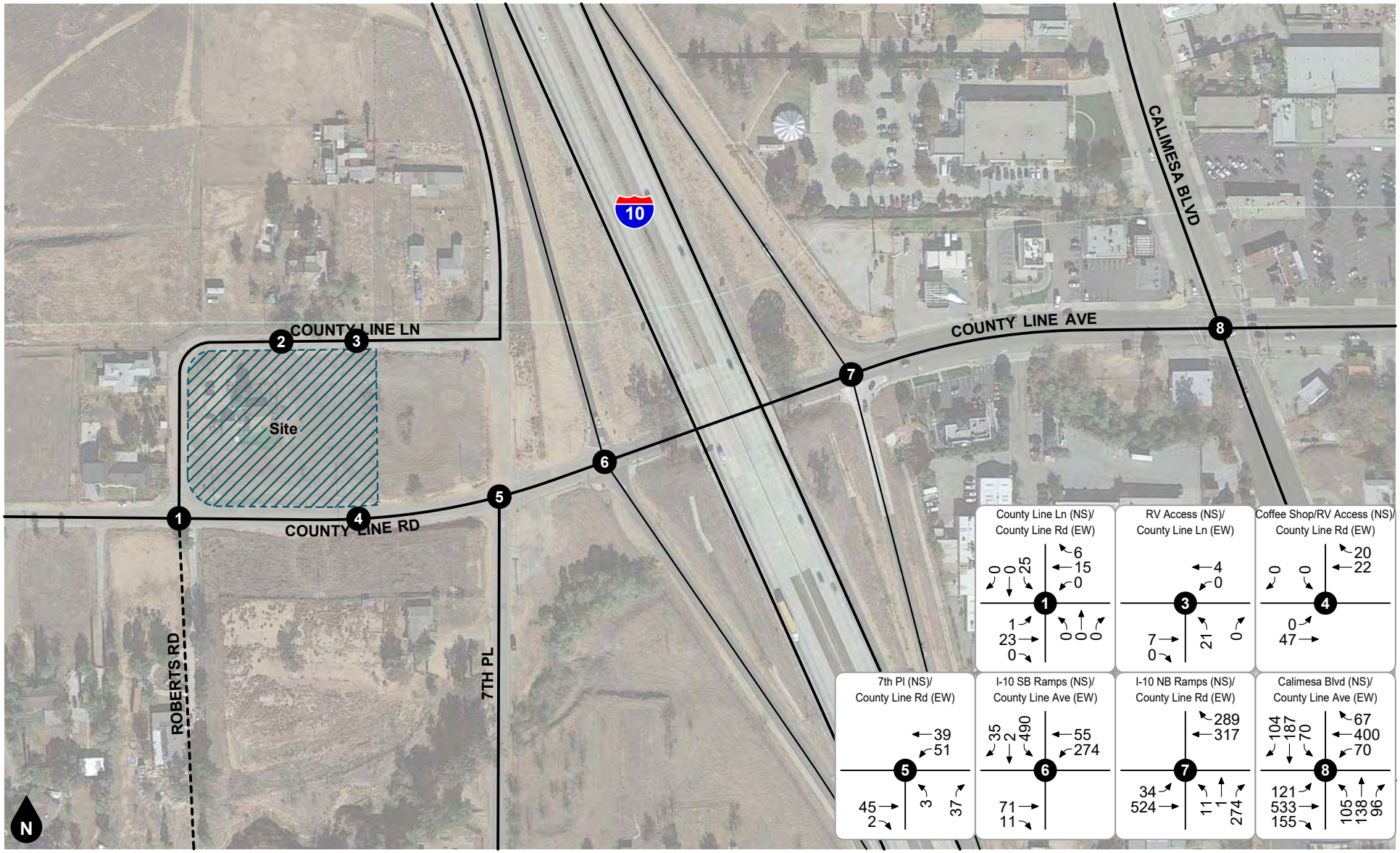
Figure 37
Existing Plus Ambient Plus Project
Average Daily Traffic Volumes - Phase 1



Legend

(#) Study Intersection

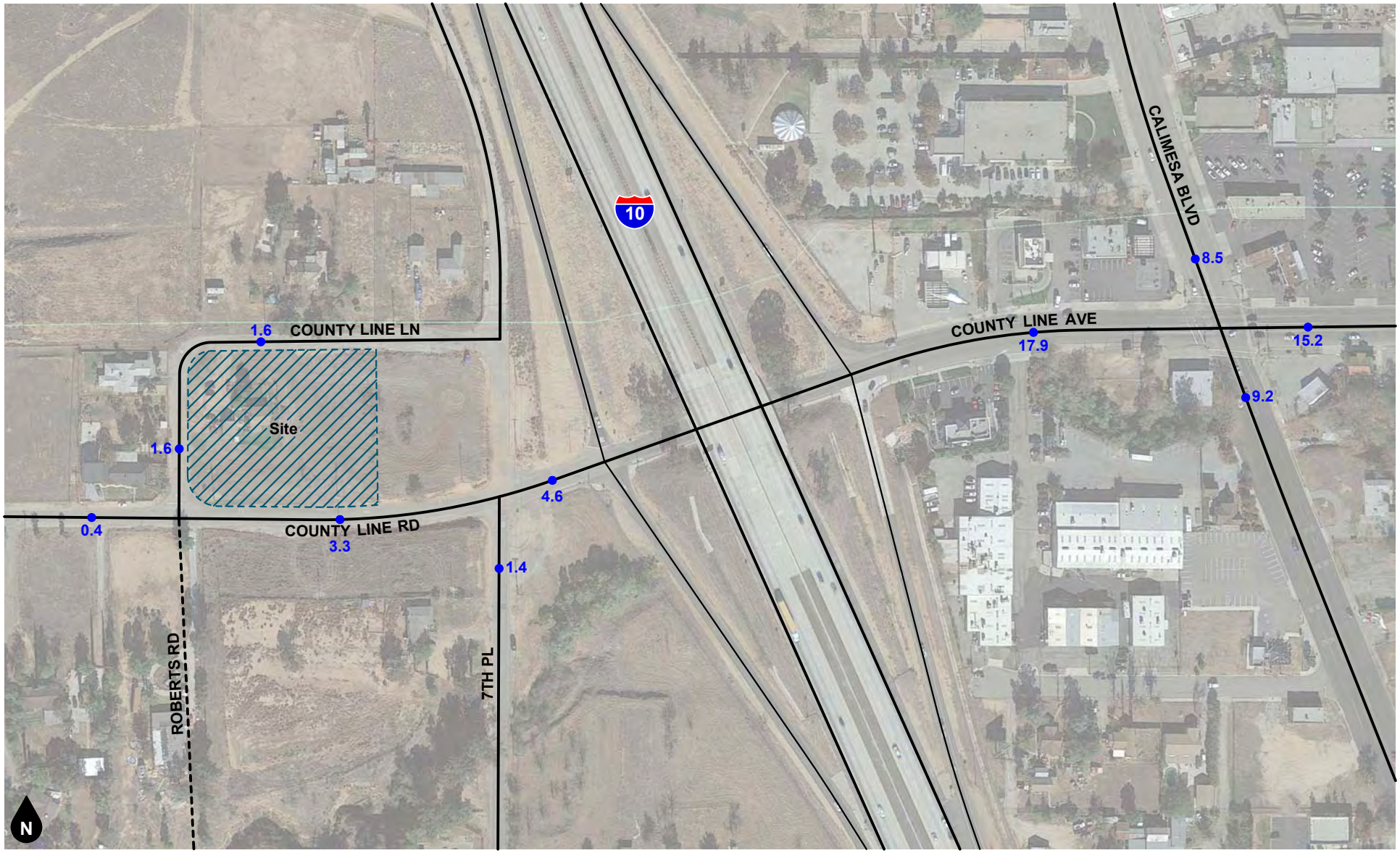
Figure 38
Existing Plus Ambient Plus Project
AM Peak Hour Intersection Turning Movement Volumes - Phase 1



Legend

Study Intersection

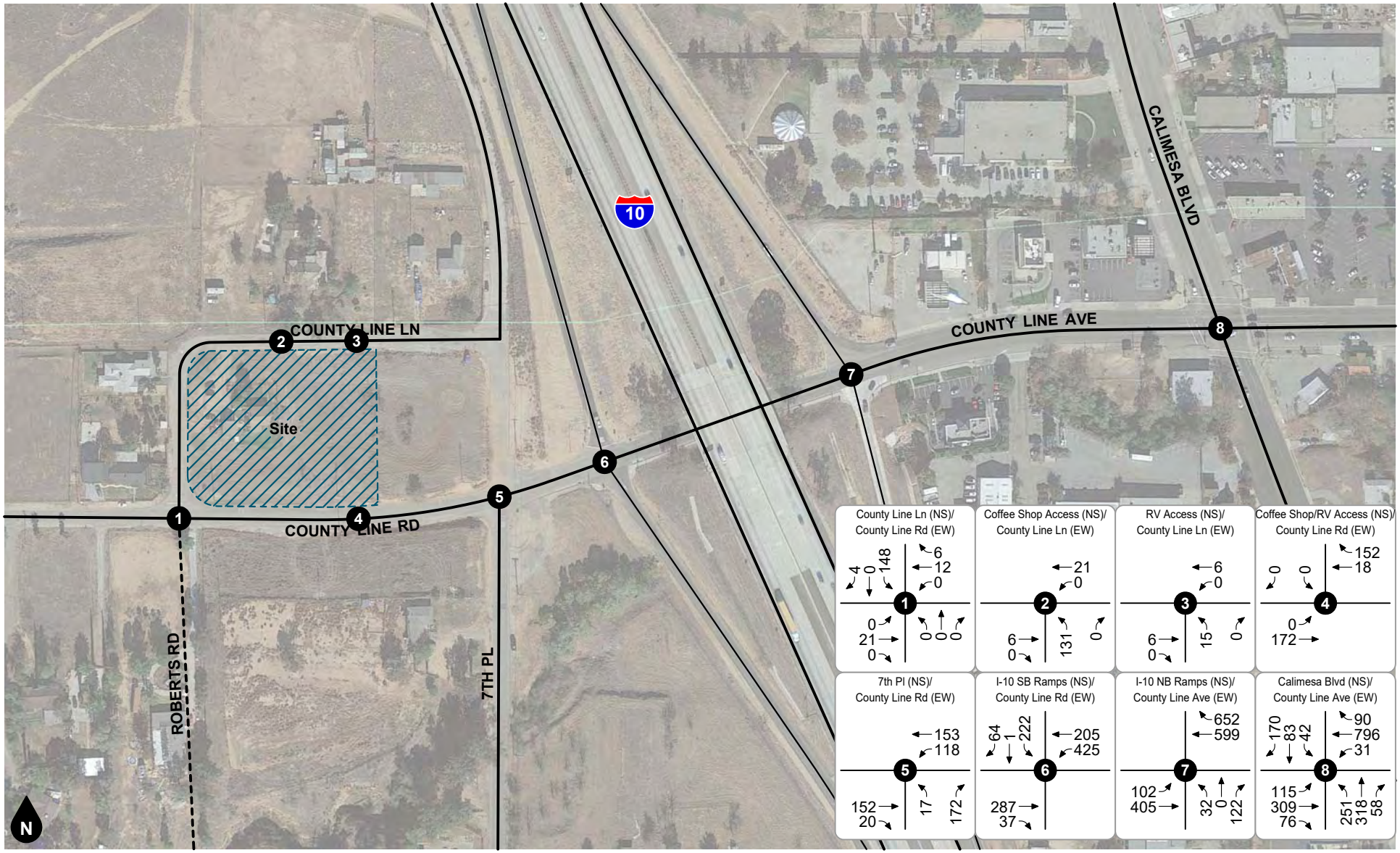
Figure 39
Existing Plus Ambient Plus Project
PM Peak Hour Intersection Turning Movement Volumes - Phase 1



Legend

●## Vehicles Per Day (1,000's)

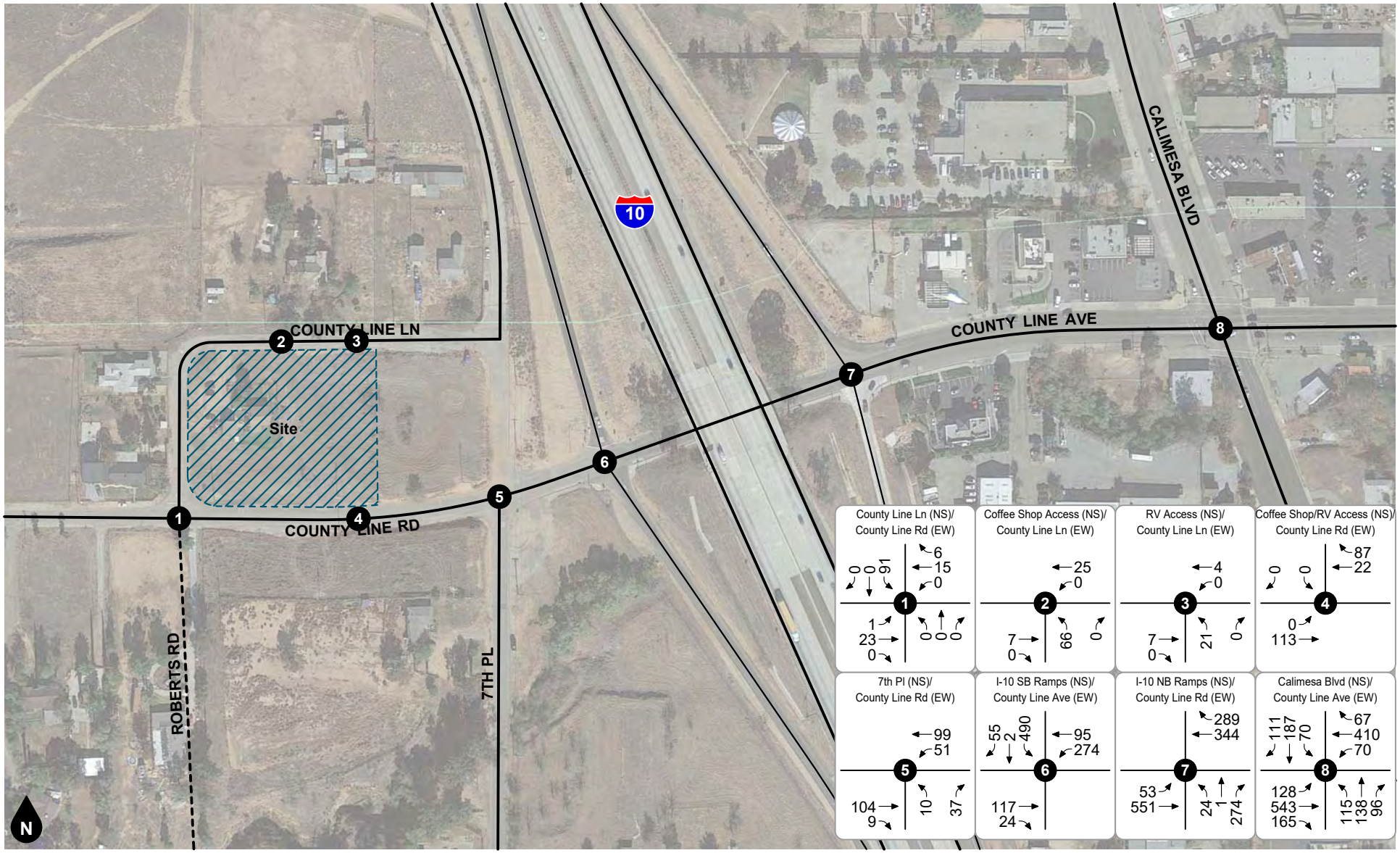
Figure 40
Existing Plus Ambient Plus Project
Average Daily Traffic Volumes - Phase 2



Legend

Study Intersection

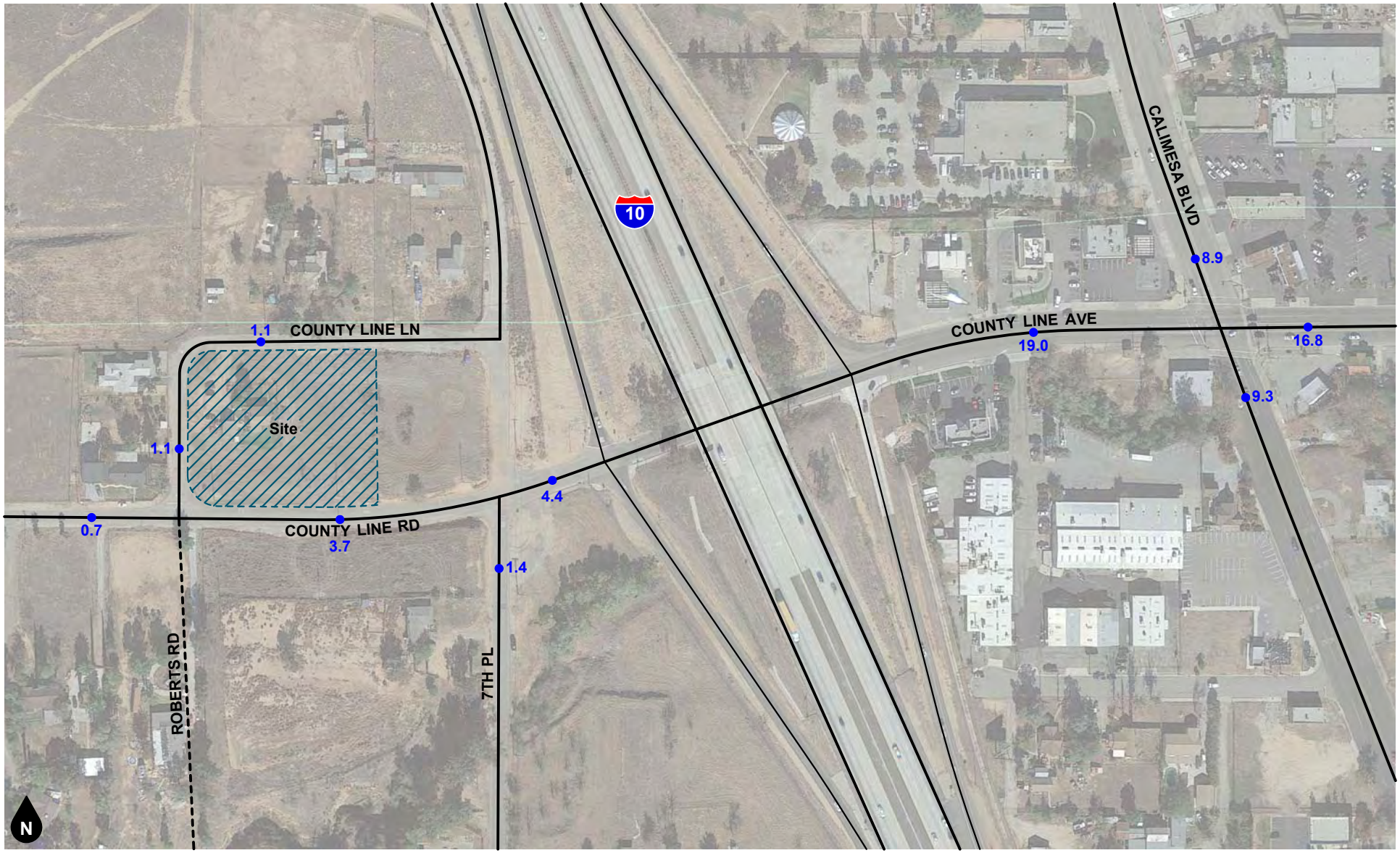
Figure 41
Existing Plus Ambient Plus Project
AM Peak Hour Intersection Turning Movement Volumes - Phase 2



Legend

Study Intersection

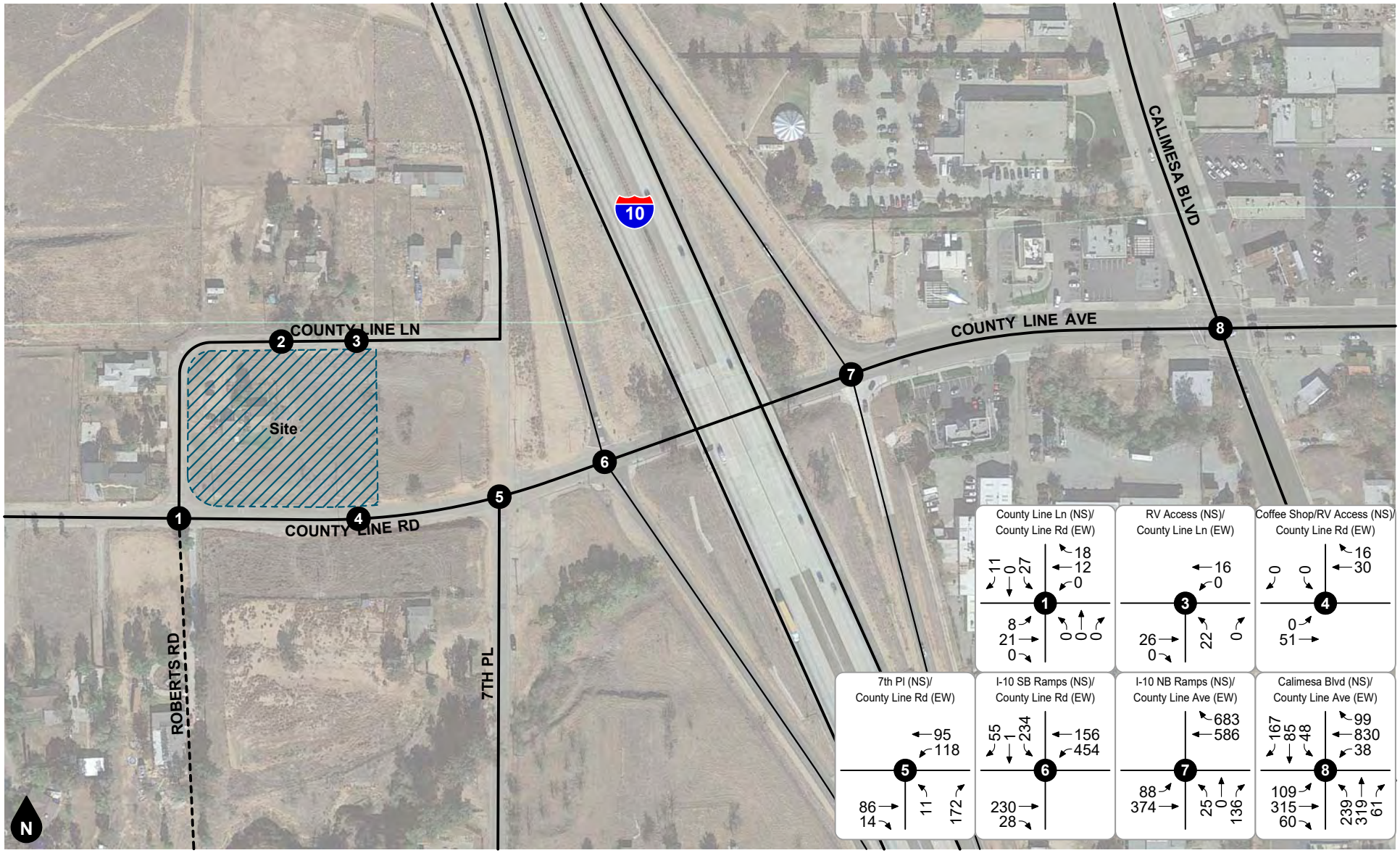
Figure 42
Existing Plus Ambient Plus Project
PM Peak Hour Intersection Turning Movement Volumes - Phase 2



Legend

●## Vehicles Per Day (1,000's)

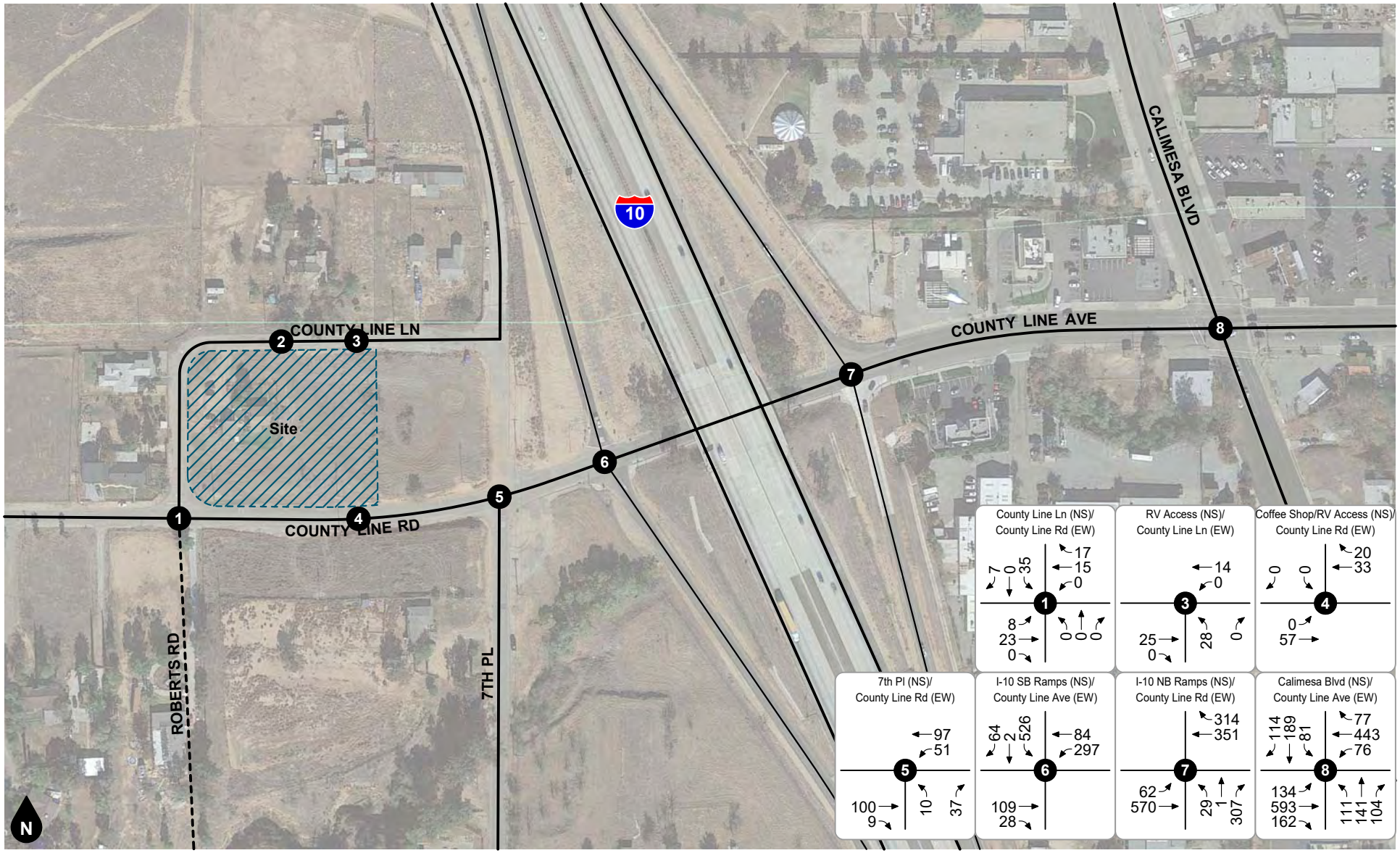
Figure 43
Existing Plus Ambient Plus Project Plus Cumulative
Average Daily Traffic Volumes - Phase 1



Legend

(#) Study Intersection

Figure 44
Existing Plus Ambient Plus Project Cumulative
AM Peak Hour Intersection Turning Movement Volumes - Phase 1



Legend

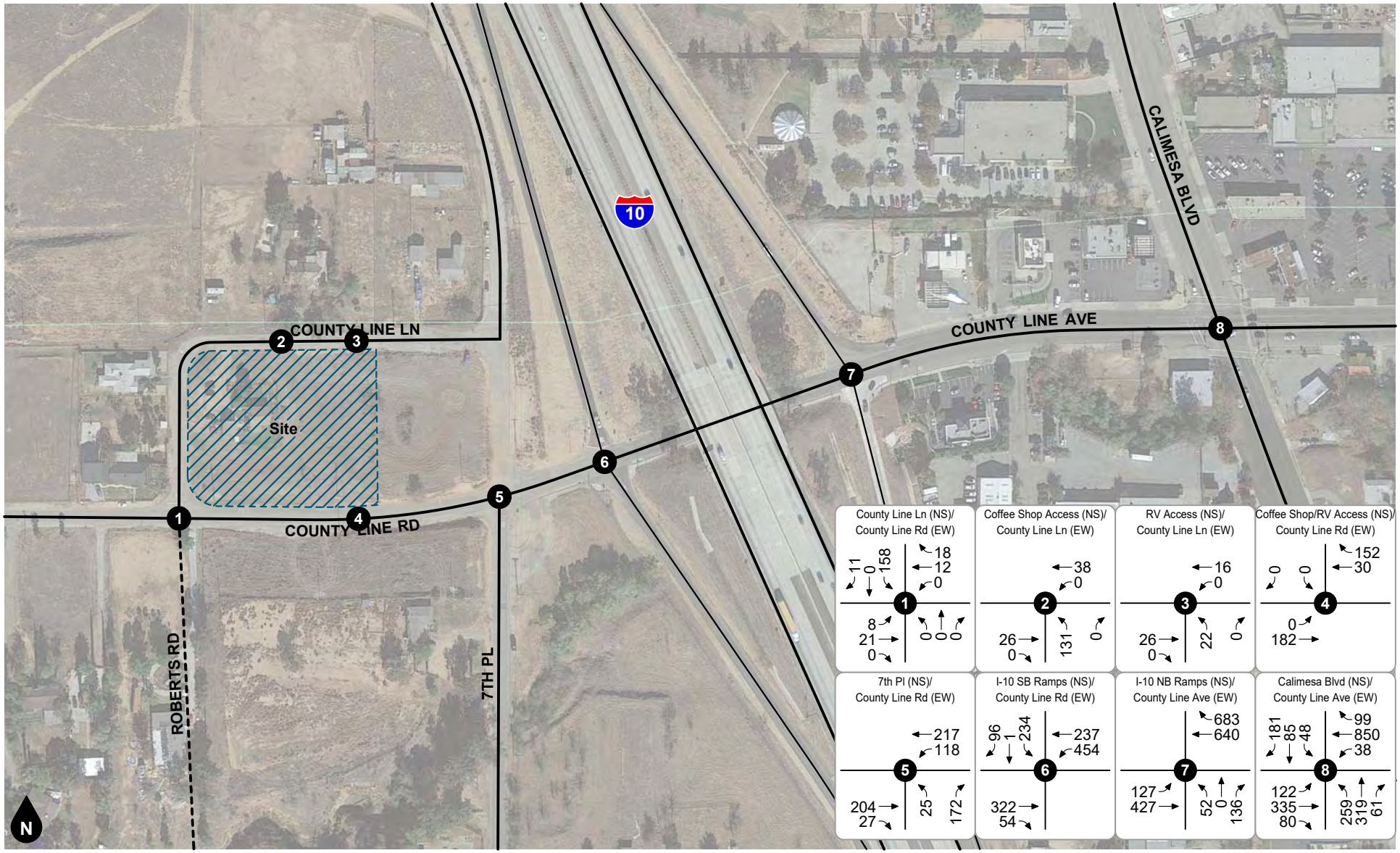
Study Intersection

Figure 45
Existing Plus Ambient Plus Project Cumulative
PM Peak Hour Intersection Turning Movement Volumes - Phase 1

Legend

●## Vehicles Per Day (1,000's)

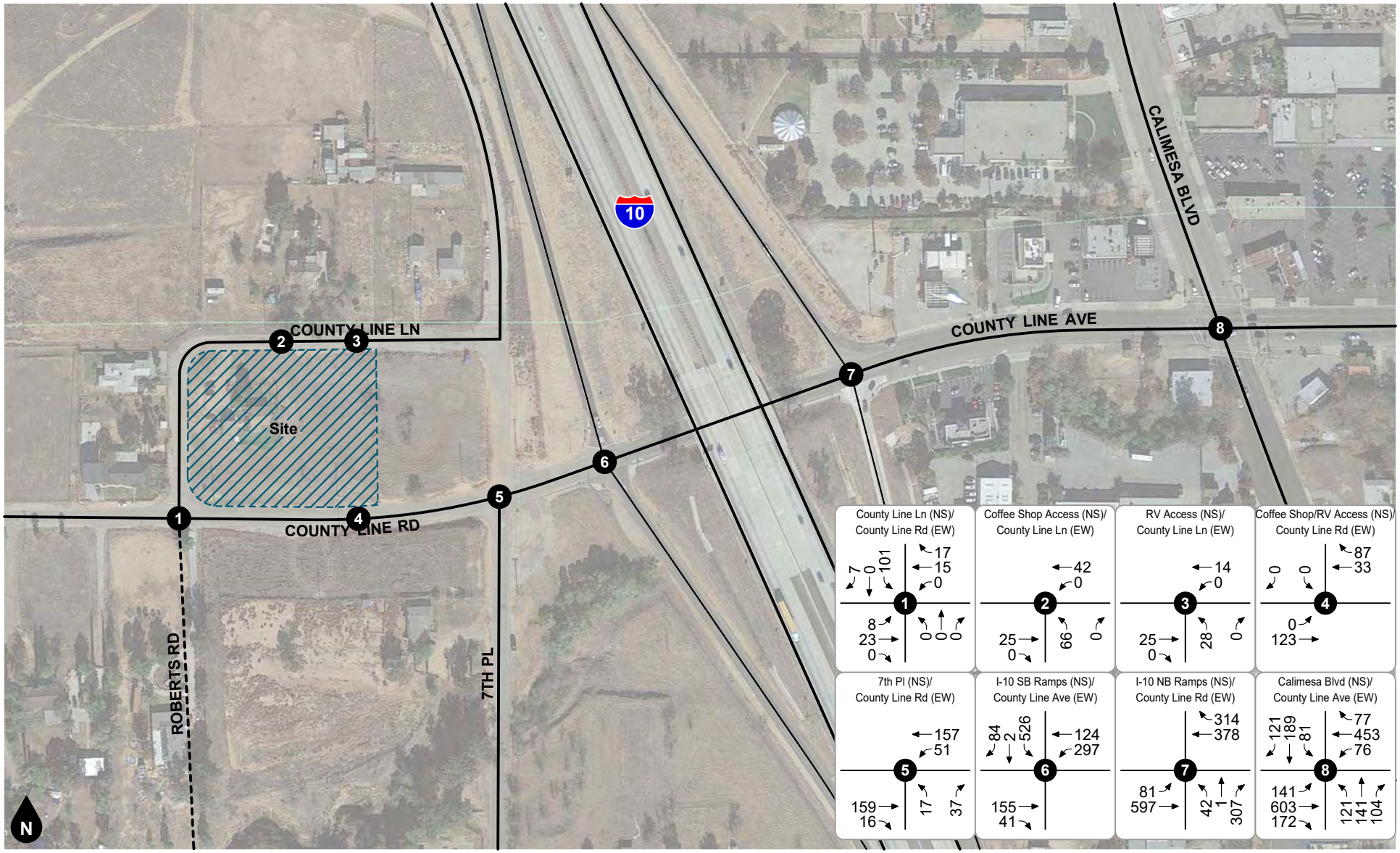
Figure 46
Existing Plus Ambient Plus Project Plus Cumulative
Average Daily Traffic Volumes - Phase 2



Legend

Study Intersection

Figure 47
Existing Plus Ambient Plus Project Cumulative
AM Peak Hour Intersection Turning Movement Volumes - Phase 2



Legend

Study Intersection

Figure 48
Existing Plus Ambient Plus Project Cumulative
PM Peak Hour Intersection Turning Movement Volumes - Phase 2

6. FUTURE OPERATIONAL ANALYSIS

Detailed intersection Level of Service calculation worksheets for each of the following analysis scenarios are provided in Appendix D.

EXISTING PLUS PROJECT

The intersection Levels of Service for Existing Plus Project conditions are shown in Table 4. As shown in Table 4, the study intersections are forecast to operate within acceptable Levels of Service (D or better) during the peak hours for Phase 1 and Phase 2 Existing Plus Project conditions, except for the following study intersections that are forecast to continue operating at Level of Service E to F during the peak hours:

- I-10 Southbound Ramps at County Line Road – #6 (AM & PM peak hours – LOS F)
- I-10 Northbound Ramps at County Line Avenue – #7 (AM Peak Hour – LOS F, PM Peak Hour – LOS E (Phase 2 only))

Based upon closer evaluation presented in the following "Other Considerations" section, the proposed project is forecast to result in minimal operational deficiencies during the peak hours for Existing Plus Project Phase 1 conditions. With installation of traffic signals or roundabouts at the I-10/County Line Road freeway interchange, the proposed project is forecast to result in no operational traffic deficiencies at the study intersections for Existing Plus Project Phase 2 conditions during the AM and PM peak hours.

EXISTING PLUS AMBIENT

The intersection Levels of Service for Existing Plus Ambient conditions are shown in Table 5. As shown in Table 5, the study intersections are forecast to operate within acceptable Levels of Service (D or better) during the peak hours for Existing Plus Ambient conditions, except for the following study intersections that are forecast to operate at Level of Service E to F during the peak hours:

- I-10 Southbound Ramps at County Line Road – #6 (AM & PM peak hours – LOS F)
- I-10 Northbound Ramps at County Line Avenue – #7 (AM Peak Hour – LOS F)

With installation of traffic signals or roundabouts at the I-10/County Line Road freeway interchange, the study intersections are forecast to operate within acceptable Levels of Service for Existing Plus Ambient conditions during the AM and PM peak hours.

EXISTING PLUS AMBIENT PLUS PROJECT

The intersection Levels of Service for Existing Plus Ambient Plus Project conditions are shown in Table 6. As shown in Table 6, the study intersections are forecast to operate within acceptable Levels of Service (D or better) during the peak hours for Phase 1 and Phase 2 Existing Plus Ambient Plus Project conditions, except for the following study intersections that are forecast to continue operating at Level of Service E to F during the peak hours:

- I-10 Southbound Ramps at County Line Road – #6 (AM & PM peak hours – LOS F)
- I-10 Northbound Ramps at County Line Avenue – #7 (AM Peak Hour – LOS F, PM Peak Hour – LOS E (Phase 2 only))

Based upon closer evaluation presented in the following "Other Considerations" section, the proposed project is forecast to result in minimal operational deficiencies during the peak hours for Existing Plus Ambient Plus Project Phase 1 conditions. With installation of traffic signals or roundabouts at the I-10/County Line Road

freeway interchange, the proposed project is forecast to result in no operational traffic deficiencies at the study intersections for Existing Plus Ambient Plus Project Phase 2 conditions during the AM and PM peak hours.

EXISTING PLUS AMBIENT PLUS PROJECT PLUS CUMULATIVE

The intersection Levels of Service for Existing Plus Ambient Plus Project Plus Cumulative conditions are shown in Table 7. As shown in Table 7, the study intersections are forecast to operate within acceptable Levels of Service (D or better) during the peak hours for Phase 1 and Phase 2 Existing Plus Ambient Plus Project Plus Cumulative conditions, except for the following study intersections that are forecast to continue operating at Level of Service E to F during the peak hours:

- I-10 Southbound Ramps at County Line Road – #6 (AM & PM peak hour – LOS F)
- I-10 Northbound Ramps at County Line Avenue – #7 (AM & PM peak hours – LOS F)

With installation of traffic signals or roundabouts at the I-10/County Line Road freeway interchange, the proposed project is forecast to result in no operational traffic deficiencies at the study intersections for both Phase 1 and Phase 2 Existing Plus Ambient Plus Project Plus Cumulative conditions during the AM and PM peak hours.

OPERATIONAL IMPROVEMENTS

The following improvements are necessary to be physically constructed prior to project Phase 2 opening:

- I-10 Southbound Ramps (NS) at County Line Road (EW) – #6
  - Install a traffic signal
- I-10 Northbound Ramps (NS) at County Line Avenue (EW) – #7
  - Install a traffic signal

The City of Calimesa and California Department of Transportation (Caltrans) plan to install roundabouts at both of these ramp intersection locations. The anticipated installation of these roundabouts is Year 2026. Traffic signal installation would be an interim measure until the roundabouts are constructed, with feasibility and necessity to be determined by the City of Calimesa and Caltrans. Traffic signal installation as an interim improvement would be a condition of approval to reduce project impacts for Phase 2. A fair share analysis has been prepared for these improvements.

The I-10/County Line Road interchange is identified as a Western Riverside Council of Governments (WRCOG) Transportation Uniform Mitigation Fee (TUMF) location in the City of Calimesa. Appendix F contains these improvements. All identified intersection improvements have the funding mechanism of TUMF. As mitigation for the potential traffic impacts, the proposed project shall contribute through the adopted traffic impact fee program for the ultimate improvements for this interchange.

I-10/COUNTY LINE ROAD FREEWAY INTERCHANGE DESIGN

The roundabout design used in this analysis is the Phase 3B Roundabout Design Alternative from the Mesa Verde Estates Focused Traffic Study, prepared by Urban Crossroads (October 10, 2016). It is the design alternative shown on the site plan.

Table 4
Existing Plus Project Intersection Levels of Service - Phase 1

Study Intersection	Jurisdiction[1]	Traffic Control[2]	AM Peak Hour		PM Peak Hour	
			Delay[3]	LOS[4]	Delay[3]	LOS[4]
1. County Line Lane at County Line Road	Calimesa	CSS	8.8	A	9.0	A
2. Coffee Shop Access at County Line Lane	Calimesa/Yucaipa	CSS	0.0	A	0.0	A
3. RV Access at County Line Lane	Calimesa/Yucaipa	CSS	8.6	A	8.6	A
4. Coffee Shop/RV Access at County Line Road	Calimesa	CSS	0.0	A	0.0	A
5. 7th Place at County Line Road	Calimesa	CSS	12.8	B	10.0	A
6. I-10 SB Ramps at County Line Road	Caltrans	CSS	1,152.2	F	345.6	F
7. I-10 NB Ramps at County Line Avenue	Caltrans	CSS	55.7	F	31.5	D
8. Calimesa Boulevard at County Line Avenue	Calimesa/Yucaipa	TS	13.0	B	12.4	B

Existing Plus Project Intersection Levels of Service - Phase 2

Study Intersection	Jurisdiction[1]	Traffic Control[2]	AM Peak Hour		PM Peak Hour	
			Delay[3]	LOS[4]	Delay[3]	LOS[4]
1. County Line Lane at County Line Road	Calimesa	CSS	9.6	A	9.4	A
2. Coffee Shop Access at County Line Lane	Calimesa/Yucaipa	CSS	9.2	A	8.9	A
3. RV Access at County Line Lane	Calimesa/Yucaipa	CSS	8.6	A	8.6	A
4. Coffee Shop/RV Access at County Line Road	Calimesa	CSS	0.0	A	0.0	A
5. 7th Place at County Line Road	Calimesa	CSS	18.8	C	11.1	B
6. I-10 SB Ramps at County Line Road	Caltrans	CSS	2,031.1	F	483.6	F
- With Improvements (Traffic Signal)		TS	16.8	B	17.1	B
- With Improvements (Roundabout)		RB	6.3	A	5.2	A
7. I-10 NB Ramps at County Line Avenue	Caltrans	CSS	209.7	F	39.5	E
- With Improvements (Traffic Signal)		TS	7.9	A	10.0	A
- With Improvements (Roundabout)		RB	8.6	A	5.3	A
8. Calimesa Boulevard at County Line Avenue	Calimesa/Yucaipa	TS	13.3	B	12.5	B

Notes:

(1) Caltrans = California Department of Transportation

(2) CSS = Cross Street Stop; TS = Traffic Signal; RB = Roundabout

(3) Delay is shown in seconds/vehicle. For intersections with traffic signal or all way stop control, overall average intersection delay and LOS are shown. For intersections with cross street stop control, LOS is based on average delay of the worst individual lane (or movements sharing a lane).

(4) LOS = Level of Service

Table 5
Existing Plus Ambient Intersection Levels of Service

Study Intersection	Jurisdiction[1]	Traffic Control[2]	AM Peak Hour		PM Peak Hour	
			Delay[3]	LOS[4]	Delay[3]	LOS[4]
1. County Line Lane at County Line Road	Calimesa	CSS	8.8	A	8.9	A
5. 7th Place at County Line Road	Calimesa	CSS	12.6	C	9.7	B
6. I-10 SB Ramps at County Line Road	Caltrans	CSS	1,319.2	F	370.0	F
- With Improvements (Traffic Signal)		TS	14.0	B	17.7	B
- With Improvements (Roundabout)		RB	6.0	A	5.2	A
7. I-10 NB Ramps at County Line Avenue	Caltrans	CSS	57.4	F	31.8	D
- With Improvements (Traffic Signal)		TS	7.0	A	9.9	A
- With Improvements (Roundabout)		RB	7.6	A	5.1	A
8. Calimesa Boulevard at County Line Avenue	Calimesa/Yucaipa	TS	13.2	B	12.6	B

Notes:

(1) Caltrans = California Department of Transportation

(2) CSS = Cross Street Stop; TS = Traffic Signal; RB = Roundabout

(3) Delay is shown in seconds/vehicle. For intersections with traffic signal or all way stop control, overall average intersection delay and LOS are shown. For intersections with cross street stop control, LOS is based on average delay of the worst individual lane (or movements sharing a lane).

(4) LOS = Level of Service

Table 6
Existing Plus Ambient Plus Project Intersection Levels of Service - Phase 1

Study Intersection	Jurisdiction[1]	Traffic Control[2]	AM Peak Hour		PM Peak Hour	
			Delay[3]	LOS[4]	Delay[3]	LOS[4]
1. County Line Lane at County Line Road	Calimesa	CSS	8.8	A	9.0	A
2. Coffee Shop Access at County Line Lane	Calimesa/Yucaipa	CSS	0.0	A	0.0	A
3. RV Access at County Line Lane	Calimesa/Yucaipa	CSS	8.6	A	8.6	A
4. Coffee Shop/RV Access at County Line Road	Calimesa	CSS	0.0	A	0.0	A
5. 7th Place at County Line Road	Calimesa	CSS	13.1	B	10.0	B
6. I-10 SB Ramps at County Line Road	Caltrans	CSS	1,410.0	F	412.7	F
7. I-10 NB Ramps at County Line Avenue	Caltrans	CSS	61.8	F	34.1	D
8. Calimesa Boulevard at County Line Avenue	Calimesa/Yucaipa	TS	13.2	B	12.7	B

Existing Plus Ambient Plus Project Intersection Levels of Service - Phase 2

Study Intersection	Jurisdiction[1]	Traffic Control[2]	AM Peak Hour		PM Peak Hour	
			Delay[3]	LOS[4]	Delay[3]	LOS[4]
1. County Line Lane at County Line Road	Calimesa	CSS	9.6	A	9.4	A
2. Coffee Shop Access at County Line Lane	Calimesa/Yucaipa	CSS	9.2	A	8.9	A
3. RV Access at County Line Lane	Calimesa/Yucaipa	CSS	8.6	A	8.6	A
4. Coffee Shop/RV Access at County Line Road	Calimesa	CSS	0.0	A	0.0	A
5. 7th Place at County Line Road	Calimesa	CSS	19.4	C	11.2	B
6. I-10 SB Ramps at County Line Road	Caltrans	CSS	2,451.8	F	565.4	F
- With Improvements (Traffic Signal)		TS	18.3	B	17.3	B
- With Improvements (Roundabout)		RB	6.5	A	5.4	A
7. I-10 NB Ramps at County Line Avenue	Caltrans	CSS	269.3	F	43.6	E
- With Improvements (Traffic Signal)		TS	8.3	A	10.2	B
- With Improvements (Roundabout)		RB	9.1	A	5.4	A
8. Calimesa Boulevard at County Line Avenue	Calimesa/Yucaipa	TS	13.7	B	12.9	B

Notes:

(1) Caltrans = California Department of Transportation

(2) CSS = Cross Street Stop; TS = Traffic Signal; RB = Roundabout

(3) Delay is shown in seconds/vehicle. For intersections with traffic signal or all way stop control, overall average intersection delay and LOS are shown. For intersections with cross street stop control, LOS is based on average delay of the worst individual lane (or movements sharing a lane).

(4) LOS = Level of Service

Table 7
Existing Plus Ambient Plus Project Plus Cumulative Intersection Levels of Service - Phase 1

Study Intersection	Jurisdiction[1]	Traffic Control[2]	AM Peak Hour		PM Peak Hour	
			Delay[3]	LOS[4]	Delay[3]	LOS[4]
1. County Line Lane at County Line Road	Calimesa	CSS	9.1	A	9.3	A
2. Coffee Shop Access at County Line Lane	Calimesa/Yucaipa	CSS	0.0	A	0.0	A
3. RV Access at County Line Lane	Calimesa/Yucaipa	CSS	8.8	A	8.8	A
4. Coffee Shop/RV Access at County Line Road	Calimesa	CSS	0.0	A	0.0	A
5. 7th Place at County Line Road	Calimesa	CSS	15.5	C	11.1	B
6. I-10 SB Ramps at County Line Road	Caltrans	CSS	2,291.8	F	709.7	F
- With Improvements (Traffic Signal)		TS	18.3	B	17.9	B
- With Improvements (Roundabout)		RB	6.5	A	5.6	A
7. I-10 NB Ramps at County Line Avenue	Caltrans	CSS	145.7	F	57.9	F
- With Improvements (Traffic Signal)		TS	8.9	A	11.0	B
- With Improvements (Roundabout)		RB	9.0	A	5.8	A
8. Calimesa Boulevard at County Line Avenue	Calimesa/Yucaipa	TS	13.6	B	13.2	B

Existing Plus Ambient Plus Project Plus Cumulative Intersection Levels of Service - Phase 2

Study Intersection	Jurisdiction[1]	Traffic Control[2]	AM Peak Hour		PM Peak Hour	
			Delay[3]	LOS[4]	Delay[3]	LOS[4]
1. County Line Lane at County Line Road	Calimesa	CSS	10.0	A	9.8	A
2. Coffee Shop Access at County Line Lane	Calimesa/Yucaipa	CSS	9.5	A	9.2	A
3. RV Access at County Line Lane	Calimesa/Yucaipa	CSS	8.8	A	8.8	A
4. Coffee Shop/RV Access at County Line Road	Calimesa	CSS	0.0	A	0.0	A
5. 7th Place at County Line Road	Calimesa	CSS	25.0	C	12.6	B
6. I-10 SB Ramps at County Line Road	Caltrans	CSS	3,921.2	F	921.2	F
- With Improvements (Traffic Signal)		TS	28.0	C	18.2	B
- With Improvements (Roundabout)		RB	7.1	A	5.8	A
7. I-10 NB Ramps at County Line Avenue	Caltrans	CSS	931.6	F	93.8	F
- With Improvements (Traffic Signal)		TS	10.3	B	11.4	B
- With Improvements (Roundabout)		RB	10.8	B	6.0	A
8. Calimesa Boulevard at County Line Avenue	Calimesa/Yucaipa	TS	14.1	B	13.7	B

Notes:

(1) Caltrans = California Department of Transportation

(2) CSS = Cross Street Stop; TS = Traffic Signal; RB = Roundabout

(3) Delay is shown in seconds/vehicle. For intersections with traffic signal or all way stop control, overall average intersection delay and LOS are shown. For intersections with cross street stop control, LOS is based on average delay of the worst individual lane (or movements sharing a lane).

(4) LOS = Level of Service

7. OTHER CONSIDERATIONS

QUEUING ANALYSIS

A turn pocket queuing analysis has been conducted along County Line Road for Existing Plus Ambient Plus Project Plus Cumulative conditions at the request of the City of Calimesa Public Works Department. To provide a conservative estimate, the 95th percentile queue was used to calculate required storage lengths.

Typically when an exclusive left turn lane is required, a minimum of 2 passenger cars should be provided at 25 feet per vehicle (50 feet minimum storage length). Where possible, the recommended minimum pocket length used on roadways should be 100 feet where the speed is 30 miles per hour and 150 feet for arterials with speeds of 40 miles per hour or more. The recommended maximum single turn storage length shall be 300 feet; therefore, dual left turn lanes should be used when over 300 feet of storage is required or when necessary to provide acceptable levels of service at the intersection. For local streets and driveways, smaller storage lengths are permitted when volumes permit.

Table 8 summarizes results of the queuing analyses for left-turn movements conducted at the study area intersections along County Line Road. The values represent the projected queue length necessary for satisfactory operations. It is recommended that the ultimate turn bay length exceed the projected queue length. The queuing analysis reports are based on the 95th percentile queue length conducted as part of the VISTRO analysis (see Appendix D). As shown in Table 8, there will be adequate storage lengths for the left turn vehicles.

PASSENGER CAR EQUIVALENT

A passenger car equivalent (PCE) is a metric to assess the impact of larger vehicles, such as trucks, recreational vehicles, and buses, by converting the traffic volume of larger vehicles to an equivalent number of passenger cars. In consultation with City of Calimesa staff, the passenger car equivalent for a RV using the RV fueling facility would be 3.0. Thus, each trip generated by the RV fueling facility would be equivalent to 3 passenger cars.

However, it is important to note that the trip generation used in this report for the RV fueling facility is a very conservative estimate because the ITE trip generation rates for Land Use Code 944 represent the number of trips generated per vehicle fueling position at a standard passenger car fueling pump. ITE does not currently provide trip generation rates for a RV fueling facility In reality, the proposed RV fueling stations are likely to have a much lower service rate due to longer fueling times and lower demand compared to passenger cars. Furthermore, the trip generation forecast does not include reductions for pass-by trips.

For these reasons, the passenger car equivalent of 3.0 was not applied to the trip generation for the RV fueling facility.

I-10/COUNTY LINE ROAD FREEWAY INTERCHANGE INTERIM TRAFFIC SIGNALIZATION

The purpose of this section is to demonstrate that Phase 1 of the proposed project (addition of three RV fueling positions to the existing gas station) would result in negligible impacts to the I-10/County Line Avenue freeway interchange.

Caltrans Planned Interchange Improvements

Since the City of Calimesa and California Department of Transportation (Caltrans) plan to install roundabouts at the I-10/County Line Road freeway interchange by Year 2026. The operational improvements for

temporary traffic signals at the interchange would still apply should Phase 2 of the project proceed prior to completion of the ultimate buildout design of the freeway interchange.

Phase 1 Trip Generation

As shown in Table 2, Phase 1 of the proposed project is forecast to generate a total of approximately 516 daily trips, including 30 trips during the AM peak hour and 42 trips during the PM peak hour.

It is important to note this is a very conservative estimate because the ITE trip generation rates for Land Use Code 944 represent the number of trips generated per vehicle fueling position at a standard passenger car fueling pump. ITE does not current provide trip generation rates for a RV fueling facility In reality, the proposed RV fueling stations are likely to have a much lower service rate due to longer fueling times and lower demand compared to passenger cars. Furthermore, the trip generation forecast does not include reductions for pass-by trips.

The location of this RV fueling facility comparative to the density of nearby residential uses, and general supply of RV's combined with the market demand for fueling due to usage rates, the project applicant anticipates that a dozen or less daily vehicle trips will be made at this facility. The average fueling time spent at the facility for a RV is also multiple times longer than for typical automobiles at a standard gas station.

Thus, the daily trip generation utilized in this analysis may be around 43 times greater than what this land use will experience. The AM and PM peak hour trip generation is expected to be between 0-2 vehicle trips based on daily vehicle trip expectations from the project applicant. To provide a conservative analysis, the Project Phase 1 trip generation is based on standard ITE rates for passenger vehicle fueling positions.

Phase 1 Traffic Study Exemption

According to the Riverside County Transportation Department Traffic Impact Analysis Preparation Guide (2008), provides traffic study exemptions in Exhibit A. Exemption 10 states: "Any use which can demonstrate, based on the most recent edition of the Trip Generation Report published by the Institute of Transportation Engineers (ITE) or other approved trip generation data, trip generation of less than 100 vehicle trips during the peak hours.

Thus, Phase 1 of the proposed project is generally considered to have a negligible impact and would typically be exempt from preparation a traffic impact analysis based on Riverside County traffic study guidelines as adopted for use by the City of Calimesa.

Existing and Existing Plus Project Phase 1 Level of Service

Table 9 shows detailed Level of Service operations for the currently deficient intersections at the I-10 Freeway Ramps and County Line Road interchange for Existing Plus Project Phase 1 conditions. It should be noted that delay increases exponentially as an intersection approach capacity based on equations from the Highway Capacity Manual delay methodology. Therefore, relatively minor changes in traffic volume can result in disproportionate changes in delay that may not necessarily be representative of actual conditions.

For example, the intersection of I-10 Southbound Ramps at County Line Road has an existing delay of 1,074.9 seconds per vehicle during the AM peak hour. This delay is for the critical movement, which is the 213 southbound left turning movements. Therefore, the HCM methodology calculates that the average delay for each of these 213 southbound left turning movements is almost 18 minutes per vehicle. Since the HCM methodology does not take into account the effect of vehicular platooning on acceptable gaps that can occur as a result of signalized upstream intersections, the computed average delay is much greater than what realistically occurs during typical operations in this particular case.

The intersection of I-10 Southbound Ramps at County Line Road is currently operating at Level of Service F during the AM and PM peak hours and is forecast to continue doing so with the addition of project Phase 1 trips. Although the existing Level of Service F is forecast to worsen in terms of delay during the AM and PM peak hours, the project adds zero trips to the critical southbound left turn movement and no more than eight (8) trips to the overall southbound approach during the peak hours at this intersection.

The intersection of I-10 Northbound Ramps at County Line Road is currently operating at LOS F during the AM peak hour and LOS D during the PM peak hour based on the worst individual movement and is forecast to continue doing so with the addition of project Phase 1 trips. Although the existing LOS F is forecast to worsen in terms of delay during the AM peak hour, the project only adds four (4) trips to the critical northbound left turn movement and overall northbound approach during the AM peak hour at this intersection. The critical northbound left turn movement goes from 1 trip during the AM peak hour to 5 trips (approximately 1 vehicle every 12 minutes); an increase in the volume of trips of this amount would not generally be noticeable to roadway users. The intersection operates at LOS D or better during the PM peak hour.

Conclusion

In summary, the Level of Service deficiencies at the intersections I-10 Southbound Ramps at County Line Road and I-10 Northbound Ramps at County Line Road are existing deficiencies that are marginally impacted by the project. The addition of a relatively minor number of new trips associated with project Phase 1 is not forecast to change the Levels of Service. Since Phase 1 of the proposed is not expected to result in appreciable changes to actual operations of the currently deficient study intersections, the project Phase 1 is forecast to result in a minimal operational traffic impact.

The improvements for installation of temporary traffic signals at the I-10/County Line Road freeway interchange would still apply should Phase 2 of the project proceed prior to completion of the ultimate buildout design of the freeway interchange.

Table 8
Queueing Analysis[1]

Study Intersection	Turning Movement	Existing Plus Ambient Plus Project Plus Cumulative		Available Storage Length[2]	Adequate Storage
		AM Peak Hour	PM Peak Hour		
7. I-10 SB Ramps at County Line Road	Westbound Left Turn Lane	70.59 Feet	<25 Feet[3]	**75 Feet**	Yes
- With Improvements (Traffic Signal)	Westbound Left Turn Lane	454.08 Feet	179.29 Feet	**475 Feet**	Yes
- With Improvements (Roundabout)	Westbound Left Turn Lane	47.82 Feet	<25 Feet	**50 Feet**	Yes
8. I-10 NB Ramps at County Line Avenue	Eastbound Left Turn Lane	43.20 Feet	<25 Feet	**50 Feet**	Yes
- With Improvements (Traffic Signal)	Eastbound Left Turn Lane	70.09 Feet	26.53 Feet	**75 Feet**	Yes
- With Improvements (Roundabout)	Eastbound Left Turn Lane	<25 Feet	<25 Feet	**25 Feet**	Yes
9. Calimesa Boulevard at County Line Avenue	Eastbound Left Turn Lane	82.58 Feet	48.72 Feet	**100 Feet**	Yes
	Westbound Left Turn Lane	17.34 Feet	45.08 Feet	**50 Feet**	Yes

Notes:

(1) Queueing analysis based on 95th-Percentile Queue Length. See Appendix D.

(2) Available storage lengths rounded to nearest 25 feet.

(3) <25 Feet = Queue length of less than 25 feet is rounded up to 25 feet to allow for one standard car length.

Table 9
Existing Plus Project Phase 1 Detailed Level of Service Operations

Study Intersection	Traffic Control[1]	AM Peak Hour									PM Peak Hour								
		Worst Case Mvmt/ Approach	Existing			Existing Plus Phase 1			Net Change		Worst Case Mvmt/ Approach	Existing			Existing Plus Phase 1			Net Change	
			Trips	Delay[2]	LOS[3]	Trips	Delay[2]	LOS[3]	Trips	Delay		Trips	Delay[2]	LOS[3]	Trips	Delay[2]	LOS[3]	Trips	Delay
6. I-10 SB Ramps at County Line Rd	CSS																		
- Worst Individual Movement		SBL	213	1074.9	F	213	1152.2	F	0	77.3	SBL	471	306.7	F	471	345.6	F	0	38.9
- Worst Approach		SB	230	1072.1	F	236	1148.2	F	6	76.1	SB	499	306.3	F	507	345.0	F	8	38.7
7. I-10 NB Ramps at County Line Ave	CSS																		
- Worst Individual Movement		NBL	1	51.8	F	5	55.7	F	4	3.9	NBT	1	29.5	D	1	31.5	D	0	2.0
- Worst Approach		NB	118	12.6	B	122	15.4	C	4	2.8	NB	270	17.9	C	275	19.3	C	5	1.4

Notes:

(1) CSS = Cross Street Stop

(2) Delay is shown in seconds/vehicle. For intersections with cross street stop control, LOS is shown for both average delay of the worst individual movement and average delay of the worst approach (6th Edition Highway Capacity Manual recommendation).

(3) LOS = Level of Service

8. CONCLUSIONS

PROJECT DESIGN FEATURES

The proposed project shall construct the following improvements to provide project site access:

Coffee Shop Access (NS) at County Line Lane (EW) - #2

- Construct the project driveway to provide one inbound lane and one outbound lane with northbound stop-control.
- The existing eastbound lane on County Line Lane will be widened and allow shared through/right turn movements.
- The existing westbound lane on County Line Lane will be widened and allow shared through/left turn movements.
- The new northbound lane at the Coffee Shop Access will allow shared left/right turn movements.

RV Access (NS) at County Line Lane (EW) - #3

- Construct the project driveway to provide one inbound lane and one outbound lane with northbound stop-control.
- The existing eastbound lane on County Line Lane will be widened and allow shared through/right turn movements.
- The existing westbound lane on County Line Lane will be widened and allow shared through/left turn movements.
- The new northbound lane at the RV Access will allow shared left/right turn movements.

Coffee Shop/RV Access (NS) at County Line Road (EW) - #4

- Construct the project driveway to provide one inbound lane.
- The existing westbound lane on County Line Road will allow shared through/right turn movements.
- The Coffee Shop/RV Access will be restricted to right turns in only with no egress.

LEVEL OF SERVICE ANALYSIS SUMMARY

Table 10 shows a summary of the intersection Level of Service analysis for the scenarios evaluated.

REQUIREMENTS FOR IMPROVEMENTS

The following improvements are necessary to be physically constructed prior to project Phase 2 opening:

- I-10 Southbound Ramps (NS) at County Line Road (EW) – #6
  - Install a traffic signal
- I-10 Northbound Ramps (NS) at County Line Avenue (EW) – #7
  - Install a traffic signal

The City of Calimesa and California Department of Transportation (Caltrans) plan to install roundabouts at both of these ramp intersection locations. The anticipated installation of these roundabouts is Year 2026. Traffic signal installation would be an interim measure until the roundabouts are constructed, with feasibility and necessity to be determined by the City of Calimesa and Caltrans. Traffic signal installation as an interim improvement would be a condition of approval to reduce project impacts for Phase 2. A fair share analysis has been prepared for these improvements.

The I-10/County Line Road interchange is identified as a Western Riverside Council of Governments (WRCOG) Transportation Uniform Mitigation Fee (TUMF) location in the City of Calimesa. As mitigation for

the potential traffic impacts, the proposed project shall contribute through the adopted traffic impact fee program for the ultimate improvements for this interchange.

PROJECT FAIR SHARE CONTRIBUTION

The project fair share contributions have been calculated for the improvement location. The project fair share contribution is based on the proportion of project peak hour intersection turning movement volumes contributed to the improvement location relative to the total new peak hour intersection turning movement volumes forecast for Existing Plus Ambient Plus Project Plus Cumulative conditions.

Table 11 presents a summary of improvement cost and project cost shares at the Existing Plus Ambient Plus Project Plus Cumulative study intersection improvement locations. The intersection fair share cost calculations are typically based on the higher of the weekday morning and weekday evening peak hour traffic volumes. As shown in Table 11, the project's fair share percentages of identified impacted intersections are approximately 8.0% to 13.0% for Phase 1, and approximately 31.9% to 58.1% for Phase 2. The fair share calculations are intended only for the discussion purposes of this traffic impact analysis, and do not imply any legal responsibility or formula for contributions or mitigation.

The I-10/County Line Road interchange is identified as a Western Riverside Council of Governments (WRCOG) Transportation Uniform Mitigation Fee (TUMF) location in the City of Calimesa. Appendix F contains these improvements. All identified intersection improvements have the funding mechanism of TUMF. As mitigation for the potential traffic impacts, the proposed project shall contribute through the adopted traffic impact fee program for the ultimate improvements for this interchange.

VEHICLE MILES TRAVELED (VMT) ANALYSIS

Appendix G contains a VMT analysis for the proposed development.

GENERAL RECOMMENDATIONS

Site-specific circulation and access recommendations are depicted on Figure 49.

All roadway design, traffic signing and striping, and traffic control improvements relating to the proposed project should be constructed in accordance with applicable engineering standards and to the satisfaction of the City of Calimesa Public Works Department.

Site-adjacent roadways should be constructed or repaired at their ultimate half-section width, including landscaping and parkway improvements in conjunction with development, or as otherwise required by the City of Calimesa Public Works Department.

On-site traffic signing and striping plans should be submitted for City of Calimesa approval in conjunction with detailed construction plans for the project.

Off-street parking should be provided to meet City of Calimesa Municipal Code requirements.

On-street parking on County Line Road will be prohibited.

The final grading, landscaping, and street improvement plans should demonstrate that sight distance standards are met in accordance with applicable City of Calimesa/California Department of Transportation sight distance standards.

As is the case for any roadway design, the City of Calimesa should periodically review traffic operations in the vicinity of the project once the project is constructed to assure that the traffic operations are satisfactory.

Table 10
Summary of Intersection Levels of Service - Phase 1

Study Intersection	Jurisdiction	Peak Hour Delay[1]-LOS[2]									
		Existing		Existing Plus Project		Existing Plus Ambient		Existing Plus Ambient Plus Project		Existing Plus Ambient Plus Project Plus Cumulative	
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
1. County Line Lane at County Line Road	Calimesa	8.8-A	8.8-A	8.8-A	9-A	8.8-A	8.9-A	8.8-A	9-A	9.1-A	9.3-A
2. Coffee Shop Access at County Line Lane	Calimesa/Yucaipa	-	-	0-A	0-A	-	-	0-A	0-A	0-A	0-A
3. RV Access at County Line Lane	Calimesa/Yucaipa	-	-	8.6-A	8.6-A	-	-	8.6-A	8.6-A	8.8-A	8.8-A
4. Coffee Shop/RV Access at County Line Road	Calimesa	-	-	0-A	0-A	-	-	0-A	0-A	0-A	0-A
5. 7th Place at County Line Road	Calimesa	12.4-B	9.7-A	12.8-B	10-A	12.6-C	9.7-B	13.1-B	10-B	15.5-C	11.1-B
6. I-10 SB Ramps at County Line Road	Caltrans	1074.9-F	306.7-F	1152.2-F	345.6-F	1319.2-F	370-F	1410-F	412.7-F	2291.8-F	709.7-F
- With Improvements (Traffic Signal)		-	-	13.6-B	17.5-B	14-B	17.7-B	14.3-B	17.6-B	18.3-B	17.9-B
- With Improvements (Roundabout)		-	-	5.8-A	5.1-A	6-A	5.2-A	6-A	5.2-A	6.5-A	5.6-A
7. I-10 NB Ramps at County Line Avenue	Caltrans	51.8-F	29.5-D	55.7-F	31.5-D	57.4-F	31.8-D	61.8-F	34.1-D	145.7-F	57.9-F
- With Improvements (Traffic Signal)		-	-	6.8-A	9.8-A	7-A	9.9-A	7.2-A	10-A	8.9-A	11-B
- With Improvements (Roundabout)		-	-	7.4-A	5-A	7.6-A	5.1-A	7.8-A	5.2-A	9-A	5.8-A
8. Calimesa Boulevard at County Line Avenue	Calimesa/Yucaipa	12.9-B	12.3-B	13-B	12.4-B	13.2-B	12.6-B	13.2-B	12.7-B	13.6-B	13.2-B

Summary of Intersection Levels of Service - Phase 2

Study Intersection	Jurisdiction	Peak Hour Delay[1]-LOS[2]									
		Existing		Existing Plus Project		Existing Plus Ambient		Existing Plus Ambient Plus Project		Existing Plus Ambient Plus Project Plus Cumulative	
		AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
1. County Line Lane at County Line Road	Calimesa	8.8-A	8.8-A	9.6-A	9.4-A	8.8-A	8.9-A	9.6-A	9.4-A	10-A	9.8-A
2. Coffee Shop Access at County Line Lane	Calimesa/Yucaipa	-	-	9.2-A	8.9-A	-	-	9.2-A	8.9-A	9.5-A	9.2-A
3. RV Access at County Line Lane	Calimesa/Yucaipa	-	-	8.6-A	8.6-A	-	-	8.6-A	8.6-A	8.8-A	8.8-A
4. Coffee Shop/RV Access at County Line Road	Calimesa	-	-	0-A	0-A	-	-	0-A	0-A	0-A	0-A
5. 7th Place at County Line Road	Calimesa	12.4-B	9.7-A	18.8-C	11.1-B	12.6-C	9.7-B	19.4-C	11.2-B	25-C	12.6-B
6. I-10 SB Ramps at County Line Road	Caltrans	1074.9-F	306.7-F	2031.1-F	483.6-F	1319.2-F	370-F	2451.8-F	565.4-F	3921.2-F	921.2-F
- With Improvements (Traffic Signal)		-	-	16.8-B	17.1-B	14-B	17.7-B	18.3-B	17.3-B	28-C	18.2-B
- With Improvements (Roundabout)		-	-	6.3-A	5.2-A	6-A	5.2-A	6.5-A	5.4-A	7.1-A	5.8-A
7. I-10 NB Ramps at County Line Avenue	Caltrans	51.8-F	29.5-D	209.7-F	39.5-E	57.4-F	31.8-D	269.3-F	43.6-E	931.6-F	93.8-F
- With Improvements (Traffic Signal)		-	-	7.9-A	10-A	7-A	9.9-A	8.3-A	10.2-B	10.3-B	11.4-B
- With Improvements (Roundabout)		-	-	8.6-A	5.3-A	7.6-A	5.1-A	9.1-A	5.4-A	10.8-B	6-A
8. Calimesa Boulevard at County Line Avenue	Calimesa/Yucaipa	12.9-B	12.3-B	13.3-B	12.5-B	13.2-B	12.6-B	13.7-B	12.9-B	14.1-B	13.7-B

Notes:
(1) Delay is shown in seconds/vehicle. For intersections with traffic signal or all way stop control, overall average intersection delay and LOS are shown. For intersections with cross street stop control, LOS is based on average delay of the worst individual lane (or movements sharing a lane).
(2) LOS = Level of Service

Table 11
Project Fair Share Contribution - Phase 2

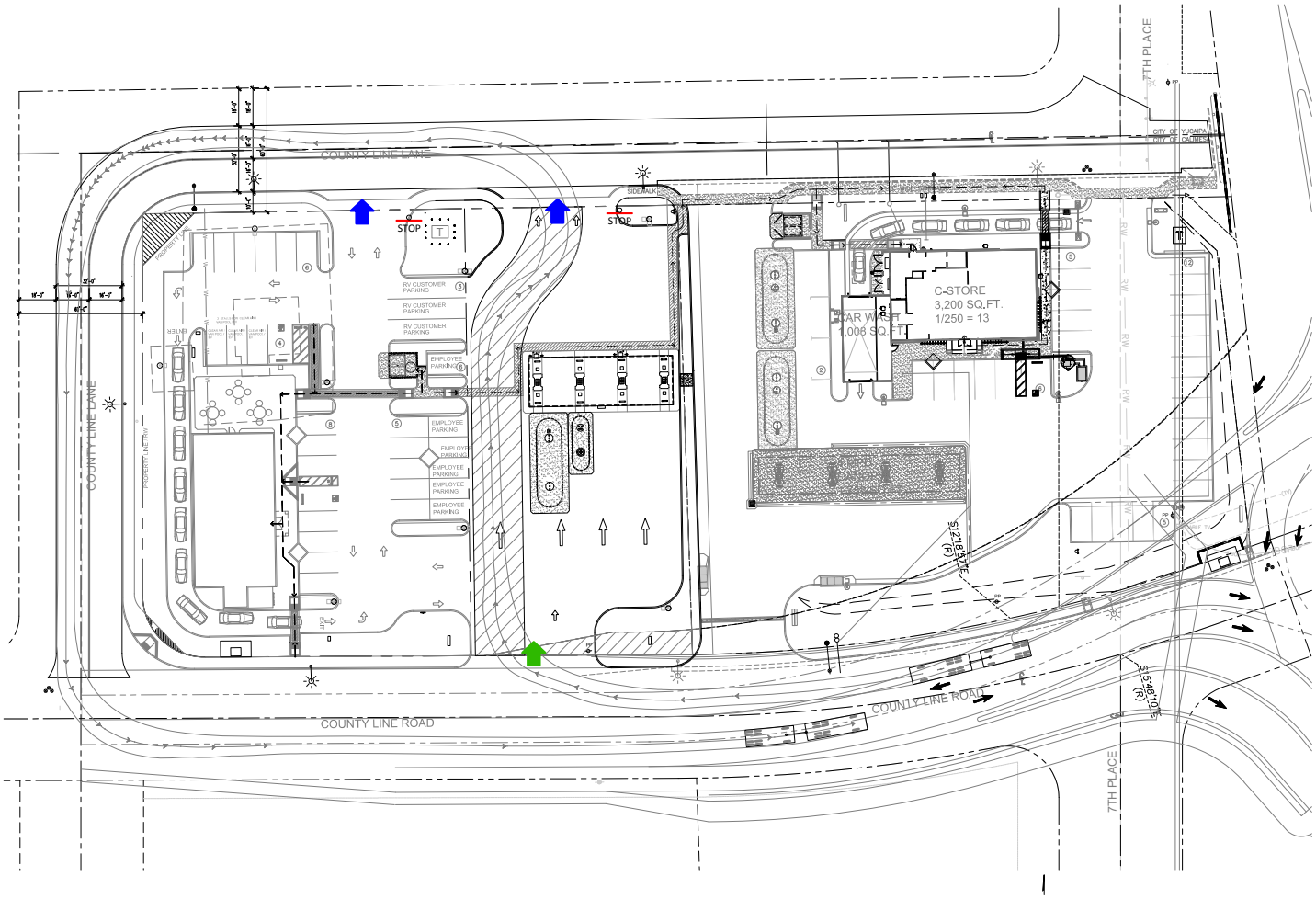
Study Intersection	Jurisdiction[1]	Peak Hour	Intersection Turning Movement Volumes				
			Existing	Existing Plus Ambient Plus Project Plus Cumulative	Project Trips	Total New Trips	Project Share of Total New Trips
6. I-10 SB Ramps at County Line Road	Caltrans	AM	935	1,398	269	463	58.1%
		PM	864	1,229	158	365	43.3%
7. I-10 NB Ramps at County Line Avenue	Caltrans	AM	1,654	2,065	192	411	46.7%
		PM	1,369	1,720	112	351	31.9%

Study Intersection	Improvement	Cost Estimate[2]	Project Share
6. I-10 SB Ramps at County Line Road	Install traffic signal[2]	$ 600,000	$ 348,596
7. I-10 NB Ramps at County Line Avenue	Install traffic signal[2]	$ 600,000	$ 280,292
Total		$ 1,200,000	$ 628,888

Notes:

(1) Roundabout improvements included within the current Western Riverside Council of Governments (WRCOG) Transportation Uniform Mitigation Fee (TUMF) improvement list.

(2) Cost estimate based on values from the County of San Bernardino Congestion Management Program (2003 Update), and adjusted by the City of Calimesa. Cost estimates are sensitive to the quantity and location of work specified for a given installation. These values represent the relative magnitude of the cost and should be verified through the bidding process. Additional costs may be required for Caltrans encroachment permit processes.



All roadway design, traffic signing and striping, and traffic control improvements relating to the proposed project should be constructed in accordance with applicable engineering standards and to the satisfaction of the City of Calimesa Public Works Department.

Site-adjacent roadways should be constructed or repaired at their ultimate half-section width, including landscaping and parkway improvements in conjunction with development, or as otherwise required by the City of Calimesa Public Works Department.

On-site traffic signing and striping plans should be submitted for City of Calimesa approval in conjunction with detailed construction plans for the project.

Off-street parking should be provided to meet City of Calimesa Municipal Code requirements.

On-street parking on County Line Road will be prohibited.

The final grading, landscaping, and street improvement plans should demonstrate that sight distance standards are met in accordance with applicable City of Calimesa/California Department of Transportation sight distance standards.

As is the case for any roadway design, the City of Calimesa should periodically review traffic operations in the vicinity of the project once the project is constructed to assure that the traffic operations are satisfactory.

N

Legend
STOP Stop Sign
Full Access Driveway
Inbound Access Only

Figure 49
Circulation Recommendations

APPENDICES

Appendix A Glossary
Appendix B Scoping Agreement
Appendix C Volume Count Worksheets
Appendix D Level of Service Worksheets
Appendix E Traffic Signal Warrant Worksheets
Appendix F Transportation Uniform Mitigation Fee (TUMF) Improvement Network
Appendix G Vehicle Miles Traveled (VMT) Analysis

APPENDIX A

GLOSSARY

GLOSSARY OF TERMS

ACRONYMS

AC	Acres
ADT	Average Daily Traffic
Caltrans	California Department of Transportation
DU	Dwelling Unit
ICU	Intersection Capacity Utilization
LOS	Level of Service
TSF	Thousand Square Feet
V/C	Volume/Capacity
VMT	Vehicle Miles Traveled

TERMS

AVERAGE DAILY TRAFFIC: The average 24-hour volume for a stated period divided by the number of days in that period. For example, Annual Average Daily Traffic is the total volume during a year divided by 365 days.

BANDWIDTH: The number of seconds of green time available for through traffic in a signal progression.

BOTTLENECK: A point of constriction along a roadway that limits the amount of traffic that can proceed downstream from its location.

CAPACITY: The maximum number of vehicles that can be reasonably expected to pass over a given section of a lane or a roadway in a given time period.

CHANNELIZATION: The separation or regulation of conflicting traffic movements into definite paths of travel by the use of pavement markings, raised islands, or other suitable means to facilitate the safe and orderly movements of both vehicles and pedestrians.

CLEARANCE INTERVAL: Nearly same as yellow time. If there is an all red interval after the end of a yellow, then that is also added into the clearance interval.

CONTROL DELAY: The component of delay, typically expressed in seconds per vehicle, resulting from the type of traffic control at an intersection. Control delay is measured by comparison with the uncontrolled condition; it includes delay incurred by slowing down, stopping/waiting, and speeding up.

CORDON: An imaginary line around an area across which vehicles, persons, or other items are counted (in and out).

CORNER SIGHT DISTANCE: The minimum sight distance required by the driver of a vehicle to cross or enter the lanes of the major roadway without requiring approaching traffic travelling at a given speed to radically alter their speed or trajectory. Corner sight distance is measured from the driver's eye at 42 inches above the pavement to an object height of 36 inches above the pavement in the center of the nearest approach lane.

CYCLE LENGTH: The time period in seconds required for a traffic signal to complete one full cycle of indications.

CUL-DE-SAC: A local street open at one end only and with special provisions for turning around.

DAILY CAPACITY: A theoretical value representing the daily traffic volume that will typically result in a peak hour volume equal to the capacity of the roadway.

DELAY: The time consumed while traffic is impeded in its movement by some element over which it has no control, usually expressed in seconds per vehicle.

DEMAND RESPONSIVE SIGNAL: Same as traffic-actuated signal.

DENSITY: The number of vehicles occupying in a unit length of the through traffic lanes of a roadway at any given instant. Usually expressed in vehicles per mile.

DETECTOR: A device that responds to a physical stimulus and transmits a resulting impulse to the signal controller.

DESIGN SPEED: A speed selected for purposes of design. Features of a highway, such as curvature, superelevation, and sight distance (upon which the safe operation of vehicles is dependent) are correlated to design speed.

DIRECTIONAL SPLIT: The percent of traffic in the peak direction at any point in time.

DIVERSION: The rerouting of peak hour traffic to avoid congestion.

FORCED FLOW: Opposite of free flow.

FREE FLOW: Volumes are well below capacity. Vehicles can maneuver freely and travel is unimpeded by other traffic.

GAP: Time or distance between successive vehicles in a traffic stream, rear bumper to front bumper.

HEADWAY: Time or distance spacing between successive vehicles in a traffic stream, front bumper to front bumper.

INTERCONNECTED SIGNAL SYSTEM: A number of intersections that are connected to achieve signal progression.

LEVEL OF SERVICE: A qualitative measure of a number of factors, which include speed and travel time, traffic interruptions, freedom to maneuver, safety, driving comfort and convenience, and operating costs.

LOOP DETECTOR: A vehicle detector consisting of a loop of wire embedded in the roadway, energized by alternating current and producing an output circuit closure when passed over by a vehicle.

MINIMUM ACCEPTABLE GAP: Smallest time headway between successive vehicles in a traffic stream into which another vehicle is willing and able to cross or merge.

MULTI-MODAL: More than one mode; such as automobile, bus transit, rail rapid transit, and bicycle transportation modes.

OFFSET: The time interval in seconds between the beginning of green at one intersection and the beginning of green at an adjacent intersection.

PLATOON: A closely grouped component of traffic that is composed of several vehicles moving, or standing ready to move, with clear spaces ahead and behind.

PASSENGER CAR EQUIVALENT (PCE): A metric used to assess the impact of larger vehicles, such as trucks, recreational vehicles, and buses, by converting the traffic volume of larger vehicles to an equivalent number of passenger cars.

PEAK HOUR: The 60 consecutive minutes with the highest number of vehicles.

PRETIMED SIGNAL: A type of traffic signal that directs traffic to stop and go on a predetermined time schedule without regard to traffic conditions. Also, fixed time signal.

PROGRESSION: A term used to describe the progressive movement of traffic through several signalized intersections.

QUEUE: The number of vehicles waiting at a service area such as a traffic signal, stop sign, or access gate.

QUEUE LENGTH: The length of vehicle queue, typically expressed in feet, waiting at a service area such as a traffic signal, stop sign, or access gate.

SCREEN-LINE: An imaginary line or physical feature across which all trips are counted, normally to verify the validity of mathematical traffic models.

SHARED/RECIPROCAL PARKING AGREEMENT: A written binding document executed between property owners to provide a designated number of off-street parking stalls within a designated area to be available for specified businesses or land uses.

SIGHT DISTANCE: The continuous length of roadway visible to a driver or roadway user.

SIGNAL CYCLE: The time period in seconds required for one complete sequence of signal indications.

SIGNAL PHASE: The part of the signal cycle allocated to one or more traffic movements.

STACKING DISTANCE: The length of area available behind a service area, such as a traffic signal or gate, for vehicle queueing to occur.

STARTING DELAY: The delay experienced in initiating the movement of queued traffic from a stop to an average running speed through an intersection.

STOPPING SIGHT DISTANCE: The minimum distance required by the driver of a vehicle on the major roadway travelling at a given speed to bring the vehicle to a stop after an object on the road becomes visible. Stopping sight distance is measured from the driver's eye at 42 inches above the pavement to an object height of 6 inches above the pavement.

TRAFFIC-ACTUATED SIGNAL: A type of traffic signal that directs traffic to stop and go in accordance with the demands of traffic, as registered by the actuation of detectors.

TRIP: The movement of a person or vehicle from one location (origin) to another (destination). For example, from home to store to home is two trips, not one.

TRIP-END: One end of a trip at either the origin or destination (i.e., each trip has two trip-ends). A trip-end occurs when a person, object, or message is transferred to or from a vehicle.

TRIP GENERATION RATE: The quantity of trips produced and/or attracted by a specific land use stated in terms of units such as per dwelling, per acre, and per 1,000 square feet of floor space.

TRUCK: A vehicle having dual tires on one or more axles, or having more than two axles.

TURNING RADIUS: The circular arc formed by the smallest turning path radius of the front outside tire of a vehicle, such as that performed by a U-turn maneuver. This is based on the length and width of the wheel base as well as the steering mechanism of the vehicle.

UNBALANCED FLOW: Heavier traffic flow in one direction than the other. On a daily basis, most facilities have balanced flow. During the peak hours, flow is seldom balanced in an urban area.

VEHICLE MILES OF TRAVEL: A measure of the amount of usage of a section of highway, obtained by multiplying the average daily traffic by length of facility in miles.

APPENDIX B

SCOPING AGREEMENT

1st REVIEW 9.17.19

Pls. revise + resubmit.

Exhibit B

SCOPING AGREEMENT FOR TRAFFIC IMPACT STUDY

This letter acknowledges the Riverside County Transportation Department requirements for traffic impact analysis of the following project. The analysis must follow the Riverside County Transportation Department Traffic Study Guidelines dated April 2008.

Case No. _____

Related Cases -

SP No. _____

EIR No. _____

GPA No. _____

CZ No. _____

Project Name: 7th Street & County Line Road RV Fueling & Retail Project

Project Address: Northeast of County Line Lane and County Line Road

Project Description: 3,000 SF of coffee/donut shop with drive-thru and a 3 FP RV Fueling Facility

	Consultant	Developer
Name:	Ganddini Group, Inc./ Bryan Crawford	J&T Management, Inc. / Jack Kofdarali
Address:	550 Parkcenter Dr. Suite 202	P.O. Box 1958
	Santa Ana, Ca 92705	Corona, CA 92878
Telephone:	714-795-3100 ext 104	951-280-3833
Fax:	bryan@ganddini.com	jack@jntmgmt.com

A. Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation, 10th Edition, 2017

	Current GP Land Use	Proposed Land Use
	C-C : Commercial Community	C-C : Commercial Community
Current Zoning	C-C : Commercial Community	Proposed Zoning C-C : Commercial Community

	Current Trip Generation			Proposed Trip Generation		
	In	Out	Total	In	Out	Total
AM Trips	-	-	-	151	146	297
PM Trips	-	-	-	87	87	174

may have some. small %.

Internal Trip Allowance ☐ Yes ☒ No (_____ % Trip Discount)

Pass-By Trip Allowance ☐ Yes ☒ No (_____ % Trip Discount)

A passby trip discount of 25% is allowed for appropriate land uses. The passby trips at adjacent study area intersections and project driveways shall be indicated on a report figure.

B. Trip Geographic Distribution: (attach exhibit for detailed assignment) N 0 % S 10 % E 90 % W 0 %

? SECTION D. + E. COMMENTS

C. Background Traffic

Project Build-out Year: 2021

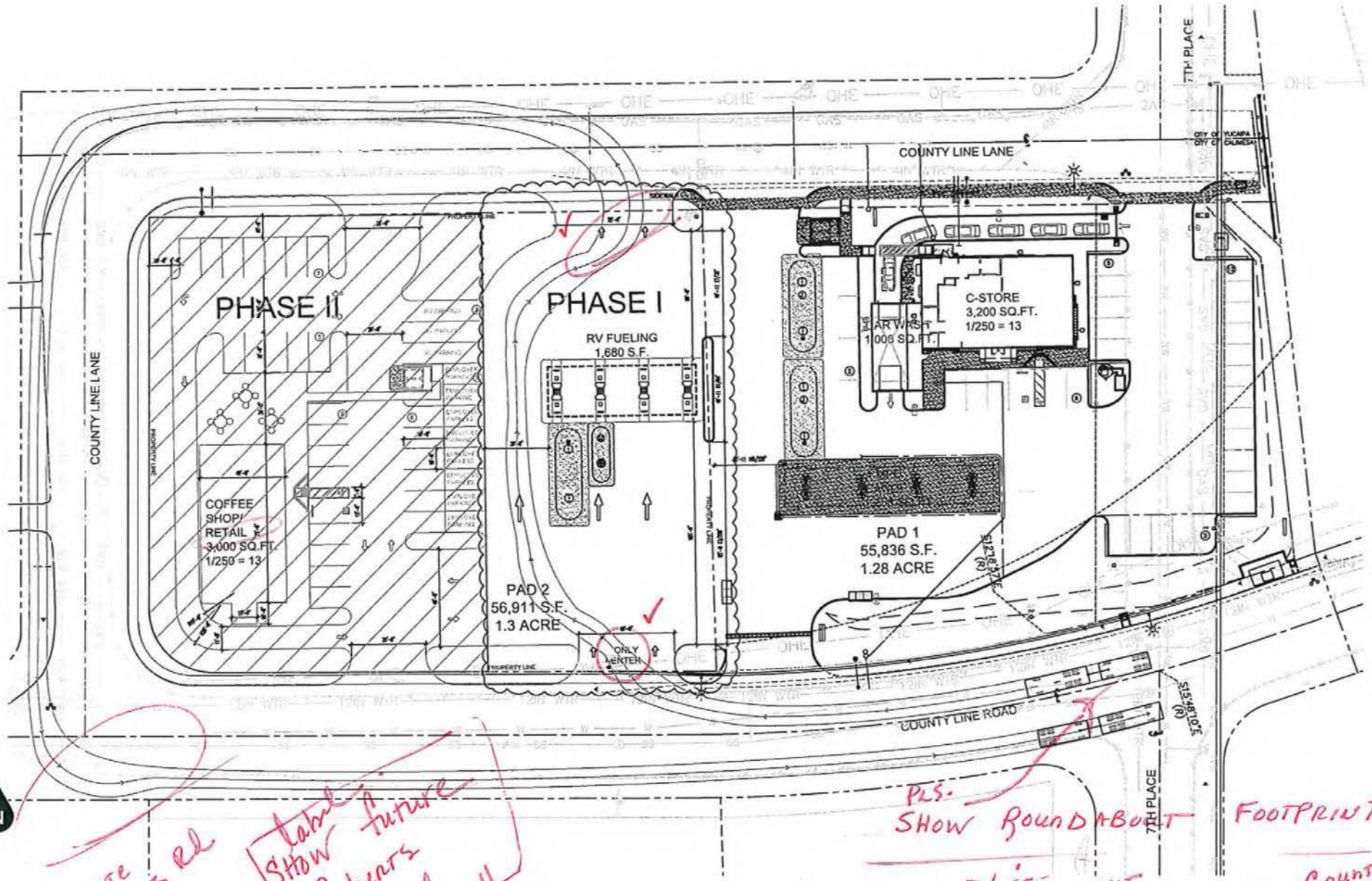
Annual Ambient Growth Rate: 2.0 %

Phase Year(s) _____

Other area projects to be analyzed: Please provide cumulative data. include Mesa Verde SP for 2023 analysis.

Model/Forecast methodology: Manual build up approach

as applicable.



ULTIMATE Roberts RL NOT LIKELY to be offset IN final alignment.

Label: SHOW future Roberts RL

Line up for analysis

PLS. SHOW ROUNDABOUT FOOTPRINT

→ OR BOTH D/WS - RIGHT IN / RIGHT OUT W/ ALL Egress to County Line Lar

* DRIVEWAY SPACING DOES NOT MEET ACCESS MGMT. CRITERIA

* RECIPROCAL USE BTWN PHASES PLANNED

Figure 2
Site Plan

ganddini

7th Street & County Line Road RV Fueling & Retail Project
Traffic Impact Analysis
19-0183

Gmail **Bryan Crawford <bryandavidcrawford@gmail.com>**

FW: 7th St & County Line Road RV Fueling & Retail Project

Bryan Crawford <bryan@ganddini.com> Wed, Sep 25, 2019 at 11:58 AM
To: Lori Askew <laskew@cityofcalimesa.net>

Lori,

Attached is the revised scoping agreement based on the comments from Monae Pugh. The project applicant has determined that they would rather keep the existing driveway configuration on County Line Road with those project accesses being restricted to right turns in only. All egress will be to County Line Lane. The trip distribution figures have been updated to reflect this as well as northbound traffic included on County Line Lane for Year 2023. Site plans have been revised based on Monae's comments. Monae had a question regarding a retail component. The 3,000 square foot building has been analyzed as a coffee shop even though the site plan says "coffee shop/retail" . This building is anticipated to be either a coffee shop or fast-food restaurant. In consultation with the project applicant, we are using the land use with the highest trip generation rates as to provide for a conservative analysis.

Thank you.
[Quoted text hidden]
[Quoted text hidden]

TIA Scoping Revised - 7th Street & County Line Road RV Fueling & Retail Project.pdf
2257K

Gmail **Bryan Crawford <bryandavidcrawford@gmail.com>**

FW: 7th St & County Line Road RV Fueling & Retail Project

Lori Askew <laskew@cityofcalimesa.net> Wed, Sep 25, 2019 at 1:02 PM
To: Bryan Crawford <bryan@ganddini.com>

Thanks Bryan. This will be forwarded to Monae.

[Quoted text hidden]

Exhibit B

SCOPING AGREEMENT FOR TRAFFIC IMPACT STUDY

This letter acknowledges the Riverside County Transportation Department requirements for traffic impact analysis of the following project. The analysis must follow the Riverside County Transportation Department Traffic Study Guidelines dated April 2008.

Case No. _____
Related Cases -
SP No. _____
EIR No. _____
GPA No. _____
CZ No. _____
Project Name: 7th Street & County Line Road RV Fueling & Retail Project
Project Address: Northeast of County Line Lane and County Line Road
Project Description: 3,000 SF of coffee/donut shop with drive-thru and a 3 FP RV Fueling Facility

	Consultant	Developer
Name:	Ganddini Group, Inc./ Bryan Crawford	J&T Management, Inc. / Jack Kofdarali
Address:	550 Parkcenter Dr. Suite 202	P.O. Box 1958
	Santa Ana, Ca 92705	Corona, CA 92878
Telephone:	714-795-3100 ext 104	951-280-3833
Fax:	bryan@ganddini.com	jack@jntmgmt.com

A. Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation, 10th Edition, 2017

Current GP Land Use	C-C : Commercial Community	Proposed Land Use	C-C : Commercial Community
Current Zoning	C-C : Commercial Community	Proposed Zoning	C-C : Commercial Community

Current Trip Generation	In	Out	Total	Proposed Trip Generation	In	Out	Total
AM Trips	-	-	-		151	146	297
PM Trips	-	-	-		87	87	174

Internal Trip Allowance ☐ Yes ☒ No (_____ % Trip Discount)
Pass-By Trip Allowance ☐ Yes ☒ No (_____ % Trip Discount)

A passby trip discount of 25% is allowed for appropriate land uses. The passby trips at adjacent study area intersections and project driveways shall be indicated on a report figure.

B. Trip Geographic Distribution: N 5 % S 10 % E 85 % W 0 %
(attach exhibit for detailed assignment)

C. Background Traffic

Project Build-out Year: 2021 Annual Ambient Growth Rate: 2.0 %

Phase Year(s) _____
Other area projects to be analyzed: Please provide cumulative data. Mesa Verde Specific Plan and Yucaipa project north of County Line Road for 2023 analysis, as applicable.
Model/Forecast methodology Manual build up approach

D. Study intersections: *(NOTE: Subject to revision after other projects, trip generation and distribution are determined, or comments from other agencies.)*

1. County Line Ln (NS) at County Line Rd (EW)
2. Coffee Shop Access (NS) at County Line Ln (EW)
3. Coffee Shop Access (NS) at County Line Rd EW)
4. RV Access (NS) at County Line Ln (EW)
5. RV Access (NS) at County Line Rd (EW)
6. 7th Place (NS) at County Line Ln (EW) - 2023 only
7. 7th Place (NS) at County Line Rd (EW)
8. I-10 SB Ramps (NS) at County Line Rd (EW)
9. I-10 NB Ramps (NS) at County Line Ave (EW)
10. Calimesa Blvd (NS) at County Line Ave (EW)

E. Study Roadway Segments: *(NOTE: Subject to revision after other projects, trip generation and distribution are determined, or comments from other agencies.)*

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

E. Other Jurisdictional Impacts

Is this project within a City's Sphere of Influence or one-mile radius of City boundaries? [X] Yes [ ] No

If so, name of City Jurisdiction: City of Yucaipa

F. Site Plan (please attach reduced copy) See Figure 2

G. Specific issues to be addressed in the Study (in addition to the standard analysis described line) (To be filled out by Transportation Department)

(NOTE: If the traffic study states that "a traffic signal is warranted" (or "a traffic signal appears to be warranted," or similar statement) at an existing unsignalized intersection under existing conditions, 8-hour approach traffic volume information must be submitted in addition to the peak hourly turning movement counts for that intersection.)

I-10 interchange at County Line Rd/Ave proposed for roundabouts for Year 2030. 8-hour counts not necessary.

Queuing analysis along County Line Road. Fair share analysis.

H. Existing Conditions

Traffic count data must be new or recent. Provide traffic count dates if using other than new counts.
Date of counts New Counts

***NOTE* Traffic Study Submittal Form and appropriate fee must be submitted with, or prior to submittal of this form. Transportation Department staff will not process the Scoping Agreement prior to receipt of the fee.**

Recommended by:

Bryan Crawford — 9/9/2019

Consultant's Representative — Date

Approved Scoping Agreement:

_____ — _____

City of Calimesa Transportation Department — Date

Scoping Agreement Submitted on 9/23/2019

Revised on 9/23/2019

Table 1
Project Trip Generation

Trip Generation Rates									
			AM Peak Hour			PM Peak Hour			Daily
Land Use	Source[1]	Units[2]	% In	% Out	Rate	% In	% Out	Rate	Rate
Coffee/Donut Shop with Drive-Thru	ITE 937	TSF	51%	49%	88.99	50%	50%	43.88	820.38
RV Fueling Facility	ITE 944	FP	50%	50%	10.28	50%	50%	14.03	172.01

Trips Generated									
			AM Peak Hour			PM Peak Hour			
Land Use	Quantity	Units[2]	In	Out	Total	In	Out	Total	Daily
Coffee/Donut Shop with Drive-Thru	3.000	TSF	136	131	267	66	66	132	2461
RV Fueling Facility	3	FP	15	15	30	21	21	42	516
Total			151	146	297	87	87	174	2,977

Notes:

1) ITE = Institute of Transportation Engineers, Trip Generation Manual, 10th Edition, 2017; XXX= Land Use Code

2) TSF = Thousand Square Feet; FP = Fueling Positions

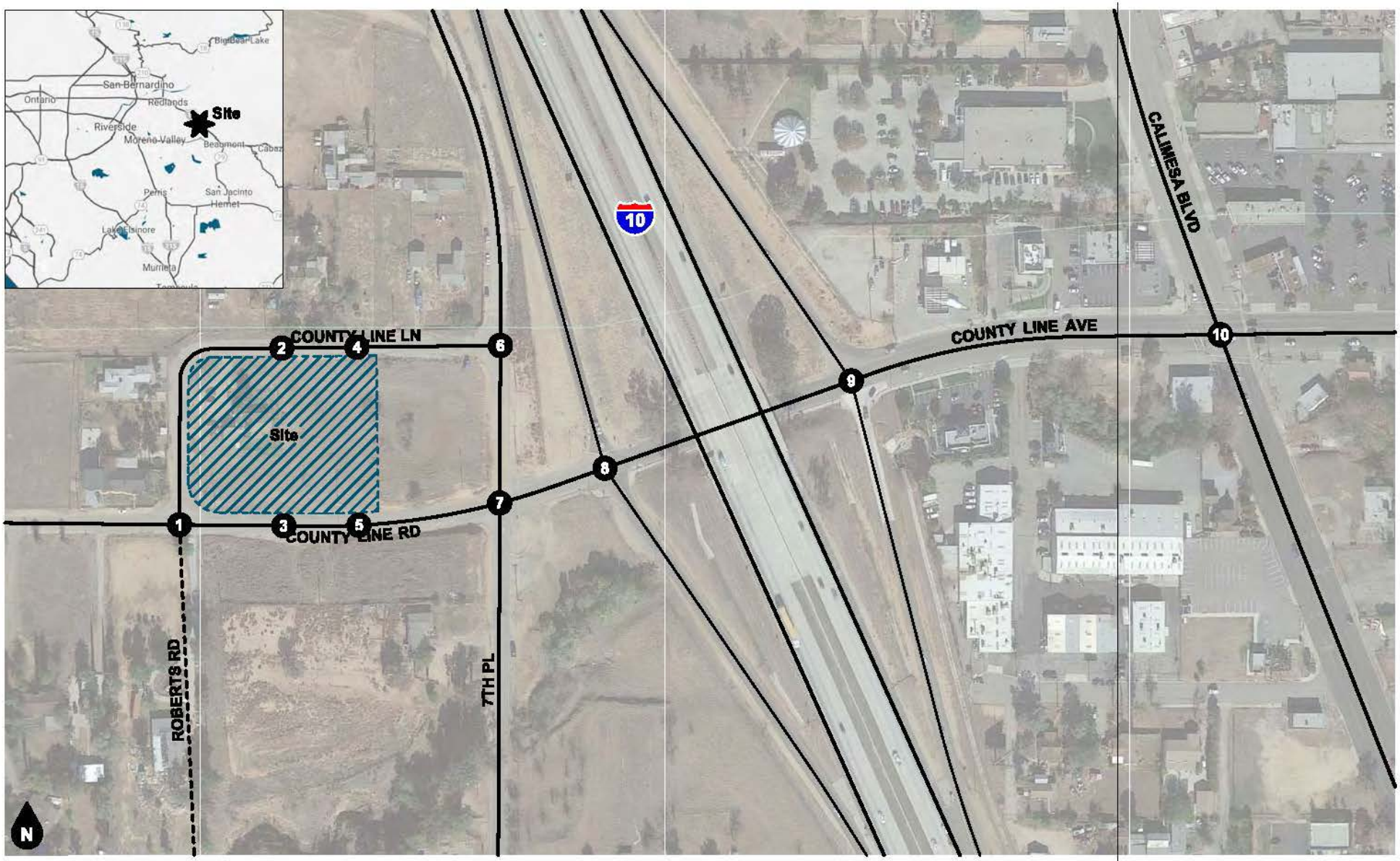


Figure 1
Project Location Map

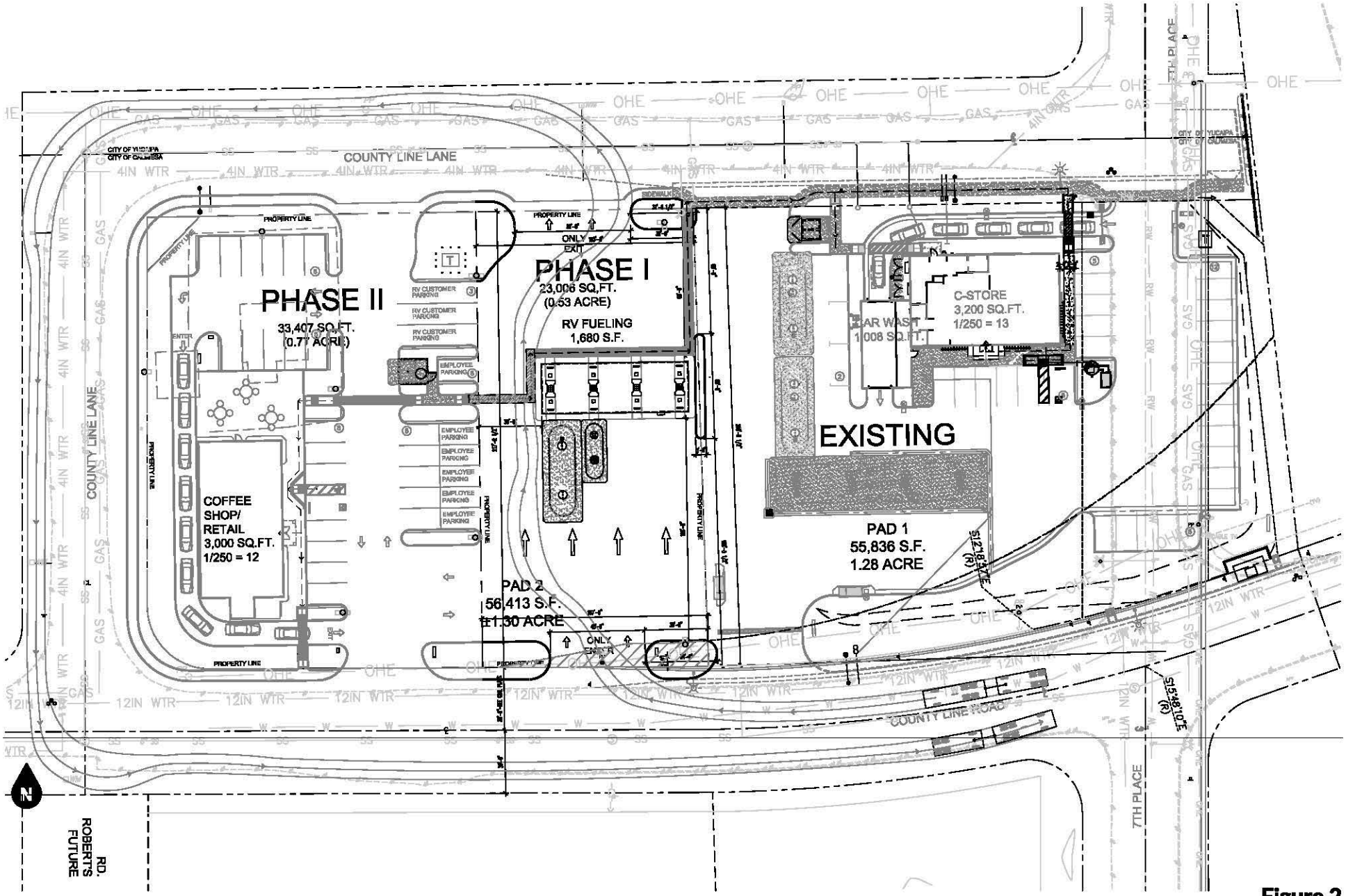


Figure 2
Site Plan

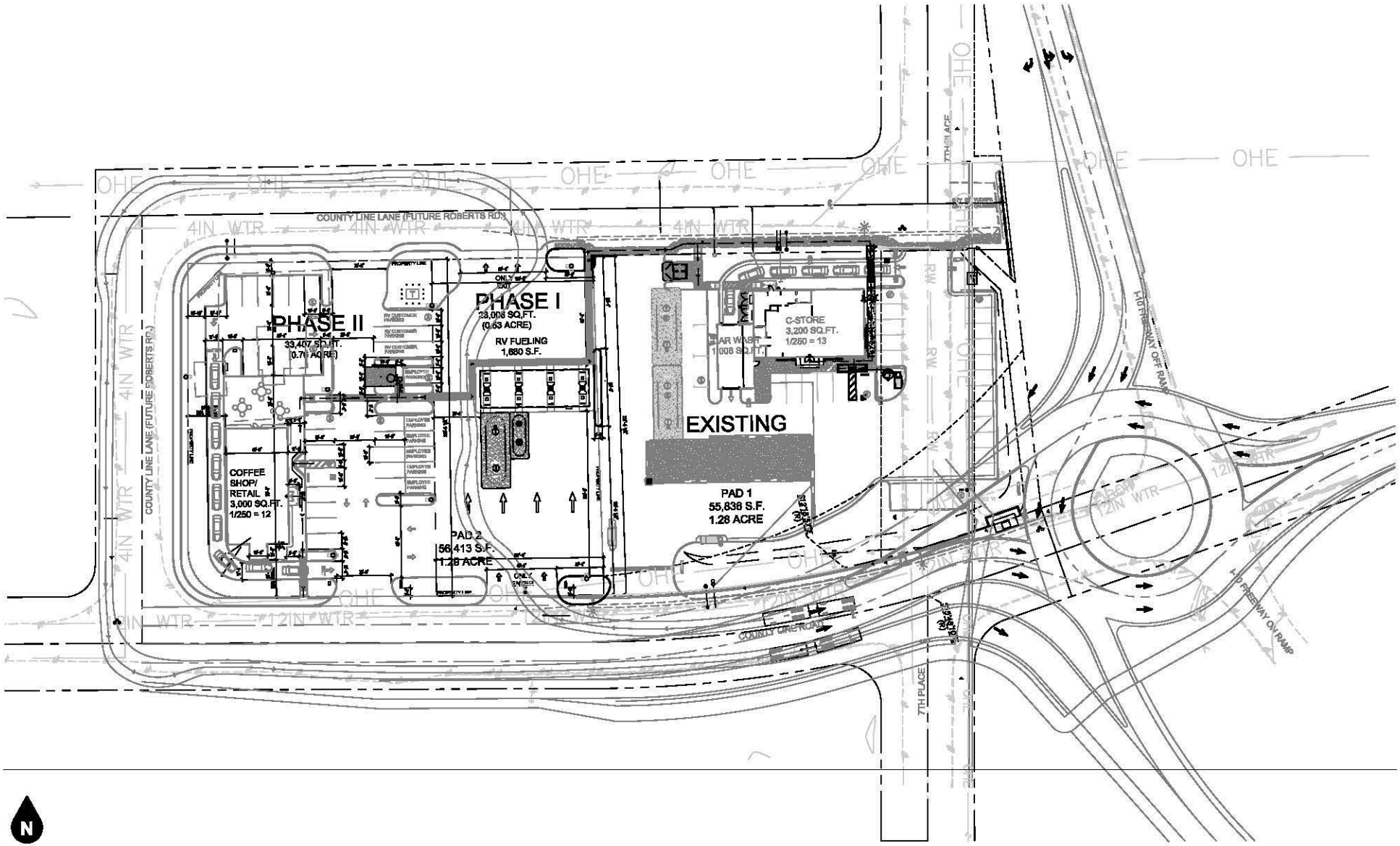
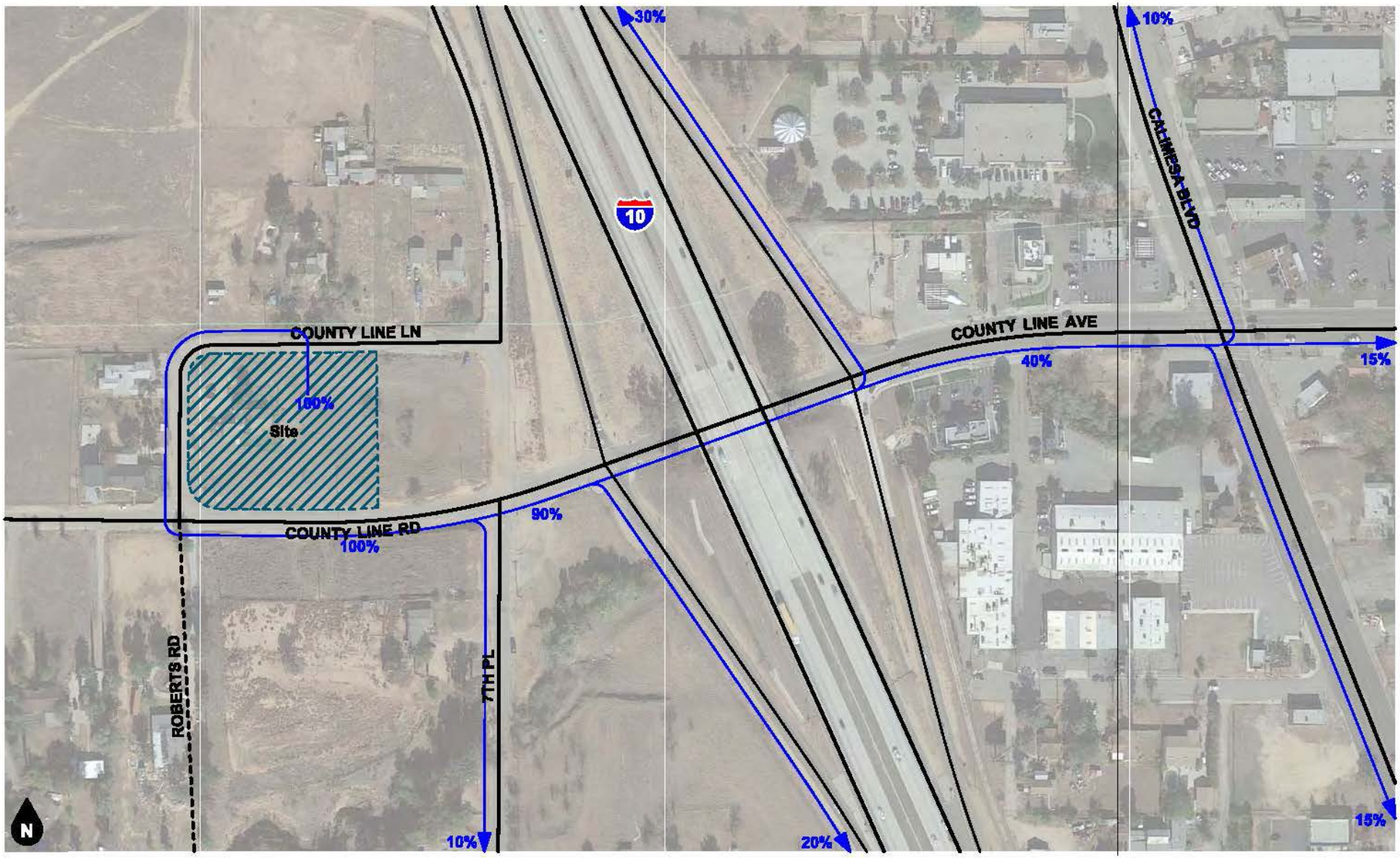


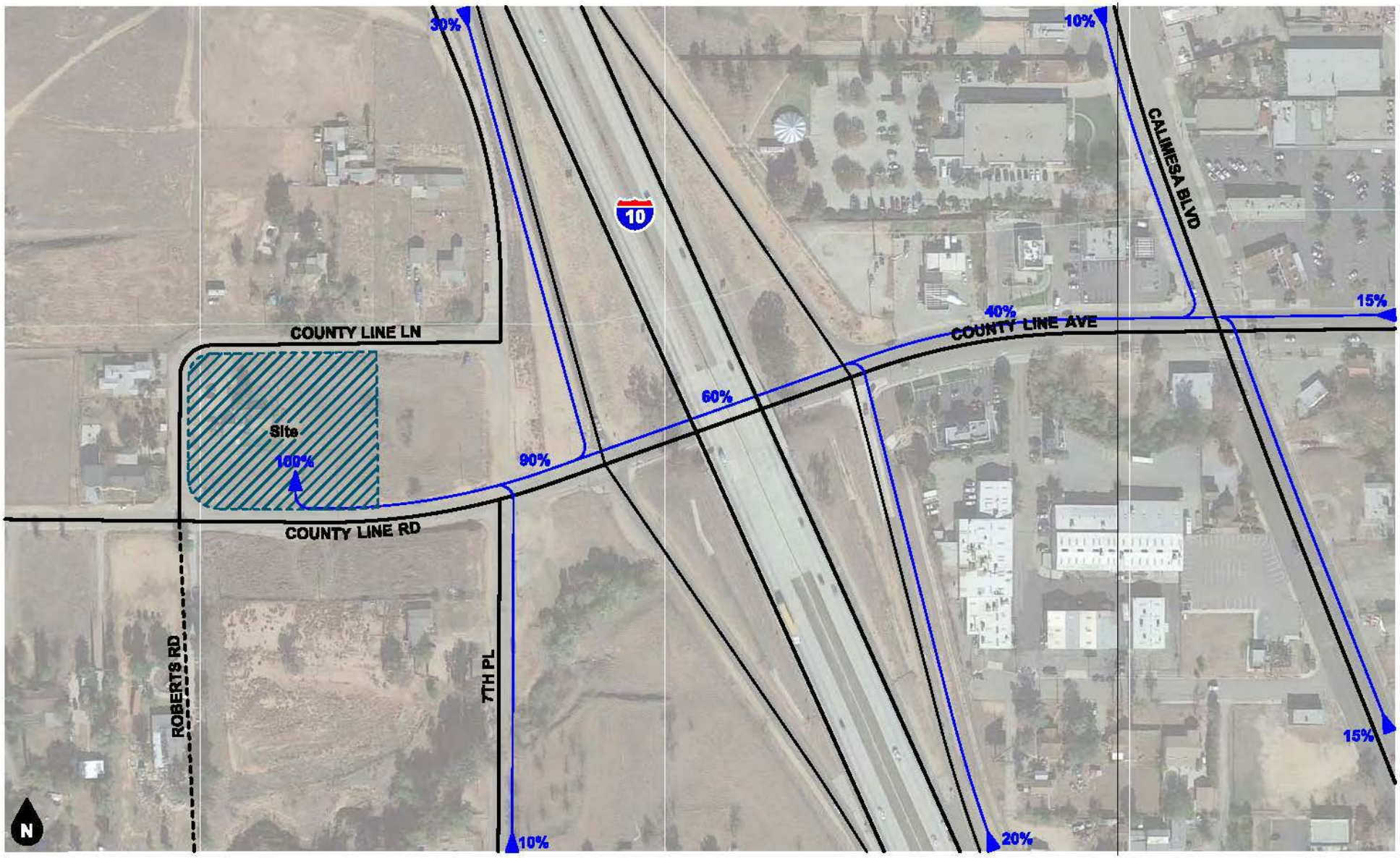
Figure 3
Site Plan - With Interchange Roudbout



Legend

10% Percent From Project

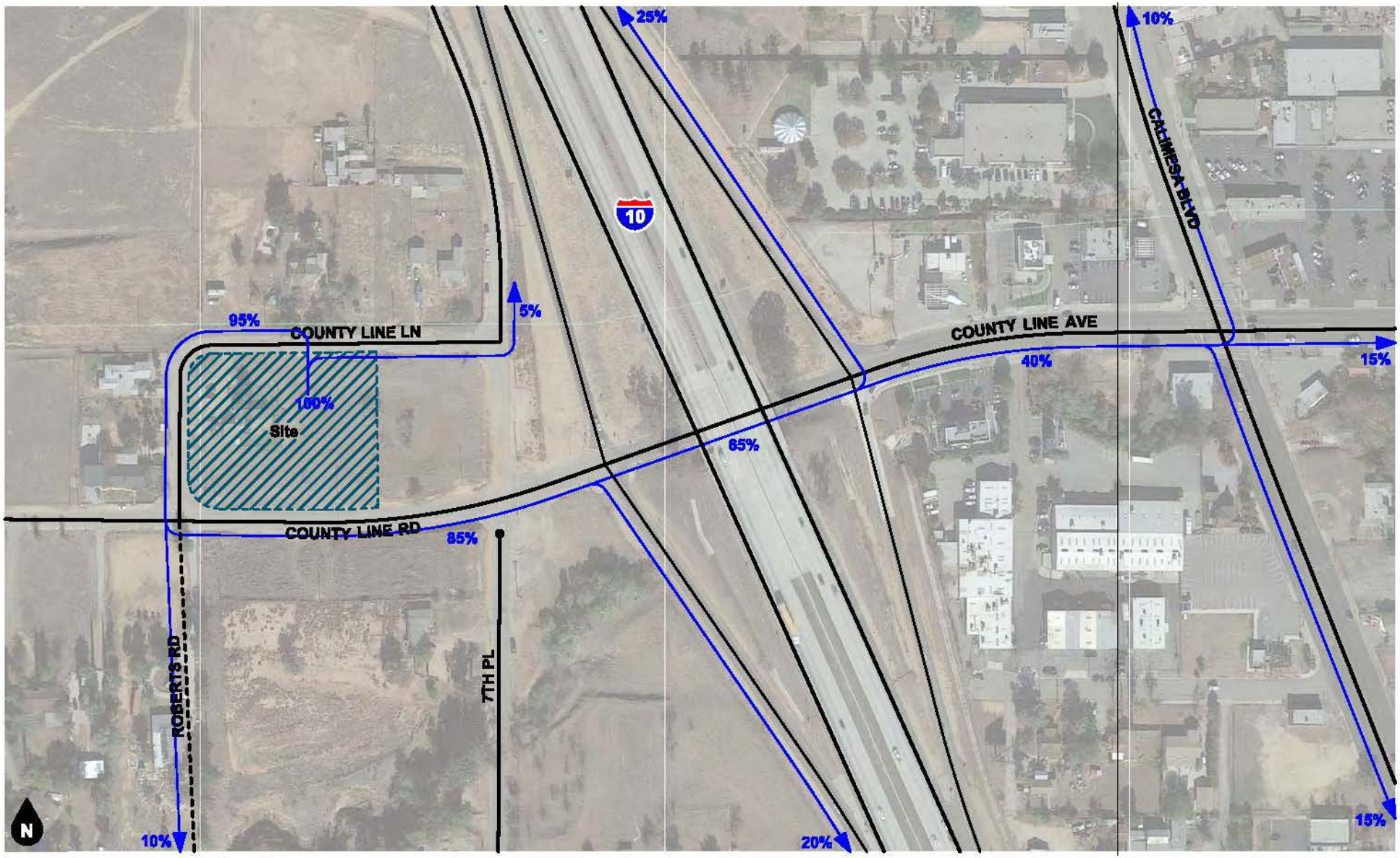
Figure 4
Project Outbound Trip Distribution - Opening Year
(Coffee / Donut Shop with Drive-Thru)



Legend

10% Percent To Project

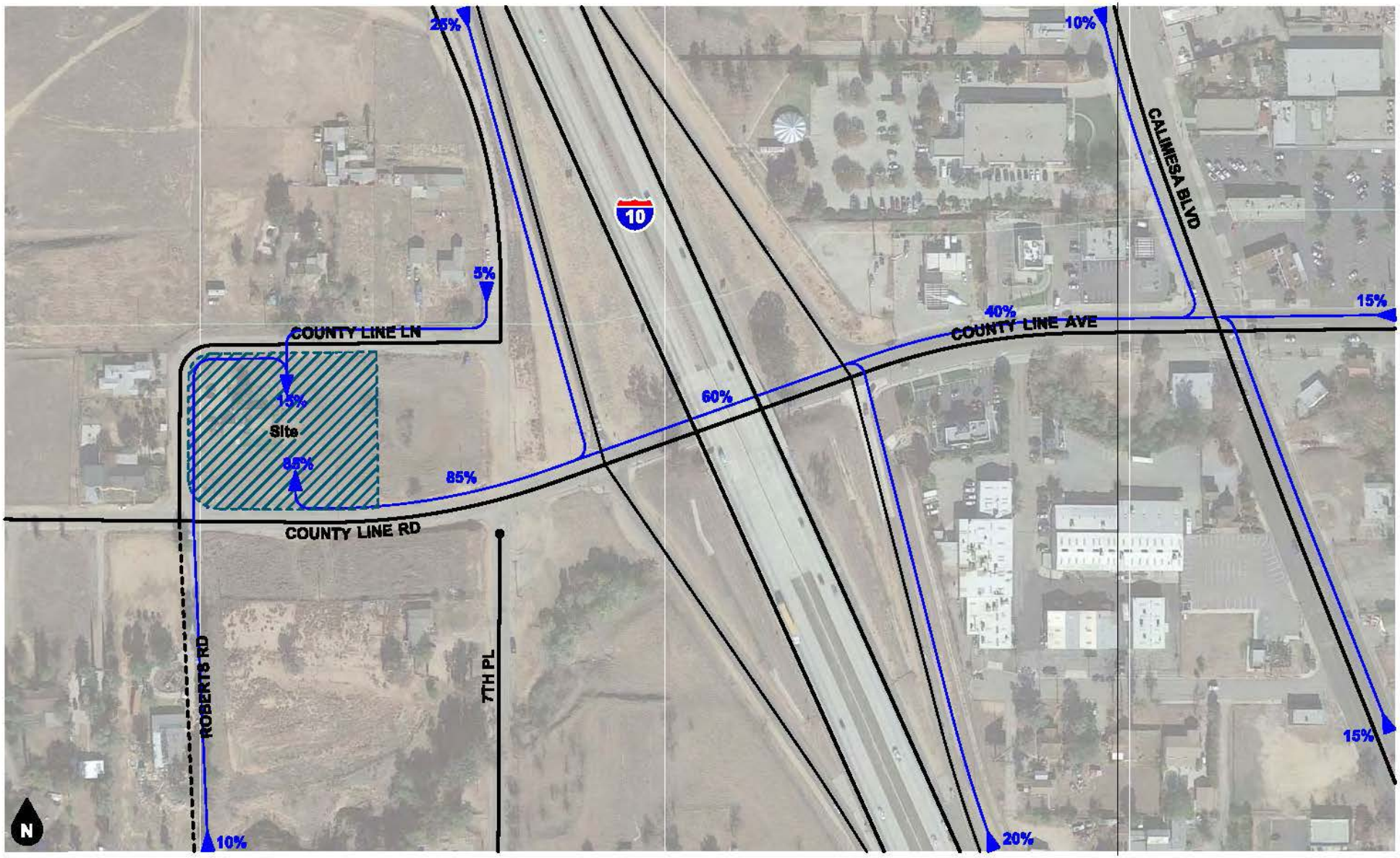
Figure 5
Project Inbound Trip Distribution - Opening Year
(Coffee / Donut Shop with Drive-Thru)



Legend

10% Percent From Project

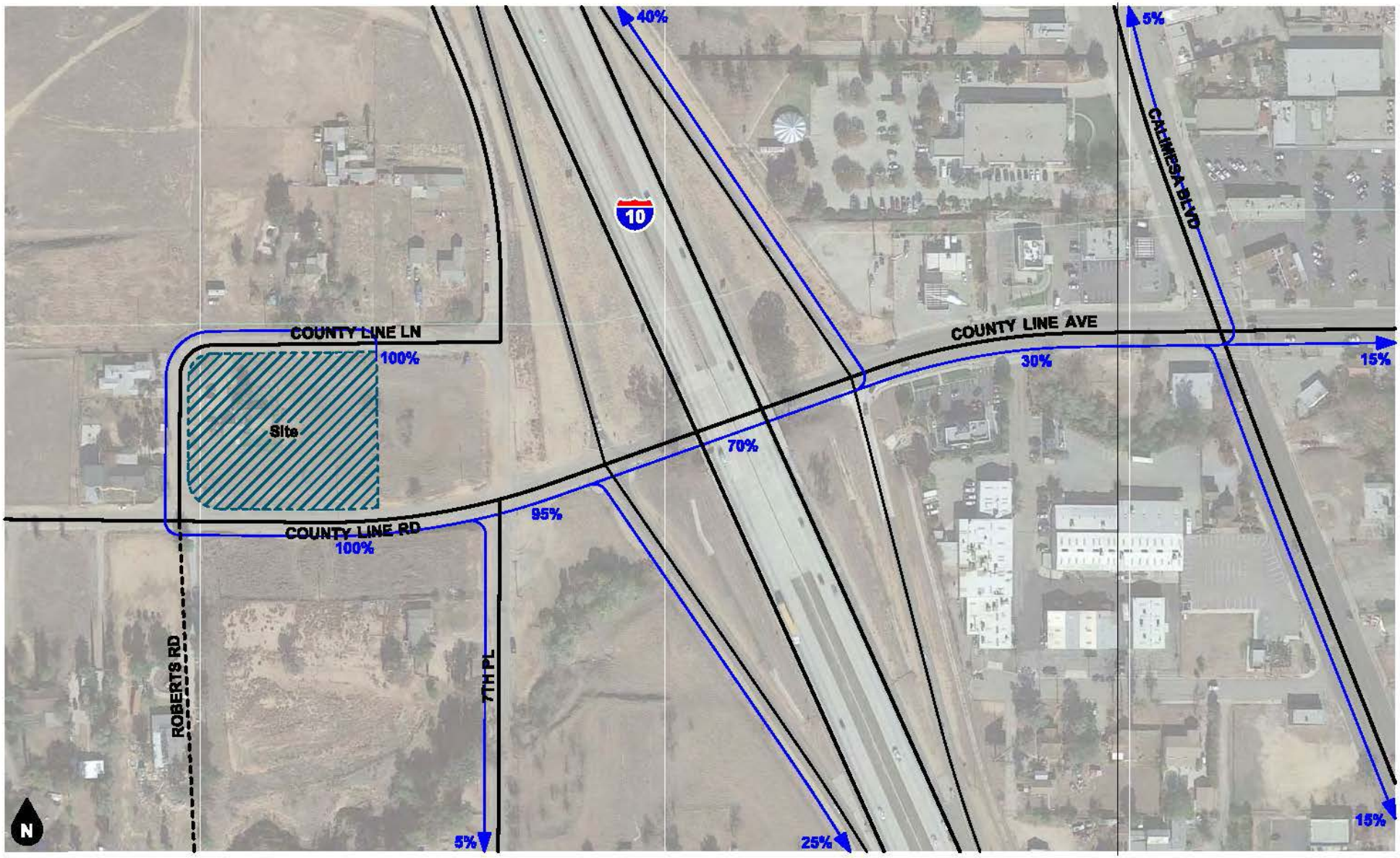
Figure 6
Project Outbound Trip Distribution - Year 2023
(Coffee / Donut Shop with Drive-Thru)



Legend

10% Percent To Project

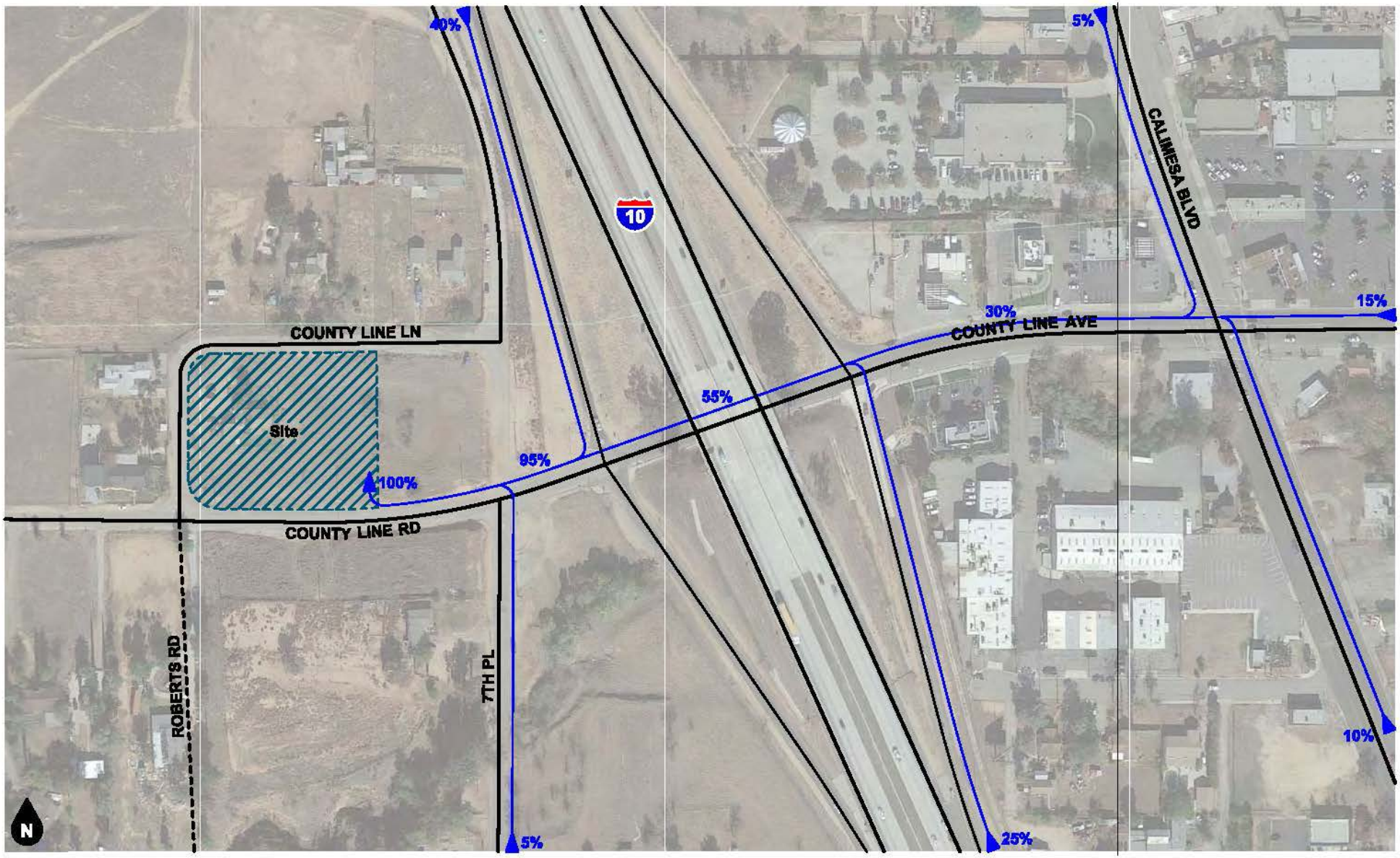
Figure 7
Project Inbound Trip Distribution - Year 2023
(Coffee / Donut Shop with Drive-Thru)



Legend

10% Percent From Project

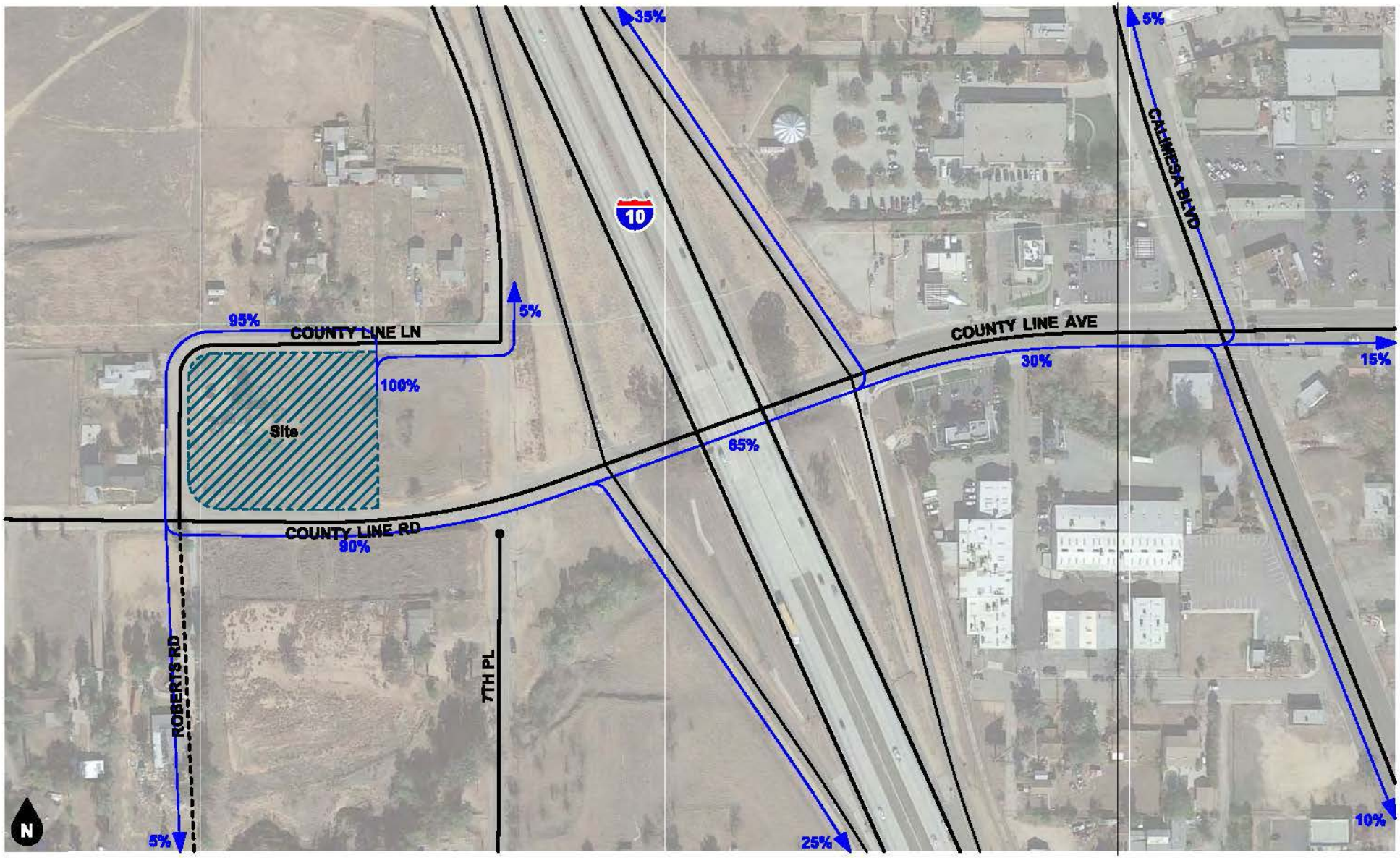
Figure 8
Project Outbound Trip Distribution - Opening Year
(RV Fueling Facility)



Legend

10% Percent To Project

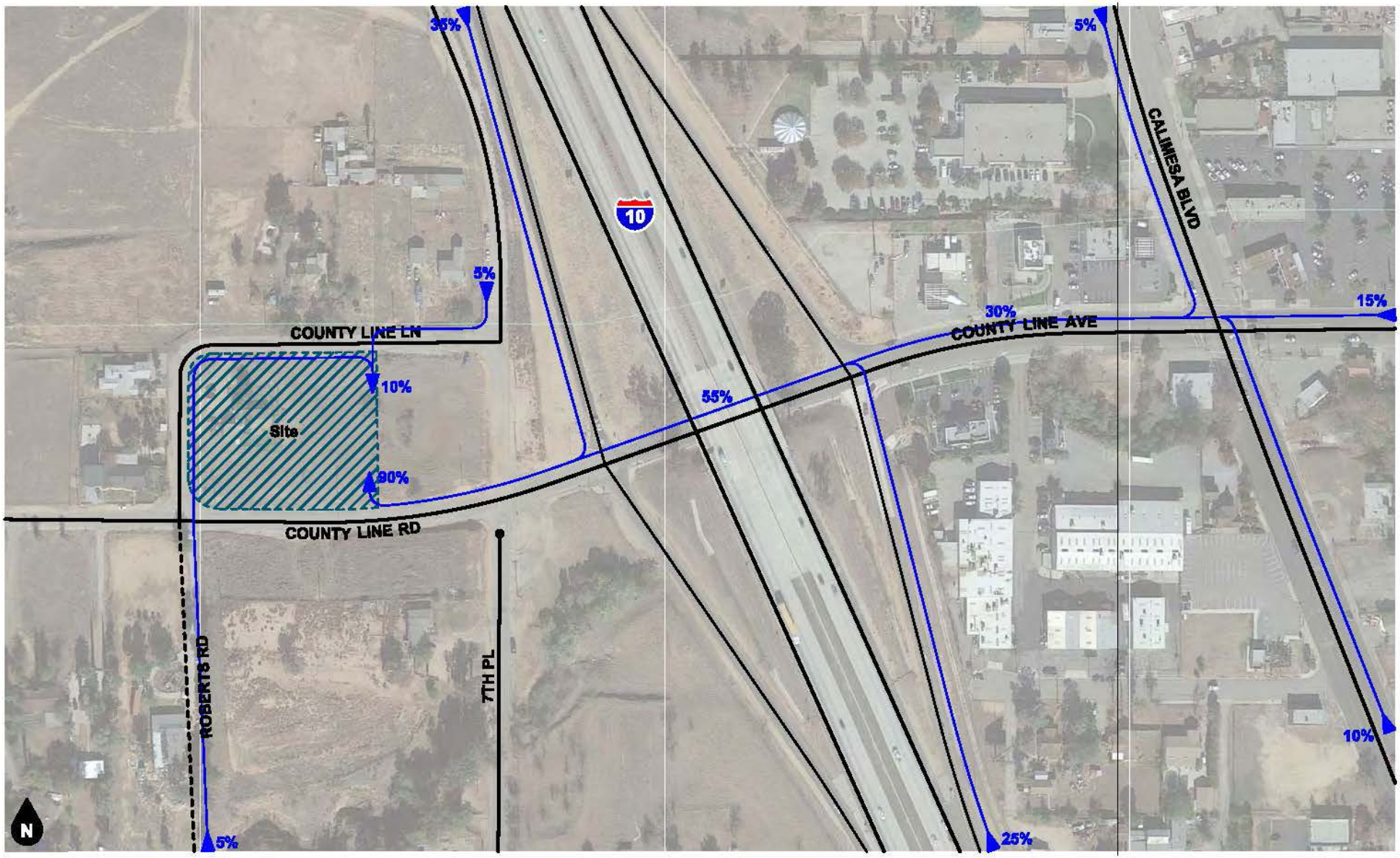
Figure 9
Project Inbound Trip Distribution - Opening Year
(RV Fueling Facility)



Legend

10% Percent From Project

Figure 10
Project Outbound Trip Distribution - Year 2023
(RV Fueling Facility)



Legend

10% Percent To Project

Figure 11
Project Inbound Trip Distribution - Year 2023
(RV Fueling Facility)

APPENDIX C

VOLUME COUNT WORKSHEETS

INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:				
Thu, Sep 19, 19	LOCATION:	Calimesa	PROJECT #:	SC2360
	NORTH & SOUTH:	County Line	LOCATION #:	1
	EAST & WEST:	W County Line	CONTROL:	STOP S

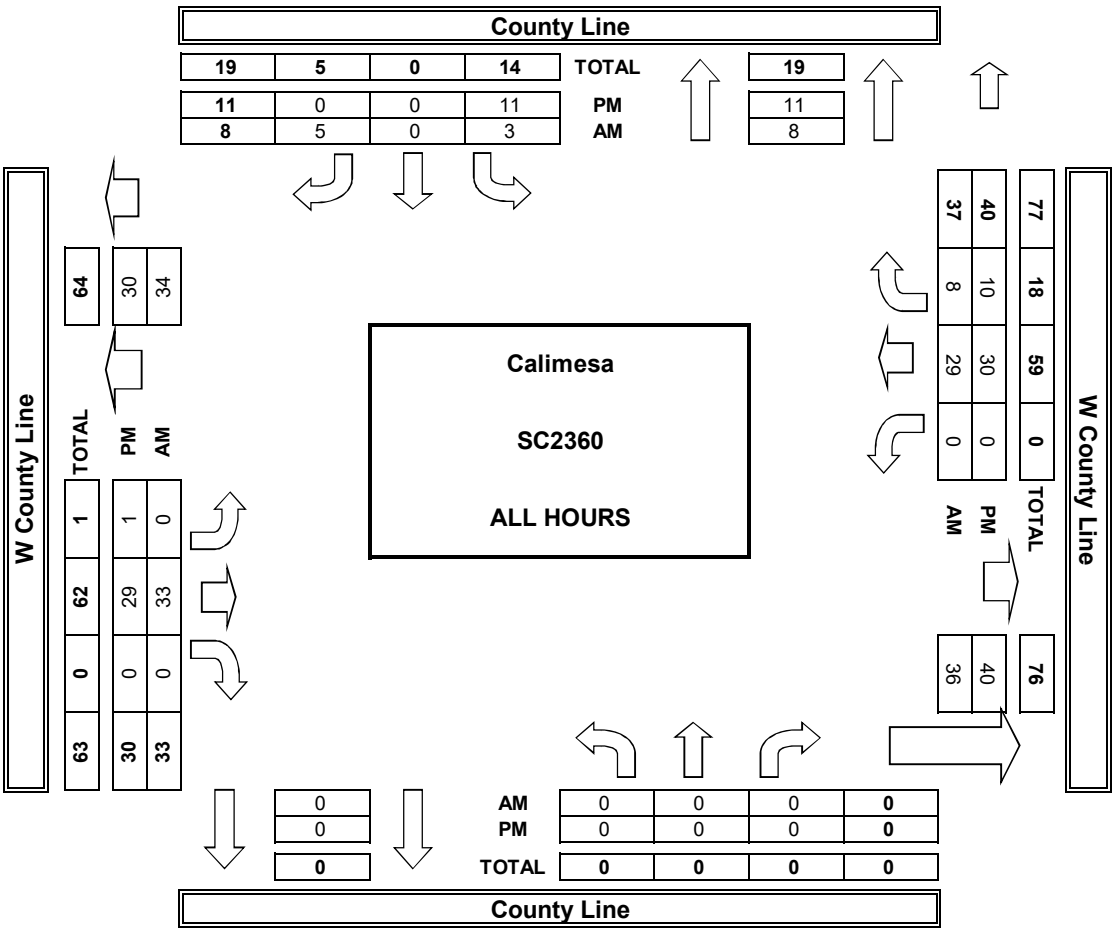
NOTES:

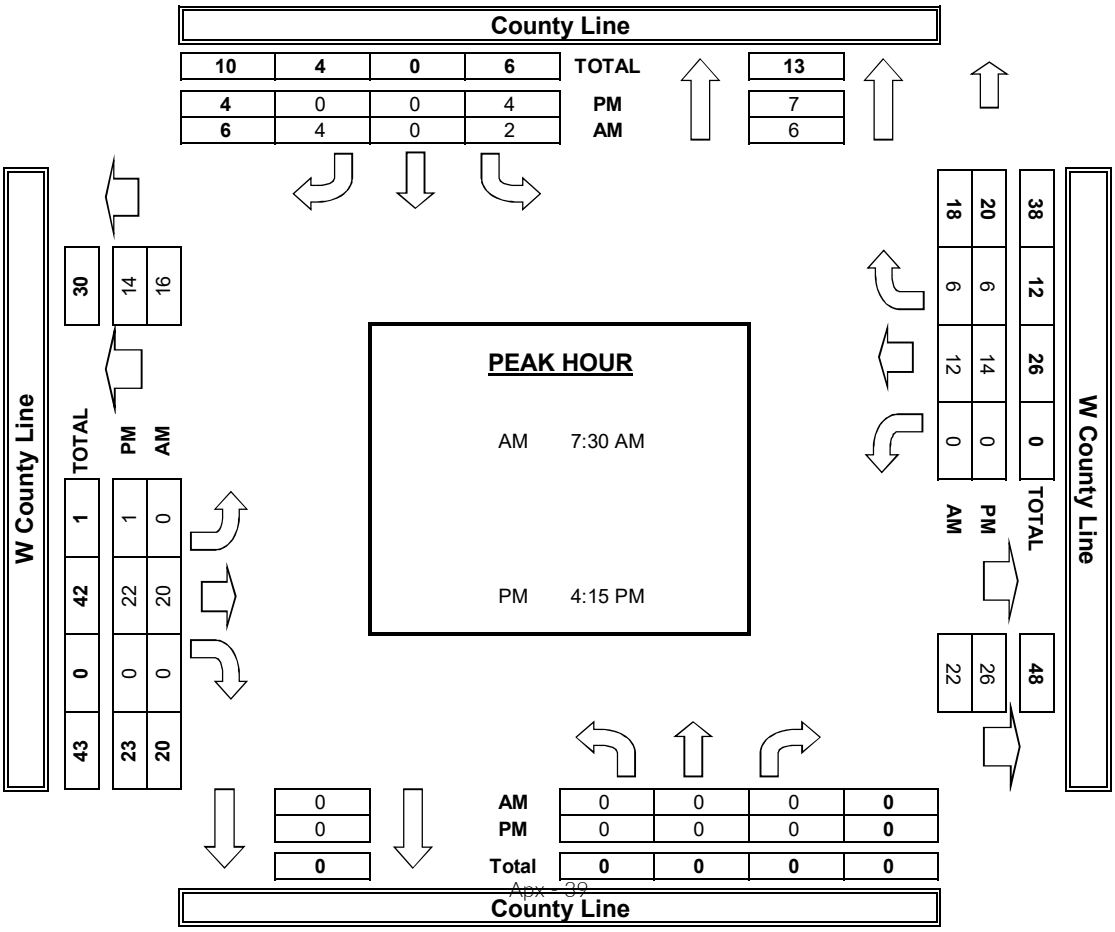
AM / PM / MD / OTHER / OTHER — ▲ N ◄ W E ► S ▼

		NORTHBOUND County Line			SOUTHBOUND County Line			EASTBOUND W County Line			WESTBOUND W County Line			
	LANES:	NL X	NT X	NR X	SL 0	ST X	SR 0	EL 0	ET 1	ER X	WL X	WT 1	WR 0	TOTAL
AM	7:00 AM	0	0	0	0	0	1	0	5	0	0	4	2	12
	7:15 AM	0	0	0	0	0	0	0	4	0	0	2	0	6
	7:30 AM	0	0	0	0	0	2	0	6	0	0	3	2	13
	7:45 AM	0	0	0	0	0	0	0	4	0	0	2	0	6
	8:00 AM	0	0	0	1	0	1	0	4	0	0	4	2	12
	8:15 AM	0	0	0	1	0	1	0	6	0	0	3	2	13
	8:30 AM	0	0	0	1	0	0	0	2	0	0	6	0	9
	8:45 AM	0	0	0	0	0	0	0	2	0	0	5	0	7
	VOLUMES	0	0	0	3	0	5	0	33	0	0	29	8	78
	APPROACH %	0%	0%	0%	38%	0%	63%	0%	100%	0%	0%	78%	22%	
	APP/DEPART	0	/	8	8	/	0	33	/	36	37	/	34	0
	BEGIN PEAK HR		7:30 AM											
	VOLUMES	0	0	0	2	0	4	0	20	0	0	12	6	44
	APPROACH %	0%	0%	0%	33%	0%	67%	0%	100%	0%	0%	67%	33%	
	PEAK HR FACTOR		0.000			0.750			0.833			0.750		0.846
	APP/DEPART	0	/	6	6	/	0	20	/	22	18	/	16	0
PM	4:00 PM	0	0	0	4	0	0	0	3	0	0	5	0	12
	4:15 PM	0	0	0	1	0	0	0	7	0	0	7	1	16
	4:30 PM	0	0	0	0	0	0	0	9	0	0	0	3	12
	4:45 PM	0	0	0	3	0	0	0	0	0	0	2	1	6
	5:00 PM	0	0	0	0	0	0	1	6	0	0	5	1	13
	5:15 PM	0	0	0	1	0	0	0	2	0	0	6	1	10
	5:30 PM	0	0	0	1	0	0	0	1	0	0	4	2	8
	5:45 PM	0	0	0	1	0	0	0	1	0	0	1	1	4
	VOLUMES	0	0	0	11	0	0	1	29	0	0	30	10	81
	APPROACH %	0%	0%	0%	100%	0%	0%	3%	97%	0%	0%	75%	25%	
	APP/DEPART	0	/	11	11	/	0	30	/	40	40	/	30	0
	BEGIN PEAK HR		4:15 PM											
	VOLUMES	0	0	0	4	0	0	1	22	0	0	14	6	47
	APPROACH %	0%	0%	0%	100%	0%	0%	4%	96%	0%	0%	70%	30%	
	PEAK HR FACTOR		0.000			0.333			0.639			0.625		0.734
	APP/DEPART	0	/	7	4	/	0	23	/	26	20	/	14	0

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC2360
Thu, Sep 19, 19	NORTH & SOUTH:	7th	LOCATION #:	2
	EAST & WEST:	County Line	CONTROL:	STOP N/S

NOTES:

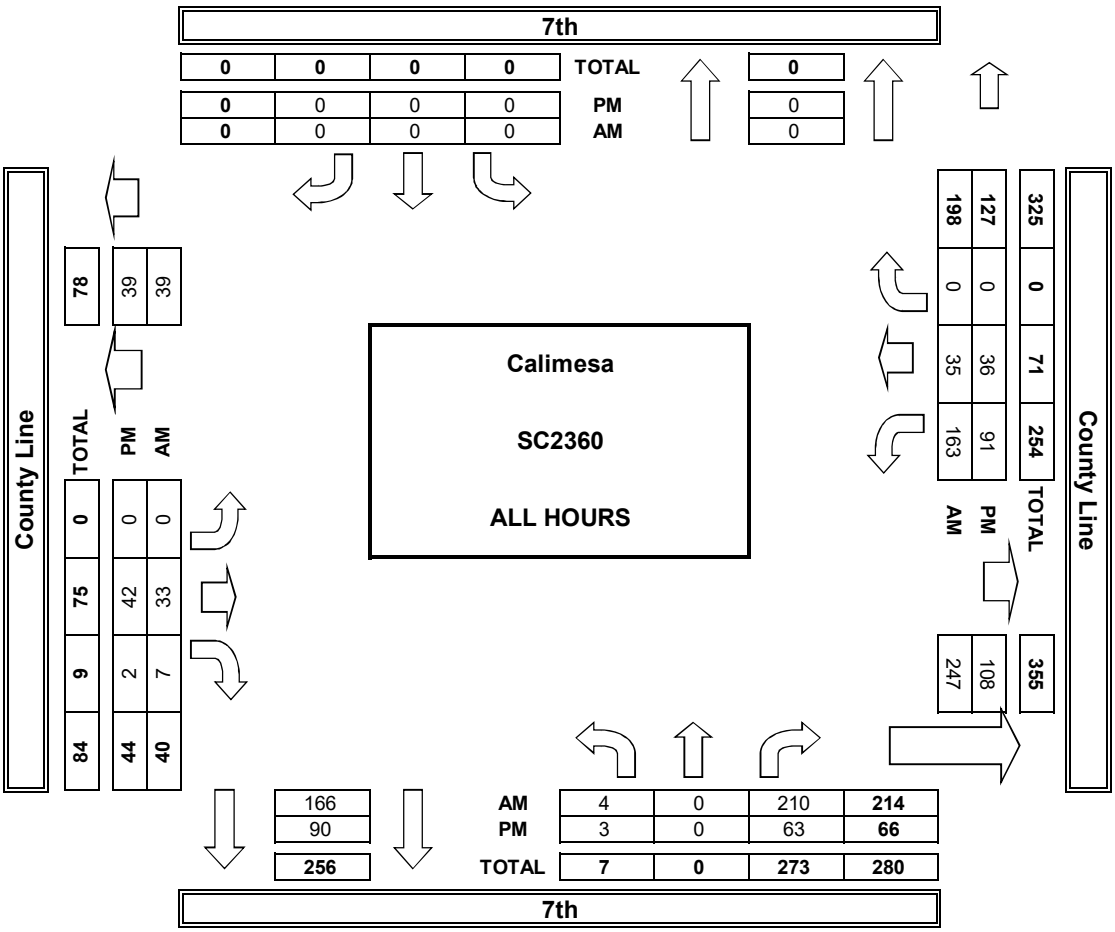
Construction north leg

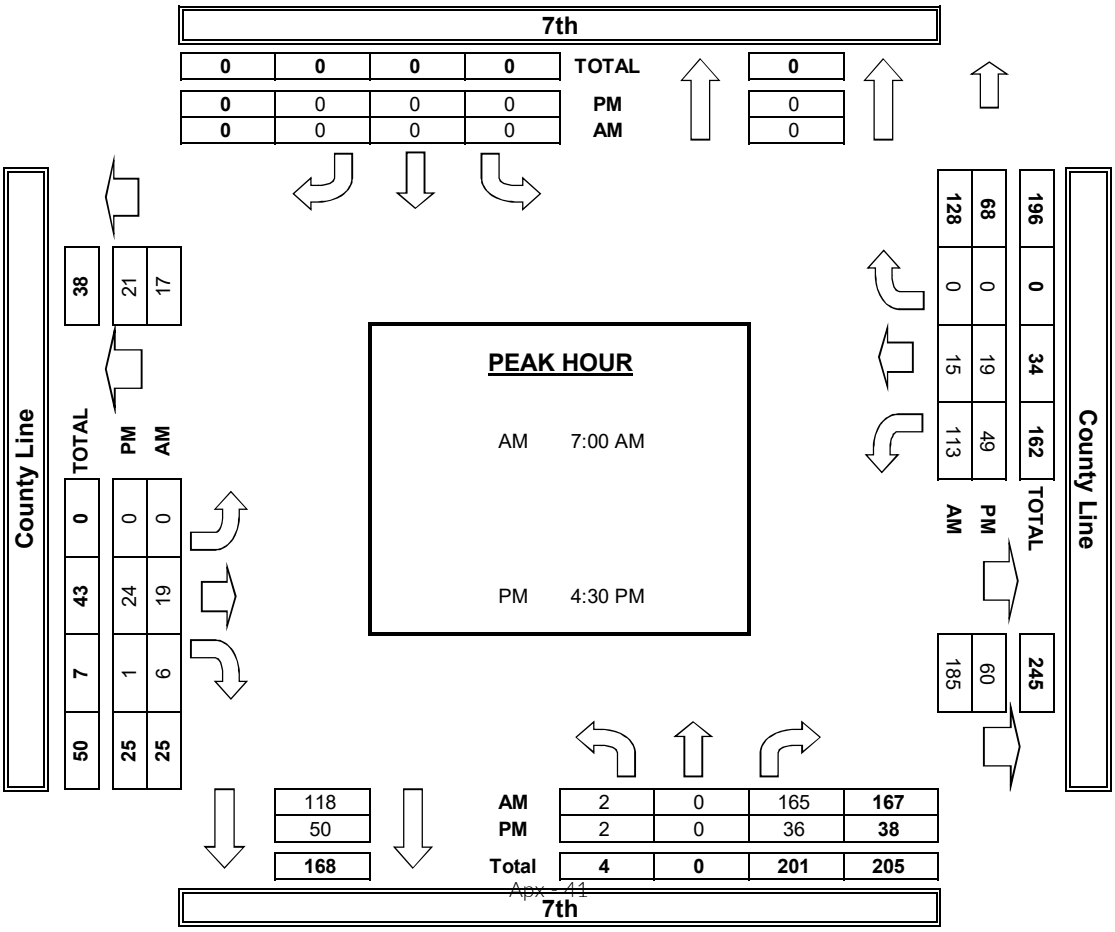
AM / PM / MD / OTHER / OTHER — ▲ N ◄ W E ► S ▼

		NORTHBOUND 7th			SOUTHBOUND 7th			EASTBOUND County Line			WESTBOUND County Line			
	LANES:	NL 0	NT 1	NR 0	SL 0	ST 1	SR 0	EL 0	ET 1	ER 0	WL 0	WT 1	WR 0	TOTAL
AM	7:00 AM	0	0	37	0	0	0	0	6	1	38	6	0	88
	7:15 AM	0	0	54	0	0	0	0	2	1	52	3	0	112
	7:30 AM	0	0	57	0	0	0	0	6	1	15	6	0	85
	7:45 AM	2	0	17	0	0	0	0	5	3	8	0	0	35
	8:00 AM	1	0	12	0	0	0	0	2	0	14	5	0	34
	8:15 AM	1	0	15	0	0	0	0	4	0	18	1	0	39
	8:30 AM	0	0	10	0	0	0	0	7	0	10	8	0	35
	8:45 AM	0	0	8	0	0	0	0	1	1	8	6	0	24
	VOLUMES	4	0	210	0	0	0	0	33	7	163	35	0	452
	APPROACH %	2%	0%	98%	0%	0%	0%	0%	83%	18%	82%	18%	0%	
	APP/DEPART	214	/	0	0	/	166	40	/	247	198	/	39	0
	BEGIN PEAK HR		7:00 AM											
	VOLUMES	2	0	165	0	0	0	0	19	6	113	15	0	320
	APPROACH %	1%	0%	99%	0%	0%	0%	0%	76%	24%	88%	12%	0%	
	PEAK HR FACTOR		0.732			0.000			0.781			0.582		0.714
	APP/DEPART	167	/	0	0	/	118	25	/	185	128	/	17	0
PM	4:00 PM	0	0	6	0	0	0	0	7	0	16	4	0	33
	4:15 PM	1	0	8	0	0	0	0	7	0	7	6	0	29
	4:30 PM	1	0	13	0	0	0	0	10	1	10	3	0	38
	4:45 PM	0	0	11	0	0	0	0	6	0	7	5	0	29
	5:00 PM	0	0	9	0	0	0	0	3	0	12	4	0	28
	5:15 PM	1	0	3	0	0	0	0	5	0	20	7	0	36
	5:30 PM	0	0	7	0	0	0	0	3	1	9	3	0	23
	5:45 PM	0	0	6	0	0	0	0	1	0	10	4	0	21
	VOLUMES	3	0	63	0	0	0	0	42	2	91	36	0	237
	APPROACH %	5%	0%	95%	0%	0%	0%	0%	95%	5%	72%	28%	0%	
	APP/DEPART	66	/	0	0	/	90	44	/	108	127	/	39	0
	BEGIN PEAK HR		4:30 PM											
	VOLUMES	2	0	36	0	0	0	0	24	1	49	19	0	131
	APPROACH %	5%	0%	95%	0%	0%	0%	0%	96%	4%	72%	28%	0%	
	PEAK HR FACTOR		0.679			0.000			0.568			0.630		0.862
	APP/DEPART	38	/	0	0	/	50	25	/	60	68	/	21	0

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:				
Thu, Sep 19, 19	LOCATION:	Calimesa	PROJECT #:	SC2360
	NORTH & SOUTH:	I-10 SB Ramps	LOCATION #:	3
	EAST & WEST:	County Line	CONTROL:	STOP S

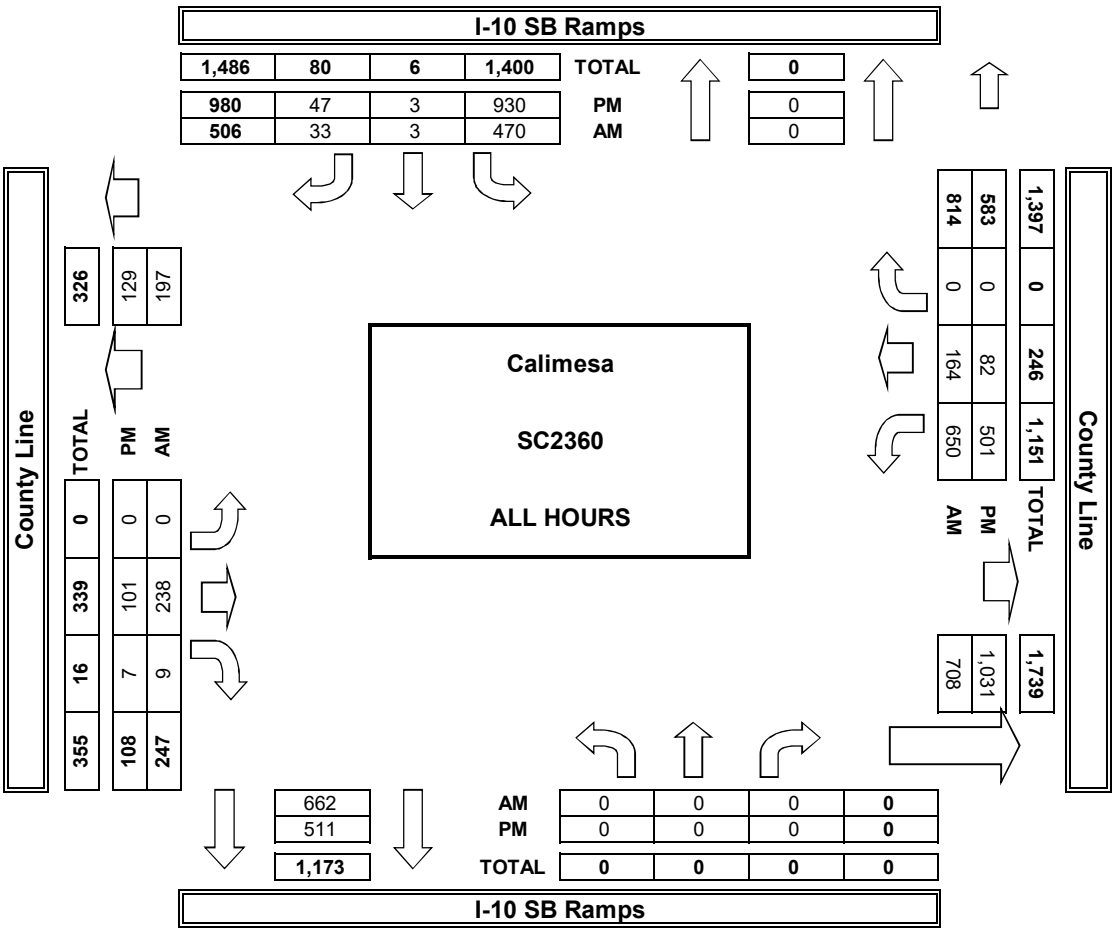
NOTES:

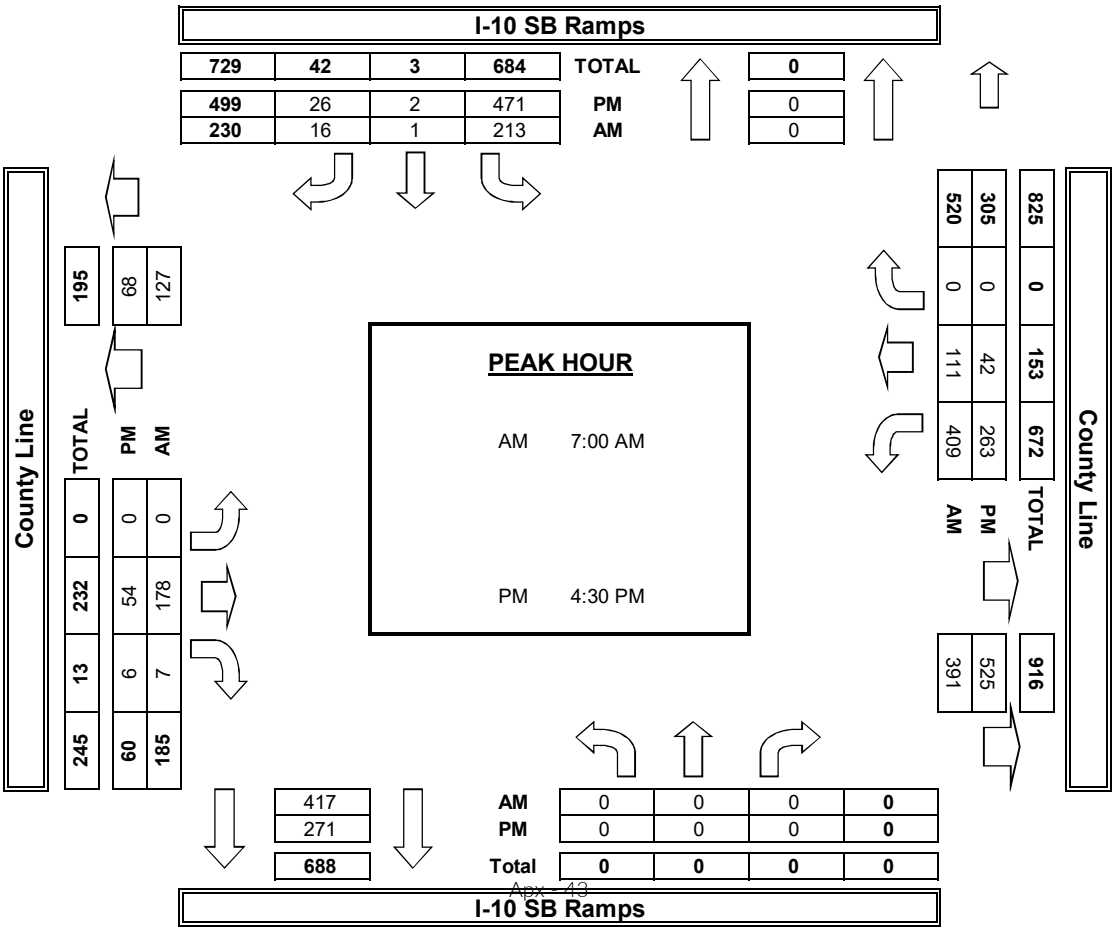
AM / PM / MD / OTHER / OTHER — ▲ N ◄ W E ► S ▼

		NORTHBOUND I-10 SB Ramps			SOUTHBOUND I-10 SB Ramps			EASTBOUND County Line			WESTBOUND County Line			
	LANES:	NL X	NT X	NR X	SL 0	ST 1	SR 0	EL X	ET 1	ER 0	WL 1	WT 1	WR X	TOTAL
AM	7:00 AM	0	0	0	48	1	3	0	41	2	118	42	0	255
	7:15 AM	0	0	0	55	0	6	0	56	1	115	49	0	282
	7:30 AM	0	0	0	38	0	2	0	60	3	82	18	0	203
	7:45 AM	0	0	0	72	0	5	0	21	1	94	2	0	195
	8:00 AM	0	0	0	68	1	4	0	15	1	57	14	0	160
	8:15 AM	0	0	0	68	0	9	0	19	0	72	11	0	179
	8:30 AM	0	0	0	54	0	3	0	17	1	63	15	0	153
	8:45 AM	0	0	0	67	1	1	0	9	0	49	13	0	140
	VOLUMES	0	0	0	470	3	33	0	238	9	650	164	0	1,567
	APPROACH %	0%	0%	0%	93%	1%	7%	0%	96%	4%	80%	20%	0%	
	APP/DEPART	0	/	0	506	/	662	247	/	708	814	/	197	0
	BEGIN PEAK HR		7:00 AM											
	VOLUMES	0	0	0	213	1	16	0	178	7	409	111	0	935
	APPROACH %	0%	0%	0%	93%	0%	7%	0%	96%	4%	79%	21%	0%	
	PEAK HR FACTOR		0.000			0.747			0.734			0.793		0.829
	APP/DEPART	0	/	0	230	/	417	185	/	391	520	/	127	0
PM	4:00 PM	0	0	0	116	0	9	0	14	0	60	14	0	213
	4:15 PM	0	0	0	116	1	5	0	14	1	62	8	0	207
	4:30 PM	0	0	0	111	2	4	0	22	2	67	8	0	216
	4:45 PM	0	0	0	117	0	5	0	15	1	67	7	0	212
	5:00 PM	0	0	0	128	0	6	0	11	1	55	11	0	212
	5:15 PM	0	0	0	115	0	11	0	6	2	74	16	0	224
	5:30 PM	0	0	0	124	0	5	0	11	0	66	6	0	212
	5:45 PM	0	0	0	103	0	2	0	8	0	50	12	0	175
	VOLUMES	0	0	0	930	3	47	0	101	7	501	82	0	1,671
	APPROACH %	0%	0%	0%	95%	0%	5%	0%	94%	6%	86%	14%	0%	
	APP/DEPART	0	/	0	980	/	511	108	/	1,031	583	/	129	0
	BEGIN PEAK HR		4:30 PM											
	VOLUMES	0	0	0	471	2	26	0	54	6	263	42	0	864
	APPROACH %	0%	0%	0%	94%	0%	5%	0%	90%	10%	86%	14%	0%	
	PEAK HR FACTOR		0.000			0.931			0.625			0.847		0.964
	APP/DEPART	0	/	0	499	/	271	60	/	525	305	/	68	0

AimTD LLC

TURNING MOVEMENT COUNTS





INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:	LOCATION:	Calimesa	PROJECT #:	SC2360
Thu, Sep 19, 19	NORTH & SOUTH:	I-10 NB Ramps	LOCATION #:	4
	EAST & WEST:	County Line	CONTROL:	STOP N

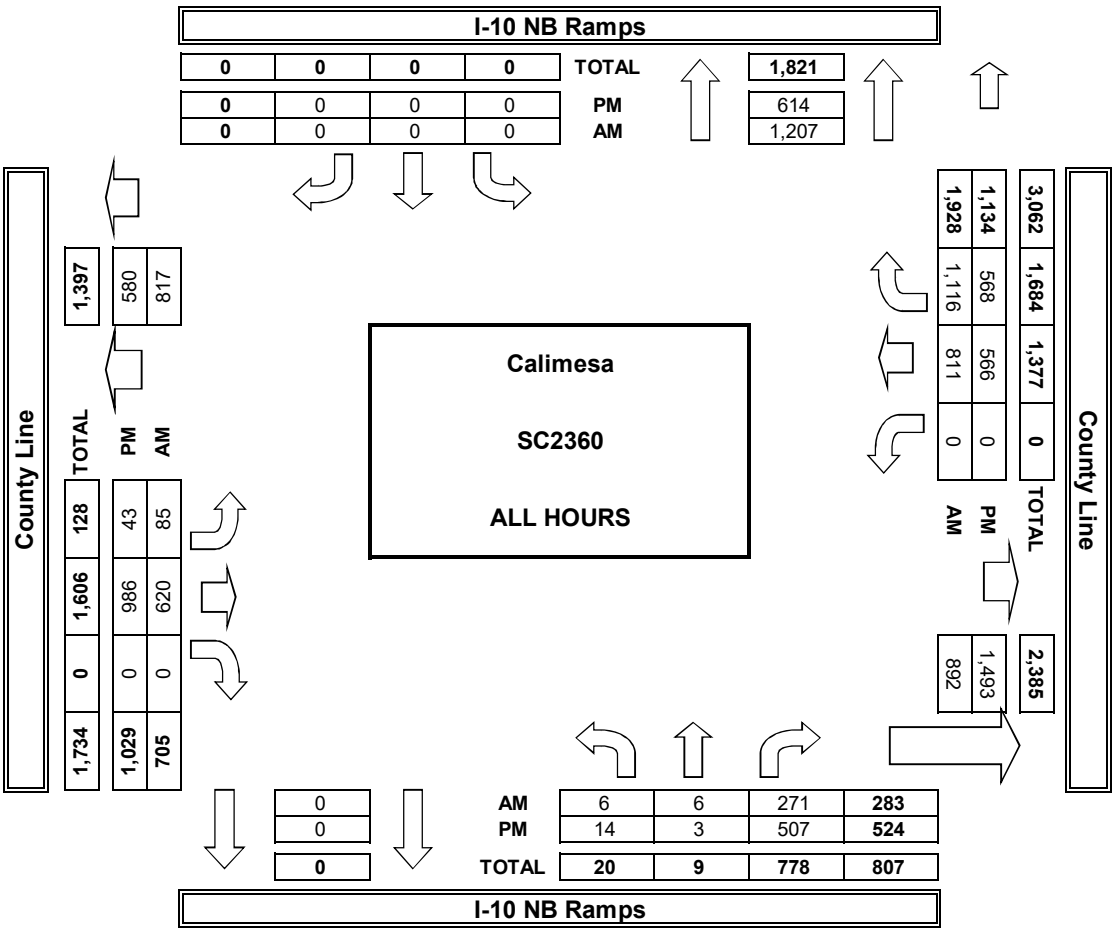
NOTES:

AM / PM / MD / OTHER / OTHER — ▲ N ◄ W E ► S ▼

		NORTHBOUND I-10 NB Ramps			SOUTHBOUND I-10 NB Ramps			EASTBOUND County Line			WESTBOUND County Line			
	LANES:	NL 0	NT 1	NR 0	SL X	ST X	SR X	EL 1	ET 1	ER X	WL X	WT 1	WR 1	TOTAL
AM	7:00 AM	0	0	18	0	0	0	17	75	0	0	169	175	454
	7:15 AM	0	0	20	0	0	0	14	91	0	0	158	218	501
	7:30 AM	1	0	46	0	0	0	19	88	0	0	102	111	367
	7:45 AM	0	0	33	0	0	0	6	80	0	0	90	123	332
	8:00 AM	3	0	27	0	0	0	11	78	0	0	75	127	321
	8:15 AM	1	0	33	0	0	0	4	78	0	0	84	119	319
	8:30 AM	1	2	49	0	0	0	7	61	0	0	82	145	347
	8:45 AM	0	4	45	0	0	0	7	69	0	0	51	98	274
	VOLUMES	6	6	271	0	0	0	85	620	0	0	811	1,116	2,916
	APPROACH %	2%	2%	96%	0%	0%	0%	12%	88%	0%	0%	42%	58%	
	APP/DEPART	283	/	1,207	0	/	0	705	/	892	1,928	/	817	0
	BEGIN PEAK HR		7:00 AM											
	VOLUMES	1	0	117	0	0	0	56	334	0	0	519	627	1,654
	APPROACH %	1%	0%	99%	0%	0%	0%	14%	86%	0%	0%	45%	55%	
	PEAK HR FACTOR		0.628			0.000			0.911			0.762		0.825
	APP/DEPART	118	/	683	0	/	0	390	/	451	1,146	/	520	0
PM	4:00 PM	1	0	67	0	0	0	7	123	0	0	63	79	340
	4:15 PM	4	1	49	0	0	0	8	125	0	0	74	74	335
	4:30 PM	0	0	62	0	0	0	14	118	0	0	73	77	344
	4:45 PM	2	0	73	0	0	0	3	128	0	0	74	65	345
	5:00 PM	2	1	67	0	0	0	3	126	0	0	69	67	335
	5:15 PM	2	0	61	0	0	0	4	126	0	0	83	69	345
	5:30 PM	1	1	75	0	0	0	2	117	0	0	75	72	343
	5:45 PM	2	0	53	0	0	0	2	123	0	0	55	65	300
	VOLUMES	14	3	507	0	0	0	43	986	0	0	566	568	2,687
	APPROACH %	3%	1%	97%	0%	0%	0%	4%	96%	0%	0%	50%	50%	
	APP/DEPART	524	/	614	0	/	0	1,029	/	1,493	1,134	/	580	0
	BEGIN PEAK HR		4:30 PM											
	VOLUMES	6	1	263	0	0	0	24	498	0	0	299	278	1,369
	APPROACH %	2%	0%	97%	0%	0%	0%	5%	95%	0%	0%	52%	48%	
	PEAK HR FACTOR		0.900			0.000			0.989			0.949		0.992
	APP/DEPART	270	/	303	0	/	0	522	/	761	577	/	305	0

AimTD LLC

TURNING MOVEMENT COUNTS



INTERSECTION TURNING MOVEMENT COUNTS

PREPARED BY: AimTD LLC. tel: 714 253 7888 cs@aimtd.com

DATE:				
Thu, Sep 19, 19	LOCATION:	Calimesa	PROJECT #:	SC2360
	NORTH & SOUTH:	Calimesa	LOCATION #:	5
	EAST & WEST:	County Line	CONTROL:	SIGNAL

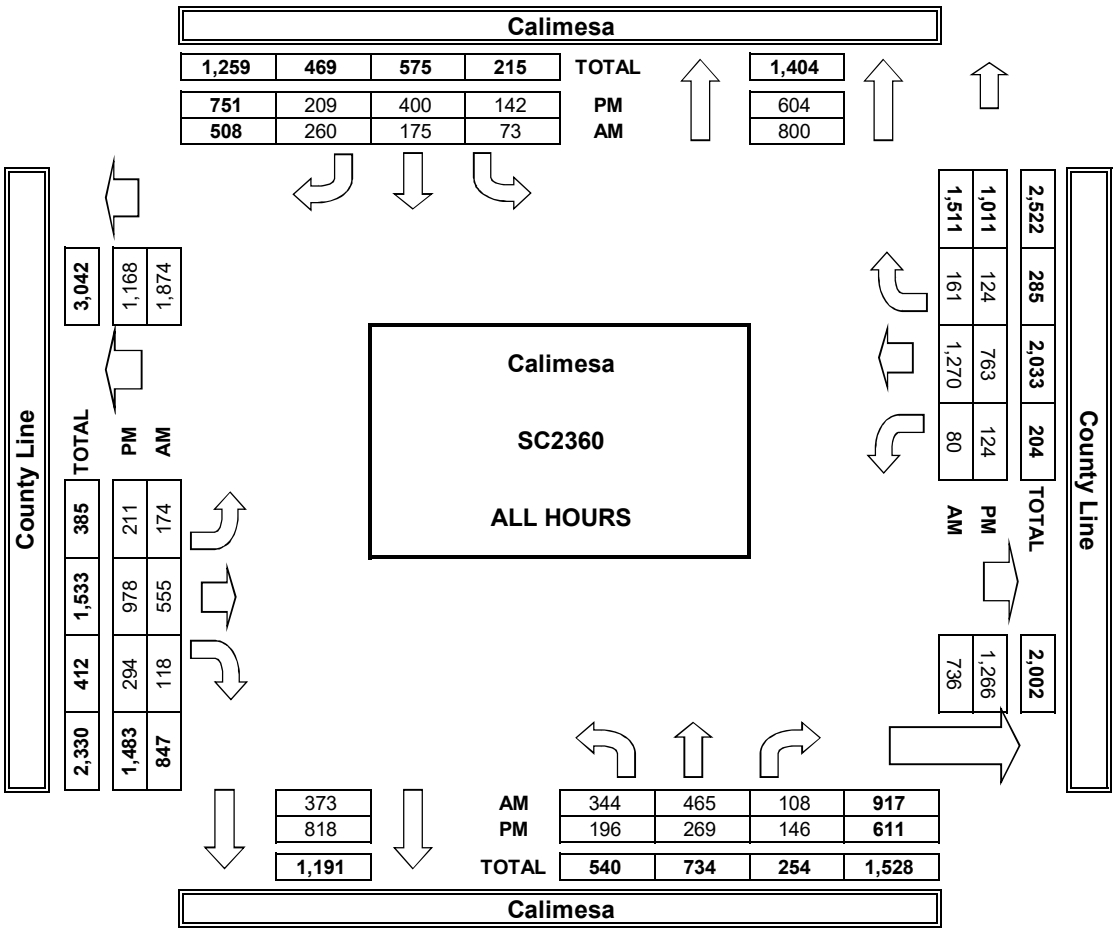
NOTES:

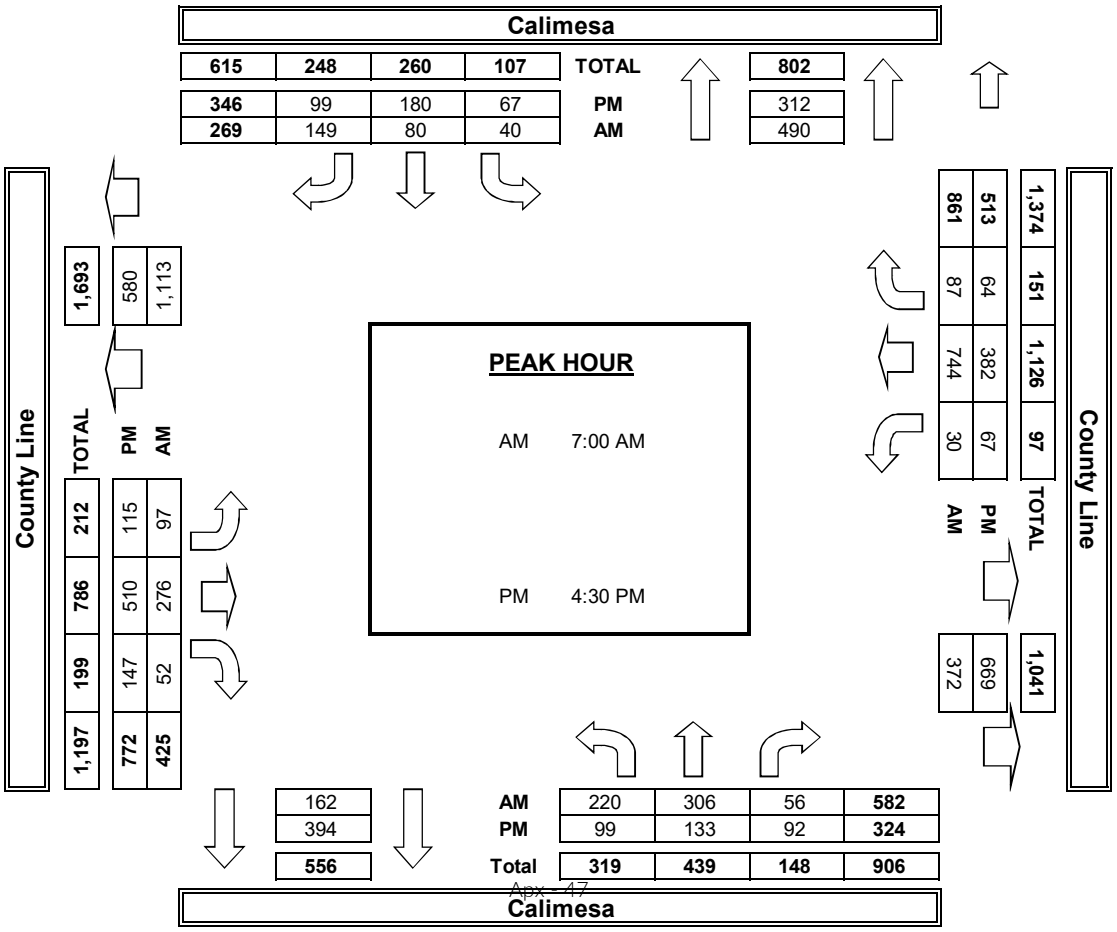
AM / PM / MD / OTHER / OTHER — ▲ N ◄ W E ► S ▼

		NORTHBOUND Calimesa			SOUTHBOUND Calimesa			EASTBOUND County Line			WESTBOUND County Line			
	LANES:	NL 1	NT 2	NR 0	SL 1	ST 1	SR 1	EL 1	ET 1	ER 0	WL 1	WT 2	WR 0	TOTAL
AM	7:00 AM	56	84	10	2	17	43	20	60	9	8	252	27	588
	7:15 AM	80	76	10	11	13	42	28	58	10	9	216	25	578
	7:30 AM	37	82	19	15	21	39	30	70	16	7	133	17	486
	7:45 AM	47	64	17	12	29	25	19	88	17	6	143	18	485
	8:00 AM	33	45	22	15	24	23	13	64	14	8	141	18	420
	8:15 AM	31	43	8	8	22	34	17	78	24	10	147	16	438
	8:30 AM	31	36	9	7	16	29	20	72	12	17	153	21	423
	8:45 AM	29	35	13	3	33	25	27	65	16	15	85	19	365
	VOLUMES	344	465	108	73	175	260	174	555	118	80	1,270	161	3,783
	APPROACH %	38%	51%	12%	14%	34%	51%	21%	66%	14%	5%	84%	11%	
	APP/DEPART	917	/	800	508	/	373	847	/	736	1,511	/	1,874	0
	BEGIN PEAK HR		7:00 AM											
	VOLUMES	220	306	56	40	80	149	97	276	52	30	744	87	2,137
	APPROACH %	38%	53%	10%	15%	30%	55%	23%	65%	12%	3%	86%	10%	
	PEAK HR FACTOR		0.877			0.897			0.857			0.750		0.909
	APP/DEPART	582	/	490	269	/	162	425	/	372	861	/	1,113	0
PM	4:00 PM	22	41	13	13	51	35	26	131	24	14	90	15	475
	4:15 PM	28	27	14	11	46	27	27	104	41	22	103	18	468
	4:30 PM	35	28	28	15	50	22	31	114	36	14	91	19	483
	4:45 PM	19	34	26	12	36	24	32	140	38	13	89	18	481
	5:00 PM	28	28	21	24	56	26	24	129	34	16	94	12	492
	5:15 PM	17	43	17	16	38	27	28	127	39	24	108	15	499
	5:30 PM	28	33	16	19	63	22	24	116	34	13	96	12	476
	5:45 PM	19	35	11	32	60	26	19	117	48	8	92	15	482
	VOLUMES	196	269	146	142	400	209	211	978	294	124	763	124	3,856
	APPROACH %	32%	44%	24%	19%	53%	28%	14%	66%	20%	12%	75%	12%	
	APP/DEPART	611	/	604	751	/	818	1,483	/	1,266	1,011	/	1,168	0
	BEGIN PEAK HR		4:30 PM											
	VOLUMES	99	133	92	67	180	99	115	510	147	67	382	64	1,955
	APPROACH %	31%	41%	28%	19%	52%	29%	15%	66%	19%	13%	74%	12%	
	PEAK HR FACTOR		0.890			0.816			0.919			0.872		0.979
	APP/DEPART	324	/	312	346	/	394	772	/	669	513	/	580	0

AimTD LLC

TURNING MOVEMENT COUNTS





APPENDIX D

LEVEL OF SERVICE WORKSHEETS

Existing

7th Street & County Line Road RV Fueling

Vistro File: C:\...\AME.vistro
Report File: C:\...\AME.pdf

Scenario 1 Existing AM Peak Hour
12/16/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	County Line Ln (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	SB Left	0.002	8.8	A
5	7th Pl (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	NB Left	0.005	12.4	B
6	I-10 SB Ramps (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	SB Left	3.123	1,074.9	F
7	I-10 NB Ramps (NS) at County Line Ave (EW)	Two-way stop	HCM 6th Edition	NB Left	0.013	51.8	F
8	Calimesa Blvd (NS) at County Line Ave (EW)	Signalized	HCM 6th Edition	NB Left	0.501	12.9	B

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: County Line Ln (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.8
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	2	0	4	0	20	0	0	12	6
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	2	0	4	0	20	0	0	12	6
Peak Hour Factor	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	1	0	1	0	6	0	0	4	2
Total Analysis Volume [veh/h]	0	0	0	2	0	5	0	24	0	0	14	7
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.77	9.25	8.42	8.77	9.26	8.42	7.26	0.00	0.00	7.26	0.00	0.00
Movement LOS	A	A	A	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.51	0.51	0.51	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.82			8.52			0.00			0.00		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	1.15											
Intersection LOS	A											

Intersection Level Of Service Report
Intersection 5: 7th Pl (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	12.4
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.005

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	2	165	19	6	113	15
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	165	19	6	113	15
Peak Hour Factor	0.7140	0.7140	0.7140	0.7140	0.7140	0.7140
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	58	7	2	40	5
Total Analysis Volume [veh/h]	3	231	27	8	158	21
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.22	0.00	0.00	0.10	0.00
d_M, Delay for Movement [s/veh]	12.36	9.47	0.00	0.00	7.54	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.87	0.87	0.00	0.00	0.23	0.23
95th-Percentile Queue Length [ft/ln]	21.80	21.80	0.00	0.00	5.78	5.78
d_A, Approach Delay [s/veh]	9.51		0.00		6.65	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	7.62					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 6: I-10 SB Ramps (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	1,074.9
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	3.123

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			25.00			25.00	
Grade [%]		0.00			0.00			0.00			0.00	
Crosswalk		No			No			No			No	

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	213	1	16	0	178	7	409	111	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	213	1	16	0	178	7	409	111	0
Peak Hour Factor	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	64	0	5	0	54	2	123	33	0
Total Analysis Volume [veh/h]	0	0	0	257	1	19	0	215	8	493	134	0
Pedestrian Volume [ped/h]		0			0			0			0	

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane		No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance		No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	3.12	0.01	0.02	0.00	0.00	0.00	0.37	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	1074.86	1068.52	1035.05	0.00	0.00	0.00	9.21	0.00	0.00
Movement LOS				F	F	F		A	A	A	A	
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	27.43	27.43	27.43	0.00	0.00	0.00	1.71	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	685.85	685.85	685.85	0.00	0.00	0.00	42.67	0.00	0.00
d_A, Approach Delay [s/veh]	0.00			1072.11			0.00			7.24		
Approach LOS	A			F			A			A		
d_I, Intersection Delay [s/veh]	267.54											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 7: I-10 NB Ramps (NS) at County Line Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	51.8
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.013

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	1	0	117	0	0	0	56	334	0	0	519	627
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	0	117	0	0	0	56	334	0	0	519	627
Peak Hour Factor	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	35	0	0	0	17	101	0	0	157	190
Total Analysis Volume [veh/h]	1	0	142	0	0	0	68	405	0	0	629	760
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No			
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No			
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.22	0.00	0.00	0.00	0.14	0.00	0.00	0.00	0.01	0.01
d_M, Delay for Movement [s/veh]	51.84	69.82	12.34	0.00	0.00	0.00	13.47	0.00	0.00	0.00	0.00	0.00
Movement LOS	F	F	B				B	A			A	A
95th-Percentile Queue Length [veh/ln]	0.89	0.89	0.89	0.00	0.00	0.00	0.48	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	22.37	22.37	22.37	0.00	0.00	0.00	11.90	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	12.61			0.00			1.94			0.00		
Approach LOS	B			A			A			A		
d_I, Intersection Delay [s/veh]	1.36											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 8: Calimesa Blvd (NS) at County Line Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	12.9
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.501

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	80.00	100.00	100.00	115.00	100.00	100.00	105.00	100.00	100.00
Speed [mph]	35.00			45.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	220	306	56	40	80	149	97	276	52	30	744	87
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	220	306	56	40	80	149	97	276	52	30	744	87
Peak Hour Factor	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	61	84	15	11	22	41	27	76	14	8	205	24
Total Analysis Volume [veh/h]	242	337	62	44	88	164	107	304	57	33	818	96
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	2	0	0	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	0	0	7	0	0	7	0	0	7	0
Maximum Green [s]	0	120	0	0	120	0	0	120	0	0	120	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	30	0	0	30	0	0	30	0	0	30	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	L	C	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	18	18	18	18	18	18	34	34	34	34	34
g / C, Green / Cycle	0.30	0.30	0.30	0.30	0.30	0.30	0.56	0.56	0.56	0.56	0.56
(v / s)_i Volume / Saturation Flow Rate	0.18	0.11	0.11	0.04	0.05	0.10	0.18	0.20	0.03	0.25	0.25
s, saturation flow rate [veh/h]	1309	1870	1770	985	1870	1589	611	1819	1020	1870	1802
c, Capacity [veh/h]	419	564	534	293	564	480	364	1028	564	1057	1018
d1, Uniform Delay [s]	21.94	16.44	16.45	21.37	15.36	16.32	13.14	7.09	9.91	7.56	7.56
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.27	0.39	0.42	0.23	0.13	0.42	2.05	0.94	0.20	1.33	1.38
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.58	0.36	0.36	0.15	0.16	0.34	0.29	0.35	0.06	0.44	0.44
d, Delay for Lane Group [s/veh]	23.21	16.83	16.86	21.60	15.49	16.74	15.19	8.03	10.11	8.90	8.95
Lane Group LOS	C	B	B	C	B	B	B	A	B	A	A
Critical Lane Group	Yes	No	No	No	No	No	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	3.04	2.02	1.93	0.49	0.77	1.53	1.10	2.14	0.25	2.96	2.87
50th-Percentile Queue Length [ft/ln]	76.09	50.45	48.18	12.20	19.14	38.32	27.59	53.41	6.16	74.00	71.67
95th-Percentile Queue Length [veh/ln]	5.48	3.63	3.47	0.88	1.38	2.76	1.99	3.85	0.44	5.33	5.16
95th-Percentile Queue Length [ft/ln]	136.97	90.80	86.73	21.96	34.45	68.97	49.67	96.13	11.09	133.20	129.00

Movement, Approach, & Intersection Results

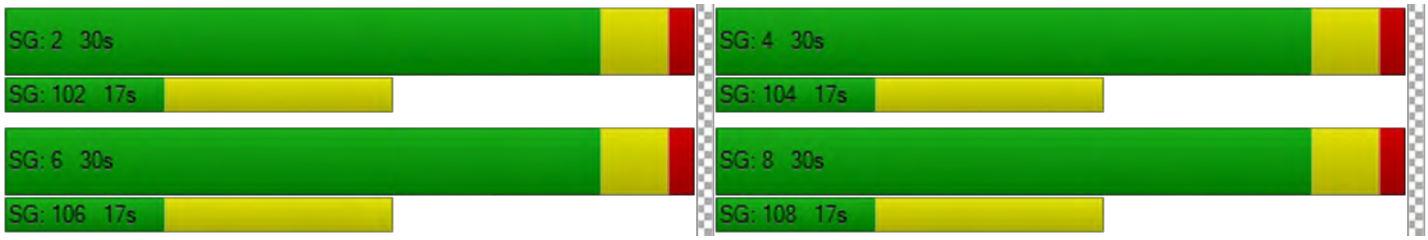
d_M, Delay for Movement [s/veh]	23.21	16.84	16.86	21.60	15.49	16.74	15.19	8.03	8.03	10.11	8.92	8.95
Movement LOS	C	B	B	C	B	B	B	A	A	B	A	A
d_A, Approach Delay [s/veh]	19.25			17.09			9.67			8.96		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	12.93											
Intersection LOS	B											
Intersection V/C	0.501											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	20.01	20.01	20.01	20.01
l_p,int, Pedestrian LOS Score for Intersection	2.388	2.674	2.934	2.557
Crosswalk LOS	B	B	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	867	867	867	867
d_b, Bicycle Delay [s]	9.63	9.63	9.63	9.63
l_b,int, Bicycle LOS Score for Intersection	2.088	2.048	2.332	2.341
Bicycle LOS	B	B	B	B

Sequence

Ring 1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



7th Street & County Line Road RV Fueling

Vistro File: C:\...\PME.vistro
Report File: C:\...\PME.pdf

Scenario 1 Existing PM Peak Hour
12/16/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	County Line Ln (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	SB Left	0.005	8.8	A
5	7th Pl (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	NB Left	0.003	9.7	A
6	I-10 SB Ramps (NS) at County Line Ave (EW)	Two-way stop	HCM 6th Edition	SB Left	1.552	306.7	F
7	I-10 NB Ramps (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	NB Thru	0.005	29.5	D
8	Calimesa Blvd (NS) at County Line Ave (EW)	Signalized	HCM 6th Edition	NB Left	0.544	12.3	B

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: County Line Ln (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.8
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.005

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	4	0	0	1	22	0	0	14	6
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	4	0	0	1	22	0	0	14	6
Peak Hour Factor	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	1	0	0	0	7	0	0	5	2
Total Analysis Volume [veh/h]	0	0	0	5	0	0	1	30	0	0	19	8
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.82	9.33	8.45	8.84	9.33	8.44	7.27	0.00	0.00	7.27	0.00	0.00
Movement LOS	A	A	A	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.40	0.40	0.40	0.05	0.05	0.05	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.87			8.84			0.23			0.00		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	0.82											
Intersection LOS	A											

Intersection Level Of Service Report
Intersection 5: 7th Pl (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.003

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	2	36	24	1	49	19
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	36	24	1	49	19
Peak Hour Factor	0.8620	0.8620	0.8620	0.8620	0.8620	0.8620
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	10	7	0	14	6
Total Analysis Volume [veh/h]	2	42	28	1	57	22
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.04	0.00	0.00	0.04	0.00
d_M, Delay for Movement [s/veh]	9.68	8.60	0.00	0.00	7.36	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.13	0.13	0.00	0.00	0.10	0.10
95th-Percentile Queue Length [ft/ln]	3.34	3.34	0.00	0.00	2.39	2.39
d_A, Approach Delay [s/veh]	8.64		0.00		5.31	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	5.26					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 6: I-10 SB Ramps (NS) at County Line Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	306.7
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.552

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	471	2	26	0	54	6	263	42	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	471	2	26	0	54	6	263	42	0
Peak Hour Factor	0.8290	0.8290	0.8290	0.9640	0.9640	0.9640	0.8290	0.9640	0.9640	0.9640	0.9640	0.8290
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	122	1	7	0	14	2	68	11	0
Total Analysis Volume [veh/h]	0	0	0	489	2	27	0	56	6	273	44	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop			Stop			Free			Free		
Flared Lane				No								
Storage Area [veh]	0			0			0			0		
Two-Stage Gap Acceptance				No								
Number of Storage Spaces in Median	0			0			0			0		

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	1.55	0.01	0.03	0.00	0.00	0.00	0.18	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	306.69	306.56	298.77	0.00	0.00	0.00	7.84	0.00	0.00
Movement LOS				F	F	F		A	A	A	A	
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	30.31	30.31	30.31	0.00	0.00	0.00	0.64	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	757.63	757.63	757.63	0.00	0.00	0.00	16.08	0.00	0.00
d_A, Approach Delay [s/veh]	0.00			306.28			0.00			6.75		
Approach LOS	A			F			A			A		
d_I, Intersection Delay [s/veh]	179.25											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 7: I-10 NB Ramps (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	29.5
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.005

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	6	1	263	0	0	0	24	498	0	0	299	278
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	6	1	263	0	0	0	24	498	0	0	299	278
Peak Hour Factor	0.9920	0.9920	0.9920	0.8250	0.8250	0.8250	0.9920	0.9920	0.8250	0.8250	0.9920	0.9920
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	0	66	0	0	0	6	126	0	0	75	70
Total Analysis Volume [veh/h]	6	1	265	0	0	0	24	502	0	0	301	280
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No			
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No			
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.01	0.47	0.00	0.00	0.00	0.02	0.01	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	27.75	29.49	17.68	0.00	0.00	0.00	8.71	0.00	0.00	0.00	0.00	0.00
Movement LOS	D	D	C				A	A			A	A
95th-Percentile Queue Length [veh/ln]	2.75	2.75	2.75	0.00	0.00	0.00	0.07	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	68.83	68.83	68.83	0.00	0.00	0.00	1.86	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	17.94			0.00			0.40			0.00		
Approach LOS	C			A			A			A		
d_I, Intersection Delay [s/veh]	3.69											
Intersection LOS	D											

Intersection Level Of Service Report
Intersection 8: Calimesa Blvd (NS) at County Line Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	12.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.544

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	80.00	100.00	100.00	115.00	100.00	100.00	105.00	100.00	100.00
Speed [mph]	35.00			45.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	99	133	92	67	180	99	115	510	147	67	382	64
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	99	133	92	67	180	99	115	510	147	67	382	64
Peak Hour Factor	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	25	34	23	17	46	25	29	130	38	17	98	16
Total Analysis Volume [veh/h]	101	136	94	68	184	101	117	521	150	68	390	65
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	2	0	0	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	0	0	7	0	0	7	0	0	7	0
Maximum Green [s]	0	120	0	0	120	0	0	120	0	0	120	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	33	0	0	33	0	0	27	0	0	27	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	L	C	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	15	15	15	15	15	15	37	37	37	37	37
g / C, Green / Cycle	0.25	0.25	0.25	0.25	0.25	0.25	0.62	0.62	0.62	0.62	0.62
(v / s)_i Volume / Saturation Flow Rate	0.08	0.06	0.07	0.06	0.10	0.06	0.13	0.37	0.09	0.12	0.13
s, saturation flow rate [veh/h]	1200	1870	1626	1150	1870	1589	936	1799	766	1870	1778
c, Capacity [veh/h]	272	471	409	298	471	400	625	1106	405	1150	1094
d1, Uniform Delay [s]	24.98	17.96	18.03	22.79	18.64	17.95	7.27	7.10	12.98	5.08	5.09
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.84	0.28	0.35	0.39	0.53	0.33	0.66	2.47	0.89	0.40	0.42
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.37	0.25	0.27	0.23	0.39	0.25	0.19	0.61	0.17	0.20	0.20
d, Delay for Lane Group [s/veh]	25.82	18.24	18.38	23.18	19.17	18.28	7.93	9.57	13.87	5.48	5.51
Lane Group LOS	C	B	B	C	B	B	A	A	B	A	A
Critical Lane Group	No	No	No	No	Yes	No	No	Yes	No	No	No
50th-Percentile Queue Length [veh/ln]	1.33	1.24	1.15	0.79	1.89	1.00	0.72	4.28	0.65	1.00	0.97
50th-Percentile Queue Length [ft/ln]	33.20	30.92	28.76	19.85	47.29	24.99	18.07	106.98	16.20	24.93	24.16
95th-Percentile Queue Length [veh/ln]	2.39	2.23	2.07	1.43	3.41	1.80	1.30	7.67	1.17	1.80	1.74
95th-Percentile Queue Length [ft/ln]	59.76	55.66	51.77	35.73	85.13	44.98	32.53	191.80	29.16	44.88	43.49

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	25.82	18.26	18.38	23.18	19.17	18.28	7.93	9.57	9.57	13.87	5.49	5.51
Movement LOS	C	B	B	C	B	B	A	A	A	B	A	A
d_A, Approach Delay [s/veh]	20.60			19.69			9.33			6.58		
Approach LOS	C			B			A			A		
d_I, Intersection Delay [s/veh]	12.31											
Intersection LOS	B											
Intersection V/C	0.544											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	20.01	20.01	20.01	20.01
l_p,int, Pedestrian LOS Score for Intersection	2.414	2.640	2.645	2.548
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	967	967	767	767
d_b, Bicycle Delay [s]	8.01	8.01	11.41	11.41
l_b,int, Bicycle LOS Score for Intersection	1.833	2.142	2.860	1.991
Bicycle LOS	A	B	C	A

Sequence

Ring 1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Existing Plus Project – Phase 1

7th Street & County Line Road RV Fueling

Vistro File: C:\...\AME.vistro
Report File: C:\...\AMEP.pdf

Scenario 2 Existing Plus Project AM Peak Hour
6/9/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	County Line Ln (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	SB Left	0.021	8.8	A
2	Coffee Shop Access (NS) at County Line Ln (EW)	Two-way stop	HCM 6th Edition	WB Thru	0.000	0.0	A
3	RV Access (NS) at County Line Ln (EW)	Two-way stop	HCM 6th Edition	NB Left	0.016	8.6	A
4	Coffee Shop/RV Access (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	EB Thru	0.000	0.0	A
5	7th Pl (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	NB Left	0.007	12.8	B
6	I-10 SB Ramps (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	SB Left	3.280	1,152.2	F
7	I-10 NB Ramps (NS) at County Line Ave (EW)	Two-way stop	HCM 6th Edition	NB Left	0.079	55.7	F
8	Calimesa Blvd (NS) at County Line Ave (EW)	Signalized	HCM 6th Edition	NB Left	0.503	13.0	B

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: County Line Ln (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.8
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.021

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	2	0	4	0	20	0	0	12	6
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	15	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	17	0	4	0	20	0	0	12	6
Peak Hour Factor	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	5	0	1	0	6	0	0	4	2
Total Analysis Volume [veh/h]	0	0	0	20	0	5	0	24	0	0	14	7
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.77	9.25	8.42	8.84	9.33	8.49	7.26	0.00	0.00	7.26	0.00	0.00
Movement LOS	A	A	A	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.08	0.08	0.08	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	1.96	1.96	1.96	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.82			8.77			0.00			0.00		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	3.13											
Intersection LOS	A											

Intersection Level Of Service Report
Intersection 2: Coffee Shop Access (NS) at County Line Ln (EW)

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	0	6	0	0	6
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	15
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	6	0	0	21
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	2	0	0	6
Total Analysis Volume [veh/h]	0	0	6	0	0	22
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.65	8.34	0.00	0.00	7.23	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.50		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 3: RV Access (NS) at County Line Ln (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.016

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	0	6	0	0	6
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	15	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	15	0	6	0	0	6
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	0	2	0	0	2
Total Analysis Volume [veh/h]	16	0	6	0	0	6
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.63	8.40	0.00	0.00	7.23	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.05	0.05	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.21	1.21	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.63		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	4.93					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 4: Coffee Shop/RV Access (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	25	17	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	15	0	16
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	40	17	16
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	11	4	4
Total Analysis Volume [veh/h]	0	0	0	42	18	17
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	0.00
Movement LOS				A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 5: 7th Pl (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	12.8
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.007

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	2	165	19	6	113	15
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	0	14	1	0	15
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	165	33	7	113	30
Peak Hour Factor	0.7140	0.7140	0.7140	0.7140	0.7140	0.7140
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	58	12	2	40	11
Total Analysis Volume [veh/h]	4	231	46	10	158	42
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.23	0.00	0.00	0.10	0.00
d_M, Delay for Movement [s/veh]	12.81	9.64	0.00	0.00	7.59	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.91	0.91	0.00	0.00	0.24	0.24
95th-Percentile Queue Length [ft/ln]	22.77	22.77	0.00	0.00	5.90	5.90
d_A, Approach Delay [s/veh]	9.69		0.00		5.99	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	7.08					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 6: I-10 SB Ramps (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	1,152.2
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	3.280

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			25.00			25.00	
Grade [%]		0.00			0.00			0.00			0.00	
Crosswalk		No			No			No			No	

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	213	1	16	0	178	7	409	111	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	6	0	10	4	0	9	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	213	1	22	0	188	11	409	120	0
Peak Hour Factor	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	64	0	7	0	57	3	123	36	0
Total Analysis Volume [veh/h]	0	0	0	257	1	27	0	227	13	493	145	0
Pedestrian Volume [ped/h]		0			0			0			0	

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane		No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance		No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	3.28	0.01	0.03	0.00	0.00	0.00	0.37	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	1152.24	1145.51	1110.28	0.00	0.00	0.00	9.31	0.00	0.00
Movement LOS				F	F	F		A	A	A	A	
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	28.63	28.63	28.63	0.00	0.00	0.00	1.74	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	715.75	715.75	715.75	0.00	0.00	0.00	43.62	0.00	0.00
d_A, Approach Delay [s/veh]	0.00			1148.24			0.00			7.19		
Approach LOS	A			F			A			A		
d_I, Intersection Delay [s/veh]	285.33											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 7: I-10 NB Ramps (NS) at County Line Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	55.7
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.079

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	1	0	117	0	0	0	56	334	0	0	519	627
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	4	0	0	0	0	0	5	5	0	0	5	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	0	117	0	0	0	61	339	0	0	524	627
Peak Hour Factor	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	0	35	0	0	0	18	103	0	0	159	190
Total Analysis Volume [veh/h]	6	0	142	0	0	0	74	411	0	0	635	760
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No			
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No			
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.08	0.00	0.22	0.00	0.00	0.00	0.15	0.00	0.00	0.00	0.01	0.01
d_M, Delay for Movement [s/veh]	55.69	74.39	13.74	0.00	0.00	0.00	13.65	0.00	0.00	0.00	0.00	0.00
Movement LOS	F	F	B				B	A			A	A
95th-Percentile Queue Length [veh/ln]	1.25	1.25	1.25	0.00	0.00	0.00	0.53	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	31.37	31.37	31.37	0.00	0.00	0.00	13.20	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	15.44			0.00			2.08			0.00		
Approach LOS	C			A			A			A		
d_I, Intersection Delay [s/veh]	1.62											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 8: Calimesa Blvd (NS) at County Line Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	13.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.503

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	80.00	100.00	100.00	115.00	100.00	100.00	105.00	100.00	100.00
Speed [mph]	35.00			45.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	220	306	56	40	80	149	97	276	52	30	744	87
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	2	0	0	0	0	1	1	2	2	0	2	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	222	306	56	40	80	150	98	278	54	30	746	87
Peak Hour Factor	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	61	84	15	11	22	41	27	76	15	8	205	24
Total Analysis Volume [veh/h]	244	337	62	44	88	165	108	306	59	33	821	96
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	2	0	0	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	0	0	7	0	0	7	0	0	7	0
Maximum Green [s]	0	120	0	0	120	0	0	120	0	0	120	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	30	0	0	30	0	0	30	0	0	30	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	L	C	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	18	18	18	18	18	18	34	34	34	34	34
g / C, Green / Cycle	0.30	0.30	0.30	0.30	0.30	0.30	0.56	0.56	0.56	0.56	0.56
(v / s)_i Volume / Saturation Flow Rate	0.19	0.11	0.11	0.04	0.05	0.10	0.18	0.20	0.03	0.25	0.25
s, saturation flow rate [veh/h]	1309	1870	1770	985	1870	1589	609	1818	1017	1870	1802
c, Capacity [veh/h]	420	567	537	294	567	482	361	1025	559	1054	1016
d1, Uniform Delay [s]	21.90	16.37	16.38	21.29	15.30	16.27	13.28	7.15	10.03	7.62	7.62
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.27	0.39	0.41	0.23	0.13	0.42	2.11	0.97	0.20	1.35	1.40
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.58	0.36	0.36	0.15	0.16	0.34	0.30	0.36	0.06	0.44	0.44
d, Delay for Lane Group [s/veh]	23.17	16.76	16.80	21.52	15.43	16.69	15.39	8.12	10.23	8.97	9.02
Lane Group LOS	C	B	B	C	B	B	B	A	B	A	A
Critical Lane Group	Yes	No	No	No	No	No	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	3.07	2.01	1.92	0.49	0.76	1.54	1.12	2.18	0.25	2.99	2.90
50th-Percentile Queue Length [ft/ln]	76.68	50.31	48.05	12.17	19.09	38.47	28.11	54.47	6.22	74.73	72.38
95th-Percentile Queue Length [veh/ln]	5.52	3.62	3.46	0.88	1.37	2.77	2.02	3.92	0.45	5.38	5.21
95th-Percentile Queue Length [ft/ln]	138.02	90.55	86.48	21.90	34.35	69.24	50.60	98.05	11.19	134.52	130.28

Movement, Approach, & Intersection Results

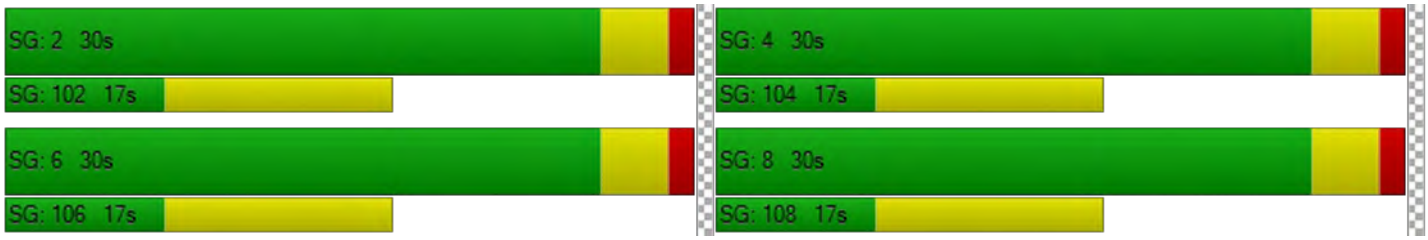
d_M, Delay for Movement [s/veh]	23.17	16.77	16.80	21.52	15.43	16.69	15.39	8.12	8.12	10.23	8.99	9.02
Movement LOS	C	B	B	C	B	B	B	A	A	B	A	A
d_A, Approach Delay [s/veh]	19.20			17.03			9.78			9.04		
Approach LOS	B			B			A			A		
d_I, Intersection Delay [s/veh]	12.96											
Intersection LOS	B											
Intersection V/C	0.503											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	20.01	20.01	20.01	20.01
l_p,int, Pedestrian LOS Score for Intersection	2.390	2.676	2.940	2.558
Crosswalk LOS	B	B	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	867	867	867	867
d_b, Bicycle Delay [s]	9.63	9.63	9.63	9.63
l_b,int, Bicycle LOS Score for Intersection	2.090	2.050	2.340	2.343
Bicycle LOS	B	B	B	B

Sequence

Ring 1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



7th Street & County Line Road RV Fueling

Vistro File: C:\...\PME.vistro
Report File: C:\...\PMEP.pdf

Scenario 2 Existing Plus Project PM Peak Hour
6/9/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	County Line Ln (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	SB Left	0.036	9.0	A
2	Coffee Shop Access (NS) at County Line Ln (EW)	Two-way stop	HCM 6th Edition	WB Thru	0.000	0.0	A
3	RV Access (NS) at County Line Ln (EW)	Two-way stop	HCM 6th Edition	NB Left	0.022	8.6	A
4	Coffee Shop/RV Access (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	EB Thru	0.000	0.0	A
5	7th Pl (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	NB Left	0.004	10.0	A
6	I-10 SB Ramps (NS) at County Line Ave (EW)	Two-way stop	HCM 6th Edition	SB Left	1.631	345.6	F
7	I-10 NB Ramps (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	NB Thru	0.005	31.5	D
8	Calimesa Blvd (NS) at County Line Ave (EW)	Signalized	HCM 6th Edition	NB Left	0.547	12.4	B

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: County Line Ln (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.036

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	4	0	0	1	22	0	0	14	6
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	21	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	25	0	0	1	22	0	0	14	6
Peak Hour Factor	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	9	0	0	0	7	0	0	5	2
Total Analysis Volume [veh/h]	0	0	0	34	0	0	1	30	0	0	19	8
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.82	9.33	8.45	8.96	9.45	8.56	7.27	0.00	0.00	7.27	0.00	0.00
Movement LOS	A	A	A	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.11	0.11	0.11	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	2.80	2.80	2.80	0.05	0.05	0.05	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.87			8.96			0.23			0.00		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	3.39											
Intersection LOS	A											

Intersection Level Of Service Report
Intersection 2: Coffee Shop Access (NS) at County Line Ln (EW)

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	0	7	0	0	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	21
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	7	0	0	25
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	2	0	0	7
Total Analysis Volume [veh/h]	0	0	7	0	0	26
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.67	8.35	0.00	0.00	7.23	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.51		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 3: RV Access (NS) at County Line Ln (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.022

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	0	7	0	0	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	21	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	21	0	7	0	0	4
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	0	2	0	0	1
Total Analysis Volume [veh/h]	22	0	7	0	0	4
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.65	8.43	0.00	0.00	7.23	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.07	0.07	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.67	1.67	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.65		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	5.77					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 4: Coffee Shop/RV Access (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	25	21	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	21	0	20
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	46	21	20
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	12	6	5
Total Analysis Volume [veh/h]	0	0	0	48	22	21
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	0.00
Movement LOS				A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 5: 7th Pl (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	10.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.004

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	2	36	24	1	49	19
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	0	20	1	0	19
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	36	44	2	49	38
Peak Hour Factor	0.8620	0.8620	0.8620	0.8620	0.8620	0.8620
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	10	13	1	14	11
Total Analysis Volume [veh/h]	3	42	51	2	57	44
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.04	0.00	0.00	0.04	0.00
d_M, Delay for Movement [s/veh]	9.98	8.72	0.00	0.00	7.41	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.14	0.14	0.00	0.00	0.10	0.10
95th-Percentile Queue Length [ft/ln]	3.56	3.56	0.00	0.00	2.44	2.44
d_A, Approach Delay [s/veh]	8.80		0.00		4.18	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	4.11					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 6: I-10 SB Ramps (NS) at County Line Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	345.6
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.631

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			25.00			25.00	
Grade [%]		0.00			0.00			0.00			0.00	
Crosswalk		No			No			No			No	

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	471	2	26	0	54	6	263	42	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	8	0	15	5	0	11	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	471	2	34	0	69	11	263	53	0
Peak Hour Factor	0.8290	0.8290	0.8290	0.9640	0.9640	0.9640	0.8290	0.9640	0.9640	0.9640	0.9640	0.8290
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	122	1	9	0	18	3	68	14	0
Total Analysis Volume [veh/h]	0	0	0	489	2	35	0	72	11	273	55	0
Pedestrian Volume [ped/h]		0			0			0			0	

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane		No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance		No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	1.63	0.01	0.03	0.00	0.00	0.00	0.18	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	345.57	345.40	337.12	0.00	0.00	0.00	7.90	0.00	0.00
Movement LOS				F	F	F		A	A	A	A	
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	32.49	32.49	32.49	0.00	0.00	0.00	0.66	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	812.36	812.36	812.36	0.00	0.00	0.00	16.43	0.00	0.00
d_A, Approach Delay [s/veh]	0.00			345.01			0.00			6.58		
Approach LOS	A			F			A			A		
d_I, Intersection Delay [s/veh]	195.98											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 7: I-10 NB Ramps (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	31.5
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.005

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	6	1	263	0	0	0	24	498	0	0	299	278
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	5	0	0	0	0	0	9	6	0	0	6	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	11	1	263	0	0	0	33	504	0	0	305	278
Peak Hour Factor	0.9920	0.9920	0.9920	0.8250	0.8250	0.8250	0.9920	0.9920	0.8250	0.8250	0.9920	0.9920
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	0	66	0	0	0	8	127	0	0	77	70
Total Analysis Volume [veh/h]	11	1	265	0	0	0	33	508	0	0	307	280
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No			
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No			
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.05	0.01	0.47	0.00	0.00	0.00	0.03	0.01	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	29.74	31.47	18.77	0.00	0.00	0.00	8.77	0.00	0.00	0.00	0.00	0.00
Movement LOS	D	D	C				A	A			A	A
95th-Percentile Queue Length [veh/ln]	3.05	3.05	3.05	0.00	0.00	0.00	0.10	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	76.22	76.22	76.22	0.00	0.00	0.00	2.59	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	19.25			0.00			0.53			0.00		
Approach LOS	C			A			A			A		
d_I, Intersection Delay [s/veh]	4.00											
Intersection LOS	D											

Intersection Level Of Service Report
Intersection 8: Calimesa Blvd (NS) at County Line Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	12.4
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.547

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	80.00	100.00	100.00	115.00	100.00	100.00	105.00	100.00	100.00
Speed [mph]	35.00			45.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	99	133	92	67	180	99	115	510	147	67	382	64
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	2	0	0	0	0	1	1	3	2	0	3	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	101	133	92	67	180	100	116	513	149	67	385	64
Peak Hour Factor	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	26	34	23	17	46	26	30	131	38	17	98	16
Total Analysis Volume [veh/h]	103	136	94	68	184	102	118	524	152	68	393	65
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	2	0	0	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	0	0	7	0	0	7	0	0	7	0
Maximum Green [s]	0	120	0	0	120	0	0	120	0	0	120	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	33	0	0	33	0	0	27	0	0	27	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	L	C	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	15	15	15	15	15	15	37	37	37	37	37
g / C, Green / Cycle	0.25	0.25	0.25	0.25	0.25	0.25	0.61	0.61	0.61	0.61	0.61
(v / s)_i Volume / Saturation Flow Rate	0.09	0.06	0.07	0.06	0.10	0.06	0.13	0.38	0.09	0.12	0.13
s, saturation flow rate [veh/h]	1200	1870	1626	1150	1870	1589	933	1799	763	1870	1779
c, Capacity [veh/h]	275	474	412	300	474	403	621	1103	400	1147	1091
d1, Uniform Delay [s]	24.92	17.88	17.95	22.69	18.56	17.88	7.36	7.19	13.21	5.13	5.14
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.85	0.28	0.34	0.38	0.52	0.33	0.68	2.55	0.92	0.40	0.43
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.38	0.25	0.27	0.23	0.39	0.25	0.19	0.61	0.17	0.20	0.21
d, Delay for Lane Group [s/veh]	25.77	18.15	18.30	23.07	19.08	18.21	8.04	9.74	14.13	5.53	5.56
Lane Group LOS	C	B	B	C	B	B	A	A	B	A	A
Critical Lane Group	No	No	No	No	Yes	No	No	Yes	No	No	No
50th-Percentile Queue Length [veh/ln]	1.35	1.23	1.15	0.79	1.89	1.01	0.74	4.37	0.66	1.01	0.98
50th-Percentile Queue Length [ft/ln]	33.83	30.83	28.67	19.79	47.14	25.18	18.40	109.27	16.41	25.31	24.53
95th-Percentile Queue Length [veh/ln]	2.44	2.22	2.06	1.43	3.39	1.81	1.32	7.80	1.18	1.82	1.77
95th-Percentile Queue Length [ft/ln]	60.89	55.50	51.60	35.63	84.85	45.32	33.12	194.98	29.54	45.56	44.15

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	25.77	18.17	18.30	23.07	19.08	18.21	8.04	9.74	9.74	14.13	5.54	5.56
Movement LOS	C	B	B	C	B	B	A	A	A	B	A	A
d_A, Approach Delay [s/veh]	20.56			19.59			9.49			6.66		
Approach LOS	C			B			A			A		
d_I, Intersection Delay [s/veh]	12.36											
Intersection LOS	B											
Intersection V/C	0.547											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	20.01	20.01	20.01	20.01
l_p,int, Pedestrian LOS Score for Intersection	2.415	2.642	2.651	2.550
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	967	967	767	767
d_b, Bicycle Delay [s]	8.01	8.01	11.41	11.41
l_b,int, Bicycle LOS Score for Intersection	1.834	2.144	2.870	1.994
Bicycle LOS	A	B	C	A

Sequence

Ring 1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

7th Street & County Line Road RV Fueling

Vistro File: C:\...\AME.vistro

Scenario 3 Existing Plus Project AM Peak Hour - With Improvements (TS)

Report File: C:\...\AMEPI-TS.pdf

6/9/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
6	I-10 SB Ramps (NS) at County Line Rd (EW)	Signalized	HCM 6th Edition	SB Left	0.686	13.6	B
7	I-10 NB Ramps (NS) at County Line Ave (EW)	Signalized	HCM 6th Edition	NB Right	0.659	6.8	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 6: I-10 SB Ramps (NS) at County Line Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	13.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.686

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			25.00			25.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present					No			No			No	
Crosswalk		No			No			No			No	

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	213	1	16	0	178	7	409	111	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	6	0	10	4	0	9	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	213	1	22	0	188	11	409	120	0
Peak Hour Factor	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	64	0	7	0	57	3	123	36	0
Total Analysis Volume [veh/h]	0	0	0	257	1	27	0	227	13	493	145	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	0	0	0	6	0	0	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	0	0	0	7	0	0	7	0	0	7	0
Maximum Green [s]	0	0	0	0	120	0	0	120	0	0	120	0
Amber [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	0	0	0	49	0	0	11	0	0	11	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	10	0	0	10	0	0	10	0
Rest In Walk					No			No			No	
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall					No			No			No	
Maximum Recall					No			No			No	
Pedestrian Recall					No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group		C	C	L	C
C, Cycle Length [s]		60	60	60	60
L, Total Lost Time per Cycle [s]		4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]		12	40	40	40
g / C, Green / Cycle		0.20	0.67	0.67	0.67
(v / s)_i Volume / Saturation Flow Rate		0.16	0.13	0.43	0.08
s, saturation flow rate [veh/h]		1761	1852	1140	1870
c, Capacity [veh/h]		353	1235	785	1247
d1, Uniform Delay [s]		22.96	3.84	9.20	3.62
k, delay calibration		0.11	0.50	0.50	0.50
I, Upstream Filtering Factor		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		4.42	0.35	3.79	0.19
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity		0.81	0.19	0.63	0.12
d, Delay for Lane Group [s/veh]		27.38	4.19	12.99	3.81
Lane Group LOS		C	A	B	A
Critical Lane Group		Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]		4.00	0.92	4.55	0.52
50th-Percentile Queue Length [ft/ln]		99.95	22.91	113.66	12.99
95th-Percentile Queue Length [veh/ln]		7.20	1.65	8.04	0.94
95th-Percentile Queue Length [ft/ln]		179.91	41.25	201.08	23.38

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	27.38	27.38	27.38	0.00	4.19	4.19	12.99	3.81	0.00
Movement LOS				C	C	C		A	A	B	A	
d_A, Approach Delay [s/veh]	0.00			27.38			4.19			10.91		
Approach LOS	A			C			A			B		
d_I, Intersection Delay [s/veh]	13.56											
Intersection LOS	B											
Intersection V/C	0.686											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	1500	233	233
d_b, Bicycle Delay [s]	30.00	1.88	23.41	23.41
l_b,int, Bicycle LOS Score for Intersection	4.132	2.030	1.956	2.612
Bicycle LOS	D	B	A	B

Sequence

Ring 1	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 7: I-10 NB Ramps (NS) at County Line Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	6.8
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.659

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	1	0	117	0	0	0	56	334	0	0	519	627
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	4	0	0	0	0	0	5	5	0	0	5	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	0	117	0	0	0	61	339	0	0	524	627
Peak Hour Factor	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	0	35	0	0	0	18	103	0	0	159	190
Total Analysis Volume [veh/h]	6	0	142	0	0	0	74	411	0	0	635	760
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	2	0	0	0	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	0	0	0	0	0	7	0	0	7	0
Maximum Green [s]	0	120	0	0	0	0	0	120	0	0	120	0
Amber [s]	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	49	0	0	0	0	0	11	0	0	11	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	0	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	10	0	0	10	0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No						No			No	
Maximum Recall		No						No			No	
Pedestrian Recall		No						No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C		L	C	C	R
C, Cycle Length [s]	60		60	60	60	60
L, Total Lost Time per Cycle [s]	4.00		4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00		2.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	7		45	45	45	45
g / C, Green / Cycle	0.12		0.75	0.75	0.75	0.75
(v / s)_i Volume / Saturation Flow Rate	0.09		0.09	0.22	0.34	0.48
s, saturation flow rate [veh/h]	1596		792	1870	1870	1589
c, Capacity [veh/h]	194		575	1394	1394	1185
d1, Uniform Delay [s]	25.60		6.01	2.49	2.95	3.73
k, delay calibration	0.11		0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	6.13		0.46	0.54	1.07	2.67
d3, Initial Queue Delay [s]	0.00		0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00		1.00	1.00	1.00	1.00
PF, progression factor	1.00		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.76		0.13	0.29	0.46	0.64
d, Delay for Lane Group [s/veh]	31.73		6.47	3.03	4.02	6.40
Lane Group LOS	C		A	A	A	A
Critical Lane Group	Yes		No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.26		0.40	0.80	1.49	2.51
50th-Percentile Queue Length [ft/ln]	56.38		9.96	19.93	37.26	62.64
95th-Percentile Queue Length [veh/ln]	4.06		0.72	1.43	2.68	4.51
95th-Percentile Queue Length [ft/ln]	101.48		17.93	35.87	67.06	112.76

Movement, Approach, & Intersection Results

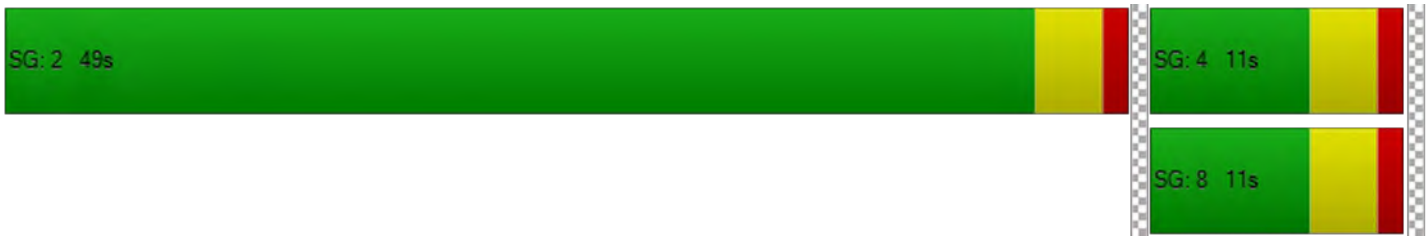
d_M, Delay for Movement [s/veh]	31.73	31.73	31.73	0.00	0.00	0.00	6.47	3.03	0.00	0.00	4.02	6.40
Movement LOS	C	C	C				A	A			A	A
d_A, Approach Delay [s/veh]	31.73			0.00			3.56			5.32		
Approach LOS	C			A			A			A		
d_I, Intersection Delay [s/veh]	6.82											
Intersection LOS	A											
Intersection V/C	0.659											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1500	0	233	233
d_b, Bicycle Delay [s]	1.88	30.00	23.41	23.41
l_b,int, Bicycle LOS Score for Intersection	1.804	4.132	2.360	3.861
Bicycle LOS	A	D	B	D

Sequence

Ring 1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



7th Street & County Line Road RV Fueling

Vistro File: C:\...\PME.vistro

Scenario 3 Existing Plus Project PM Peak Hour - With Improvements (TS)

Report File: C:\...\PMEPI-TS.pdf

6/9/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
6	I-10 SB Ramps (NS) at County Line Ave (EW)	Signalized	HCM 6th Edition	SB Left	0.583	17.5	B
7	I-10 NB Ramps (NS) at County Line Rd (EW)	Signalized	HCM 6th Edition	NB Right	0.513	9.8	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 6: I-10 SB Ramps (NS) at County Line Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	17.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.583

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			25.00			25.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present					No			No			No	
Crosswalk		No			No			No			No	

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	471	2	26	0	54	6	263	42	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	8	0	15	5	0	11	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	471	2	34	0	69	11	263	53	0
Peak Hour Factor	0.8290	0.8290	0.8290	0.9640	0.9640	0.9640	0.8290	0.9640	0.9640	0.9640	0.9640	0.8290
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	122	1	9	0	18	3	68	14	0
Total Analysis Volume [veh/h]	0	0	0	489	2	35	0	72	11	273	55	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	0	0	0	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	0	0	0	7	0	0	7	0	0	7	0
Maximum Green [s]	0	0	0	0	120	0	0	120	0	0	120	0
Amber [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	0	0	0	49	0	0	11	0	0	11	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	10	0	0	10	0	0	10	0
Rest In Walk					No			No			No	
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall					No			No			No	
Maximum Recall					No			No			No	
Pedestrian Recall					No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group		C	C	L	C
C, Cycle Length [s]		60	60	60	60
L, Total Lost Time per Cycle [s]		4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]		20	32	32	32
g / C, Green / Cycle		0.34	0.53	0.53	0.53
(v / s)_i Volume / Saturation Flow Rate		0.30	0.05	0.21	0.03
s, saturation flow rate [veh/h]		1767	1827	1315	1870
c, Capacity [veh/h]		599	965	741	987
d1, Uniform Delay [s]		18.71	7.03	10.56	6.91
k, delay calibration		0.11	0.50	0.50	0.50
I, Upstream Filtering Factor		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		4.31	0.18	1.41	0.11
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity		0.88	0.09	0.37	0.06
d, Delay for Lane Group [s/veh]		23.02	7.20	11.97	7.02
Lane Group LOS		C	A	B	A
Critical Lane Group		Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]		6.83	0.50	2.40	0.32
50th-Percentile Queue Length [ft/ln]		170.77	12.50	60.08	8.12
95th-Percentile Queue Length [veh/ln]		11.12	0.90	4.33	0.58
95th-Percentile Queue Length [ft/ln]		277.93	22.50	108.14	14.61

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	23.02	23.02	23.02	0.00	7.20	7.20	11.97	7.02	0.00
Movement LOS				C	C	C		A	A	B	A	
d_A, Approach Delay [s/veh]	0.00			23.02			7.20			11.14		
Approach LOS	A			C			A			B		
d_I, Intersection Delay [s/veh]	17.46											
Intersection LOS	B											
Intersection V/C	0.583											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	1500	233	233
d_b, Bicycle Delay [s]	30.00	1.88	23.41	23.41
l_b,int, Bicycle LOS Score for Intersection	4.132	2.428	1.697	2.101
Bicycle LOS	D	B	A	B

Sequence

Ring 1	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 7: I-10 NB Ramps (NS) at County Line Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	9.8
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.513

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	6	1	263	0	0	0	24	498	0	0	299	278
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	5	0	0	0	0	0	9	6	0	0	6	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	11	1	263	0	0	0	33	504	0	0	305	278
Peak Hour Factor	0.9920	0.9920	0.9920	0.8250	0.8250	0.8250	0.9920	0.9920	0.8250	0.8250	0.9920	0.9920
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	0	66	0	0	0	8	127	0	0	77	70
Total Analysis Volume [veh/h]	11	1	265	0	0	0	33	508	0	0	307	280
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	2	0	0	0	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	0	0	0	0	0	7	0	0	7	0
Maximum Green [s]	0	120	0	0	0	0	0	120	0	0	120	0
Amber [s]	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	49	0	0	0	0	0	11	0	0	11	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	0	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	10	0	0	10	0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No						No			No	
Maximum Recall		No						No			No	
Pedestrian Recall		No						No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C		L	C	C	R
C, Cycle Length [s]	60		60	60	60	60
L, Total Lost Time per Cycle [s]	4.00		4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00		2.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	13		39	39	39	39
g / C, Green / Cycle	0.21		0.66	0.66	0.66	0.66
(v / s)_i Volume / Saturation Flow Rate	0.17		0.03	0.27	0.16	0.18
s, saturation flow rate [veh/h]	1597		1072	1870	1870	1589
c, Capacity [veh/h]	339		712	1225	1225	1041
d1, Uniform Delay [s]	22.60		6.22	4.92	4.29	4.35
k, delay calibration	0.11		0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.85		0.12	1.04	0.49	0.63
d3, Initial Queue Delay [s]	0.00		0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00		1.00	1.00	1.00	1.00
PF, progression factor	1.00		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.82		0.05	0.41	0.25	0.27
d, Delay for Lane Group [s/veh]	27.45		6.35	5.96	4.78	4.98
Lane Group LOS	C		A	A	A	A
Critical Lane Group	Yes		No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.90		0.17	2.19	1.13	1.08
50th-Percentile Queue Length [ft/ln]	97.60		4.31	54.75	28.36	26.97
95th-Percentile Queue Length [veh/ln]	7.03		0.31	3.94	2.04	1.94
95th-Percentile Queue Length [ft/ln]	175.68		7.76	98.54	51.04	48.54

Movement, Approach, & Intersection Results

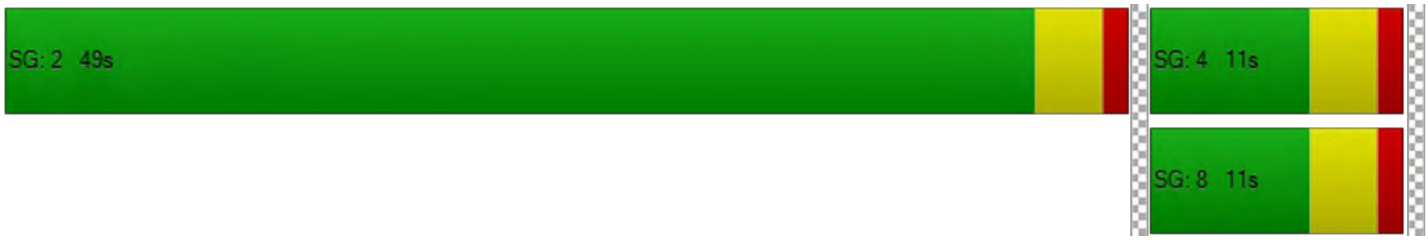
d_M, Delay for Movement [s/veh]	27.45	27.45	27.45	0.00	0.00	0.00	6.35	5.96	0.00	0.00	4.78	4.98
Movement LOS	C	C	C				A	A			A	A
d_A, Approach Delay [s/veh]	27.45			0.00			5.98			4.88		
Approach LOS	C			A			A			A		
d_I, Intersection Delay [s/veh]	9.75											
Intersection LOS	A											
Intersection V/C	0.513											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1500	0	233	233
d_b, Bicycle Delay [s]	1.88	30.00	23.41	23.41
l_b,int, Bicycle LOS Score for Intersection	2.017	4.132	2.452	2.528
Bicycle LOS	B	D	B	B

Sequence

Ring 1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



7th Street & County Line Road RV Fueling

Vistro File: C:\...\AME.vistro

Scenario 4 Existing Plus Project AM Peak Hour - With Improvements (RB)

Report File: C:\...\AMEPI-RB.pdf

6/9/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
6	I-10 SB Ramps (NS) at County Line Rd (EW)	Roundabout	HCM 6th Edition	EB Thru		5.8	A
7	I-10 NB Ramps (NS) at County Line Ave (EW)	Roundabout	HCM 6th Edition	WB Right		7.4	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 6: I-10 SB Ramps (NS) at County Line Rd (EW)

Control Type:	Roundabout	Delay (sec / veh):	5.8
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			25.00			25.00	
Grade [%]		0.00			0.00			0.00			0.00	
Crosswalk		No			No			No			No	

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	213	1	16	0	178	7	409	111	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	6	0	10	4	0	9	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	213	1	22	0	188	11	409	120	0
Peak Hour Factor	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	64	0	7	0	57	3	123	36	0
Total Analysis Volume [veh/h]	0	0	0	257	1	27	0	227	13	493	145	0
Pedestrian Volume [ped/h]		0			0			0			0	

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			1			1		
Circulating Flow Rate [veh/h]	494			651			766			0		
Exiting Flow Rate [veh/h]	517			0			175			494		
Demand Flow Rate [veh/h]	0	0	0	213	1	22	0	188	11	409	120	0
Adjusted Demand Flow Rate [veh/h]	0	0	0	257	1	27	0	227	13	493	145	0

Lanes

Overwrite Calculated Critical Headway		No	No	No	No	No	No	No	No
User-Defined Critical Headway [s]		4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time		No	No	No	No	No	No	No	No
User-Defined Follow-Up Time [s]		3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)		1420.00	1420.00	1420.00	1420.00	1420.00	1420.00	1420.00	1420.00
B (coefficient)		0.00091	0.00091	0.00091	0.00091	0.00091	0.00091	0.00091	0.00091
HV Adjustment Factor		0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Entry Flow Rate [veh/h]		132	132	28	116	116	14	503	148
Capacity of Entry and Bypass Lanes [veh/h]		786	786	786	708	708	708	1420	1420
Pedestrian Impedance		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]		771	771	771	694	694	694	1393	1393
X, volume / capacity		0.17	0.17	0.04	0.16	0.16	0.02	0.35	0.10

Movement, Approach, & Intersection Results

Lane LOS		A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh]		0.60	0.60	0.11	0.58	0.58	0.06	1.62	0.35
95th-Percentile Queue Length [ft]		14.98	14.98	2.72	14.56	14.56	1.43	40.54	8.70
Approach Delay [s/veh]	0.00	6.32			6.94			5.23	
Approach LOS	A	A			A			A	
Intersection Delay [s/veh]	5.85								
Intersection LOS	A								

Intersection Level Of Service Report
Intersection 7: I-10 NB Ramps (NS) at County Line Ave (EW)

Control Type:	Roundabout	Delay (sec / veh):	7.4
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	1	0	117	0	0	0	56	334	0	0	519	627
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	4	0	0	0	0	0	5	5	0	0	5	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	0	117	0	0	0	61	339	0	0	524	627
Peak Hour Factor	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	0	35	0	0	0	18	103	0	0	159	190
Total Analysis Volume [veh/h]	6	0	142	0	0	0	74	411	0	0	635	760
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			1			1		
Circulating Flow Rate [veh/h]	495			654			0			82		
Exiting Flow Rate [veh/h]	0			851			654			564		
Demand Flow Rate [veh/h]	5	0	117	0	0	0	61	339	0	0	524	627
Adjusted Demand Flow Rate [veh/h]	6	0	142	0	0	0	74	411	0	0	635	760

Lanes

Overwrite Calculated Critical Headway	No	No		No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00		4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No		No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00		3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00		1420.00	1420.00	1420.00	1420.00
B (coefficient)	0.00091	0.00091		0.00091	0.00091	0.00091	0.00091
HV Adjustment Factor	0.98	0.98		0.98	0.98	0.98	0.98
Entry Flow Rate [veh/h]	7	145		233	263	648	776
Capacity of Entry and Bypass Lanes [veh/h]	906	906		1420	1420	1319	1319
Pedestrian Impedance	1.00	1.00		1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	888	888		1393	1393	1293	1293
X, volume / capacity	0.01	0.16		0.16	0.18	0.49	0.59

Movement, Approach, & Intersection Results

Lane LOS	A	A		A	A	A	A
95th-Percentile Queue Length [veh]	0.02	0.57		0.59	0.68	2.80	4.04
95th-Percentile Queue Length [ft]	0.51	14.20		14.63	16.90	70.04	100.92
Approach Delay [s/veh]	5.57		0.00	4.01		8.84	
Approach LOS	A		A	A		A	
Intersection Delay [s/veh]	7.44						
Intersection LOS	A						

7th Street & County Line Road RV Fueling

Vistro File: C:\...\PME.vistro

Scenario 4 Existing Plus Project PM Peak Hour - With Improvements (RB)

Report File: C:\...\PMEPI-RB.pdf

6/9/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
6	I-10 SB Ramps (NS) at County Line Ave (EW)	Roundabout	HCM 6th Edition	EB Thru		5.1	A
7	I-10 NB Ramps (NS) at County Line Rd (EW)	Roundabout	HCM 6th Edition	NB Right		5.0	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 6: I-10 SB Ramps (NS) at County Line Ave (EW)

Control Type:	Roundabout	Delay (sec / veh):	5.1
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			25.00			25.00	
Grade [%]		0.00			0.00			0.00			0.00	
Crosswalk		No			No			No			No	

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	471	2	26	0	54	6	263	42	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	8	0	15	5	0	11	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	471	2	34	0	69	11	263	53	0
Peak Hour Factor	0.8290	0.8290	0.8290	0.9640	0.9640	0.9640	0.8290	0.9640	0.9640	0.9640	0.9640	0.8290
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	122	1	9	0	18	3	68	14	0
Total Analysis Volume [veh/h]	0	0	0	489	2	35	0	72	11	273	55	0
Pedestrian Volume [ped/h]		0			0			0			0	

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			1			1		
Circulating Flow Rate [veh/h]	572			335			779			0		
Exiting Flow Rate [veh/h]	292			0			92			572		
Demand Flow Rate [veh/h]	0	0	0	471	2	34	0	69	11	263	53	0
Adjusted Demand Flow Rate [veh/h]	0	0	0	489	2	35	0	72	11	273	55	0

Lanes

Overwrite Calculated Critical Headway		No	No	No	No	No	No	No	No
User-Defined Critical Headway [s]		4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time		No	No	No	No	No	No	No	No
User-Defined Follow-Up Time [s]		3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)		1420.00	1420.00	1420.00	1420.00	1420.00	1420.00	1420.00	1420.00
B (coefficient)		0.00091	0.00091	0.00091	0.00091	0.00091	0.00091	0.00091	0.00091
HV Adjustment Factor		0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Entry Flow Rate [veh/h]		251	251	36	37	37	12	279	57
Capacity of Entry and Bypass Lanes [veh/h]		1048	1048	1048	699	699	699	1420	1420
Pedestrian Impedance		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]		1027	1027	1027	686	686	686	1393	1393
X, volume / capacity		0.24	0.24	0.03	0.05	0.05	0.02	0.20	0.04

Movement, Approach, & Intersection Results

Lane LOS		A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh]		0.93	0.93	0.11	0.17	0.17	0.05	0.73	0.12
95th-Percentile Queue Length [ft]		23.34	23.34	2.64	4.15	4.15	1.22	18.20	3.08
Approach Delay [s/veh]	0.00	5.67			5.76			3.98	
Approach LOS	A	A			A			A	
Intersection Delay [s/veh]	5.08								
Intersection LOS	A								

Intersection Level Of Service Report
Intersection 7: I-10 NB Ramps (NS) at County Line Rd (EW)

Control Type:	Roundabout	Delay (sec / veh):	5.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	6	1	263	0	0	0	24	498	0	0	299	278
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	5	0	0	0	0	0	9	6	0	0	6	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	11	1	263	0	0	0	33	504	0	0	305	278
Peak Hour Factor	0.9920	0.9920	0.9920	0.8250	0.8250	0.8250	0.9920	0.9920	0.8250	0.8250	0.9920	0.9920
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	0	66	0	0	0	8	127	0	0	77	70
Total Analysis Volume [veh/h]	11	1	265	0	0	0	33	508	0	0	307	280
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			1			1		
Circulating Flow Rate [veh/h]	552			324			0			46		
Exiting Flow Rate [veh/h]	0			320			324			788		
Demand Flow Rate [veh/h]	11	1	263	0	0	0	33	504	0	0	305	278
Adjusted Demand Flow Rate [veh/h]	11	1	265	0	0	0	33	508	0	0	307	280

Lanes

Overwrite Calculated Critical Headway	No	No		No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00		4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No		No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00		3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00		1420.00	1420.00	1420.00	1420.00
B (coefficient)	0.00091	0.00091		0.00091	0.00091	0.00091	0.00091
HV Adjustment Factor	0.98	0.98		0.98	0.98	0.98	0.98
Entry Flow Rate [veh/h]	13	271		260	293	314	286
Capacity of Entry and Bypass Lanes [veh/h]	860	860		1420	1420	1362	1362
Pedestrian Impedance	1.00	1.00		1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	843	843		1393	1393	1336	1336
X, volume / capacity	0.01	0.31		0.18	0.21	0.23	0.21

Movement, Approach, & Intersection Results

Lane LOS	A	A		A	A	A	A
95th-Percentile Queue Length [veh]	0.04	1.35		0.67	0.77	0.89	0.79
95th-Percentile Queue Length [ft]	1.08	33.78		16.68	19.35	22.24	19.78
Approach Delay [s/veh]	7.65		0.00	4.19		4.56	
Approach LOS	A		A	A		A	
Intersection Delay [s/veh]	5.02						
Intersection LOS	A						

Existing Plus Project – Phase 2

7th Street & County Line Road RV Fueling

Vistro File: C:\...\AME.vistro
Report File: C:\...\AMEP.pdf

Scenario 2 Existing Plus Project AM Peak Hour
12/16/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	County Line Ln (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	SB Left	0.182	9.6	A
2	Coffee Shop Access (NS) at County Line Ln (EW)	Two-way stop	HCM 6th Edition	NB Left	0.140	9.2	A
3	RV Access (NS) at County Line Ln (EW)	Two-way stop	HCM 6th Edition	NB Left	0.016	8.6	A
4	Coffee Shop/RV Access (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	EB Thru	0.002	0.0	A
5	7th Pl (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	NB Left	0.074	18.8	C
6	I-10 SB Ramps (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	SB Left	5.083	2,031.1	F
7	I-10 NB Ramps (NS) at County Line Ave (EW)	Two-way stop	HCM 6th Edition	NB Left	0.851	209.7	F
8	Calimesa Blvd (NS) at County Line Ave (EW)	Signalized	HCM 6th Edition	NB Left	0.529	13.3	B

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: County Line Ln (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.182

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	2	0	4	0	20	0	0	12	6
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	146	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	148	0	4	0	20	0	0	12	6
Peak Hour Factor	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	44	0	1	0	6	0	0	4	2
Total Analysis Volume [veh/h]	0	0	0	175	0	5	0	24	0	0	14	7
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.77	9.25	8.42	9.60	10.09	9.25	7.26	0.00	0.00	7.26	0.00	0.00
Movement LOS	A	A	A	A	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.68	0.68	0.68	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	17.09	17.09	17.09	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.82			9.59			0.00			0.00		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	7.67											
Intersection LOS	A											

Intersection Level Of Service Report
Intersection 2: Coffee Shop Access (NS) at County Line Ln (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.2
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.140

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	0	6	0	0	6
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	131	0	0	0	0	15
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	131	0	6	0	0	21
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	34	0	2	0	0	6
Total Analysis Volume [veh/h]	138	0	6	0	0	22
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.14	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.24	8.94	0.00	0.00	7.23	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.49	0.49	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	12.14	12.14	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.24		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	7.68					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 3: RV Access (NS) at County Line Ln (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.016

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	0	6	0	0	6
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	15	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	15	0	6	0	0	6
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	0	2	0	0	2
Total Analysis Volume [veh/h]	16	0	6	0	0	6
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.63	8.40	0.00	0.00	7.23	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.05	0.05	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.21	1.21	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.63		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	4.93					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 4: Coffee Shop/RV Access (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	25	17	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	146	0	152
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	171	17	152
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	45	4	40
Total Analysis Volume [veh/h]	0	0	0	180	18	160
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	0.00
Movement LOS				A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 5: 7th Pl (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	18.8
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.074

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	2	165	19	6	113	15
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	15	0	132	14	0	137
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	17	165	151	20	113	152
Peak Hour Factor	0.7140	0.7140	0.7140	0.7140	0.7140	0.7140
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	58	53	7	40	53
Total Analysis Volume [veh/h]	24	231	211	28	158	213
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.28	0.00	0.00	0.12	0.00
d_M, Delay for Movement [s/veh]	18.82	12.20	0.00	0.00	8.08	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	1.62	1.62	0.00	0.00	0.28	0.28
95th-Percentile Queue Length [ft/ln]	40.54	40.54	0.00	0.00	6.96	6.96
d_A, Approach Delay [s/veh]	12.82		0.00		3.44	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	5.25					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 6: I-10 SB Ramps (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	2,031.1
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	5.083

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			25.00			25.00	
Grade [%]		0.00			0.00			0.00			0.00	
Crosswalk		No			No			No			No	

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	213	1	16	0	178	7	409	111	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	47	0	102	30	0	90	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	213	1	63	0	280	37	409	201	0
Peak Hour Factor	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	64	0	19	0	84	11	123	61	0
Total Analysis Volume [veh/h]	0	0	0	257	1	76	0	338	45	493	242	0
Pedestrian Volume [ped/h]		0			0			0			0	

Intersection Settings

Priority Scheme	Stop			Stop			Free			Free		
Flared Lane				No								
Storage Area [veh]	0			0			0			0		
Two-Stage Gap Acceptance				No								
Number of Storage Spaces in Median	0			0			0			0		

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	5.08	0.02	0.10	0.00	0.00	0.00	0.42	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	2031.06	2019.26	1964.37	0.00	0.00	0.00	10.26	0.00	0.00
Movement LOS				F	F	F		A	A	B	A	
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	37.09	37.09	37.09	0.00	0.00	0.00	2.11	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	927.27	927.27	927.27	0.00	0.00	0.00	52.87	0.00	0.00
d_A, Approach Delay [s/veh]	0.00			2015.85			0.00			6.88		
Approach LOS	A			F			A			A		
d_I, Intersection Delay [s/veh]	467.18											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 7: I-10 NB Ramps (NS) at County Line Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	209.7
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.851

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	1	0	117	0	0	0	56	334	0	0	519	627
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	31	0	0	0	0	0	44	58	0	0	59	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	32	0	117	0	0	0	100	392	0	0	578	627
Peak Hour Factor	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	0	35	0	0	0	30	119	0	0	175	190
Total Analysis Volume [veh/h]	39	0	142	0	0	0	121	475	0	0	701	760
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No			
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No			
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.85	0.00	0.24	0.00	0.00	0.00	0.26	0.00	0.00	0.00	0.01	0.01
d_M, Delay for Movement [s/veh]	209.72	236.59	137.23	0.00	0.00	0.00	15.52	0.00	0.00	0.00	0.00	0.00
Movement LOS	F	F	F				C	A			A	A
95th-Percentile Queue Length [veh/ln]	9.25	9.25	9.25	0.00	0.00	0.00	1.04	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	231.21	231.21	231.21	0.00	0.00	0.00	25.95	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	152.85			0.00			3.15			0.00		
Approach LOS	F			A			A			A		
d_I, Intersection Delay [s/veh]	13.20											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 8: Calimesa Blvd (NS) at County Line Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	13.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.529

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	80.00	100.00	100.00	115.00	100.00	100.00	105.00	100.00	100.00
Speed [mph]	35.00			45.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	220	306	56	40	80	149	97	276	52	30	744	87
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	22	0	0	0	0	15	14	22	22	0	22	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	242	306	56	40	80	164	111	298	74	30	766	87
Peak Hour Factor	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	67	84	15	11	22	45	31	82	20	8	211	24
Total Analysis Volume [veh/h]	266	337	62	44	88	180	122	328	81	33	843	96
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	2	0	0	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	0	0	7	0	0	7	0	0	7	0
Maximum Green [s]	0	120	0	0	120	0	0	120	0	0	120	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	32	0	0	32	0	0	28	0	0	28	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	L	C	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	19	19	19	19	19	19	33	33	33	33	33
g / C, Green / Cycle	0.32	0.32	0.32	0.32	0.32	0.32	0.55	0.55	0.55	0.55	0.55
(v / s)_i Volume / Saturation Flow Rate	0.20	0.11	0.11	0.04	0.05	0.11	0.20	0.23	0.03	0.26	0.26
s, saturation flow rate [veh/h]	1309	1870	1770	985	1870	1589	597	1807	976	1870	1804
c, Capacity [veh/h]	444	598	566	313	598	508	340	988	503	1023	986
d1, Uniform Delay [s]	21.35	15.59	15.60	20.31	14.57	15.66	15.00	7.97	11.49	8.28	8.28
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.30	0.34	0.36	0.20	0.11	0.42	2.93	1.28	0.25	1.53	1.59
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.60	0.34	0.34	0.14	0.15	0.35	0.36	0.41	0.07	0.47	0.47
d, Delay for Lane Group [s/veh]	22.65	15.93	15.96	20.52	14.68	16.08	17.93	9.25	11.74	9.82	9.87
Lane Group LOS	C	B	B	C	B	B	B	A	B	A	A
Critical Lane Group	Yes	No	No	No	No	No	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	3.31	1.94	1.86	0.47	0.74	1.64	1.41	2.70	0.28	3.29	3.19
50th-Percentile Queue Length [ft/ln]	82.80	48.62	46.38	11.77	18.41	40.93	35.30	67.53	6.88	82.25	79.72
95th-Percentile Queue Length [veh/ln]	5.96	3.50	3.34	0.85	1.33	2.95	2.54	4.86	0.50	5.92	5.74
95th-Percentile Queue Length [ft/ln]	149.04	87.51	83.49	21.19	33.15	73.68	63.54	121.56	12.38	148.05	143.50

Movement, Approach, & Intersection Results

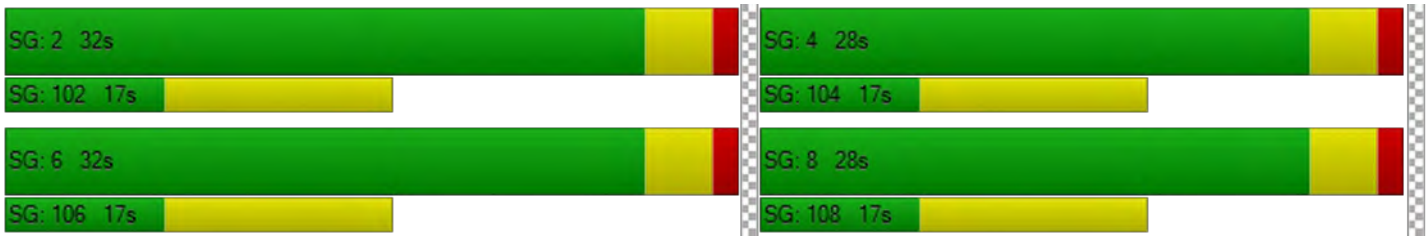
d_M, Delay for Movement [s/veh]	22.65	15.94	15.96	20.52	14.68	16.08	17.93	9.25	9.25	11.74	9.84	9.87
Movement LOS	C	B	B	C	B	B	B	A	A	B	A	A
d_A, Approach Delay [s/veh]	18.63			16.31			11.24			9.91		
Approach LOS	B			B			B			A		
d_I, Intersection Delay [s/veh]	13.34											
Intersection LOS	B											
Intersection V/C	0.529											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	20.01	20.01	20.01	20.01
l_p,int, Pedestrian LOS Score for Intersection	2.402	2.704	3.004	2.571
Crosswalk LOS	B	B	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	933	933	800	800
d_b, Bicycle Delay [s]	8.53	8.53	10.80	10.80
l_b,int, Bicycle LOS Score for Intersection	2.108	2.074	2.436	2.362
Bicycle LOS	B	B	B	B

Sequence

Ring 1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



7th Street & County Line Road RV Fueling

Vistro File: C:\...\PME.vistro
Report File: C:\...\PMEP.pdf

Scenario 2 Existing Plus Project PM Peak Hour
12/16/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	County Line Ln (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	SB Left	0.132	9.4	A
2	Coffee Shop Access (NS) at County Line Ln (EW)	Two-way stop	HCM 6th Edition	NB Left	0.070	8.9	A
3	RV Access (NS) at County Line Ln (EW)	Two-way stop	HCM 6th Edition	NB Left	0.022	8.6	A
4	Coffee Shop/RV Access (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	EB Thru	0.001	0.0	A
5	7th Pl (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	NB Left	0.019	11.1	B
6	I-10 SB Ramps (NS) at County Line Ave (EW)	Two-way stop	HCM 6th Edition	SB Left	1.911	483.6	F
7	I-10 NB Ramps (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	NB Thru	0.006	39.5	E
8	Calimesa Blvd (NS) at County Line Ave (EW)	Signalized	HCM 6th Edition	NB Left	0.561	12.5	B

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: County Line Ln (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.4
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.132

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	4	0	0	1	22	0	0	14	6
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	87	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	91	0	0	1	22	0	0	14	6
Peak Hour Factor	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	31	0	0	0	7	0	0	5	2
Total Analysis Volume [veh/h]	0	0	0	124	0	0	1	30	0	0	19	8
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.82	9.33	8.45	9.40	9.89	8.99	7.27	0.00	0.00	7.27	0.00	0.00
Movement LOS	A	A	A	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.45	0.45	0.45	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	11.32	11.32	11.32	0.05	0.05	0.05	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.87			9.40			0.23			0.00		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	6.44											
Intersection LOS	A											

Intersection Level Of Service Report
Intersection 2: Coffee Shop Access (NS) at County Line Ln (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.9
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.070

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	0	7	0	0	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	66	0	0	0	0	21
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	66	0	7	0	0	25
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	17	0	2	0	0	7
Total Analysis Volume [veh/h]	69	0	7	0	0	26
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.95	8.63	0.00	0.00	7.23	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.23	0.23	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	5.67	5.67	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.95		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	6.05					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 3: RV Access (NS) at County Line Ln (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.022

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	0	7	0	0	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	21	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	21	0	7	0	0	4
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	0	2	0	0	1
Total Analysis Volume [veh/h]	22	0	7	0	0	4
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.65	8.43	0.00	0.00	7.23	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.07	0.07	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.67	1.67	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.65		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	5.77					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 4: Coffee Shop/RV Access (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	25	21	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	87	0	87
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	112	21	87
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	29	6	23
Total Analysis Volume [veh/h]	0	0	0	118	22	92
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	0.00
Movement LOS				A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 5: 7th Pl (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	11.1
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.019

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	2	36	24	1	49	19
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	8	0	79	8	0	79
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	36	103	9	49	98
Peak Hour Factor	0.8620	0.8620	0.8620	0.8620	0.8620	0.8620
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	10	30	3	14	28
Total Analysis Volume [veh/h]	12	42	119	10	57	114
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.05	0.00	0.00	0.04	0.00
d_M, Delay for Movement [s/veh]	11.12	9.18	0.00	0.00	7.57	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.21	0.21	0.00	0.00	0.10	0.10
95th-Percentile Queue Length [ft/ln]	5.18	5.18	0.00	0.00	2.61	2.61
d_A, Approach Delay [s/veh]	9.61		0.00		2.52	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	2.69					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 6: I-10 SB Ramps (NS) at County Line Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	483.6
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.911

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			25.00			25.00	
Grade [%]		0.00			0.00			0.00			0.00	
Crosswalk		No			No			No			No	

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	471	2	26	0	54	6	263	42	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	28	0	61	18	0	51	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	471	2	54	0	115	24	263	93	0
Peak Hour Factor	0.8290	0.8290	0.8290	0.9640	0.9640	0.9640	0.8290	0.9640	0.9640	0.9640	0.9640	0.8290
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	122	1	14	0	30	6	68	24	0
Total Analysis Volume [veh/h]	0	0	0	489	2	56	0	119	25	273	96	0
Pedestrian Volume [ped/h]		0			0			0			0	

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane		No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance		No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	1.91	0.01	0.06	0.00	0.00	0.00	0.19	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	483.57	483.21	473.25	0.00	0.00	0.00	8.09	0.00	0.00
Movement LOS				F	F	F		A	A	A	A	
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	39.04	39.04	39.04	0.00	0.00	0.00	0.70	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	976.03	976.03	976.03	0.00	0.00	0.00	17.48	0.00	0.00
d_A, Approach Delay [s/veh]	0.00			482.51			0.00			5.98		
Approach LOS	A			F			A			A		
d_I, Intersection Delay [s/veh]	251.08											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 7: I-10 NB Ramps (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	39.5
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.006

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	6	1	263	0	0	0	24	498	0	0	299	278
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	18	0	0	0	0	0	28	33	0	0	33	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	24	1	263	0	0	0	52	531	0	0	332	278
Peak Hour Factor	0.9920	0.9920	0.9920	0.8250	0.8250	0.8250	0.9920	0.9920	0.8250	0.8250	0.9920	0.9920
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	0	66	0	0	0	13	134	0	0	84	70
Total Analysis Volume [veh/h]	24	1	265	0	0	0	52	535	0	0	335	280
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No			
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No			
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.14	0.01	0.49	0.00	0.00	0.00	0.05	0.01	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	37.83	39.47	23.92	0.00	0.00	0.00	8.94	0.00	0.00	0.00	0.00	0.00
Movement LOS	E	E	C				A	A			A	A
95th-Percentile Queue Length [veh/ln]	4.24	4.24	4.24	0.00	0.00	0.00	0.17	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	106.05	106.05	106.05	0.00	0.00	0.00	4.27	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	25.13			0.00			0.79			0.00		
Approach LOS	D			A			A			A		
d_I, Intersection Delay [s/veh]	5.20											
Intersection LOS	E											

Intersection Level Of Service Report
Intersection 8: Calimesa Blvd (NS) at County Line Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	12.5
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.561

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	80.00	100.00	100.00	115.00	100.00	100.00	105.00	100.00	100.00
Speed [mph]	35.00			45.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	99	133	92	67	180	99	115	510	147	67	382	64
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	12	0	0	0	0	8	8	13	12	0	13	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	111	133	92	67	180	107	123	523	159	67	395	64
Peak Hour Factor	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	28	34	23	17	46	27	31	134	41	17	101	16
Total Analysis Volume [veh/h]	113	136	94	68	184	109	126	534	162	68	403	65
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	2	0	0	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	0	0	7	0	0	7	0	0	7	0
Maximum Green [s]	0	120	0	0	120	0	0	120	0	0	120	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	34	0	0	34	0	0	26	0	0	26	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	L	C	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	15	15	15	15	15	15	37	37	37	37	37
g / C, Green / Cycle	0.25	0.25	0.25	0.25	0.25	0.25	0.62	0.62	0.62	0.62	0.62
(v / s)_i Volume / Saturation Flow Rate	0.09	0.06	0.07	0.06	0.10	0.07	0.14	0.39	0.09	0.13	0.13
s, saturation flow rate [veh/h]	1200	1870	1625	1150	1870	1589	925	1796	749	1870	1781
c, Capacity [veh/h]	285	467	406	309	467	397	605	1108	372	1154	1099
d1, Uniform Delay [s]	24.64	18.04	18.12	22.25	18.73	18.13	7.87	7.19	14.55	5.05	5.05
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.89	0.29	0.36	0.35	0.54	0.37	0.78	2.70	1.08	0.41	0.43
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.40	0.26	0.27	0.22	0.39	0.27	0.21	0.63	0.18	0.21	0.21
d, Delay for Lane Group [s/veh]	25.54	18.33	18.47	22.61	19.27	18.50	8.65	9.89	15.63	5.45	5.48
Lane Group LOS	C	B	B	C	B	B	A	A	B	A	A
Critical Lane Group	No	No	No	No	Yes	No	No	Yes	No	No	No
50th-Percentile Queue Length [veh/ln]	1.48	1.24	1.15	0.78	1.90	1.09	0.83	4.53	0.71	1.02	0.99
50th-Percentile Queue Length [ft/ln]	36.97	31.06	28.82	19.51	47.47	27.24	20.79	113.19	17.63	25.50	24.71
95th-Percentile Queue Length [veh/ln]	2.66	2.24	2.08	1.40	3.42	1.96	1.50	8.02	1.27	1.84	1.78
95th-Percentile Queue Length [ft/ln]	66.55	55.91	51.88	35.12	85.44	49.02	37.42	200.43	31.73	45.89	44.48

Movement, Approach, & Intersection Results

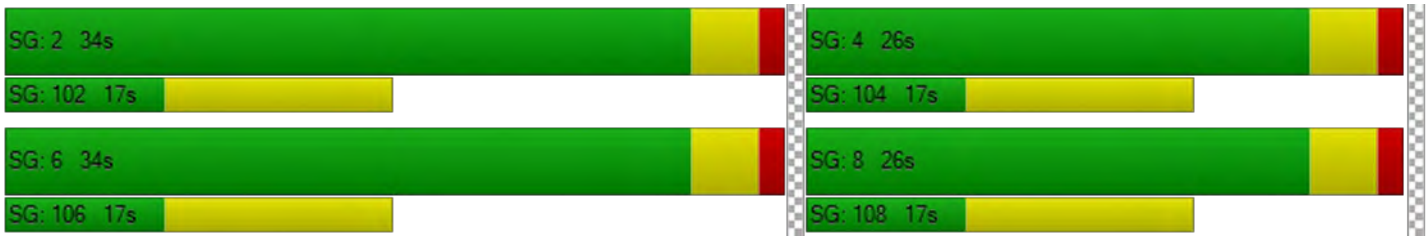
d_M, Delay for Movement [s/veh]	25.54	18.35	18.47	22.61	19.27	18.50	8.65	9.89	9.89	15.63	5.47	5.48
Movement LOS	C	B	B	C	B	B	A	A	A	B	A	A
d_A, Approach Delay [s/veh]	20.75			19.67			9.70			6.76		
Approach LOS	C			B			A			A		
d_I, Intersection Delay [s/veh]	12.52											
Intersection LOS	B											
Intersection V/C	0.561											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	20.01	20.01	20.01	20.01
l_p,int, Pedestrian LOS Score for Intersection	2.421	2.658	2.681	2.556
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1000	1000	733	733
d_b, Bicycle Delay [s]	7.50	7.50	12.03	12.03
l_b,int, Bicycle LOS Score for Intersection	1.843	2.155	2.916	2.002
Bicycle LOS	A	B	C	B

Sequence

Ring 1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



7th Street & County Line Road RV Fueling

Vistro File: C:\...\AME.vistro

Scenario 3 Existing Plus Project AM Peak Hour - With Improvements (TS)

Report File: C:\...\AMEPI-TS.pdf

12/16/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
6	I-10 SB Ramps (NS) at County Line Rd (EW)	Signalized	HCM 6th Edition	SB Left	0.791	16.8	B
7	I-10 NB Ramps (NS) at County Line Ave (EW)	Signalized	HCM 6th Edition	NB Right	0.680	7.9	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 6: I-10 SB Ramps (NS) at County Line Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	16.8
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.791

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			25.00			25.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present					No			No			No	
Crosswalk		No			No			No			No	

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	213	1	16	0	178	7	409	111	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	47	0	102	30	0	90	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	213	1	63	0	280	37	409	201	0
Peak Hour Factor	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	64	0	19	0	84	11	123	61	0
Total Analysis Volume [veh/h]	0	0	0	257	1	76	0	338	45	493	242	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	0	0	0	6	0	0	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	0	0	0	7	0	0	7	0	0	7	0
Maximum Green [s]	0	0	0	0	120	0	0	120	0	0	120	0
Amber [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	0	0	0	49	0	0	11	0	0	11	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	10	0	0	10	0	0	10	0
Rest In Walk					No			No			No	
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall					No			No			No	
Maximum Recall					No			No			No	
Pedestrian Recall					No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group		C	C	L	C
C, Cycle Length [s]		60	60	60	60
L, Total Lost Time per Cycle [s]		4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]		14	38	38	38
g / C, Green / Cycle		0.23	0.64	0.64	0.64
(v / s)_i Volume / Saturation Flow Rate		0.19	0.21	0.49	0.13
s, saturation flow rate [veh/h]		1734	1832	1000	1870
c, Capacity [veh/h]		403	1163	622	1187
d1, Uniform Delay [s]		21.96	5.08	14.72	4.61
k, delay calibration		0.11	0.50	0.50	0.50
I, Upstream Filtering Factor		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		4.43	0.76	10.02	0.39
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity		0.83	0.33	0.79	0.20
d, Delay for Lane Group [s/veh]		26.39	5.84	24.75	5.00
Lane Group LOS		C	A	C	A
Critical Lane Group		Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]		4.61	1.90	7.22	1.08
50th-Percentile Queue Length [ft/ln]		115.26	47.58	180.45	27.00
95th-Percentile Queue Length [veh/ln]		8.13	3.43	11.62	1.94
95th-Percentile Queue Length [ft/ln]		203.30	85.65	290.61	48.59

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	26.39	26.39	26.39	0.00	5.84	5.84	24.75	5.00	0.00
Movement LOS				C	C	C		A	A	C	A	
d_A, Approach Delay [s/veh]	0.00			26.39			5.84			18.24		
Approach LOS	A			C			A			B		
d_I, Intersection Delay [s/veh]	16.84											
Intersection LOS	B											
Intersection V/C	0.791											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	1500	233	233
d_b, Bicycle Delay [s]	30.00	1.88	23.41	23.41
l_b,int, Bicycle LOS Score for Intersection	4.132	2.111	2.192	2.772
Bicycle LOS	D	B	B	C

Sequence

Ring 1	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 7: I-10 NB Ramps (NS) at County Line Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	7.9
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.680

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	1	0	117	0	0	0	56	334	0	0	519	627
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	31	0	0	0	0	0	44	58	0	0	59	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	32	0	117	0	0	0	100	392	0	0	578	627
Peak Hour Factor	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	0	35	0	0	0	30	119	0	0	175	190
Total Analysis Volume [veh/h]	39	0	142	0	0	0	121	475	0	0	701	760
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	2	0	0	0	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	0	0	0	0	0	7	0	0	7	0
Maximum Green [s]	0	120	0	0	0	0	0	120	0	0	120	0
Amber [s]	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	49	0	0	0	0	0	11	0	0	11	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	0	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	10	0	0	10	0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No						No			No	
Maximum Recall		No						No			No	
Pedestrian Recall		No						No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C		L	C	C	R
C, Cycle Length [s]	60		60	60	60	60
L, Total Lost Time per Cycle [s]	4.00		4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00		2.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	9		44	44	44	44
g / C, Green / Cycle	0.14		0.72	0.72	0.72	0.72
(v / s)_i Volume / Saturation Flow Rate	0.11		0.16	0.25	0.37	0.48
s, saturation flow rate [veh/h]	1627		745	1870	1870	1589
c, Capacity [veh/h]	234		504	1352	1352	1150
d1, Uniform Delay [s]	24.82		8.43	3.09	3.69	4.42
k, delay calibration	0.11		0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.38		1.13	0.72	1.42	3.00
d3, Initial Queue Delay [s]	0.00		0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00		1.00	1.00	1.00	1.00
PF, progression factor	1.00		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.77		0.24	0.35	0.52	0.66
d, Delay for Lane Group [s/veh]	30.20		9.56	3.81	5.11	7.41
Lane Group LOS	C		A	A	A	A
Critical Lane Group	Yes		No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.68		0.87	1.22	2.21	3.13
50th-Percentile Queue Length [ft/ln]	66.93		21.87	30.51	55.20	78.25
95th-Percentile Queue Length [veh/ln]	4.82		1.57	2.20	3.97	5.63
95th-Percentile Queue Length [ft/ln]	120.47		39.37	54.91	99.36	140.85

Movement, Approach, & Intersection Results

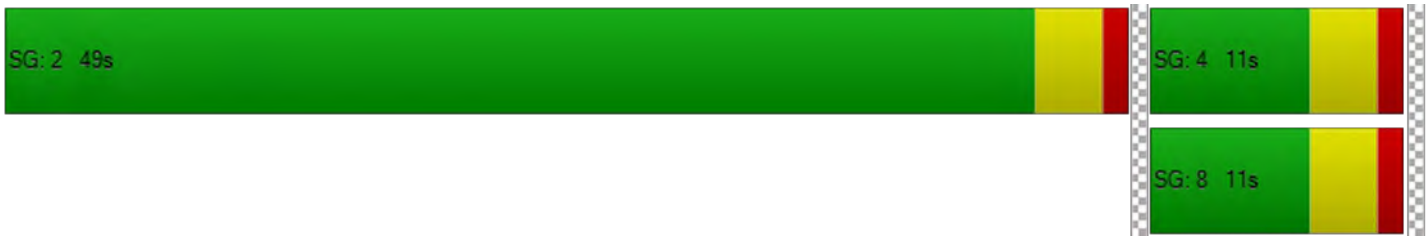
d_M, Delay for Movement [s/veh]	30.20	30.20	30.20	0.00	0.00	0.00	9.56	3.81	0.00	0.00	5.11	7.41
Movement LOS	C	C	C				A	A			A	A
d_A, Approach Delay [s/veh]	30.20			0.00			4.98			6.31		
Approach LOS	C			A			A			A		
d_I, Intersection Delay [s/veh]	7.89											
Intersection LOS	A											
Intersection V/C	0.680											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1500	0	233	233
d_b, Bicycle Delay [s]	1.88	30.00	23.41	23.41
l_b,int, Bicycle LOS Score for Intersection	1.858	4.132	2.543	3.970
Bicycle LOS	A	D	B	D

Sequence

Ring 1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



7th Street & County Line Road RV Fueling

Vistro File: C:\...\PME.vistro

Scenario 3 Existing Plus Project PM Peak Hour - With Improvements (TS)

Report File: C:\...\PMEPI-TS.pdf

12/16/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
6	I-10 SB Ramps (NS) at County Line Ave (EW)	Signalized	HCM 6th Edition	SB Left	0.612	17.1	B
7	I-10 NB Ramps (NS) at County Line Rd (EW)	Signalized	HCM 6th Edition	NB Right	0.539	10.0	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 6: I-10 SB Ramps (NS) at County Line Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	17.1
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.612

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			25.00			25.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present					No			No			No	
Crosswalk		No			No			No			No	

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	471	2	26	0	54	6	263	42	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	28	0	61	18	0	51	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	471	2	54	0	115	24	263	93	0
Peak Hour Factor	0.8290	0.8290	0.8290	0.9640	0.9640	0.9640	0.8290	0.9640	0.9640	0.9640	0.9640	0.8290
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	122	1	14	0	30	6	68	24	0
Total Analysis Volume [veh/h]	0	0	0	489	2	56	0	119	25	273	96	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	0	0	0	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	0	0	0	7	0	0	7	0	0	7	0
Maximum Green [s]	0	0	0	0	120	0	0	120	0	0	120	0
Amber [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	0	0	0	49	0	0	11	0	0	11	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	10	0	0	10	0	0	10	0
Rest In Walk					No			No			No	
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall					No			No			No	
Maximum Recall					No			No			No	
Pedestrian Recall					No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group		C	C	L	C
C, Cycle Length [s]		60	60	60	60
L, Total Lost Time per Cycle [s]		4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]		21	31	31	31
g / C, Green / Cycle		0.35	0.52	0.52	0.52
(v / s)_i Volume / Saturation Flow Rate		0.31	0.08	0.22	0.05
s, saturation flow rate [veh/h]		1760	1814	1244	1870
c, Capacity [veh/h]		620	934	666	962
d1, Uniform Delay [s]		18.31	7.70	12.13	7.48
k, delay calibration		0.11	0.50	0.50	0.50
I, Upstream Filtering Factor		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		4.33	0.35	1.87	0.21
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity		0.88	0.15	0.41	0.10
d, Delay for Lane Group [s/veh]		22.63	8.05	14.00	7.68
Lane Group LOS		C	A	B	A
Critical Lane Group		Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]		7.05	0.94	2.69	0.61
50th-Percentile Queue Length [ft/ln]		176.20	23.52	67.16	15.13
95th-Percentile Queue Length [veh/ln]		11.40	1.69	4.84	1.09
95th-Percentile Queue Length [ft/ln]		285.05	42.33	120.89	27.23

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	22.63	22.63	22.63	0.00	8.05	8.05	14.00	7.68	0.00
Movement LOS				C	C	C		A	A	B	A	
d_A, Approach Delay [s/veh]	0.00			22.63			8.05			12.35		
Approach LOS	A			C			A			B		
d_I, Intersection Delay [s/veh]	17.07											
Intersection LOS	B											
Intersection V/C	0.612											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	1500	233	233
d_b, Bicycle Delay [s]	30.00	1.88	23.41	23.41
l_b,int, Bicycle LOS Score for Intersection	4.132	2.462	1.797	2.168
Bicycle LOS	D	B	A	B

Sequence

Ring 1	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 7: I-10 NB Ramps (NS) at County Line Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	10.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.539

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	6	1	263	0	0	0	24	498	0	0	299	278
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	18	0	0	0	0	0	28	33	0	0	33	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	24	1	263	0	0	0	52	531	0	0	332	278
Peak Hour Factor	0.9920	0.9920	0.9920	0.8250	0.8250	0.8250	0.9920	0.9920	0.8250	0.8250	0.9920	0.9920
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	0	66	0	0	0	13	134	0	0	84	70
Total Analysis Volume [veh/h]	24	1	265	0	0	0	52	535	0	0	335	280
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	2	0	0	0	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	0	0	0	0	0	7	0	0	7	0
Maximum Green [s]	0	120	0	0	0	0	0	120	0	0	120	0
Amber [s]	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	49	0	0	0	0	0	11	0	0	11	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	0	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	10	0	0	10	0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No						No			No	
Maximum Recall		No						No			No	
Pedestrian Recall		No						No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C		L	C	C	R
C, Cycle Length [s]	60		60	60	60	60
L, Total Lost Time per Cycle [s]	4.00		4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00		2.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	13		39	39	39	39
g / C, Green / Cycle	0.22		0.65	0.65	0.65	0.65
(v / s)_i Volume / Saturation Flow Rate	0.18		0.05	0.29	0.18	0.18
s, saturation flow rate [veh/h]	1605		1045	1870	1870	1589
c, Capacity [veh/h]	353		679	1210	1210	1029
d1, Uniform Delay [s]	22.35		6.85	5.25	4.56	4.55
k, delay calibration	0.11		0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.80		0.22	1.17	0.57	0.65
d3, Initial Queue Delay [s]	0.00		0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00		1.00	1.00	1.00	1.00
PF, progression factor	1.00		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.82		0.08	0.44	0.28	0.27
d, Delay for Lane Group [s/veh]	27.16		7.07	6.42	5.13	5.20
Lane Group LOS	C		A	A	A	A
Critical Lane Group	Yes		No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	4.07		0.30	2.46	1.32	1.13
50th-Percentile Queue Length [ft/ln]	101.65		7.38	61.61	32.96	28.14
95th-Percentile Queue Length [veh/ln]	7.32		0.53	4.44	2.37	2.03
95th-Percentile Queue Length [ft/ln]	182.97		13.29	110.90	59.33	50.65

Movement, Approach, & Intersection Results

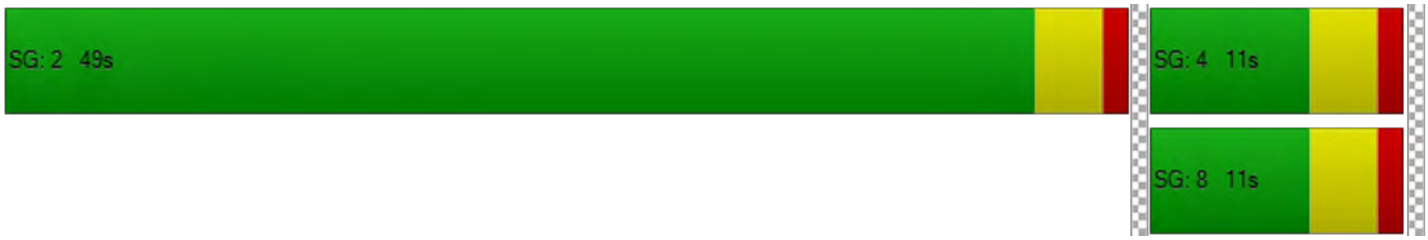
d_M, Delay for Movement [s/veh]	27.16	27.16	27.16	0.00	0.00	0.00	7.07	6.42	0.00	0.00	5.13	5.20
Movement LOS	C	C	C				A	A			A	A
d_A, Approach Delay [s/veh]	27.16			0.00			6.48			5.16		
Approach LOS	C			A			A			A		
d_I, Intersection Delay [s/veh]	9.95											
Intersection LOS	A											
Intersection V/C	0.539											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1500	0	233	233
d_b, Bicycle Delay [s]	1.88	30.00	23.41	23.41
l_b,int, Bicycle LOS Score for Intersection	2.038	4.132	2.528	2.574
Bicycle LOS	B	D	B	B

Sequence

Ring 1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



7th Street & County Line Road RV Fueling

Vistro File: C:\...\AME.vistro

Scenario 4 Existing Plus Project AM Peak Hour - With Improvements (RB)

Report File: C:\...\AMEPI-RB.pdf

12/16/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
6	I-10 SB Ramps (NS) at County Line Rd (EW)	Roundabout	HCM 6th Edition	EB Thru		6.3	A
7	I-10 NB Ramps (NS) at County Line Ave (EW)	Roundabout	HCM 6th Edition	WB Right		8.6	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 6: I-10 SB Ramps (NS) at County Line Rd (EW)

Control Type:	Roundabout	Delay (sec / veh):	6.3
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			25.00			25.00	
Grade [%]		0.00			0.00			0.00			0.00	
Crosswalk		No			No			No			No	

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	213	1	16	0	178	7	409	111	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	47	0	102	30	0	90	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	213	1	63	0	280	37	409	201	0
Peak Hour Factor	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	64	0	19	0	84	11	123	61	0
Total Analysis Volume [veh/h]	0	0	0	257	1	76	0	338	45	493	242	0
Pedestrian Volume [ped/h]		0			0			0			0	

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			1			1			
Circulating Flow Rate [veh/h]	607			750			766			0			
Exiting Flow Rate [veh/h]	550			0			324			607			
Demand Flow Rate [veh/h]	0	0	0	213	1	63	0	280	37	409	201	0	
Adjusted Demand Flow Rate [veh/h]	0	0	0	257	1	76	0	338	45	493	242	0	

Lanes

Overwrite Calculated Critical Headway		No	No	No	No	No	No	No	No
User-Defined Critical Headway [s]		4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time		No	No	No	No	No	No	No	No
User-Defined Follow-Up Time [s]		3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)		1420.00	1420.00	1420.00	1420.00	1420.00	1420.00	1420.00	1420.00
B (coefficient)		0.00091	0.00091	0.00091	0.00091	0.00091	0.00091	0.00091	0.00091
HV Adjustment Factor		0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Entry Flow Rate [veh/h]		132	132	78	173	173	46	503	247
Capacity of Entry and Bypass Lanes [veh/h]		718	718	718	708	708	708	1420	1420
Pedestrian Impedance		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]		704	704	704	694	694	694	1393	1393
X, volume / capacity		0.18	0.18	0.11	0.24	0.24	0.06	0.35	0.17

Movement, Approach, & Intersection Results

Lane LOS		A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh]		0.67	0.67	0.36	0.95	0.95	0.21	1.62	0.63
95th-Percentile Queue Length [ft]		16.68	16.68	9.04	23.83	23.83	5.19	40.54	15.71
Approach Delay [s/veh]	0.00	6.97			7.82			5.19	
Approach LOS	A	A			A			A	
Intersection Delay [s/veh]	6.29								
Intersection LOS	A								

Intersection Level Of Service Report
Intersection 7: I-10 NB Ramps (NS) at County Line Ave (EW)

Control Type:	Roundabout	Delay (sec / veh):	8.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	1	0	117	0	0	0	56	334	0	0	519	627
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	31	0	0	0	0	0	44	58	0	0	59	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	32	0	117	0	0	0	100	392	0	0	578	627
Peak Hour Factor	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	0	35	0	0	0	30	119	0	0	175	190
Total Analysis Volume [veh/h]	39	0	142	0	0	0	121	475	0	0	701	760
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			1			1		
Circulating Flow Rate [veh/h]	608			755			0			163		
Exiting Flow Rate [veh/h]	0			899			755			629		
Demand Flow Rate [veh/h]	32	0	117	0	0	0	100	392	0	0	578	627
Adjusted Demand Flow Rate [veh/h]	39	0	142	0	0	0	121	475	0	0	701	760

Lanes

Overwrite Calculated Critical Headway	No	No		No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00		4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No		No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00		3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00		1420.00	1420.00	1420.00	1420.00
B (coefficient)	0.00091	0.00091		0.00091	0.00091	0.00091	0.00091
HV Adjustment Factor	0.98	0.98		0.98	0.98	0.98	0.98
Entry Flow Rate [veh/h]	40	145		286	323	716	776
Capacity of Entry and Bypass Lanes [veh/h]	817	817		1420	1420	1225	1225
Pedestrian Impedance	1.00	1.00		1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	801	801		1393	1393	1201	1201
X, volume / capacity	0.05	0.18		0.20	0.23	0.58	0.63

Movement, Approach, & Intersection Results

Lane LOS	A	A		A	A	B	B
95th-Percentile Queue Length [veh]	0.15	0.64		0.75	0.87	3.96	4.77
95th-Percentile Queue Length [ft]	3.83	16.04		18.79	21.87	99.06	119.20
Approach Delay [s/veh]	6.05		0.00	4.37		10.64	
Approach LOS	A		A	A		B	
Intersection Delay [s/veh]	8.60						
Intersection LOS	A						

7th Street & County Line Road RV Fueling

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Scenario 4 Existing Plus Project PM Peak Hour - With Improvements (RB)

Report File: C:\...\PMEPI-RB.pdf

12/16/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
6	I-10 SB Ramps (NS) at County Line Ave (EW)	Roundabout	HCM 6th Edition	EB Thru		5.2	A
7	I-10 NB Ramps (NS) at County Line Rd (EW)	Roundabout	HCM 6th Edition	NB Right		5.3	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 6: I-10 SB Ramps (NS) at County Line Ave (EW)

Control Type:	Roundabout	Delay (sec / veh):	5.2
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			25.00			25.00	
Grade [%]		0.00			0.00			0.00			0.00	
Crosswalk		No			No			No			No	

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	471	2	26	0	54	6	263	42	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	28	0	61	18	0	51	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	471	2	54	0	115	24	263	93	0
Peak Hour Factor	0.8290	0.8290	0.8290	0.9640	0.9640	0.9640	0.8290	0.9640	0.9640	0.9640	0.9640	0.8290
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	122	1	14	0	30	6	68	24	0
Total Analysis Volume [veh/h]	0	0	0	489	2	56	0	119	25	273	96	0
Pedestrian Volume [ped/h]		0			0			0			0	

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			1			1		
Circulating Flow Rate [veh/h]	620			376			779			0		
Exiting Flow Rate [veh/h]	306			0			155			620		
Demand Flow Rate [veh/h]	0	0	0	471	2	54	0	115	24	263	93	0
Adjusted Demand Flow Rate [veh/h]	0	0	0	489	2	56	0	119	25	273	96	0

Lanes

Overwrite Calculated Critical Headway		No	No	No	No	No	No	No	No
User-Defined Critical Headway [s]		4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time		No	No	No	No	No	No	No	No
User-Defined Follow-Up Time [s]		3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)		1420.00	1420.00	1420.00	1420.00	1420.00	1420.00	1420.00	1420.00
B (coefficient)		0.00091	0.00091	0.00091	0.00091	0.00091	0.00091	0.00091	0.00091
HV Adjustment Factor		0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Entry Flow Rate [veh/h]		251	251	58	61	61	26	279	98
Capacity of Entry and Bypass Lanes [veh/h]		1009	1009	1009	699	699	699	1420	1420
Pedestrian Impedance		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]		989	989	989	686	686	686	1393	1393
X, volume / capacity		0.25	0.25	0.06	0.09	0.09	0.04	0.20	0.07

Movement, Approach, & Intersection Results

Lane LOS		A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh]		0.98	0.98	0.18	0.28	0.28	0.11	0.73	0.22
95th-Percentile Queue Length [ft]		24.53	24.53	4.50	7.11	7.11	2.84	18.20	5.55
Approach Delay [s/veh]	0.00	5.88			6.09			3.92	
Approach LOS	A	A			A			A	
Intersection Delay [s/veh]	5.23								
Intersection LOS	A								

Intersection Level Of Service Report
Intersection 7: I-10 NB Ramps (NS) at County Line Rd (EW)

Control Type:	Roundabout	Delay (sec / veh):	5.3
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	6	1	263	0	0	0	24	498	0	0	299	278
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	18	0	0	0	0	0	28	33	0	0	33	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	24	1	263	0	0	0	52	531	0	0	332	278
Peak Hour Factor	0.9920	0.9920	0.9920	0.8250	0.8250	0.8250	0.9920	0.9920	0.8250	0.8250	0.9920	0.9920
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	0	66	0	0	0	13	134	0	0	84	70
Total Analysis Volume [veh/h]	24	1	265	0	0	0	52	535	0	0	335	280
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			1			1		
Circulating Flow Rate [veh/h]	599			366			0			79		
Exiting Flow Rate [veh/h]	0			340			366			816		
Demand Flow Rate [veh/h]	24	1	263	0	0	0	52	531	0	0	332	278
Adjusted Demand Flow Rate [veh/h]	24	1	265	0	0	0	52	535	0	0	335	280

Lanes

Overwrite Calculated Critical Headway	No	No		No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00		4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No		No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00		3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00		1420.00	1420.00	1420.00	1420.00
B (coefficient)	0.00091	0.00091		0.00091	0.00091	0.00091	0.00091
HV Adjustment Factor	0.98	0.98		0.98	0.98	0.98	0.98
Entry Flow Rate [veh/h]	26	271		282	318	342	286
Capacity of Entry and Bypass Lanes [veh/h]	824	824		1420	1420	1323	1323
Pedestrian Impedance	1.00	1.00		1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	808	808		1393	1393	1297	1297
X, volume / capacity	0.03	0.33		0.20	0.22	0.26	0.22

Movement, Approach, & Intersection Results

Lane LOS	A	A		A	A	A	A
95th-Percentile Queue Length [veh]	0.10	1.44		0.74	0.86	1.04	0.82
95th-Percentile Queue Length [ft]	2.39	35.89		18.44	21.45	25.92	20.53
Approach Delay [s/veh]	7.96		0.00	4.34		4.85	
Approach LOS	A		A	A		A	
Intersection Delay [s/veh]	5.25						
Intersection LOS	A						

Existing Plus Ambient

7th Street & County Line Road RV Fueling

Vistro File: C:\...\AME.vistro
Report File: C:\...\AMEA.pdf

Scenario 5 Existing Plus Ambient Growth AM Peak Hour
12/16/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	County Line Ln (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	SB Left	0.002	8.8	A
5	7th Pl (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	NB Left	0.005	12.6	B
6	I-10 SB Ramps (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	SB Left	3.644	1,319.2	F
7	I-10 NB Ramps (NS) at County Line Ave (EW)	Two-way stop	HCM 6th Edition	NB Left	0.014	57.4	F
8	Calimesa Blvd (NS) at County Line Ave (EW)	Signalized	HCM 6th Edition	NB Left	0.521	13.2	B

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: County Line Ln (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.8
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	2	0	4	0	20	0	0	12	6
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	2	0	4	0	21	0	0	12	6
Peak Hour Factor	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	1	0	1	0	6	0	0	4	2
Total Analysis Volume [veh/h]	0	0	0	2	0	5	0	25	0	0	14	7
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.78	9.26	8.42	8.77	9.26	8.42	7.26	0.00	0.00	7.26	0.00	0.00
Movement LOS	A	A	A	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.51	0.51	0.51	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.82			8.52			0.00			0.00		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	1.13											
Intersection LOS	A											

Intersection Level Of Service Report
Intersection 5: 7th Pl (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	12.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.005

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	2	165	19	6	113	15
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	172	20	6	118	16
Peak Hour Factor	0.7140	0.7140	0.7140	0.7140	0.7140	0.7140
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	60	7	2	41	6
Total Analysis Volume [veh/h]	3	241	28	8	165	22
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.23	0.00	0.00	0.10	0.00
d_M, Delay for Movement [s/veh]	12.59	9.54	0.00	0.00	7.55	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.92	0.92	0.00	0.00	0.24	0.24
95th-Percentile Queue Length [ft/ln]	23.05	23.05	0.00	0.00	6.07	6.07
d_A, Approach Delay [s/veh]	9.57		0.00		6.66	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	7.67					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 6: I-10 SB Ramps (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	1,319.2
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	3.644

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			25.00			25.00	
Grade [%]		0.00			0.00			0.00			0.00	
Crosswalk		No			No			No			No	

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	213	1	16	0	178	7	409	111	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.04	1.04	1.04	1.00	1.04	1.04	1.04	1.04	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	222	1	17	0	185	7	425	115	0
Peak Hour Factor	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	67	0	5	0	56	2	128	35	0
Total Analysis Volume [veh/h]	0	0	0	268	1	21	0	223	8	513	139	0
Pedestrian Volume [ped/h]		0			0			0			0	

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane		No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance		No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	3.64	0.01	0.02	0.00	0.00	0.00	0.38	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	1319.21	1311.66	1274.21	0.00	0.00	0.00	9.36	0.00	0.00
Movement LOS				F	F	F		A	A	A	A	
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	30.02	30.02	30.02	0.00	0.00	0.00	1.84	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	750.48	750.48	750.48	0.00	0.00	0.00	45.89	0.00	0.00
d_A, Approach Delay [s/veh]	0.00			1315.92			0.00			7.36		
Approach LOS	A			F			A			A		
d_I, Intersection Delay [s/veh]	329.43											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 7: I-10 NB Ramps (NS) at County Line Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	57.4
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.014

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	1	0	117	0	0	0	56	334	0	0	519	627
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	0	122	0	0	0	58	347	0	0	540	652
Peak Hour Factor	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	37	0	0	0	18	105	0	0	164	198
Total Analysis Volume [veh/h]	1	0	148	0	0	0	70	421	0	0	655	790
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No			
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No			
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.00	0.23	0.00	0.00	0.00	0.15	0.00	0.00	0.00	0.01	0.01
d_M, Delay for Movement [s/veh]	57.35	78.26	12.66	0.00	0.00	0.00	14.02	0.00	0.00	0.00	0.00	0.00
Movement LOS	F	F	B				B	A			A	A
95th-Percentile Queue Length [veh/ln]	0.97	0.97	0.97	0.00	0.00	0.00	0.52	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	24.31	24.31	24.31	0.00	0.00	0.00	13.02	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	12.96			0.00			2.00			0.00		
Approach LOS	B			A			A			A		
d_I, Intersection Delay [s/veh]	1.40											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 8: Calimesa Blvd (NS) at County Line Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	13.2
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.521

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	80.00	100.00	100.00	115.00	100.00	100.00	105.00	100.00	100.00
Speed [mph]	35.00			45.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	220	306	56	40	80	149	97	276	52	30	744	87
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	229	318	58	42	83	155	101	287	54	31	774	90
Peak Hour Factor	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	63	87	16	12	23	43	28	79	15	9	213	25
Total Analysis Volume [veh/h]	252	350	64	46	91	171	111	316	59	34	851	99
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	2	0	0	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	0	0	7	0	0	7	0	0	7	0
Maximum Green [s]	0	120	0	0	120	0	0	120	0	0	120	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	30	0	0	30	0	0	30	0	0	30	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	L	C	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	19	19	19	19	19	19	33	33	33	33	33
g / C, Green / Cycle	0.31	0.31	0.31	0.31	0.31	0.31	0.56	0.56	0.56	0.56	0.56
(v / s)_i Volume / Saturation Flow Rate	0.19	0.11	0.11	0.05	0.05	0.11	0.19	0.21	0.03	0.26	0.26
s, saturation flow rate [veh/h]	1305	1870	1771	972	1870	1589	590	1819	1007	1870	1802
c, Capacity [veh/h]	429	581	550	297	581	494	344	1012	541	1040	1002
d1, Uniform Delay [s]	21.69	16.09	16.10	21.09	14.99	15.98	14.24	7.45	10.52	7.98	7.98
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.29	0.38	0.41	0.24	0.12	0.42	2.47	1.04	0.22	1.50	1.55
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.59	0.37	0.37	0.15	0.16	0.35	0.32	0.37	0.06	0.47	0.47
d, Delay for Lane Group [s/veh]	22.98	16.47	16.51	21.33	15.12	16.40	16.71	8.50	10.74	9.48	9.53
Lane Group LOS	C	B	B	C	B	B	B	A	B	A	A
Critical Lane Group	Yes	No	No	No	No	No	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	3.16	2.07	1.97	0.51	0.78	1.58	1.23	2.32	0.27	3.23	3.13
50th-Percentile Queue Length [ft/ln]	78.94	51.68	49.32	12.66	19.46	39.40	30.65	58.02	6.64	80.83	78.30
95th-Percentile Queue Length [veh/ln]	5.68	3.72	3.55	0.91	1.40	2.84	2.21	4.18	0.48	5.82	5.64
95th-Percentile Queue Length [ft/ln]	142.08	93.02	88.77	22.78	35.02	70.92	55.17	104.44	11.94	145.49	140.94

Movement, Approach, & Intersection Results

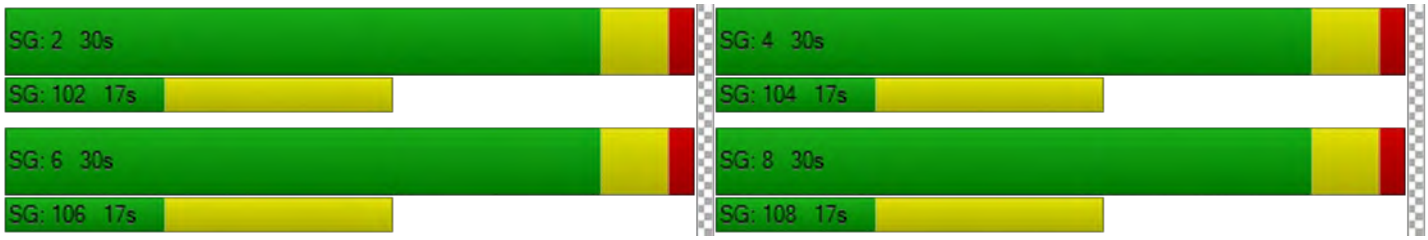
d_M, Delay for Movement [s/veh]	22.98	16.49	16.51	21.33	15.12	16.40	16.71	8.50	8.50	10.74	9.50	9.53
Movement LOS	C	B	B	C	B	B	B	A	A	B	A	A
d_A, Approach Delay [s/veh]	18.95			16.76			10.37			9.55		
Approach LOS	B			B			B			A		
d_I, Intersection Delay [s/veh]	13.18											
Intersection LOS	B											
Intersection V/C	0.521											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	20.01	20.01	20.01	20.01
l_p,int, Pedestrian LOS Score for Intersection	2.399	2.689	2.968	2.575
Crosswalk LOS	B	B	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	867	867	867	867
d_b, Bicycle Delay [s]	9.63	9.63	9.63	9.63
l_b,int, Bicycle LOS Score for Intersection	2.109	2.068	2.362	2.371
Bicycle LOS	B	B	B	B

Sequence

Ring 1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



7th Street & County Line Road RV Fueling

Vistro File: C:\...\PME.vistro
Report File: C:\...\PMEA.pdf

Scenario 5 Existing Plus Ambient Growth PM Peak Hour
12/16/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	County Line Ln (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	SB Left	0.005	8.9	A
5	7th Pl (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	NB Left	0.003	9.7	A
6	I-10 SB Ramps (NS) at County Line Ave (EW)	Two-way stop	HCM 6th Edition	SB Left	1.694	370.0	F
7	I-10 NB Ramps (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	NB Thru	0.005	31.8	D
8	Calimesa Blvd (NS) at County Line Ave (EW)	Signalized	HCM 6th Edition	NB Left	0.565	12.6	B

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: County Line Ln (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.9
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.005

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	4	0	0	1	22	0	0	14	6
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	4	0	0	1	23	0	0	15	6
Peak Hour Factor	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	1	0	0	0	8	0	0	5	2
Total Analysis Volume [veh/h]	0	0	0	5	0	0	1	31	0	0	20	8
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.83	9.34	8.45	8.85	9.34	8.44	7.27	0.00	0.00	7.28	0.00	0.00
Movement LOS	A	A	A	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.02	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.40	0.40	0.40	0.05	0.05	0.05	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.87			8.85			0.23			0.00		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	0.79											
Intersection LOS	A											

Intersection Level Of Service Report
Intersection 5: 7th Pl (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.7
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.003

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	2	36	24	1	49	19
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	2	37	25	1	51	20
Peak Hour Factor	0.8620	0.8620	0.8620	0.8620	0.8620	0.8620
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	11	7	0	15	6
Total Analysis Volume [veh/h]	2	43	29	1	59	23
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.04	0.00	0.00	0.04	0.00
d_M, Delay for Movement [s/veh]	9.72	8.60	0.00	0.00	7.36	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.14	0.14	0.00	0.00	0.10	0.10
95th-Percentile Queue Length [ft/ln]	3.42	3.42	0.00	0.00	2.50	2.50
d_A, Approach Delay [s/veh]	8.65		0.00		5.30	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	5.25					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 6: I-10 SB Ramps (NS) at County Line Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	370.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.694

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			25.00			25.00	
Grade [%]		0.00			0.00			0.00			0.00	
Crosswalk		No			No			No			No	

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	471	2	26	0	54	6	263	42	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.04	1.04	1.04	1.00	1.04	1.04	1.04	1.04	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	490	2	27	0	56	6	274	44	0
Peak Hour Factor	0.8290	0.8290	0.8290	0.9640	0.9640	0.9640	0.8290	0.9640	0.9640	0.9640	0.9640	0.8290
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	127	1	7	0	15	2	71	11	0
Total Analysis Volume [veh/h]	0	0	0	508	2	28	0	58	6	284	46	0
Pedestrian Volume [ped/h]		0			0			0			0	

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane		No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance		No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	1.69	0.01	0.03	0.00	0.00	0.00	0.18	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	369.98	369.78	361.49	0.00	0.00	0.00	7.87	0.00	0.00
Movement LOS				F	F	F		A	A	A	A	
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	34.22	34.22	34.22	0.00	0.00	0.00	0.68	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	855.57	855.57	855.57	0.00	0.00	0.00	16.91	0.00	0.00
d_A, Approach Delay [s/veh]	0.00			369.54			0.00			6.77		
Approach LOS	A			F			A			A		
d_I, Intersection Delay [s/veh]	215.71											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 7: I-10 NB Ramps (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	31.8
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.005

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	6	1	263	0	0	0	24	498	0	0	299	278
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	6	1	274	0	0	0	25	518	0	0	311	289
Peak Hour Factor	0.9920	0.9920	0.9920	0.8250	0.8250	0.8250	0.9920	0.9920	0.8250	0.8250	0.9920	0.9920
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	0	69	0	0	0	6	131	0	0	78	73
Total Analysis Volume [veh/h]	6	1	276	0	0	0	25	522	0	0	314	291
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No			
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No			
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.01	0.50	0.00	0.00	0.00	0.03	0.01	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	29.93	31.78	18.93	0.00	0.00	0.00	8.80	0.00	0.00	0.00	0.00	0.00
Movement LOS	D	D	C				A	A			A	A
95th-Percentile Queue Length [veh/ln]	3.10	3.10	3.10	0.00	0.00	0.00	0.08	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	77.57	77.57	77.57	0.00	0.00	0.00	1.98	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	19.21			0.00			0.40			0.00		
Approach LOS	C			A			A			A		
d_I, Intersection Delay [s/veh]	3.94											
Intersection LOS	D											

Intersection Level Of Service Report
Intersection 8: Calimesa Blvd (NS) at County Line Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	12.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.565

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	80.00	100.00	100.00	115.00	100.00	100.00	105.00	100.00	100.00
Speed [mph]	35.00			45.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	99	133	92	67	180	99	115	510	147	67	382	64
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	103	138	96	70	187	103	120	530	153	70	397	67
Peak Hour Factor	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	26	35	25	18	48	26	31	135	39	18	101	17
Total Analysis Volume [veh/h]	105	141	98	72	191	105	123	541	156	72	406	68
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	2	0	0	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	0	0	7	0	0	7	0	0	7	0
Maximum Green [s]	0	120	0	0	120	0	0	120	0	0	120	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	33	0	0	33	0	0	27	0	0	27	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	L	C	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	15	15	15	15	15	15	37	37	37	37	37
g / C, Green / Cycle	0.26	0.26	0.26	0.26	0.26	0.26	0.61	0.61	0.61	0.61	0.61
(v / s)_i Volume / Saturation Flow Rate	0.09	0.07	0.07	0.06	0.10	0.07	0.13	0.39	0.10	0.13	0.13
s, saturation flow rate [veh/h]	1192	1870	1625	1141	1870	1589	920	1799	748	1870	1778
c, Capacity [veh/h]	277	485	421	303	485	412	606	1093	379	1136	1080
d1, Uniform Delay [s]	24.82	17.64	17.72	22.58	18.34	17.63	7.70	7.55	14.20	5.31	5.32
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.85	0.28	0.34	0.40	0.52	0.32	0.75	2.85	1.11	0.43	0.46
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.38	0.26	0.27	0.24	0.39	0.25	0.20	0.64	0.19	0.21	0.21
d, Delay for Lane Group [s/veh]	25.67	17.92	18.06	22.98	18.86	17.96	8.46	10.41	15.31	5.74	5.78
Lane Group LOS	C	B	B	C	B	B	A	B	B	A	A
Critical Lane Group	No	No	No	No	Yes	No	No	Yes	No	No	No
50th-Percentile Queue Length [veh/ln]	1.38	1.27	1.18	0.84	1.94	1.03	0.80	4.75	0.74	1.08	1.05
50th-Percentile Queue Length [ft/ln]	34.43	31.83	29.52	20.93	48.59	25.68	19.96	118.68	18.39	27.07	26.19
95th-Percentile Queue Length [veh/ln]	2.48	2.29	2.13	1.51	3.50	1.85	1.44	8.32	1.32	1.95	1.89
95th-Percentile Queue Length [ft/ln]	61.97	57.29	53.14	37.67	87.47	46.22	35.92	208.01	33.11	48.72	47.14

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	25.67	17.94	18.06	22.98	18.86	17.96	8.46	10.41	10.41	15.31	5.76	5.78
Movement LOS	C	B	B	C	B	B	A	B	B	B	A	A
d_A, Approach Delay [s/veh]	20.33			19.41			10.11			7.02		
Approach LOS	C			B			B			A		
d_I, Intersection Delay [s/veh]	12.64											
Intersection LOS	B											
Intersection V/C	0.565											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	20.01	20.01	20.01	20.01
l_p,int, Pedestrian LOS Score for Intersection	2.428	2.657	2.666	2.568
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	967	967	767	767
d_b, Bicycle Delay [s]	8.01	8.01	11.41	11.41
l_b,int, Bicycle LOS Score for Intersection	1.843	2.167	2.913	2.010
Bicycle LOS	A	B	C	B

Sequence

Ring 1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

7th Street & County Line Road RV Fueling

Vistro File: C:\...\AME.vistro

Scenario 6 Existing Plus Ambient Growth AM Peak Hour - With Improvements (TS)

Report File: C:\...\AMEAI-TS.pdf

12/16/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
6	I-10 SB Ramps (NS) at County Line Rd (EW)	Signalized	HCM 6th Edition	SB Left	0.704	14.0	B
7	I-10 NB Ramps (NS) at County Line Ave (EW)	Signalized	HCM 6th Edition	NB Right	0.681	7.0	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 6: I-10 SB Ramps (NS) at County Line Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	14.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.704

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			25.00			25.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present					No			No			No	
Crosswalk		No			No			No			No	

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	213	1	16	0	178	7	409	111	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.04	1.04	1.04	1.00	1.04	1.04	1.04	1.04	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	222	1	17	0	185	7	425	115	0
Peak Hour Factor	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	67	0	5	0	56	2	128	35	0
Total Analysis Volume [veh/h]	0	0	0	268	1	21	0	223	8	513	139	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	0	0	0	6	0	0	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	0	0	0	7	0	0	7	0	0	7	0
Maximum Green [s]	0	0	0	0	120	0	0	120	0	0	120	0
Amber [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	0	0	0	49	0	0	11	0	0	11	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	10	0	0	10	0	0	10	0
Rest In Walk					No			No			No	
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall					No			No			No	
Maximum Recall					No			No			No	
Pedestrian Recall					No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group		C	C	L	C
C, Cycle Length [s]		60	60	60	60
L, Total Lost Time per Cycle [s]		4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]		12	40	40	40
g / C, Green / Cycle		0.20	0.67	0.67	0.67
(v / s)_i Volume / Saturation Flow Rate		0.16	0.12	0.45	0.07
s, saturation flow rate [veh/h]		1766	1859	1149	1870
c, Capacity [veh/h]		358	1235	790	1242
d1, Uniform Delay [s]		22.88	3.87	9.45	3.66
k, delay calibration		0.11	0.50	0.50	0.50
I, Upstream Filtering Factor		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		4.40	0.34	4.12	0.18
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity		0.81	0.19	0.65	0.11
d, Delay for Lane Group [s/veh]		27.28	4.21	13.57	3.85
Lane Group LOS		C	A	B	A
Critical Lane Group		Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]		4.06	0.89	4.88	0.50
50th-Percentile Queue Length [ft/ln]		101.53	22.20	121.97	12.57
95th-Percentile Queue Length [veh/ln]		7.31	1.60	8.50	0.91
95th-Percentile Queue Length [ft/ln]		182.75	39.95	212.53	22.63

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	27.28	27.28	27.28	0.00	4.21	4.21	13.57	3.85	0.00
Movement LOS				C	C	C		A	A	B	A	
d_A, Approach Delay [s/veh]	0.00			27.28			4.21			11.50		
Approach LOS	A			C			A			B		
d_I, Intersection Delay [s/veh]	13.97											
Intersection LOS	B											
Intersection V/C	0.704											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	1500	233	233
d_b, Bicycle Delay [s]	30.00	1.88	23.41	23.41
l_b,int, Bicycle LOS Score for Intersection	4.132	2.038	1.941	2.635
Bicycle LOS	D	B	A	B

Sequence

Ring 1	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 7: I-10 NB Ramps (NS) at County Line Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	7.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.681

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	1	0	117	0	0	0	56	334	0	0	519	627
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	0	122	0	0	0	58	347	0	0	540	652
Peak Hour Factor	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	37	0	0	0	18	105	0	0	164	198
Total Analysis Volume [veh/h]	1	0	148	0	0	0	70	421	0	0	655	790
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	2	0	0	0	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	0	0	0	0	0	7	0	0	7	0
Maximum Green [s]	0	120	0	0	0	0	0	120	0	0	120	0
Amber [s]	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	49	0	0	0	0	0	11	0	0	11	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	0	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	10	0	0	10	0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No						No			No	
Maximum Recall		No						No			No	
Pedestrian Recall		No						No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C		L	C	C	R
C, Cycle Length [s]	60		60	60	60	60
L, Total Lost Time per Cycle [s]	4.00		4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00		2.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	7		45	45	45	45
g / C, Green / Cycle	0.12		0.75	0.75	0.75	0.75
(v / s)_i Volume / Saturation Flow Rate	0.09		0.09	0.23	0.35	0.50
s, saturation flow rate [veh/h]	1591		778	1870	1870	1589
c, Capacity [veh/h]	195		560	1392	1392	1183
d1, Uniform Delay [s]	25.57		6.23	2.53	3.02	3.90
k, delay calibration	0.11		0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	6.13		0.46	0.56	1.14	2.99
d3, Initial Queue Delay [s]	0.00		0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00		1.00	1.00	1.00	1.00
PF, progression factor	1.00		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.76		0.13	0.30	0.47	0.67
d, Delay for Lane Group [s/veh]	31.69		6.68	3.09	4.16	6.90
Lane Group LOS	C		A	A	A	A
Critical Lane Group	Yes		No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.27		0.39	0.83	1.59	2.77
50th-Percentile Queue Length [ft/ln]	56.73		9.70	20.83	39.67	69.19
95th-Percentile Queue Length [veh/ln]	4.08		0.70	1.50	2.86	4.98
95th-Percentile Queue Length [ft/ln]	102.11		17.47	37.49	71.40	124.53

Movement, Approach, & Intersection Results

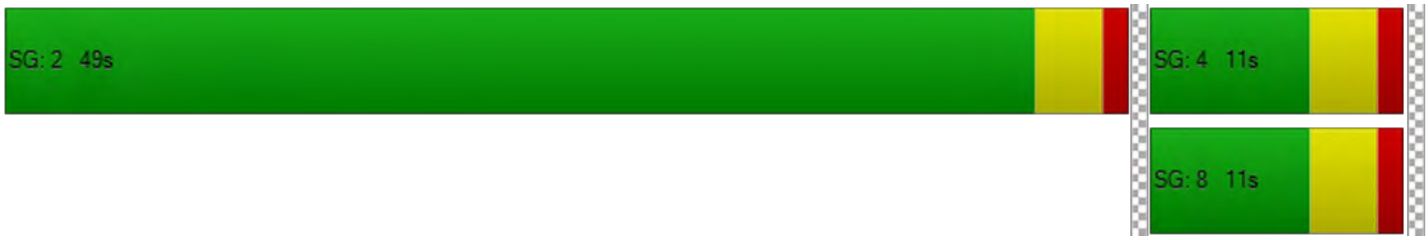
d_M, Delay for Movement [s/veh]	31.69	31.69	31.69	0.00	0.00	0.00	6.68	3.09	0.00	0.00	4.16	6.90
Movement LOS	C	C	C				A	A			A	A
d_A, Approach Delay [s/veh]	31.69			0.00			3.61			5.66		
Approach LOS	C			A			A			A		
d_I, Intersection Delay [s/veh]	7.04											
Intersection LOS	A											
Intersection V/C	0.681											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1500	0	233	233
d_b, Bicycle Delay [s]	1.88	30.00	23.41	23.41
l_b,int, Bicycle LOS Score for Intersection	1.805	4.132	2.370	3.944
Bicycle LOS	A	D	B	D

Sequence

Ring 1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



7th Street & County Line Road RV Fueling

Vistro File: C:\...\PME.vistro

Scenario 6 Existing Plus Ambient Growth PM Peak Hour - With Improvements (TS)

Report File: C:\...\PMEAI-TS.pdf

12/16/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
6	I-10 SB Ramps (NS) at County Line Ave (EW)	Signalized	HCM 6th Edition	SB Left	0.596	17.7	B
7	I-10 NB Ramps (NS) at County Line Rd (EW)	Signalized	HCM 6th Edition	NB Right	0.527	9.9	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 6: I-10 SB Ramps (NS) at County Line Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	17.7
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.596

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			25.00			25.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present					No			No			No	
Crosswalk		No			No			No			No	

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	471	2	26	0	54	6	263	42	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.04	1.04	1.04	1.00	1.04	1.04	1.04	1.04	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	490	2	27	0	56	6	274	44	0
Peak Hour Factor	0.8290	0.8290	0.8290	0.9640	0.9640	0.9640	0.8290	0.9640	0.9640	0.9640	0.9640	0.8290
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	127	1	7	0	15	2	71	11	0
Total Analysis Volume [veh/h]	0	0	0	508	2	28	0	58	6	284	46	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	0	0	0	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	0	0	0	7	0	0	7	0	0	7	0
Maximum Green [s]	0	0	0	0	120	0	0	120	0	0	120	0
Amber [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	0	0	0	49	0	0	11	0	0	11	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	10	0	0	10	0	0	10	0
Rest In Walk					No			No			No	
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall					No			No			No	
Maximum Recall					No			No			No	
Pedestrian Recall					No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group		C	C	L	C
C, Cycle Length [s]		60	60	60	60
L, Total Lost Time per Cycle [s]		4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]		21	31	31	31
g / C, Green / Cycle		0.34	0.52	0.52	0.52
(v / s)_i Volume / Saturation Flow Rate		0.30	0.03	0.21	0.02
s, saturation flow rate [veh/h]		1770	1840	1338	1870
c, Capacity [veh/h]		612	959	751	975
d1, Uniform Delay [s]		18.52	7.14	10.66	7.06
k, delay calibration		0.11	0.50	0.50	0.50
I, Upstream Filtering Factor		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		4.30	0.13	1.45	0.09
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity		0.88	0.07	0.38	0.05
d, Delay for Lane Group [s/veh]		22.82	7.27	12.11	7.15
Lane Group LOS		C	A	B	A
Critical Lane Group		Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]		6.96	0.39	2.52	0.28
50th-Percentile Queue Length [ft/ln]		173.97	9.70	62.99	6.88
95th-Percentile Queue Length [veh/ln]		11.28	0.70	4.54	0.50
95th-Percentile Queue Length [ft/ln]		282.12	17.47	113.38	12.39

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	22.82	22.82	22.82	0.00	7.27	7.27	12.11	7.15	0.00
Movement LOS				C	C	C		A	A	B	A	
d_A, Approach Delay [s/veh]	0.00			22.82			7.27			11.42		
Approach LOS	A			C			A			B		
d_I, Intersection Delay [s/veh]	17.72											
Intersection LOS	B											
Intersection V/C	0.596											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	1500	233	233
d_b, Bicycle Delay [s]	30.00	1.88	23.41	23.41
l_b,int, Bicycle LOS Score for Intersection	4.132	2.447	1.665	2.104
Bicycle LOS	D	B	A	B

Sequence

Ring 1	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 7: I-10 NB Ramps (NS) at County Line Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	9.9
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.527

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	6	1	263	0	0	0	24	498	0	0	299	278
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	6	1	274	0	0	0	25	518	0	0	311	289
Peak Hour Factor	0.9920	0.9920	0.9920	0.8250	0.8250	0.8250	0.9920	0.9920	0.8250	0.8250	0.9920	0.9920
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	0	69	0	0	0	6	131	0	0	78	73
Total Analysis Volume [veh/h]	6	1	276	0	0	0	25	522	0	0	314	291
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	2	0	0	0	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	0	0	0	0	0	7	0	0	7	0
Maximum Green [s]	0	120	0	0	0	0	0	120	0	0	120	0
Amber [s]	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	49	0	0	0	0	0	11	0	0	11	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	0	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	10	0	0	10	0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No						No			No	
Maximum Recall		No						No			No	
Pedestrian Recall		No						No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C		L	C	C	R
C, Cycle Length [s]	60		60	60	60	60
L, Total Lost Time per Cycle [s]	4.00		4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00		2.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	13		39	39	39	39
g / C, Green / Cycle	0.22		0.65	0.65	0.65	0.65
(v / s)_i Volume / Saturation Flow Rate	0.18		0.02	0.28	0.17	0.18
s, saturation flow rate [veh/h]	1594		1065	1870	1870	1589
c, Capacity [veh/h]	345		700	1217	1217	1034
d1, Uniform Delay [s]	22.46		6.38	5.10	4.42	4.50
k, delay calibration	0.11		0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.85		0.10	1.11	0.51	0.68
d3, Initial Queue Delay [s]	0.00		0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00		1.00	1.00	1.00	1.00
PF, progression factor	1.00		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.82		0.04	0.43	0.26	0.28
d, Delay for Lane Group [s/veh]	27.31		6.47	6.20	4.93	5.18
Lane Group LOS	C		A	A	A	A
Critical Lane Group	Yes		No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	3.98		0.13	2.33	1.19	1.16
50th-Percentile Queue Length [ft/ln]	99.48		3.32	58.34	29.87	28.98
95th-Percentile Queue Length [veh/ln]	7.16		0.24	4.20	2.15	2.09
95th-Percentile Queue Length [ft/ln]	179.06		5.98	105.02	53.77	52.17

Movement, Approach, & Intersection Results

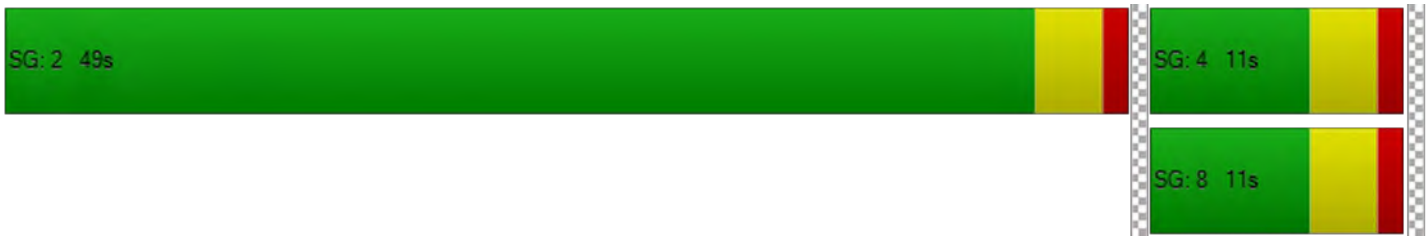
d_M, Delay for Movement [s/veh]	27.31	27.31	27.31	0.00	0.00	0.00	6.47	6.20	0.00	0.00	4.93	5.18
Movement LOS	C	C	C				A	A			A	A
d_A, Approach Delay [s/veh]	27.31			0.00			6.22			5.05		
Approach LOS	C			A			A			A		
d_I, Intersection Delay [s/veh]	9.88											
Intersection LOS	A											
Intersection V/C	0.527											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1500	0	233	233
d_b, Bicycle Delay [s]	1.88	30.00	23.41	23.41
l_b,int, Bicycle LOS Score for Intersection	2.027	4.132	2.462	2.558
Bicycle LOS	B	D	B	B

Sequence

Ring 1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



7th Street & County Line Road RV Fueling

Vistro File: C:\...\AME.vistro

Scenario 7 Existing Plus Ambient Growth AM Peak Hour - With Improvements (RB)

Report File: C:\...\AMEAI-RB.pdf

12/16/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
6	I-10 SB Ramps (NS) at County Line Rd (EW)	Roundabout	HCM 6th Edition	EB Thru		6.0	A
7	I-10 NB Ramps (NS) at County Line Ave (EW)	Roundabout	HCM 6th Edition	WB Right		7.6	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 6: I-10 SB Ramps (NS) at County Line Rd (EW)

Control Type:	Roundabout	Delay (sec / veh):	6.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			25.00			25.00	
Grade [%]		0.00			0.00			0.00			0.00	
Crosswalk		No			No			No			No	

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	213	1	16	0	178	7	409	111	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.04	1.04	1.04	1.00	1.04	1.04	1.04	1.04	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	222	1	17	0	185	7	425	115	0
Peak Hour Factor	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	67	0	5	0	56	2	128	35	0
Total Analysis Volume [veh/h]	0	0	0	268	1	21	0	223	8	513	139	0
Pedestrian Volume [ped/h]		0			0			0			0	

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			1			1			
Circulating Flow Rate [veh/h]	501			665			798			0			
Exiting Flow Rate [veh/h]	532			0			163			501			
Demand Flow Rate [veh/h]	0	0	0	222	1	17	0	185	7	425	115	0	
Adjusted Demand Flow Rate [veh/h]	0	0	0	268	1	21	0	223	8	513	139	0	

Lanes

Overwrite Calculated Critical Headway		No	No	No	No	No	No	No	No
User-Defined Critical Headway [s]		4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time		No	No	No	No	No	No	No	No
User-Defined Follow-Up Time [s]		3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)		1420.00	1420.00	1420.00	1420.00	1420.00	1420.00	1420.00	1420.00
B (coefficient)		0.00091	0.00091	0.00091	0.00091	0.00091	0.00091	0.00091	0.00091
HV Adjustment Factor		0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Entry Flow Rate [veh/h]		138	138	22	114	114	9	524	142
Capacity of Entry and Bypass Lanes [veh/h]		776	776	776	688	688	688	1420	1420
Pedestrian Impedance		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]		761	761	761	674	674	674	1393	1393
X, volume / capacity		0.18	0.18	0.03	0.17	0.17	0.01	0.37	0.10

Movement, Approach, & Intersection Results

Lane LOS		A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh]		0.64	0.64	0.09	0.59	0.59	0.04	1.72	0.33
95th-Percentile Queue Length [ft]		15.99	15.99	2.13	14.75	14.75	0.90	43.09	8.30
Approach Delay [s/veh]	0.00	6.52			7.17			5.38	
Approach LOS	A	A			A			A	
Intersection Delay [s/veh]	6.02								
Intersection LOS	A								

Intersection Level Of Service Report
Intersection 7: I-10 NB Ramps (NS) at County Line Ave (EW)

Control Type:	Roundabout	Delay (sec / veh):	7.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	1	0	117	0	0	0	56	334	0	0	519	627
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	1	0	122	0	0	0	58	347	0	0	540	652
Peak Hour Factor	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	37	0	0	0	18	105	0	0	164	198
Total Analysis Volume [veh/h]	1	0	148	0	0	0	70	421	0	0	655	790
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			1			1		
Circulating Flow Rate [veh/h]	501			669			0			72		
Exiting Flow Rate [veh/h]	0			877			669			580		
Demand Flow Rate [veh/h]	1	0	122	0	0	0	58	347	0	0	540	652
Adjusted Demand Flow Rate [veh/h]	1	0	148	0	0	0	70	421	0	0	655	790

Lanes

Overwrite Calculated Critical Headway	No	No		No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00		4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No		No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00		3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00		1420.00	1420.00	1420.00	1420.00
B (coefficient)	0.00091	0.00091		0.00091	0.00091	0.00091	0.00091
HV Adjustment Factor	0.98	0.98		0.98	0.98	0.98	0.98
Entry Flow Rate [veh/h]	2	151		236	266	669	806
Capacity of Entry and Bypass Lanes [veh/h]	901	901		1420	1420	1330	1330
Pedestrian Impedance	1.00	1.00		1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	883	883		1393	1393	1304	1304
X, volume / capacity	0.00	0.17		0.17	0.19	0.50	0.61

Movement, Approach, & Intersection Results

Lane LOS	A	A		A	A	A	A
95th-Percentile Queue Length [veh]	0.00	0.60		0.59	0.69	2.93	4.33
95th-Percentile Queue Length [ft]	0.09	15.01		14.84	17.16	73.13	108.13
Approach Delay [s/veh]	5.73		0.00	4.03		9.08	
Approach LOS	A		A	A		A	
Intersection Delay [s/veh]	7.65						
Intersection LOS	A						

7th Street & County Line Road RV Fueling

Vistro File: C:\...\PME.vistro

Scenario 7 Existing Plus Ambient Growth PM Peak Hour - With Improvements (RB)

Report File: C:\...\PMEAI-RB.pdf

12/16/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
6	I-10 SB Ramps (NS) at County Line Ave (EW)	Roundabout	HCM 6th Edition	SB Left		5.2	A
7	I-10 NB Ramps (NS) at County Line Rd (EW)	Roundabout	HCM 6th Edition	NB Right		5.1	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 6: I-10 SB Ramps (NS) at County Line Ave (EW)

Control Type:	Roundabout	Delay (sec / veh):	5.2
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			25.00			25.00	
Grade [%]		0.00			0.00			0.00			0.00	
Crosswalk		No			No			No			No	

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	471	2	26	0	54	6	263	42	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.04	1.04	1.04	1.00	1.04	1.04	1.04	1.04	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	490	2	27	0	56	6	274	44	0
Peak Hour Factor	0.8290	0.8290	0.8290	0.9640	0.9640	0.9640	0.8290	0.9640	0.9640	0.9640	0.9640	0.8290
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	127	1	7	0	15	2	71	11	0
Total Analysis Volume [veh/h]	0	0	0	508	2	28	0	58	6	284	46	0
Pedestrian Volume [ped/h]		0			0			0			0	

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			1			1		
Circulating Flow Rate [veh/h]	577			337			810			0		
Exiting Flow Rate [veh/h]	298			0			75			577		
Demand Flow Rate [veh/h]	0	0	0	490	2	27	0	56	6	274	44	0
Adjusted Demand Flow Rate [veh/h]	0	0	0	508	2	28	0	58	6	284	46	0

Lanes

Overwrite Calculated Critical Headway		No	No	No	No	No	No	No	No
User-Defined Critical Headway [s]		4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time		No	No	No	No	No	No	No	No
User-Defined Follow-Up Time [s]		3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)		1420.00	1420.00	1420.00	1420.00	1420.00	1420.00	1420.00	1420.00
B (coefficient)		0.00091	0.00091	0.00091	0.00091	0.00091	0.00091	0.00091	0.00091
HV Adjustment Factor		0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Entry Flow Rate [veh/h]		261	261	29	30	30	7	290	47
Capacity of Entry and Bypass Lanes [veh/h]		1046	1046	1046	680	680	680	1420	1420
Pedestrian Impedance		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]		1025	1025	1025	667	667	667	1393	1393
X, volume / capacity		0.25	0.25	0.03	0.04	0.04	0.01	0.20	0.03

Movement, Approach, & Intersection Results

Lane LOS		A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh]		0.98	0.98	0.08	0.14	0.14	0.03	0.76	0.10
95th-Percentile Queue Length [ft]		24.59	24.59	2.11	3.41	3.41	0.68	19.12	2.56
Approach Delay [s/veh]	0.00	5.80			5.83			4.07	
Approach LOS	A	A			A			A	
Intersection Delay [s/veh]	5.19								
Intersection LOS	A								

Intersection Level Of Service Report
Intersection 7: I-10 NB Ramps (NS) at County Line Rd (EW)

Control Type:	Roundabout	Delay (sec / veh):	5.1
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	6	1	263	0	0	0	24	498	0	0	299	278
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	6	1	274	0	0	0	25	518	0	0	311	289
Peak Hour Factor	0.9920	0.9920	0.9920	0.8250	0.8250	0.8250	0.9920	0.9920	0.8250	0.8250	0.9920	0.9920
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	0	69	0	0	0	6	131	0	0	78	73
Total Analysis Volume [veh/h]	6	1	276	0	0	0	25	522	0	0	314	291
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			1			1		
Circulating Flow Rate [veh/h]	558			326			0			33		
Exiting Flow Rate [veh/h]	0			323			326			814		
Demand Flow Rate [veh/h]	6	1	274	0	0	0	25	518	0	0	311	289
Adjusted Demand Flow Rate [veh/h]	6	1	276	0	0	0	25	522	0	0	314	291

Lanes

Overwrite Calculated Critical Headway	No	No		No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00		4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No		No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00		3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00		1420.00	1420.00	1420.00	1420.00
B (coefficient)	0.00091	0.00091		0.00091	0.00091	0.00091	0.00091
HV Adjustment Factor	0.98	0.98		0.98	0.98	0.98	0.98
Entry Flow Rate [veh/h]	8	282		263	296	321	297
Capacity of Entry and Bypass Lanes [veh/h]	855	855		1420	1420	1379	1379
Pedestrian Impedance	1.00	1.00		1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	838	838		1393	1393	1352	1352
X, volume / capacity	0.01	0.33		0.18	0.21	0.23	0.22

Movement, Approach, & Intersection Results

Lane LOS	A	A		A	A	A	A
95th-Percentile Queue Length [veh]	0.03	1.44		0.68	0.78	0.90	0.82
95th-Percentile Queue Length [ft]	0.63	36.10		16.91	19.61	22.54	20.46
Approach Delay [s/veh]	7.95		0.00	4.21		4.55	
Approach LOS	A		A	A		A	
Intersection Delay [s/veh]	5.09						
Intersection LOS	A						

Existing Plus Ambient Plus Project – Phase 1

7th Street & County Line Road RV Fueling

Vistro File: C:\...\AME.vistro

Scenario 8 Existing Plus Ambient Growth Plus Project AM Peak Hour

Report File: C:\...\AMEAP.pdf

6/9/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	County Line Ln (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	SB Left	0.021	8.8	A
2	Coffee Shop Access (NS) at County Line Ln (EW)	Two-way stop	HCM 6th Edition	WB Thru	0.000	0.0	A
3	RV Access (NS) at County Line Ln (EW)	Two-way stop	HCM 6th Edition	NB Left	0.016	8.6	A
4	Coffee Shop/RV Access (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	EB Thru	0.000	0.0	A
5	7th Pl (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	NB Left	0.008	13.1	B
6	I-10 SB Ramps (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	SB Left	3.830	1,410.0	F
7	I-10 NB Ramps (NS) at County Line Ave (EW)	Two-way stop	HCM 6th Edition	NB Left	0.089	61.8	F
8	Calimesa Blvd (NS) at County Line Ave (EW)	Signalized	HCM 6th Edition	NB Left	0.524	13.2	B

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: County Line Ln (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.8
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.021

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	2	0	4	0	20	0	0	12	6
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	15	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	17	0	4	0	21	0	0	12	6
Peak Hour Factor	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	5	0	1	0	6	0	0	4	2
Total Analysis Volume [veh/h]	0	0	0	20	0	5	0	25	0	0	14	7
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.78	9.26	8.42	8.84	9.33	8.49	7.26	0.00	0.00	7.26	0.00	0.00
Movement LOS	A	A	A	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.08	0.08	0.08	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	1.96	1.96	1.96	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.82			8.77			0.00			0.00		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	3.09											
Intersection LOS	A											

Intersection Level Of Service Report
Intersection 2: Coffee Shop Access (NS) at County Line Ln (EW)

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	0	6	0	0	6
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	15
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	6	0	0	21
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	2	0	0	6
Total Analysis Volume [veh/h]	0	0	6	0	0	22
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.65	8.34	0.00	0.00	7.23	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.50		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 3: RV Access (NS) at County Line Ln (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.016

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	0	6	0	0	6
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	15	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	15	0	6	0	0	6
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	0	2	0	0	2
Total Analysis Volume [veh/h]	16	0	6	0	0	6
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.63	8.40	0.00	0.00	7.23	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.05	0.05	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.21	1.21	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.63		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	4.93					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 4: Coffee Shop/RV Access (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	25	17	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	15	0	16
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	41	18	16
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	11	5	4
Total Analysis Volume [veh/h]	0	0	0	43	19	17
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	0.00
Movement LOS				A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 5: 7th Pl (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	13.1
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.008

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	2	165	19	6	113	15
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	0	14	1	0	15
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	172	34	7	118	31
Peak Hour Factor	0.7140	0.7140	0.7140	0.7140	0.7140	0.7140
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	60	12	2	41	11
Total Analysis Volume [veh/h]	4	241	48	10	165	43
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.01	0.24	0.00	0.00	0.11	0.00
d_M, Delay for Movement [s/veh]	13.07	9.72	0.00	0.00	7.61	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.96	0.96	0.00	0.00	0.25	0.25
95th-Percentile Queue Length [ft/ln]	24.12	24.12	0.00	0.00	6.19	6.19
d_A, Approach Delay [s/veh]	9.77		0.00		6.03	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	7.14					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 6: I-10 SB Ramps (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	1,410.0
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	3.830

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			25.00			25.00	
Grade [%]		0.00			0.00			0.00			0.00	
Crosswalk		No			No			No			No	

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	213	1	16	0	178	7	409	111	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.04	1.04	1.04	1.00	1.04	1.04	1.04	1.04	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	6	0	10	4	0	9	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	222	1	23	0	195	11	425	124	0
Peak Hour Factor	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	67	0	7	0	59	3	128	37	0
Total Analysis Volume [veh/h]	0	0	0	268	1	28	0	235	13	513	150	0
Pedestrian Volume [ped/h]		0			0			0			0	

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane		No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance		No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	3.83	0.01	0.03	0.00	0.00	0.00	0.39	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	1410.03	1402.02	1362.59	0.00	0.00	0.00	9.46	0.00	0.00
Movement LOS				F	F	F		A	A	A	A	
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	31.12	31.12	31.12	0.00	0.00	0.00	1.88	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	777.99	777.99	777.99	0.00	0.00	0.00	46.93	0.00	0.00
d_A, Approach Delay [s/veh]	0.00			1405.53			0.00			7.32		
Approach LOS	A			F			A			A		
d_I, Intersection Delay [s/veh]	349.58											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 7: I-10 NB Ramps (NS) at County Line Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	61.8
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.089

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	1	0	117	0	0	0	56	334	0	0	519	627
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	4	0	0	0	0	0	5	5	0	0	5	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	0	122	0	0	0	63	352	0	0	545	652
Peak Hour Factor	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	0	37	0	0	0	19	107	0	0	165	198
Total Analysis Volume [veh/h]	6	0	148	0	0	0	76	427	0	0	661	790
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No			
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No			
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.09	0.00	0.24	0.00	0.00	0.00	0.16	0.00	0.00	0.00	0.01	0.01
d_M, Delay for Movement [s/veh]	61.84	83.62	14.34	0.00	0.00	0.00	14.21	0.00	0.00	0.00	0.00	0.00
Movement LOS	F	F	B				B	A			A	A
95th-Percentile Queue Length [veh/ln]	1.39	1.39	1.39	0.00	0.00	0.00	0.58	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	34.82	34.82	34.82	0.00	0.00	0.00	14.42	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	16.19			0.00			2.15			0.00		
Approach LOS	C			A			A			A		
d_I, Intersection Delay [s/veh]	1.70											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 8: Calimesa Blvd (NS) at County Line Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	13.2
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.524

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	80.00	100.00	100.00	115.00	100.00	100.00	105.00	100.00	100.00
Speed [mph]	35.00			45.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	220	306	56	40	80	149	97	276	52	30	744	87
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	2	0	0	0	0	1	1	2	2	0	2	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	231	318	58	42	83	156	102	289	56	31	776	90
Peak Hour Factor	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	64	87	16	12	23	43	28	79	15	9	213	25
Total Analysis Volume [veh/h]	254	350	64	46	91	172	112	318	62	34	854	99
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	2	0	0	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	0	0	7	0	0	7	0	0	7	0
Maximum Green [s]	0	120	0	0	120	0	0	120	0	0	120	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	30	0	0	30	0	0	30	0	0	30	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	L	C	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	19	19	19	19	19	19	33	33	33	33	33
g / C, Green / Cycle	0.31	0.31	0.31	0.31	0.31	0.31	0.55	0.55	0.55	0.55	0.55
(v / s)_i Volume / Saturation Flow Rate	0.19	0.11	0.11	0.05	0.05	0.11	0.19	0.21	0.03	0.26	0.26
s, saturation flow rate [veh/h]	1305	1870	1771	972	1870	1589	589	1818	1003	1870	1803
c, Capacity [veh/h]	430	584	553	298	584	496	342	1008	536	1037	1000
d1, Uniform Delay [s]	21.65	16.03	16.04	21.01	14.93	15.93	14.40	7.53	10.66	8.04	8.04
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.29	0.38	0.40	0.24	0.12	0.42	2.55	1.08	0.23	1.52	1.57
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.59	0.36	0.37	0.15	0.16	0.35	0.33	0.38	0.06	0.47	0.47
d, Delay for Lane Group [s/veh]	22.94	16.41	16.44	21.24	15.06	16.35	16.94	8.60	10.88	9.56	9.61
Lane Group LOS	C	B	B	C	B	B	B	A	B	A	A
Critical Lane Group	Yes	No	No	No	No	No	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	3.18	2.06	1.97	0.50	0.78	1.58	1.25	2.37	0.27	3.26	3.16
50th-Percentile Queue Length [ft/ln]	79.52	51.53	49.18	12.62	19.40	39.55	31.22	59.36	6.70	81.60	79.06
95th-Percentile Queue Length [veh/ln]	5.73	3.71	3.54	0.91	1.40	2.85	2.25	4.27	0.48	5.88	5.69
95th-Percentile Queue Length [ft/ln]	143.13	92.76	88.52	22.72	34.92	71.18	56.19	106.85	12.06	146.89	142.30

Movement, Approach, & Intersection Results

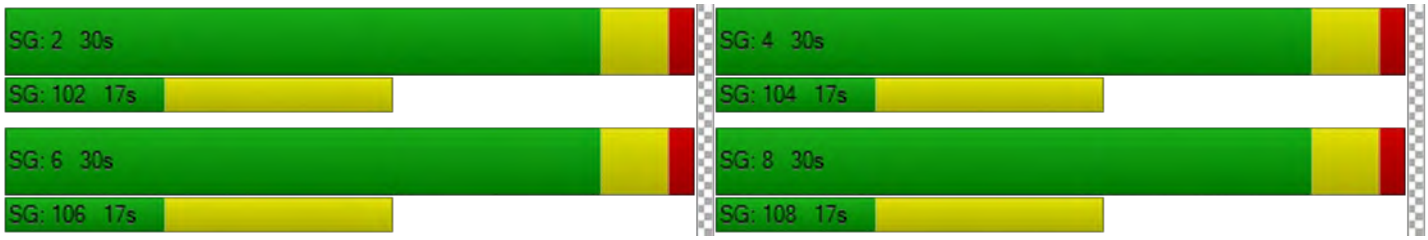
d_M, Delay for Movement [s/veh]	22.94	16.42	16.44	21.24	15.06	16.35	16.94	8.60	8.60	10.88	9.58	9.61
Movement LOS	C	B	B	C	B	B	B	A	A	B	A	A
d_A, Approach Delay [s/veh]	18.90			16.70			10.50			9.63		
Approach LOS	B			B			B			A		
d_I, Intersection Delay [s/veh]	13.21											
Intersection LOS	B											
Intersection V/C	0.524											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	20.01	20.01	20.01	20.01
l_p,int, Pedestrian LOS Score for Intersection	2.400	2.691	2.974	2.576
Crosswalk LOS	B	B	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	867	867	867	867
d_b, Bicycle Delay [s]	9.63	9.63	9.63	9.63
l_b,int, Bicycle LOS Score for Intersection	2.111	2.069	2.371	2.374
Bicycle LOS	B	B	B	B

Sequence

Ring 1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



7th Street & County Line Road RV Fueling

Vistro File: C:\...\PME.vistro

Scenario 8 Existing Plus Ambient Growth Plus Project PM Peak Hour

Report File: C:\...\PMEAP.pdf

6/9/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	County Line Ln (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	SB Left	0.036	9.0	A
2	Coffee Shop Access (NS) at County Line Ln (EW)	Two-way stop	HCM 6th Edition	WB Thru	0.000	0.0	A
3	RV Access (NS) at County Line Ln (EW)	Two-way stop	HCM 6th Edition	NB Left	0.022	8.6	A
4	Coffee Shop/RV Access (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	EB Thru	0.000	0.0	A
5	7th Pl (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	NB Left	0.004	10.0	B
6	I-10 SB Ramps (NS) at County Line Ave (EW)	Two-way stop	HCM 6th Edition	SB Left	1.780	412.7	F
7	I-10 NB Ramps (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	NB Thru	0.006	34.1	D
8	Calimesa Blvd (NS) at County Line Ave (EW)	Signalized	HCM 6th Edition	NB Left	0.568	12.7	B

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: County Line Ln (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.036

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	4	0	0	1	22	0	0	14	6
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	21	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	25	0	0	1	23	0	0	15	6
Peak Hour Factor	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	9	0	0	0	8	0	0	5	2
Total Analysis Volume [veh/h]	0	0	0	34	0	0	1	31	0	0	20	8
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.83	9.34	8.45	8.98	9.46	8.56	7.27	0.00	0.00	7.28	0.00	0.00
Movement LOS	A	A	A	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.11	0.11	0.11	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	2.81	2.81	2.81	0.05	0.05	0.05	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.87			8.98			0.23			0.00		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	3.32											
Intersection LOS	A											

Intersection Level Of Service Report
Intersection 2: Coffee Shop Access (NS) at County Line Ln (EW)

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	0	7	0	0	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	21
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	7	0	0	25
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	2	0	0	7
Total Analysis Volume [veh/h]	0	0	7	0	0	26
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop		Free		Free	
Flared Lane	No					
Storage Area [veh]	0		0		0	
Two-Stage Gap Acceptance	No					
Number of Storage Spaces in Median	0		0		0	

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.67	8.35	0.00	0.00	7.23	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.51		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 3: RV Access (NS) at County Line Ln (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.022

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	0	7	0	0	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	21	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	21	0	7	0	0	4
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	0	2	0	0	1
Total Analysis Volume [veh/h]	22	0	7	0	0	4
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.65	8.43	0.00	0.00	7.23	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.07	0.07	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.67	1.67	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.65		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	5.77					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 4: Coffee Shop/RV Access (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	25	21	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	21	0	20
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	47	22	20
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	12	6	5
Total Analysis Volume [veh/h]	0	0	0	49	23	21
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	0.00
Movement LOS				A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 5: 7th Pl (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	10.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.004

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	2	36	24	1	49	19
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	1	0	20	1	0	19
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	3	37	45	2	51	39
Peak Hour Factor	0.8620	0.8620	0.8620	0.8620	0.8620	0.8620
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	1	11	13	1	15	11
Total Analysis Volume [veh/h]	3	43	52	2	59	45
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.04	0.00	0.00	0.04	0.00
d_M, Delay for Movement [s/veh]	10.03	8.73	0.00	0.00	7.41	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.15	0.15	0.00	0.00	0.10	0.10
95th-Percentile Queue Length [ft/ln]	3.65	3.65	0.00	0.00	2.55	2.55
d_A, Approach Delay [s/veh]	8.81		0.00		4.21	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	4.13					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 6: I-10 SB Ramps (NS) at County Line Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	412.7
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	1.780

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			25.00			25.00	
Grade [%]		0.00			0.00			0.00			0.00	
Crosswalk		No			No			No			No	

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	471	2	26	0	54	6	263	42	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.04	1.04	1.04	1.00	1.04	1.04	1.04	1.04	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	8	0	15	5	0	11	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	490	2	35	0	71	11	274	55	0
Peak Hour Factor	0.8290	0.8290	0.8290	0.9640	0.9640	0.9640	0.8290	0.9640	0.9640	0.9640	0.9640	0.8290
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	127	1	9	0	18	3	71	14	0
Total Analysis Volume [veh/h]	0	0	0	508	2	36	0	74	11	284	57	0
Pedestrian Volume [ped/h]		0			0			0			0	

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane		No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance		No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	1.78	0.01	0.04	0.00	0.00	0.00	0.19	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	412.68	412.43	403.64	0.00	0.00	0.00	7.93	0.00	0.00
Movement LOS				F	F	F		A	A	A	A	
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	36.42	36.42	36.42	0.00	0.00	0.00	0.69	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	910.57	910.57	910.57	0.00	0.00	0.00	17.27	0.00	0.00
d_A, Approach Delay [s/veh]	0.00			412.09			0.00			6.61		
Approach LOS	A			F			A			A		
d_I, Intersection Delay [s/veh]	233.80											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 7: I-10 NB Ramps (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	34.1
Analysis Method:	HCM 6th Edition	Level Of Service:	D
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.006

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	6	1	263	0	0	0	24	498	0	0	299	278
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	5	0	0	0	0	0	9	6	0	0	6	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	11	1	274	0	0	0	34	524	0	0	317	289
Peak Hour Factor	0.9920	0.9920	0.9920	0.8250	0.8250	0.8250	0.9920	0.9920	0.8250	0.8250	0.9920	0.9920
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	0	69	0	0	0	9	132	0	0	80	73
Total Analysis Volume [veh/h]	11	1	276	0	0	0	34	528	0	0	320	291
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No			
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No			
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.06	0.01	0.50	0.00	0.00	0.00	0.04	0.01	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	32.24	34.08	20.26	0.00	0.00	0.00	8.85	0.00	0.00	0.00	0.00	0.00
Movement LOS	D	D	C				A	A			A	A
95th-Percentile Queue Length [veh/ln]	3.45	3.45	3.45	0.00	0.00	0.00	0.11	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	86.24	86.24	86.24	0.00	0.00	0.00	2.73	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	20.77			0.00			0.54			0.00		
Approach LOS	C			A			A			A		
d_I, Intersection Delay [s/veh]	4.30											
Intersection LOS	D											

Intersection Level Of Service Report
Intersection 8: Calimesa Blvd (NS) at County Line Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	12.7
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.568

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	80.00	100.00	100.00	115.00	100.00	100.00	105.00	100.00	100.00
Speed [mph]	35.00			45.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	99	133	92	67	180	99	115	510	147	67	382	64
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	2	0	0	0	0	1	1	3	2	0	3	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	105	138	96	70	187	104	121	533	155	70	400	67
Peak Hour Factor	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	27	35	25	18	48	27	31	136	40	18	102	17
Total Analysis Volume [veh/h]	107	141	98	72	191	106	124	544	158	72	409	68
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	2	0	0	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	0	0	7	0	0	7	0	0	7	0
Maximum Green [s]	0	120	0	0	120	0	0	120	0	0	120	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	33	0	0	33	0	0	27	0	0	27	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	L	C	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	16	16	16	16	16	16	36	36	36	36	36
g / C, Green / Cycle	0.26	0.26	0.26	0.26	0.26	0.26	0.61	0.61	0.61	0.61	0.61
(v / s)_i Volume / Saturation Flow Rate	0.09	0.07	0.07	0.06	0.10	0.07	0.14	0.39	0.10	0.13	0.13
s, saturation flow rate [veh/h]	1192	1870	1624	1141	1870	1589	917	1799	745	1870	1779
c, Capacity [veh/h]	279	488	424	305	488	415	603	1089	374	1133	1077
d1, Uniform Delay [s]	24.76	17.57	17.64	22.48	18.26	17.57	7.79	7.65	14.44	5.36	5.37
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.86	0.27	0.34	0.39	0.51	0.32	0.77	2.94	1.15	0.43	0.46
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.38	0.26	0.27	0.24	0.39	0.26	0.21	0.64	0.19	0.21	0.22
d, Delay for Lane Group [s/veh]	25.62	17.84	17.98	22.88	18.77	17.89	8.56	10.59	15.59	5.80	5.83
Lane Group LOS	C	B	B	C	B	B	A	B	B	A	A
Critical Lane Group	No	No	No	No	Yes	No	No	Yes	No	No	No
50th-Percentile Queue Length [veh/ln]	1.40	1.27	1.18	0.83	1.94	1.03	0.81	4.85	0.75	1.10	1.06
50th-Percentile Queue Length [ft/ln]	35.06	31.74	29.42	20.87	48.43	25.86	20.31	121.21	18.63	27.46	26.58
95th-Percentile Queue Length [veh/ln]	2.52	2.29	2.12	1.50	3.49	1.86	1.46	8.46	1.34	1.98	1.91
95th-Percentile Queue Length [ft/ln]	63.11	57.13	52.96	37.56	87.18	46.55	36.55	211.48	33.54	49.43	47.84

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	25.62	17.85	17.98	22.88	18.77	17.89	8.56	10.59	10.59	15.59	5.81	5.83
Movement LOS	C	B	B	C	B	B	A	B	B	B	A	A
d_A, Approach Delay [s/veh]	20.29			19.32			10.29			7.10		
Approach LOS	C			B			B			A		
d_I, Intersection Delay [s/veh]	12.70											
Intersection LOS	B											
Intersection V/C	0.568											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	20.01	20.01	20.01	20.01
l_p,int, Pedestrian LOS Score for Intersection	2.429	2.659	2.673	2.570
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	967	967	767	767
d_b, Bicycle Delay [s]	8.01	8.01	11.41	11.41
l_b,int, Bicycle LOS Score for Intersection	1.845	2.168	2.923	2.013
Bicycle LOS	A	B	C	B

Sequence

Ring 1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

7th Street & County Line Road RV Fueling

Vistro File: C:\...\AME.vistro

Scenario 9 Existing Plus Ambient Growth Plus Project AM Peak Hour - With Improvements (TS)

Report File: C:\...\AMEAPI-TS.pdf

6/9/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
6	I-10 SB Ramps (NS) at County Line Rd (EW)	Signalized	HCM 6th Edition	SB Left	0.718	14.3	B
7	I-10 NB Ramps (NS) at County Line Ave (EW)	Signalized	HCM 6th Edition	NB Right	0.685	7.2	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 6: I-10 SB Ramps (NS) at County Line Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	14.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.718

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			25.00			25.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present					No			No			No	
Crosswalk		No			No			No			No	

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	213	1	16	0	178	7	409	111	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.04	1.04	1.04	1.00	1.04	1.04	1.04	1.04	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	6	0	10	4	0	9	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	222	1	23	0	195	11	425	124	0
Peak Hour Factor	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	67	0	7	0	59	3	128	37	0
Total Analysis Volume [veh/h]	0	0	0	268	1	28	0	235	13	513	150	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	0	0	0	6	0	0	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	0	0	0	7	0	0	7	0	0	7	0
Maximum Green [s]	0	0	0	0	120	0	0	120	0	0	120	0
Amber [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	0	0	0	49	0	0	11	0	0	11	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	10	0	0	10	0	0	10	0
Rest In Walk					No			No			No	
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall					No			No			No	
Maximum Recall					No			No			No	
Pedestrian Recall					No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group		C	C	L	C
C, Cycle Length [s]		60	60	60	60
L, Total Lost Time per Cycle [s]		4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]		12	40	40	40
g / C, Green / Cycle		0.21	0.66	0.66	0.66
(v / s)_i Volume / Saturation Flow Rate		0.17	0.13	0.45	0.08
s, saturation flow rate [veh/h]		1761	1853	1132	1870
c, Capacity [veh/h]		365	1222	768	1234
d1, Uniform Delay [s]		22.74	4.02	10.03	3.79
k, delay calibration		0.11	0.50	0.50	0.50
I, Upstream Filtering Factor		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		4.40	0.37	4.57	0.20
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity		0.81	0.20	0.67	0.12
d, Delay for Lane Group [s/veh]		27.14	4.40	14.60	3.99
Lane Group LOS		C	A	B	A
Critical Lane Group		Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]		4.15	0.99	5.16	0.56
50th-Percentile Queue Length [ft/ln]		103.74	24.70	128.88	13.99
95th-Percentile Queue Length [veh/ln]		7.47	1.78	8.88	1.01
95th-Percentile Queue Length [ft/ln]		186.72	44.46	221.98	25.18

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	27.14	27.14	27.14	0.00	4.40	4.40	14.60	3.99	0.00
Movement LOS				C	C	C		A	A	B	A	
d_A, Approach Delay [s/veh]	0.00			27.14			4.40			12.20		
Approach LOS	A			C			A			B		
d_I, Intersection Delay [s/veh]	14.27											
Intersection LOS	B											
Intersection V/C	0.718											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	1500	233	233
d_b, Bicycle Delay [s]	30.00	1.88	23.41	23.41
l_b,int, Bicycle LOS Score for Intersection	4.132	2.050	1.969	2.654
Bicycle LOS	D	B	A	B

Sequence

Ring 1	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 7: I-10 NB Ramps (NS) at County Line Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	7.2
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.685

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	1	0	117	0	0	0	56	334	0	0	519	627
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	4	0	0	0	0	0	5	5	0	0	5	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	0	122	0	0	0	63	352	0	0	545	652
Peak Hour Factor	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	0	37	0	0	0	19	107	0	0	165	198
Total Analysis Volume [veh/h]	6	0	148	0	0	0	76	427	0	0	661	790
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	2	0	0	0	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	0	0	0	0	0	7	0	0	7	0
Maximum Green [s]	0	120	0	0	0	0	0	120	0	0	120	0
Amber [s]	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	49	0	0	0	0	0	11	0	0	11	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	0	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	10	0	0	10	0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No						No			No	
Maximum Recall		No						No			No	
Pedestrian Recall		No						No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C		L	C	C	R
C, Cycle Length [s]	60		60	60	60	60
L, Total Lost Time per Cycle [s]	4.00		4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00		2.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	7		45	45	45	45
g / C, Green / Cycle	0.12		0.74	0.74	0.74	0.74
(v / s)_i Volume / Saturation Flow Rate	0.10		0.10	0.23	0.35	0.50
s, saturation flow rate [veh/h]	1596		774	1870	1870	1589
c, Capacity [veh/h]	201		552	1386	1386	1178
d1, Uniform Delay [s]	25.44		6.50	2.61	3.12	4.01
k, delay calibration	0.11		0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.98		0.52	0.58	1.18	3.05
d3, Initial Queue Delay [s]	0.00		0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00		1.00	1.00	1.00	1.00
PF, progression factor	1.00		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.77		0.14	0.31	0.48	0.67
d, Delay for Lane Group [s/veh]	31.42		7.02	3.19	4.30	7.06
Lane Group LOS	C		A	A	A	A
Critical Lane Group	Yes		No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.33		0.44	0.88	1.67	2.87
50th-Percentile Queue Length [ft/ln]	58.32		10.94	22.07	41.85	71.81
95th-Percentile Queue Length [veh/ln]	4.20		0.79	1.59	3.01	5.17
95th-Percentile Queue Length [ft/ln]	104.97		19.68	39.73	75.34	129.27

Movement, Approach, & Intersection Results

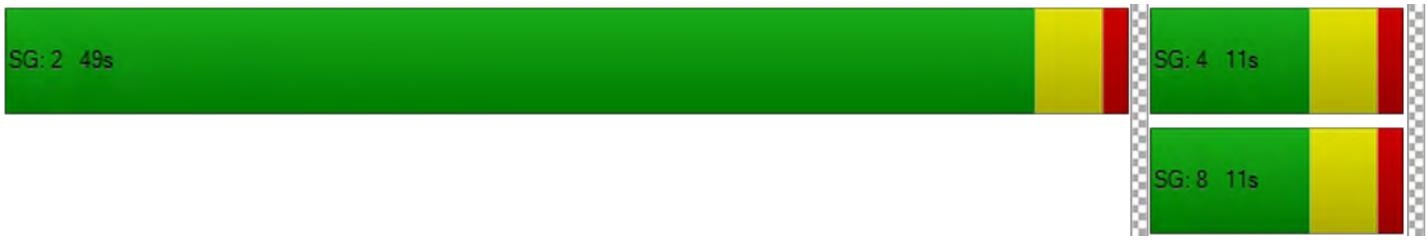
d_M, Delay for Movement [s/veh]	31.42	31.42	31.42	0.00	0.00	0.00	7.02	3.19	0.00	0.00	4.30	7.06
Movement LOS	C	C	C				A	A			A	A
d_A, Approach Delay [s/veh]	31.42			0.00			3.77			5.80		
Approach LOS	C			A			A			A		
d_I, Intersection Delay [s/veh]	7.19											
Intersection LOS	A											
Intersection V/C	0.685											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1500	0	233	233
d_b, Bicycle Delay [s]	1.88	30.00	23.41	23.41
l_b,int, Bicycle LOS Score for Intersection	1.814	4.132	2.390	3.954
Bicycle LOS	A	D	B	D

Sequence

Ring 1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



7th Street & County Line Road RV Fueling

Vistro File: C:\...\PME.vistro

Scenario 9 Existing Plus Ambient Growth Plus Project PM Peak Hour - With Improvements (TS)

Report File: C:\...\PMEAPI-TS.pdf

6/9/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
6	I-10 SB Ramps (NS) at County Line Ave (EW)	Signalized	HCM 6th Edition	SB Left	0.606	17.6	B
7	I-10 NB Ramps (NS) at County Line Rd (EW)	Signalized	HCM 6th Edition	NB Right	0.534	10.0	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 6: I-10 SB Ramps (NS) at County Line Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	17.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.606

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			25.00			25.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present					No			No			No	
Crosswalk		No			No			No			No	

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	471	2	26	0	54	6	263	42	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.04	1.04	1.04	1.00	1.04	1.04	1.04	1.04	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	8	0	15	5	0	11	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	490	2	35	0	71	11	274	55	0
Peak Hour Factor	0.8290	0.8290	0.8290	0.9640	0.9640	0.9640	0.8290	0.9640	0.9640	0.9640	0.9640	0.8290
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	127	1	9	0	18	3	71	14	0
Total Analysis Volume [veh/h]	0	0	0	508	2	36	0	74	11	284	57	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	0	0	0	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	0	0	0	7	0	0	7	0	0	7	0
Maximum Green [s]	0	0	0	0	120	0	0	120	0	0	120	0
Amber [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	0	0	0	49	0	0	11	0	0	11	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	10	0	0	10	0	0	10	0
Rest In Walk					No			No			No	
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall					No			No			No	
Maximum Recall					No			No			No	
Pedestrian Recall					No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group		C	C	L	C
C, Cycle Length [s]		60	60	60	60
L, Total Lost Time per Cycle [s]		4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]		21	31	31	31
g / C, Green / Cycle		0.35	0.52	0.52	0.52
(v / s)_i Volume / Saturation Flow Rate		0.31	0.05	0.22	0.03
s, saturation flow rate [veh/h]		1767	1828	1312	1870
c, Capacity [veh/h]		620	944	723	966
d1, Uniform Delay [s]		18.36	7.38	11.20	7.26
k, delay calibration		0.11	0.50	0.50	0.50
I, Upstream Filtering Factor		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		4.31	0.19	1.60	0.12
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity		0.88	0.09	0.39	0.06
d, Delay for Lane Group [s/veh]		22.68	7.57	12.79	7.37
Lane Group LOS		C	A	B	A
Critical Lane Group		Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]		7.04	0.53	2.62	0.35
50th-Percentile Queue Length [ft/ln]		176.02	13.27	65.50	8.72
95th-Percentile Queue Length [veh/ln]		11.39	0.96	4.72	0.63
95th-Percentile Queue Length [ft/ln]		284.82	23.89	117.90	15.70

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	22.68	22.68	22.68	0.00	7.57	7.57	12.79	7.37	0.00
Movement LOS				C	C	C		A	A	B	A	
d_A, Approach Delay [s/veh]	0.00			22.68			7.57			11.89		
Approach LOS	A			C			A			B		
d_I, Intersection Delay [s/veh]	17.57											
Intersection LOS	B											
Intersection V/C	0.606											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	1500	233	233
d_b, Bicycle Delay [s]	30.00	1.88	23.41	23.41
l_b,int, Bicycle LOS Score for Intersection	4.132	2.461	1.700	2.122
Bicycle LOS	D	B	A	B

Sequence

Ring 1	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 7: I-10 NB Ramps (NS) at County Line Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	10.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.534

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			35.00			35.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present		No						No			No	
Crosswalk		No			No			No			No	

Volumes

Name												
Base Volume Input [veh/h]	6	1	263	0	0	0	24	498	0	0	299	278
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	5	0	0	0	0	0	9	6	0	0	6	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	11	1	274	0	0	0	34	524	0	0	317	289
Peak Hour Factor	0.9920	0.9920	0.9920	0.8250	0.8250	0.8250	0.9920	0.9920	0.8250	0.8250	0.9920	0.9920
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	0	69	0	0	0	9	132	0	0	80	73
Total Analysis Volume [veh/h]	11	1	276	0	0	0	34	528	0	0	320	291
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	2	0	0	0	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	0	0	0	0	0	7	0	0	7	0
Maximum Green [s]	0	120	0	0	0	0	0	120	0	0	120	0
Amber [s]	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	49	0	0	0	0	0	11	0	0	11	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	0	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	10	0	0	10	0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No						No			No	
Maximum Recall		No						No			No	
Pedestrian Recall		No						No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C		L	C	C	R
C, Cycle Length [s]	60		60	60	60	60
L, Total Lost Time per Cycle [s]	4.00		4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00		2.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	13		39	39	39	39
g / C, Green / Cycle	0.22		0.65	0.65	0.65	0.65
(v / s)_i Volume / Saturation Flow Rate	0.18		0.03	0.28	0.17	0.18
s, saturation flow rate [veh/h]	1597		1059	1870	1870	1589
c, Capacity [veh/h]	350		692	1211	1211	1029
d1, Uniform Delay [s]	22.37		6.58	5.21	4.51	4.57
k, delay calibration	0.11		0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.83		0.13	1.14	0.53	0.69
d3, Initial Queue Delay [s]	0.00		0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00		1.00	1.00	1.00	1.00
PF, progression factor	1.00		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.82		0.05	0.44	0.26	0.28
d, Delay for Lane Group [s/veh]	27.20		6.72	6.35	5.04	5.26
Lane Group LOS	C		A	A	A	A
Critical Lane Group	Yes		No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	4.04		0.19	2.41	1.24	1.18
50th-Percentile Queue Length [ft/ln]	101.03		4.65	60.30	31.08	29.45
95th-Percentile Queue Length [veh/ln]	7.27		0.33	4.34	2.24	2.12
95th-Percentile Queue Length [ft/ln]	181.86		8.37	108.55	55.94	53.02

Movement, Approach, & Intersection Results

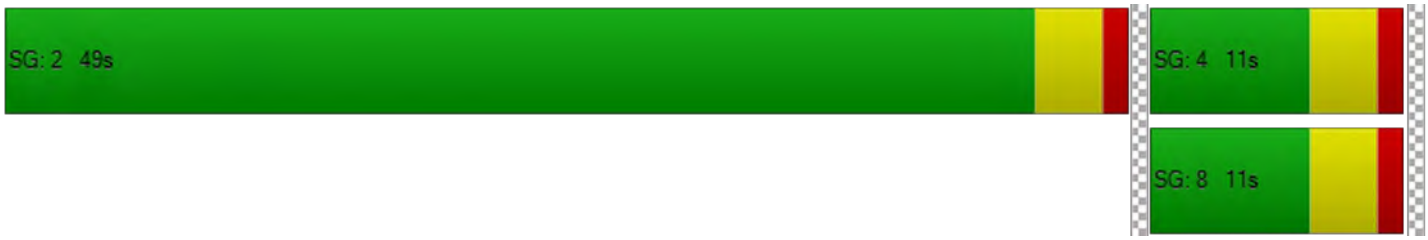
d_M, Delay for Movement [s/veh]	27.20	27.20	27.20	0.00	0.00	0.00	6.72	6.35	0.00	0.00	5.04	5.26
Movement LOS	C	C	C				A	A			A	A
d_A, Approach Delay [s/veh]	27.20			0.00			6.37			5.15		
Approach LOS	C			A			A			A		
d_I, Intersection Delay [s/veh]	9.96											
Intersection LOS	A											
Intersection V/C	0.534											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1500	0	233	233
d_b, Bicycle Delay [s]	1.88	30.00	23.41	23.41
l_b,int, Bicycle LOS Score for Intersection	2.035	4.132	2.487	2.568
Bicycle LOS	B	D	B	B

Sequence

Ring 1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



7th Street & County Line Road RV Fueling

Vistro File: C:\...\AME.vistro

Scenario 10 Existing Plus Ambient Growth Plus Project AM Peak Hour - With Improvements (RB)

Report File: C:\...\AMEAPI-RB.pdf

6/9/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
6	I-10 SB Ramps (NS) at County Line Rd (EW)	Roundabout	HCM 6th Edition	EB Thru		6.0	A
7	I-10 NB Ramps (NS) at County Line Ave (EW)	Roundabout	HCM 6th Edition	WB Right		7.8	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 6: I-10 SB Ramps (NS) at County Line Rd (EW)

Control Type:	Roundabout	Delay (sec / veh):	6.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			25.00			25.00	
Grade [%]		0.00			0.00			0.00			0.00	
Crosswalk		No			No			No			No	

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	213	1	16	0	178	7	409	111	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.04	1.04	1.04	1.00	1.04	1.04	1.04	1.04	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	6	0	10	4	0	9	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	222	1	23	0	195	11	425	124	0
Peak Hour Factor	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	67	0	7	0	59	3	128	37	0
Total Analysis Volume [veh/h]	0	0	0	268	1	28	0	235	13	513	150	0
Pedestrian Volume [ped/h]		0			0			0			0	

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			1			1			
Circulating Flow Rate [veh/h]	513			676			798			0			
Exiting Flow Rate [veh/h]	538			0			182			513			
Demand Flow Rate [veh/h]	0	0	0	222	1	23	0	195	11	425	124	0	
Adjusted Demand Flow Rate [veh/h]	0	0	0	268	1	28	0	235	13	513	150	0	

Lanes

Overwrite Calculated Critical Headway		No	No	No	No	No	No	No	No
User-Defined Critical Headway [s]		4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time		No	No	No	No	No	No	No	No
User-Defined Follow-Up Time [s]		3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)		1420.00	1420.00	1420.00	1420.00	1420.00	1420.00	1420.00	1420.00
B (coefficient)		0.00091	0.00091	0.00091	0.00091	0.00091	0.00091	0.00091	0.00091
HV Adjustment Factor		0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Entry Flow Rate [veh/h]		138	138	29	120	120	14	524	153
Capacity of Entry and Bypass Lanes [veh/h]		768	768	768	688	688	688	1420	1420
Pedestrian Impedance		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]		753	753	753	674	674	674	1393	1393
X, volume / capacity		0.18	0.18	0.04	0.17	0.17	0.02	0.37	0.11

Movement, Approach, & Intersection Results

Lane LOS		A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh]		0.65	0.65	0.12	0.63	0.63	0.06	1.72	0.36
95th-Percentile Queue Length [ft]		16.19	16.19	2.90	15.70	15.70	1.47	43.09	9.04
Approach Delay [s/veh]	0.00	6.57			7.25			5.37	
Approach LOS	A	A			A			A	
Intersection Delay [s/veh]	6.05								
Intersection LOS	A								

Intersection Level Of Service Report
Intersection 7: I-10 NB Ramps (NS) at County Line Ave (EW)

Control Type:	Roundabout	Delay (sec / veh):	7.8
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	1	0	117	0	0	0	56	334	0	0	519	627
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	4	0	0	0	0	0	5	5	0	0	5	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	5	0	122	0	0	0	63	352	0	0	545	652
Peak Hour Factor	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	2	0	37	0	0	0	19	107	0	0	165	198
Total Analysis Volume [veh/h]	6	0	148	0	0	0	76	427	0	0	661	790
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			1			1		
Circulating Flow Rate [veh/h]	513			680			0			84		
Exiting Flow Rate [veh/h]	0			883			680			587		
Demand Flow Rate [veh/h]	5	0	122	0	0	0	63	352	0	0	545	652
Adjusted Demand Flow Rate [veh/h]	6	0	148	0	0	0	76	427	0	0	661	790

Lanes

Overwrite Calculated Critical Headway	No	No		No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00		4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No		No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00		3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00		1420.00	1420.00	1420.00	1420.00
B (coefficient)	0.00091	0.00091		0.00091	0.00091	0.00091	0.00091
HV Adjustment Factor	0.98	0.98		0.98	0.98	0.98	0.98
Entry Flow Rate [veh/h]	7	151		242	272	675	806
Capacity of Entry and Bypass Lanes [veh/h]	891	891		1420	1420	1316	1316
Pedestrian Impedance	1.00	1.00		1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	873	873		1393	1393	1291	1291
X, volume / capacity	0.01	0.17		0.17	0.19	0.51	0.61

Movement, Approach, & Intersection Results

Lane LOS	A	A		A	A	A	B
95th-Percentile Queue Length [veh]	0.02	0.61		0.61	0.71	3.03	4.43
95th-Percentile Queue Length [ft]	0.52	15.21		15.28	17.67	75.87	110.64
Approach Delay [s/veh]	5.75		0.00	4.06		9.28	
Approach LOS	A		A	A		A	
Intersection Delay [s/veh]	7.78						
Intersection LOS	A						

7th Street & County Line Road RV Fueling

Vistro File: C:\...\PME.vistro

Scenario 10 Existing Plus Ambient Growth Plus Project PM Peak Hour - With Improvements (RB)

Report File: C:\...\PMEAPI-RB.pdf

6/9/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
6	I-10 SB Ramps (NS) at County Line Ave (EW)	Roundabout	HCM 6th Edition	EB Thru		5.2	A
7	I-10 NB Ramps (NS) at County Line Rd (EW)	Roundabout	HCM 6th Edition	NB Right		5.2	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 6: I-10 SB Ramps (NS) at County Line Ave (EW)

Control Type:	Roundabout	Delay (sec / veh):	5.2
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			25.00			25.00	
Grade [%]		0.00			0.00			0.00			0.00	
Crosswalk		No			No			No			No	

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	471	2	26	0	54	6	263	42	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.04	1.04	1.04	1.00	1.04	1.04	1.04	1.04	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	8	0	15	5	0	11	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	490	2	35	0	71	11	274	55	0
Peak Hour Factor	0.8290	0.8290	0.8290	0.9640	0.9640	0.9640	0.8290	0.9640	0.9640	0.9640	0.9640	0.8290
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	127	1	9	0	18	3	71	14	0
Total Analysis Volume [veh/h]	0	0	0	508	2	36	0	74	11	284	57	0
Pedestrian Volume [ped/h]		0			0			0			0	

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			1			1		
Circulating Flow Rate [veh/h]	594			348			810			0		
Exiting Flow Rate [veh/h]	303			0			95			594		
Demand Flow Rate [veh/h]	0	0	0	490	2	35	0	71	11	274	55	0
Adjusted Demand Flow Rate [veh/h]	0	0	0	508	2	36	0	74	11	284	57	0

Lanes

Overwrite Calculated Critical Headway		No	No	No	No	No	No	No	No
User-Defined Critical Headway [s]		4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time		No	No	No	No	No	No	No	No
User-Defined Follow-Up Time [s]		3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)		1420.00	1420.00	1420.00	1420.00	1420.00	1420.00	1420.00	1420.00
B (coefficient)		0.00091	0.00091	0.00091	0.00091	0.00091	0.00091	0.00091	0.00091
HV Adjustment Factor		0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Entry Flow Rate [veh/h]		261	261	37	38	38	12	290	59
Capacity of Entry and Bypass Lanes [veh/h]		1035	1035	1035	680	680	680	1420	1420
Pedestrian Impedance		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]		1015	1015	1015	667	667	667	1393	1393
X, volume / capacity		0.25	0.25	0.04	0.06	0.06	0.02	0.20	0.04

Movement, Approach, & Intersection Results

Lane LOS		A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh]		1.00	1.00	0.11	0.18	0.18	0.05	0.76	0.13
95th-Percentile Queue Length [ft]		24.92	24.92	2.76	4.40	4.40	1.26	19.12	3.20
Approach Delay [s/veh]	0.00	5.85			5.94			4.04	
Approach LOS	A	A			A			A	
Intersection Delay [s/veh]	5.22								
Intersection LOS	A								

Intersection Level Of Service Report
Intersection 7: I-10 NB Ramps (NS) at County Line Rd (EW)

Control Type:	Roundabout	Delay (sec / veh):	5.2
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	6	1	263	0	0	0	24	498	0	0	299	278
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	5	0	0	0	0	0	9	6	0	0	6	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	11	1	274	0	0	0	34	524	0	0	317	289
Peak Hour Factor	0.9920	0.9920	0.9920	0.8250	0.8250	0.8250	0.9920	0.9920	0.8250	0.8250	0.9920	0.9920
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	0	69	0	0	0	9	132	0	0	80	73
Total Analysis Volume [veh/h]	11	1	276	0	0	0	34	528	0	0	320	291
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			1			1		
Circulating Flow Rate [veh/h]	573			338			0			47		
Exiting Flow Rate [veh/h]	0			333			338			820		
Demand Flow Rate [veh/h]	11	1	274	0	0	0	34	524	0	0	317	289
Adjusted Demand Flow Rate [veh/h]	11	1	276	0	0	0	34	528	0	0	320	291

Lanes

Overwrite Calculated Critical Headway	No	No		No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00		4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No		No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00		3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00		1420.00	1420.00	1420.00	1420.00
B (coefficient)	0.00091	0.00091		0.00091	0.00091	0.00091	0.00091
HV Adjustment Factor	0.98	0.98		0.98	0.98	0.98	0.98
Entry Flow Rate [veh/h]	13	282		270	304	327	297
Capacity of Entry and Bypass Lanes [veh/h]	843	843		1420	1420	1361	1361
Pedestrian Impedance	1.00	1.00		1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	827	827		1393	1393	1334	1334
X, volume / capacity	0.01	0.33		0.19	0.21	0.24	0.22

Movement, Approach, & Intersection Results

Lane LOS	A	A		A	A	A	A
95th-Percentile Queue Length [veh]	0.04	1.47		0.70	0.81	0.94	0.83
95th-Percentile Queue Length [ft]	1.10	36.83		17.48	20.29	23.50	20.79
Approach Delay [s/veh]	8.04		0.00	4.26		4.65	
Approach LOS	A		A	A		A	
Intersection Delay [s/veh]	5.17						
Intersection LOS	A						

Existing Plus Ambient Plus Project – Phase 2

7th Street & County Line Road RV Fueling

Vistro File: C:\...\AME.vistro

Scenario 8 Existing Plus Ambient Growth Plus Project AM Peak Hour

Report File: C:\...\AMEAP.pdf

12/16/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	County Line Ln (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	SB Left	0.182	9.6	A
2	Coffee Shop Access (NS) at County Line Ln (EW)	Two-way stop	HCM 6th Edition	NB Left	0.140	9.2	A
3	RV Access (NS) at County Line Ln (EW)	Two-way stop	HCM 6th Edition	NB Left	0.016	8.6	A
4	Coffee Shop/RV Access (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	EB Thru	0.002	0.0	A
5	7th Pl (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	NB Left	0.076	19.4	C
6	I-10 SB Ramps (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	SB Left	5.980	2,451.8	F
7	I-10 NB Ramps (NS) at County Line Ave (EW)	Two-way stop	HCM 6th Edition	NB Left	0.968	269.3	F
8	Calimesa Blvd (NS) at County Line Ave (EW)	Signalized	HCM 6th Edition	NB Left	0.550	13.7	B

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: County Line Ln (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.182

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	2	0	4	0	20	0	0	12	6
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	146	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	148	0	4	0	21	0	0	12	6
Peak Hour Factor	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	44	0	1	0	6	0	0	4	2
Total Analysis Volume [veh/h]	0	0	0	175	0	5	0	25	0	0	14	7
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.18	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.78	9.26	8.42	9.61	10.10	9.25	7.26	0.00	0.00	7.26	0.00	0.00
Movement LOS	A	A	A	A	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.68	0.68	0.68	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	17.12	17.12	17.12	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.82			9.60			0.00			0.00		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	7.64											
Intersection LOS	A											

Intersection Level Of Service Report
Intersection 2: Coffee Shop Access (NS) at County Line Ln (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.2
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.140

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	0	6	0	0	6
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	131	0	0	0	0	15
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	131	0	6	0	0	21
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	34	0	2	0	0	6
Total Analysis Volume [veh/h]	138	0	6	0	0	22
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.14	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.24	8.94	0.00	0.00	7.23	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.49	0.49	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	12.14	12.14	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.24		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	7.68					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 3: RV Access (NS) at County Line Ln (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.016

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	0	6	0	0	6
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	15	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	15	0	6	0	0	6
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	0	2	0	0	2
Total Analysis Volume [veh/h]	16	0	6	0	0	6
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.63	8.40	0.00	0.00	7.23	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.05	0.05	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.21	1.21	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.63		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	4.93					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 4: Coffee Shop/RV Access (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	25	17	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	146	0	152
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	172	18	152
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	45	5	40
Total Analysis Volume [veh/h]	0	0	0	181	19	160
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	0.00
Movement LOS				A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 5: 7th Pl (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	19.4
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.076

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	2	165	19	6	113	15
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	15	0	132	14	0	137
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	17	172	152	20	118	153
Peak Hour Factor	0.7140	0.7140	0.7140	0.7140	0.7140	0.7140
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	60	53	7	41	54
Total Analysis Volume [veh/h]	24	241	213	28	165	214
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.08	0.30	0.00	0.00	0.12	0.00
d_M, Delay for Movement [s/veh]	19.35	12.41	0.00	0.00	8.10	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	1.73	1.73	0.00	0.00	0.29	0.29
95th-Percentile Queue Length [ft/ln]	43.19	43.19	0.00	0.00	7.31	7.31
d_A, Approach Delay [s/veh]	13.03		0.00		3.53	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	5.41					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 6: I-10 SB Ramps (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	2,451.8
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	5.980

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			25.00			25.00	
Grade [%]		0.00			0.00			0.00			0.00	
Crosswalk		No			No			No			No	

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	213	1	16	0	178	7	409	111	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.04	1.04	1.04	1.00	1.04	1.04	1.04	1.04	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	47	0	102	30	0	90	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	222	1	64	0	287	37	425	205	0
Peak Hour Factor	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	67	0	19	0	87	11	128	62	0
Total Analysis Volume [veh/h]	0	0	0	268	1	77	0	346	45	513	247	0
Pedestrian Volume [ped/h]		0			0			0			0	

Intersection Settings

Priority Scheme	Stop			Stop			Free			Free		
Flared Lane				No								
Storage Area [veh]	0			0			0			0		
Two-Stage Gap Acceptance				No								
Number of Storage Spaces in Median	0			0			0			0		

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	5.98	0.02	0.10	0.00	0.00	0.00	0.44	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	2451.83	2437.82	2376.05	0.00	0.00	0.00	10.48	0.00	0.00
Movement LOS				F	F	F		A	A	B	A	
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	39.44	39.44	39.44	0.00	0.00	0.00	2.29	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	986.10	986.10	986.10	0.00	0.00	0.00	57.18	0.00	0.00
d_A, Approach Delay [s/veh]	0.00			2434.93			0.00			7.07		
Approach LOS	A			F			A			A		
d_I, Intersection Delay [s/veh]	566.37											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 7: I-10 NB Ramps (NS) at County Line Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	269.3
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.968

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	1	0	117	0	0	0	56	334	0	0	519	627
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	31	0	0	0	0	0	44	58	0	0	59	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	32	0	122	0	0	0	102	405	0	0	599	652
Peak Hour Factor	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	0	37	0	0	0	31	123	0	0	182	198
Total Analysis Volume [veh/h]	39	0	148	0	0	0	124	491	0	0	726	790
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No			
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No			
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.97	0.00	0.26	0.00	0.00	0.00	0.28	0.00	0.00	0.00	0.01	0.01
d_M, Delay for Movement [s/veh]	269.31	301.27	186.21	0.00	0.00	0.00	16.34	0.00	0.00	0.00	0.00	0.00
Movement LOS	F	F	F				C	A			A	A
95th-Percentile Queue Length [veh/ln]	10.78	10.78	10.78	0.00	0.00	0.00	1.14	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	269.55	269.55	269.55	0.00	0.00	0.00	28.55	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	203.54			0.00			3.29			0.00		
Approach LOS	F			A			A			A		
d_I, Intersection Delay [s/veh]	17.29											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 8: Calimesa Blvd (NS) at County Line Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	13.7
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.550

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	80.00	100.00	100.00	115.00	100.00	100.00	105.00	100.00	100.00
Speed [mph]	35.00			45.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	220	306	56	40	80	149	97	276	52	30	744	87
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	22	0	0	0	0	15	14	22	22	0	22	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	251	318	58	42	83	170	115	309	76	31	796	90
Peak Hour Factor	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	69	87	16	12	23	47	32	85	21	9	219	25
Total Analysis Volume [veh/h]	276	350	64	46	91	187	127	340	84	34	876	99
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	2	0	0	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	0	0	7	0	0	7	0	0	7	0
Maximum Green [s]	0	120	0	0	120	0	0	120	0	0	120	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	32	0	0	32	0	0	28	0	0	28	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	L	C	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	20	20	20	20	20	20	32	32	32	32	32
g / C, Green / Cycle	0.33	0.33	0.33	0.33	0.33	0.33	0.54	0.54	0.54	0.54	0.54
(v / s)_i Volume / Saturation Flow Rate	0.21	0.11	0.11	0.05	0.05	0.12	0.22	0.23	0.04	0.27	0.27
s, saturation flow rate [veh/h]	1305	1870	1771	972	1870	1589	577	1807	963	1870	1804
c, Capacity [veh/h]	454	615	583	317	615	523	321	972	480	1006	970
d1, Uniform Delay [s]	21.09	15.25	15.26	20.03	14.21	15.32	16.32	8.38	12.20	8.73	8.73
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.32	0.33	0.35	0.21	0.11	0.41	3.62	1.43	0.29	1.73	1.79
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.61	0.34	0.35	0.15	0.15	0.36	0.40	0.44	0.07	0.49	0.49
d, Delay for Lane Group [s/veh]	22.41	15.58	15.61	20.24	14.32	15.73	19.93	9.81	12.49	10.46	10.52
Lane Group LOS	C	B	B	C	B	B	B	A	B	B	B
Critical Lane Group	Yes	No	No	No	No	No	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	3.42	1.99	1.90	0.49	0.75	1.68	1.58	2.93	0.30	3.59	3.48
50th-Percentile Queue Length [ft/ln]	85.55	49.76	47.44	12.20	18.70	41.90	39.59	73.25	7.41	89.66	86.93
95th-Percentile Queue Length [veh/ln]	6.16	3.58	3.42	0.88	1.35	3.02	2.85	5.27	0.53	6.46	6.26
95th-Percentile Queue Length [ft/ln]	153.99	89.57	85.40	21.97	33.67	75.43	71.27	131.85	13.34	161.39	156.48

Movement, Approach, & Intersection Results

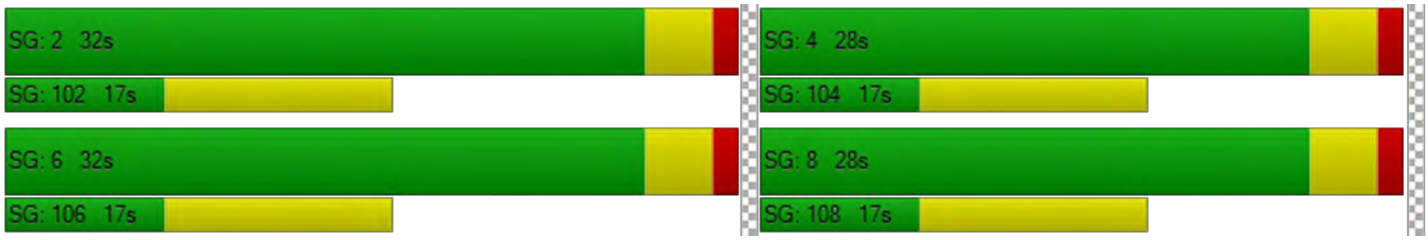
d_M, Delay for Movement [s/veh]	22.41	15.59	15.61	20.24	14.32	15.73	19.93	9.81	9.81	12.49	10.49	10.52
Movement LOS	C	B	B	C	B	B	B	A	A	B	B	B
d_A, Approach Delay [s/veh]	18.32			15.98			12.14			10.56		
Approach LOS	B			B			B			B		
d_I, Intersection Delay [s/veh]	13.66											
Intersection LOS	B											
Intersection V/C	0.550											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	20.01	20.01	20.01	20.01
l_p,int, Pedestrian LOS Score for Intersection	2.413	2.721	3.039	2.589
Crosswalk LOS	B	B	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	933	933	800	800
d_b, Bicycle Delay [s]	8.53	8.53	10.80	10.80
l_b,int, Bicycle LOS Score for Intersection	2.129	2.094	2.469	2.392
Bicycle LOS	B	B	B	B

Sequence

Ring 1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



7th Street & County Line Road RV Fueling

Vistro File: C:\...\PME.vistro

Scenario 8 Existing Plus Ambient Growth Plus Project PM Peak Hour

Report File: C:\...\PMEAP.pdf

12/16/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	County Line Ln (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	SB Left	0.132	9.4	A
2	Coffee Shop Access (NS) at County Line Ln (EW)	Two-way stop	HCM 6th Edition	NB Left	0.070	8.9	A
3	RV Access (NS) at County Line Ln (EW)	Two-way stop	HCM 6th Edition	NB Left	0.022	8.6	A
4	Coffee Shop/RV Access (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	EB Thru	0.001	0.0	A
5	7th Pl (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	NB Left	0.020	11.2	B
6	I-10 SB Ramps (NS) at County Line Ave (EW)	Two-way stop	HCM 6th Edition	SB Left	2.091	565.4	F
7	I-10 NB Ramps (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	NB Thru	0.007	43.6	E
8	Calimesa Blvd (NS) at County Line Ave (EW)	Signalized	HCM 6th Edition	NB Left	0.583	12.9	B

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: County Line Ln (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.4
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.132

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	4	0	0	1	22	0	0	14	6
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	87	0	0	0	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	91	0	0	1	23	0	0	15	6
Peak Hour Factor	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	31	0	0	0	8	0	0	5	2
Total Analysis Volume [veh/h]	0	0	0	124	0	0	1	31	0	0	20	8
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.13	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.83	9.34	8.45	9.41	9.90	9.00	7.27	0.00	0.00	7.28	0.00	0.00
Movement LOS	A	A	A	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.45	0.45	0.45	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	11.35	11.35	11.35	0.05	0.05	0.05	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.87			9.41			0.23			0.00		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	6.38											
Intersection LOS	A											

Intersection Level Of Service Report
Intersection 2: Coffee Shop Access (NS) at County Line Ln (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.9
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.070

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	0	7	0	0	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	66	0	0	0	0	21
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	66	0	7	0	0	25
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	17	0	2	0	0	7
Total Analysis Volume [veh/h]	69	0	7	0	0	26
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.95	8.63	0.00	0.00	7.23	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.23	0.23	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	5.67	5.67	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.95		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	6.05					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 3: RV Access (NS) at County Line Ln (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.022

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	0	7	0	0	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	21	0	0	0	0	0
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	21	0	7	0	0	4
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	0	2	0	0	1
Total Analysis Volume [veh/h]	22	0	7	0	0	4
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.65	8.43	0.00	0.00	7.23	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.07	0.07	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.67	1.67	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.65		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	5.77					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 4: Coffee Shop/RV Access (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	25	21	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	87	0	87
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	113	22	87
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	30	6	23
Total Analysis Volume [veh/h]	0	0	0	119	23	92
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	0.00
Movement LOS				A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 5: 7th Pl (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	11.2
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.020

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	2	36	24	1	49	19
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	8	0	79	8	0	79
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	37	104	9	51	99
Peak Hour Factor	0.8620	0.8620	0.8620	0.8620	0.8620	0.8620
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	11	30	3	15	29
Total Analysis Volume [veh/h]	12	43	121	10	59	115
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.05	0.00	0.00	0.04	0.00
d_M, Delay for Movement [s/veh]	11.19	9.20	0.00	0.00	7.58	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.21	0.21	0.00	0.00	0.11	0.11
95th-Percentile Queue Length [ft/ln]	5.30	5.30	0.00	0.00	2.72	2.72
d_A, Approach Delay [s/veh]	9.63		0.00		2.57	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	2.71					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 6: I-10 SB Ramps (NS) at County Line Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	565.4
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	2.091

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	471	2	26	0	54	6	263	42	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.04	1.04	1.04	1.00	1.04	1.04	1.04	1.04	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	28	0	61	18	0	51	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	490	2	55	0	117	24	274	95	0
Peak Hour Factor	0.8290	0.8290	0.8290	0.9640	0.9640	0.9640	0.8290	0.9640	0.9640	0.9640	0.9640	0.8290
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	127	1	14	0	30	6	71	25	0
Total Analysis Volume [veh/h]	0	0	0	508	2	57	0	121	25	284	99	0
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane		No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance		No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	2.09	0.01	0.06	0.00	0.00	0.00	0.20	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	565.41	564.95	554.36	0.00	0.00	0.00	8.12	0.00	0.00
Movement LOS				F	F	F		A	A	A	A	
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	42.98	42.98	42.98	0.00	0.00	0.00	0.74	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	1074.56	1074.56	1074.56	0.00	0.00	0.00	18.40	0.00	0.00
d_A, Approach Delay [s/veh]	0.00			564.30			0.00			6.02		
Approach LOS	A			F			A			A		
d_I, Intersection Delay [s/veh]	294.04											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 7: I-10 NB Ramps (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	43.6
Analysis Method:	HCM 6th Edition	Level Of Service:	E
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.007

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	6	1	263	0	0	0	24	498	0	0	299	278
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	18	0	0	0	0	0	28	33	0	0	33	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	24	1	274	0	0	0	53	551	0	0	344	289
Peak Hour Factor	0.9920	0.9920	0.9920	0.8250	0.8250	0.8250	0.9920	0.9920	0.8250	0.8250	0.9920	0.9920
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	0	69	0	0	0	13	139	0	0	87	73
Total Analysis Volume [veh/h]	24	1	276	0	0	0	53	555	0	0	347	291
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No			
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No			
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.15	0.01	0.52	0.00	0.00	0.00	0.06	0.01	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	41.83	43.57	26.72	0.00	0.00	0.00	9.03	0.00	0.00	0.00	0.00	0.00
Movement LOS	E	E	D				A	A			A	A
95th-Percentile Queue Length [veh/ln]	4.86	4.86	4.86	0.00	0.00	0.00	0.18	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	121.48	121.48	121.48	0.00	0.00	0.00	4.45	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	27.98			0.00			0.79			0.00		
Approach LOS	D			A			A			A		
d_I, Intersection Delay [s/veh]	5.75											
Intersection LOS	E											

Intersection Level Of Service Report
Intersection 8: Calimesa Blvd (NS) at County Line Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	12.9
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.583

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	80.00	100.00	100.00	115.00	100.00	100.00	105.00	100.00	100.00
Speed [mph]	35.00			45.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	99	133	92	67	180	99	115	510	147	67	382	64
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	12	0	0	0	0	8	8	13	12	0	13	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	115	138	96	70	187	111	128	543	165	70	410	67
Peak Hour Factor	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	29	35	25	18	48	28	33	139	42	18	105	17
Total Analysis Volume [veh/h]	117	141	98	72	191	113	131	555	169	72	419	68
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	2	0	0	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	0	0	7	0	0	7	0	0	7	0
Maximum Green [s]	0	120	0	0	120	0	0	120	0	0	120	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	34	0	0	34	0	0	26	0	0	26	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	L	C	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	15	15	15	15	15	15	37	37	37	37	37
g / C, Green / Cycle	0.26	0.26	0.26	0.26	0.26	0.26	0.61	0.61	0.61	0.61	0.61
(v / s)_i Volume / Saturation Flow Rate	0.10	0.07	0.07	0.06	0.10	0.07	0.14	0.40	0.10	0.13	0.13
s, saturation flow rate [veh/h]	1192	1870	1624	1141	1870	1589	909	1796	729	1870	1780
c, Capacity [veh/h]	289	480	417	314	480	408	587	1096	344	1141	1086
d1, Uniform Delay [s]	24.50	17.76	17.84	22.07	18.47	17.85	8.30	7.64	15.95	5.26	5.27
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.91	0.28	0.35	0.37	0.53	0.36	0.88	3.14	1.38	0.44	0.47
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.40	0.26	0.27	0.23	0.40	0.28	0.22	0.66	0.21	0.22	0.22
d, Delay for Lane Group [s/veh]	25.42	18.05	18.19	22.44	19.00	18.21	9.18	10.78	17.33	5.70	5.73
Lane Group LOS	C	B	B	C	B	B	A	B	B	A	A
Critical Lane Group	No	No	No	No	Yes	No	No	Yes	No	No	No
50th-Percentile Queue Length [veh/ln]	1.53	1.28	1.18	0.82	1.95	1.12	0.91	5.04	0.80	1.10	1.07
50th-Percentile Queue Length [ft/ln]	38.20	32.00	29.61	20.57	48.82	27.93	22.64	125.99	20.08	27.60	26.71
95th-Percentile Queue Length [veh/ln]	2.75	2.30	2.13	1.48	3.52	2.01	1.63	8.72	1.45	1.99	1.92
95th-Percentile Queue Length [ft/ln]	68.76	57.60	53.30	37.03	87.88	50.28	40.75	218.04	36.15	49.67	48.08

Movement, Approach, & Intersection Results

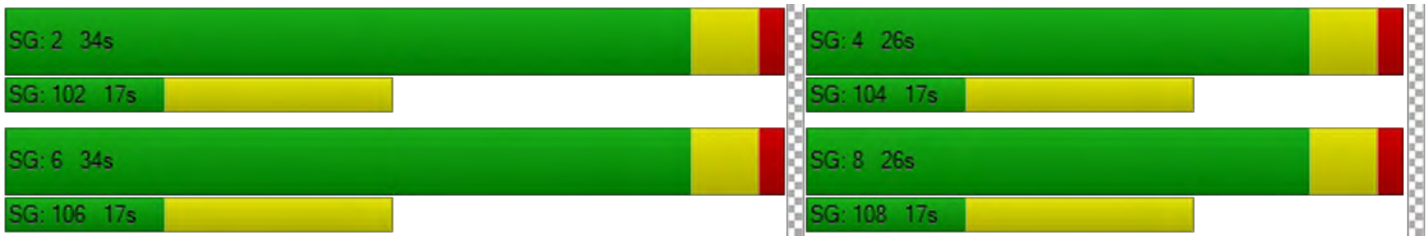
d_M, Delay for Movement [s/veh]	25.42	18.06	18.19	22.44	19.00	18.21	9.18	10.78	10.78	17.33	5.71	5.73
Movement LOS	C	B	B	C	B	B	A	B	B	B	A	A
d_A, Approach Delay [s/veh]	20.51			19.42			10.53			7.21		
Approach LOS	C			B			B			A		
d_I, Intersection Delay [s/veh]	12.88											
Intersection LOS	B											
Intersection V/C	0.583											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	20.01	20.01	20.01	20.01
l_p,int, Pedestrian LOS Score for Intersection	2.435	2.673	2.703	2.576
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1000	1000	733	733
d_b, Bicycle Delay [s]	7.50	7.50	12.03	12.03
l_b,int, Bicycle LOS Score for Intersection	1.853	2.180	2.970	2.021
Bicycle LOS	A	B	C	B

Sequence

Ring 1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



7th Street & County Line Road RV Fueling

Vistro File: C:\...\AME.vistro

Scenario 9 Existing Plus Ambient Growth Plus Project AM Peak Hour - With Improvements (TS)

Report File: C:\...\AMEAPI-TS.pdf

12/16/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
6	I-10 SB Ramps (NS) at County Line Rd (EW)	Signalized	HCM 6th Edition	SB Left	0.826	18.3	B
7	I-10 NB Ramps (NS) at County Line Ave (EW)	Signalized	HCM 6th Edition	NB Right	0.706	8.3	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 6: I-10 SB Ramps (NS) at County Line Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	18.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.826

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			25.00			25.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present					No			No			No	
Crosswalk		No			No			No			No	

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	213	1	16	0	178	7	409	111	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.04	1.04	1.04	1.00	1.04	1.04	1.04	1.04	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	47	0	102	30	0	90	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	222	1	64	0	287	37	425	205	0
Peak Hour Factor	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	67	0	19	0	87	11	128	62	0
Total Analysis Volume [veh/h]	0	0	0	268	1	77	0	346	45	513	247	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	0	0	0	6	0	0	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	0	0	0	7	0	0	7	0	0	7	0
Maximum Green [s]	0	0	0	0	120	0	0	120	0	0	120	0
Amber [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	0	0	0	20	0	0	40	0	0	40	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	10	0	0	10	0	0	10	0
Rest In Walk					No			No			No	
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall					No			No			No	
Maximum Recall					No			No			No	
Pedestrian Recall					No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group		C	C	L	C
C, Cycle Length [s]		60	60	60	60
L, Total Lost Time per Cycle [s]		4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]		14	38	38	38
g / C, Green / Cycle		0.23	0.64	0.64	0.64
(v / s)_i Volume / Saturation Flow Rate		0.20	0.21	0.52	0.13
s, saturation flow rate [veh/h]		1735	1833	993	1870
c, Capacity [veh/h]		401	1166	618	1189
d1, Uniform Delay [s]		22.22	5.07	15.40	4.59
k, delay calibration		0.11	0.50	0.50	0.50
I, Upstream Filtering Factor		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		5.61	0.78	12.23	0.40
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity		0.86	0.34	0.83	0.21
d, Delay for Lane Group [s/veh]		27.84	5.85	27.63	4.99
Lane Group LOS		C	A	C	A
Critical Lane Group		Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]		4.93	1.94	8.09	1.10
50th-Percentile Queue Length [ft/ln]		123.33	48.58	202.14	27.49
95th-Percentile Queue Length [veh/ln]		8.58	3.50	12.75	1.98
95th-Percentile Queue Length [ft/ln]		214.40	87.44	318.72	49.47

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	27.84	27.84	27.84	0.00	5.85	5.85	27.63	4.99	0.00
Movement LOS				C	C	C		A	A	C	A	
d_A, Approach Delay [s/veh]	0.00			27.84			5.85			20.27		
Approach LOS	A			C			A			C		
d_I, Intersection Delay [s/veh]	18.25											
Intersection LOS	B											
Intersection V/C	0.826											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	533	1200	1200
d_b, Bicycle Delay [s]	30.00	16.13	4.80	4.80
l_b,int, Bicycle LOS Score for Intersection	4.132	2.131	2.205	2.814
Bicycle LOS	D	B	B	C

Sequence

Ring 1	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 7: I-10 NB Ramps (NS) at County Line Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	8.3
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.706

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			35.00			35.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present		No						No			No	
Crosswalk		No			No			No			No	

Volumes

Name												
Base Volume Input [veh/h]	1	0	117	0	0	0	56	334	0	0	519	627
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	31	0	0	0	0	0	44	58	0	0	59	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	32	0	122	0	0	0	102	405	0	0	599	652
Peak Hour Factor	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	0	37	0	0	0	31	123	0	0	182	198
Total Analysis Volume [veh/h]	39	0	148	0	0	0	124	491	0	0	726	790
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	2	0	0	0	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	0	0	0	0	0	7	0	0	7	0
Maximum Green [s]	0	120	0	0	0	0	0	120	0	0	120	0
Amber [s]	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	49	0	0	0	0	0	11	0	0	11	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	0	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	10	0	0	10	0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No						No			No	
Maximum Recall		No						No			No	
Pedestrian Recall		No						No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C		L	C	C	R
C, Cycle Length [s]	60		60	60	60	60
L, Total Lost Time per Cycle [s]	4.00		4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00		2.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	9		43	43	43	43
g / C, Green / Cycle	0.15		0.72	0.72	0.72	0.72
(v / s)_i Volume / Saturation Flow Rate	0.12		0.17	0.26	0.39	0.50
s, saturation flow rate [veh/h]	1626		728	1870	1870	1589
c, Capacity [veh/h]	241		482	1344	1344	1143
d1, Uniform Delay [s]	24.67		9.14	3.23	3.89	4.73
k, delay calibration	0.11		0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.31		1.29	0.77	1.56	3.44
d3, Initial Queue Delay [s]	0.00		0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00		1.00	1.00	1.00	1.00
PF, progression factor	1.00		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.78		0.26	0.37	0.54	0.69
d, Delay for Lane Group [s/veh]	29.98		10.43	3.99	5.45	8.17
Lane Group LOS	C		B	A	A	A
Critical Lane Group	Yes		No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.75		0.96	1.33	2.44	3.55
50th-Percentile Queue Length [ft/ln]	68.87		23.95	33.22	61.00	88.78
95th-Percentile Queue Length [veh/ln]	4.96		1.72	2.39	4.39	6.39
95th-Percentile Queue Length [ft/ln]	123.96		43.11	59.80	109.80	159.80

Movement, Approach, & Intersection Results

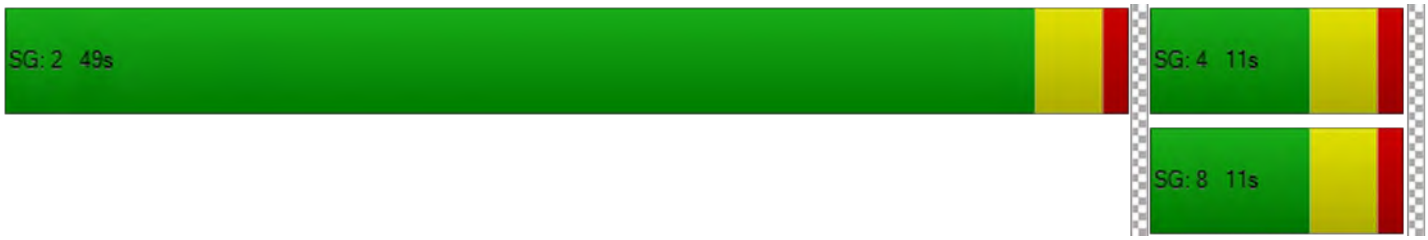
d_M, Delay for Movement [s/veh]	29.98	29.98	29.98	0.00	0.00	0.00	10.43	3.99	0.00	0.00	5.45	8.17
Movement LOS	C	C	C				B	A			A	A
d_A, Approach Delay [s/veh]	29.98			0.00			5.29			6.87		
Approach LOS	C			A			A			A		
d_I, Intersection Delay [s/veh]	8.31											
Intersection LOS	A											
Intersection V/C	0.706											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1500	0	233	233
d_b, Bicycle Delay [s]	1.88	30.00	23.41	23.41
l_b,int, Bicycle LOS Score for Intersection	1.868	4.132	2.574	4.061
Bicycle LOS	A	D	B	D

Sequence

Ring 1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



7th Street & County Line Road RV Fueling

Vistro File: C:\...\PME.vistro

Scenario 9 Existing Plus Ambient Growth Plus Project PM Peak Hour - With Improvements (TS)

Report File: C:\...\PMEAPI-TS.pdf

12/16/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
6	I-10 SB Ramps (NS) at County Line Ave (EW)	Signalized	HCM 6th Edition	SB Left	0.635	17.3	B
7	I-10 NB Ramps (NS) at County Line Rd (EW)	Signalized	HCM 6th Edition	NB Right	0.559	10.2	B

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 6: I-10 SB Ramps (NS) at County Line Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	17.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.635

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			25.00			25.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present					No			No			No	
Crosswalk		No			No			No			No	

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	471	2	26	0	54	6	263	42	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.04	1.04	1.04	1.00	1.04	1.04	1.04	1.04	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	28	0	61	18	0	51	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	490	2	55	0	117	24	274	95	0
Peak Hour Factor	0.8290	0.8290	0.8290	0.9640	0.9640	0.9640	0.8290	0.9640	0.9640	0.9640	0.9640	0.8290
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	127	1	14	0	30	6	71	25	0
Total Analysis Volume [veh/h]	0	0	0	508	2	57	0	121	25	284	99	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	0	0	0	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	0	0	0	7	0	0	7	0	0	7	0
Maximum Green [s]	0	0	0	0	120	0	0	120	0	0	120	0
Amber [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	0	0	0	49	0	0	11	0	0	11	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	10	0	0	10	0	0	10	0
Rest In Walk					No			No			No	
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall					No			No			No	
Maximum Recall					No			No			No	
Pedestrian Recall					No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group		C	C	L	C
C, Cycle Length [s]		60	60	60	60
L, Total Lost Time per Cycle [s]		4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]		22	30	30	30
g / C, Green / Cycle		0.36	0.50	0.50	0.50
(v / s)_i Volume / Saturation Flow Rate		0.32	0.08	0.23	0.05
s, saturation flow rate [veh/h]		1760	1815	1242	1870
c, Capacity [veh/h]		640	913	649	941
d1, Uniform Delay [s]		17.96	8.08	12.85	7.84
k, delay calibration		0.11	0.50	0.50	0.50
I, Upstream Filtering Factor		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		4.33	0.37	2.14	0.22
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity		0.89	0.16	0.44	0.11
d, Delay for Lane Group [s/veh]		22.29	8.45	15.00	8.07
Lane Group LOS		C	A	B	A
Critical Lane Group		Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]		7.25	0.99	2.93	0.65
50th-Percentile Queue Length [ft/ln]		181.32	24.69	73.29	16.16
95th-Percentile Queue Length [veh/ln]		11.67	1.78	5.28	1.16
95th-Percentile Queue Length [ft/ln]		291.74	44.44	131.91	29.09

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	22.29	22.29	22.29	0.00	8.45	8.45	15.00	8.07	0.00
Movement LOS				C	C	C		A	A	B	A	
d_A, Approach Delay [s/veh]	0.00			22.29			8.45			13.21		
Approach LOS	A			C			A			B		
d_I, Intersection Delay [s/veh]	17.27											
Intersection LOS	B											
Intersection V/C	0.635											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	1500	233	233
d_b, Bicycle Delay [s]	30.00	1.88	23.41	23.41
l_b,int, Bicycle LOS Score for Intersection	4.132	2.495	1.801	2.192
Bicycle LOS	D	B	A	B

Sequence

Ring 1	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 7: I-10 NB Ramps (NS) at County Line Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	10.2
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.559

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			35.00			35.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present		No						No			No	
Crosswalk		No			No			No			No	

Volumes

Name												
Base Volume Input [veh/h]	6	1	263	0	0	0	24	498	0	0	299	278
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	18	0	0	0	0	0	28	33	0	0	33	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	24	1	274	0	0	0	53	551	0	0	344	289
Peak Hour Factor	0.9920	0.9920	0.9920	0.8250	0.8250	0.8250	0.9920	0.9920	0.8250	0.8250	0.9920	0.9920
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	0	69	0	0	0	13	139	0	0	87	73
Total Analysis Volume [veh/h]	24	1	276	0	0	0	53	555	0	0	347	291
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	2	0	0	0	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	0	0	0	0	0	7	0	0	7	0
Maximum Green [s]	0	120	0	0	0	0	0	120	0	0	120	0
Amber [s]	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	49	0	0	0	0	0	11	0	0	11	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	0	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	10	0	0	10	0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No						No			No	
Maximum Recall		No						No			No	
Pedestrian Recall		No						No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C		L	C	C	R
C, Cycle Length [s]	60		60	60	60	60
L, Total Lost Time per Cycle [s]	4.00		4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00		2.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	14		39	39	39	39
g / C, Green / Cycle	0.23		0.64	0.64	0.64	0.64
(v / s)_i Volume / Saturation Flow Rate	0.19		0.05	0.30	0.19	0.18
s, saturation flow rate [veh/h]	1604		1034	1870	1870	1589
c, Capacity [veh/h]	364		660	1197	1197	1017
d1, Uniform Delay [s]	22.13		7.23	5.55	4.79	4.78
k, delay calibration	0.11		0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.78		0.24	1.29	0.61	0.71
d3, Initial Queue Delay [s]	0.00		0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00		1.00	1.00	1.00	1.00
PF, progression factor	1.00		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.83		0.08	0.46	0.29	0.29
d, Delay for Lane Group [s/veh]	26.91		7.47	6.84	5.40	5.48
Lane Group LOS	C		A	A	A	A
Critical Lane Group	Yes		No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	4.20		0.31	2.71	1.43	1.23
50th-Percentile Queue Length [ft/ln]	105.07		7.86	67.65	35.81	30.68
95th-Percentile Queue Length [veh/ln]	7.56		0.57	4.87	2.58	2.21
95th-Percentile Queue Length [ft/ln]	189.12		14.15	121.77	64.46	55.22

Movement, Approach, & Intersection Results

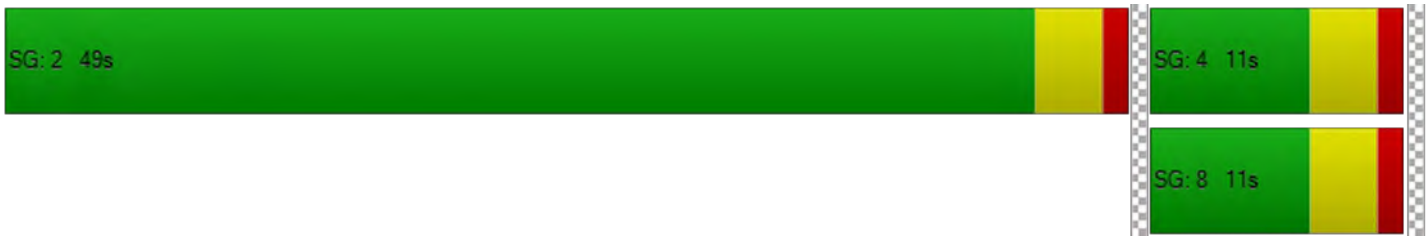
d_M, Delay for Movement [s/veh]	26.91	26.91	26.91	0.00	0.00	0.00	7.47	6.84	0.00	0.00	5.40	5.48
Movement LOS	C	C	C				A	A			A	A
d_A, Approach Delay [s/veh]	26.91			0.00			6.90			5.44		
Approach LOS	C			A			A			A		
d_I, Intersection Delay [s/veh]	10.19											
Intersection LOS	B											
Intersection V/C	0.559											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1500	0	233	233
d_b, Bicycle Delay [s]	1.88	30.00	23.41	23.41
l_b,int, Bicycle LOS Score for Intersection	2.056	4.132	2.563	2.612
Bicycle LOS	B	D	B	B

Sequence

Ring 1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



7th Street & County Line Road RV Fueling

Vistro File: C:\...\AME.vistro

Scenario 10 Existing Plus Ambient Growth Plus Project AM Peak Hour - With Improvements (RB)

Report File: C:\...\AMEAPI-RB.pdf

12/16/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
6	I-10 SB Ramps (NS) at County Line Rd (EW)	Roundabout	HCM 6th Edition	EB Thru		6.5	A
7	I-10 NB Ramps (NS) at County Line Ave (EW)	Roundabout	HCM 6th Edition	WB Right		9.1	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 6: I-10 SB Ramps (NS) at County Line Rd (EW)

Control Type:	Roundabout	Delay (sec / veh):	6.5
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			25.00			25.00	
Grade [%]		0.00			0.00			0.00			0.00	
Crosswalk		No			No			No			No	

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	213	1	16	0	178	7	409	111	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.04	1.04	1.04	1.00	1.04	1.04	1.04	1.04	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	47	0	102	30	0	90	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	222	1	64	0	287	37	425	205	0
Peak Hour Factor	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	67	0	19	0	87	11	128	62	0
Total Analysis Volume [veh/h]	0	0	0	268	1	77	0	346	45	513	247	0
Pedestrian Volume [ped/h]		0			0			0			0	

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			1			1			
Circulating Flow Rate [veh/h]	626			775			798			0			
Exiting Flow Rate [veh/h]	570			0			330			626			
Demand Flow Rate [veh/h]	0	0	0	222	1	64	0	287	37	425	205	0	
Adjusted Demand Flow Rate [veh/h]	0	0	0	268	1	77	0	346	45	513	247	0	

Lanes

Overwrite Calculated Critical Headway		No	No	No	No	No	No	No	No
User-Defined Critical Headway [s]		4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time		No	No	No	No	No	No	No	No
User-Defined Follow-Up Time [s]		3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)		1420.00	1420.00	1420.00	1420.00	1420.00	1420.00	1420.00	1420.00
B (coefficient)		0.00091	0.00091	0.00091	0.00091	0.00091	0.00091	0.00091	0.00091
HV Adjustment Factor		0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Entry Flow Rate [veh/h]		138	138	79	177	177	46	524	252
Capacity of Entry and Bypass Lanes [veh/h]		702	702	702	688	688	688	1420	1420
Pedestrian Impedance		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]		688	688	688	674	674	674	1393	1393
X, volume / capacity		0.20	0.20	0.11	0.26	0.26	0.07	0.37	0.18

Movement, Approach, & Intersection Results

Lane LOS		A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh]		0.72	0.72	0.38	1.02	1.02	0.21	1.72	0.64
95th-Percentile Queue Length [ft]		18.05	18.05	9.41	25.50	25.50	5.35	43.09	16.10
Approach Delay [s/veh]	0.00	7.25			8.19			5.31	
Approach LOS	A	A			A			A	
Intersection Delay [s/veh]	6.51								
Intersection LOS	A								

Intersection Level Of Service Report
Intersection 7: I-10 NB Ramps (NS) at County Line Ave (EW)

Control Type:	Roundabout	Delay (sec / veh):	9.1
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	1	0	117	0	0	0	56	334	0	0	519	627
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	31	0	0	0	0	0	44	58	0	0	59	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	32	0	122	0	0	0	102	405	0	0	599	652
Peak Hour Factor	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	10	0	37	0	0	0	31	123	0	0	182	198
Total Analysis Volume [veh/h]	39	0	148	0	0	0	124	491	0	0	726	790
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			1			1		
Circulating Flow Rate [veh/h]	627			780			0			166		
Exiting Flow Rate [veh/h]	0			932			780			652		
Demand Flow Rate [veh/h]	32	0	122	0	0	0	102	405	0	0	599	652
Adjusted Demand Flow Rate [veh/h]	39	0	148	0	0	0	124	491	0	0	726	790

Lanes

Overwrite Calculated Critical Headway	No	No		No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00		4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No		No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00		3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00		1420.00	1420.00	1420.00	1420.00
B (coefficient)	0.00091	0.00091		0.00091	0.00091	0.00091	0.00091
HV Adjustment Factor	0.98	0.98		0.98	0.98	0.98	0.98
Entry Flow Rate [veh/h]	40	151		295	333	741	806
Capacity of Entry and Bypass Lanes [veh/h]	803	803		1420	1420	1221	1221
Pedestrian Impedance	1.00	1.00		1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	787	787		1393	1393	1197	1197
X, volume / capacity	0.05	0.19		0.21	0.23	0.61	0.66

Movement, Approach, & Intersection Results

Lane LOS	A	A		A	A	B	B
95th-Percentile Queue Length [veh]	0.16	0.69		0.78	0.91	4.31	5.28
95th-Percentile Queue Length [ft]	3.91	17.23		19.54	22.77	107.78	131.98
Approach Delay [s/veh]	6.26		0.00	4.43		11.28	
Approach LOS	A		A	A		B	
Intersection Delay [s/veh]	9.06						
Intersection LOS	A						

7th Street & County Line Road RV Fueling

Vistro File: C:\...\PME.vistro

Scenario 10 Existing Plus Ambient Growth Plus Project PM Peak Hour - With Improvements (RB)

Report File: C:\...\PMEAPI-RB.pdf

12/16/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
6	I-10 SB Ramps (NS) at County Line Ave (EW)	Roundabout	HCM 6th Edition	EB Thru		5.4	A
7	I-10 NB Ramps (NS) at County Line Rd (EW)	Roundabout	HCM 6th Edition	NB Right		5.4	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 6: I-10 SB Ramps (NS) at County Line Ave (EW)

Control Type:	Roundabout	Delay (sec / veh):	5.4
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			25.00			25.00	
Grade [%]		0.00			0.00			0.00			0.00	
Crosswalk		No			No			No			No	

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	471	2	26	0	54	6	263	42	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.04	1.04	1.04	1.00	1.04	1.04	1.04	1.04	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	0	0	28	0	61	18	0	51	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	490	2	55	0	117	24	274	95	0
Peak Hour Factor	0.8290	0.8290	0.8290	0.9640	0.9640	0.9640	0.8290	0.9640	0.9640	0.9640	0.9640	0.8290
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	127	1	14	0	30	6	71	25	0
Total Analysis Volume [veh/h]	0	0	0	508	2	57	0	121	25	284	99	0
Pedestrian Volume [ped/h]		0			0			0			0	

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			1			1			
Circulating Flow Rate [veh/h]	642			391			810			0			
Exiting Flow Rate [veh/h]	317			0			159			642			
Demand Flow Rate [veh/h]	0	0	0	490	2	55	0	117	24	274	95	0	
Adjusted Demand Flow Rate [veh/h]	0	0	0	508	2	57	0	121	25	284	99	0	

Lanes

Overwrite Calculated Critical Headway		No	No	No	No	No	No	No	No
User-Defined Critical Headway [s]		4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time		No	No	No	No	No	No	No	No
User-Defined Follow-Up Time [s]		3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)		1420.00	1420.00	1420.00	1420.00	1420.00	1420.00	1420.00	1420.00
B (coefficient)		0.00091	0.00091	0.00091	0.00091	0.00091	0.00091	0.00091	0.00091
HV Adjustment Factor		0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Entry Flow Rate [veh/h]		261	261	59	62	62	26	290	101
Capacity of Entry and Bypass Lanes [veh/h]		996	996	996	680	680	680	1420	1420
Pedestrian Impedance		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]		976	976	976	667	667	667	1393	1393
X, volume / capacity		0.26	0.26	0.06	0.09	0.09	0.04	0.20	0.07

Movement, Approach, & Intersection Results

Lane LOS		A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh]		1.05	1.05	0.19	0.30	0.30	0.12	0.76	0.23
95th-Percentile Queue Length [ft]		26.23	26.23	4.65	7.46	7.46	2.92	19.12	5.73
Approach Delay [s/veh]	0.00	6.09			6.29			3.98	
Approach LOS	A	A			A			A	
Intersection Delay [s/veh]	5.38								
Intersection LOS	A								

Intersection Level Of Service Report
Intersection 7: I-10 NB Ramps (NS) at County Line Rd (EW)

Control Type:	Roundabout	Delay (sec / veh):	5.4
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	6	1	263	0	0	0	24	498	0	0	299	278
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	18	0	0	0	0	0	28	33	0	0	33	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	24	1	274	0	0	0	53	551	0	0	344	289
Peak Hour Factor	0.9920	0.9920	0.9920	0.8250	0.8250	0.8250	0.9920	0.9920	0.8250	0.8250	0.9920	0.9920
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	0	69	0	0	0	13	139	0	0	87	73
Total Analysis Volume [veh/h]	24	1	276	0	0	0	53	555	0	0	347	291
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			1			1		
Circulating Flow Rate [veh/h]	620			378			0			80		
Exiting Flow Rate [veh/h]	0			352			378			848		
Demand Flow Rate [veh/h]	24	1	274	0	0	0	53	551	0	0	344	289
Adjusted Demand Flow Rate [veh/h]	24	1	276	0	0	0	53	555	0	0	347	291

Lanes

Overwrite Calculated Critical Headway	No	No		No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00		4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No		No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00		3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00		1420.00	1420.00	1420.00	1420.00
B (coefficient)	0.00091	0.00091		0.00091	0.00091	0.00091	0.00091
HV Adjustment Factor	0.98	0.98		0.98	0.98	0.98	0.98
Entry Flow Rate [veh/h]	26	282		292	329	354	297
Capacity of Entry and Bypass Lanes [veh/h]	808	808		1420	1420	1321	1321
Pedestrian Impedance	1.00	1.00		1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	792	792		1393	1393	1295	1295
X, volume / capacity	0.03	0.35		0.21	0.23	0.27	0.22

Movement, Approach, & Intersection Results

Lane LOS	A	A		A	A	A	A
95th-Percentile Queue Length [veh]	0.10	1.57		0.77	0.90	1.09	0.86
95th-Percentile Queue Length [ft]	2.44	39.18		19.26	22.44	27.20	21.59
Approach Delay [s/veh]	8.38		0.00	4.41		4.94	
Approach LOS	A		A	A		A	
Intersection Delay [s/veh]	5.40						
Intersection LOS	A						

Existing Plus Ambient Plus Project Plus Cumulative – Phase 1

7th Street & County Line Road RV Fueling

Vistro File: C:\...\AME.vistro

Scenario 11 Existing Plus Ambient Growth Plus Project Plus Cumulative AM Peak Hour

Report File: C:\...\AMEAPC.pdf

6/9/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	County Line Ln (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	SB Left	0.035	9.1	A
2	Coffee Shop Access (NS) at County Line Ln (EW)	Two-way stop	HCM 6th Edition	WB Thru	0.000	0.0	A
3	RV Access (NS) at County Line Ln (EW)	Two-way stop	HCM 6th Edition	NB Left	0.024	8.8	A
4	Coffee Shop/RV Access (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	EB Thru	0.001	0.0	A
5	7th Pl (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	NB Left	0.037	15.5	C
6	I-10 SB Ramps (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	SB Left	5.672	2,291.8	F
7	I-10 NB Ramps (NS) at County Line Ave (EW)	Two-way stop	HCM 6th Edition	NB Left	0.635	145.7	F
8	Calimesa Blvd (NS) at County Line Ave (EW)	Signalized	HCM 6th Edition	NB Left	0.554	13.6	B

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: County Line Ln (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.1
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.035

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	2	0	4	0	20	0	0	12	6
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	25	0	7	8	0	0	0	0	12
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	27	0	11	8	21	0	0	12	18
Peak Hour Factor	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	8	0	3	2	6	0	0	4	5
Total Analysis Volume [veh/h]	0	0	0	32	0	13	9	25	0	0	14	21
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.03	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.00	9.46	8.42	9.09	9.59	8.61	7.30	0.00	0.00	7.26	0.00	0.00
Movement LOS	A	A	A	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.15	0.15	0.15	0.02	0.02	0.02	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	3.70	3.70	3.70	0.38	0.38	0.38	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.96			8.95			1.93			0.00		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	4.11											
Intersection LOS	A											

Intersection Level Of Service Report
Intersection 2: Coffee Shop Access (NS) at County Line Ln (EW)

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	0	6	0	0	6
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	20	0	0	32
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	26	0	0	38
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	7	0	0	10
Total Analysis Volume [veh/h]	0	0	27	0	0	40
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.84	8.43	0.00	0.00	7.27	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.64		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 3: RV Access (NS) at County Line Ln (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.8
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.024

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	0	6	0	0	6
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	22	0	20	0	0	10
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	22	0	26	0	0	16
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	0	7	0	0	4
Total Analysis Volume [veh/h]	23	0	27	0	0	17
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.82	8.52	0.00	0.00	7.27	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.07	0.07	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.83	1.83	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.82		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	3.03					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 4: Coffee Shop/RV Access (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	25	17	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	25	12	16
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	51	30	16
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	13	8	4
Total Analysis Volume [veh/h]	0	0	0	54	32	17
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	0.00
Movement LOS				A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 5: 7th Pl (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	15.5
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.037

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	2	165	19	6	113	15
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	9	0	66	8	0	79
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	11	172	86	14	118	95
Peak Hour Factor	0.7140	0.7140	0.7140	0.7140	0.7140	0.7140
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	4	60	30	5	41	33
Total Analysis Volume [veh/h]	15	241	120	20	165	133
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.26	0.00	0.00	0.11	0.00
d_M, Delay for Movement [s/veh]	15.55	10.69	0.00	0.00	7.82	0.00
Movement LOS	C	B	A	A	A	A
95th-Percentile Queue Length [veh/ln]	1.26	1.26	0.00	0.00	0.27	0.27
95th-Percentile Queue Length [ft/ln]	31.40	31.40	0.00	0.00	6.67	6.67
d_A, Approach Delay [s/veh]	10.98		0.00		4.33	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	5.91					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 6: I-10 SB Ramps (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	2,291.8
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	5.672

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			25.00			25.00	
Grade [%]		0.00			0.00			0.00			0.00	
Crosswalk		No			No			No			No	

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	213	1	16	0	178	7	409	111	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.04	1.04	1.04	1.00	1.04	1.04	1.04	1.04	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	12	0	38	0	45	21	29	41	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	234	1	55	0	230	28	454	156	0
Peak Hour Factor	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	71	0	17	0	69	8	137	47	0
Total Analysis Volume [veh/h]	0	0	0	282	1	66	0	277	34	548	188	0
Pedestrian Volume [ped/h]		0			0			0			0	

Intersection Settings

Priority Scheme	Stop			Stop			Free			Free		
Flared Lane				No								
Storage Area [veh]	0			0			0			0		
Two-Stage Gap Acceptance				No								
Number of Storage Spaces in Median	0			0			0			0		

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	5.67	0.02	0.08	0.00	0.00	0.00	0.44	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	2291.76	2279.42	2223.56	0.00	0.00	0.00	10.11	0.00	0.00
Movement LOS				F	F	F		A	A	B	A	
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	39.38	39.38	39.38	0.00	0.00	0.00	2.28	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	984.55	984.55	984.55	0.00	0.00	0.00	57.11	0.00	0.00
d_A, Approach Delay [s/veh]	0.00			2278.82			0.00			7.53		
Approach LOS	A			F			A			A		
d_I, Intersection Delay [s/veh]	573.68											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 7: I-10 NB Ramps (NS) at County Line Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	145.7
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.635

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	1	0	117	0	0	0	56	334	0	0	519	627
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	24	0	14	1	0	0	30	27	0	0	46	31
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	25	0	136	1	0	0	88	374	0	0	586	683
Peak Hour Factor	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	0	41	0	0	0	27	113	0	0	178	207
Total Analysis Volume [veh/h]	30	0	165	1	0	0	107	453	0	0	710	828
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No			
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No			
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.64	0.00	0.27	0.00	0.00	0.00	0.25	0.00	0.00	0.00	0.01	0.01
d_M, Delay for Movement [s/veh]	145.70	177.12	75.38	0.00	0.00	0.00	16.05	0.00	0.00	0.00	0.00	0.00
Movement LOS	F	F	F				C	A			A	A
95th-Percentile Queue Length [veh/ln]	7.40	7.40	7.40	0.00	0.00	0.00	0.96	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	184.93	184.93	184.93	0.00	0.00	0.00	24.11	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	86.20			0.00			3.07			0.00		
Approach LOS	F			A			A			A		
d_I, Intersection Delay [s/veh]	8.08											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 8: Calimesa Blvd (NS) at County Line Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	13.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.554

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	80.00	100.00	100.00	115.00	100.00	100.00	105.00	100.00	100.00
Speed [mph]	35.00			45.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	220	306	56	40	80	149	97	276	52	30	744	87
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	10	1	3	6	2	12	8	28	6	7	56	9
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	239	319	61	48	85	167	109	315	60	38	830	99
Peak Hour Factor	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	66	88	17	13	23	46	30	87	17	10	228	27
Total Analysis Volume [veh/h]	263	351	67	53	94	184	120	347	66	42	913	109
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	2	0	0	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	0	0	7	0	0	7	0	0	7	0
Maximum Green [s]	0	120	0	0	120	0	0	120	0	0	120	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	31	0	0	31	0	0	29	0	0	29	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	L	C	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	19	19	19	19	19	19	33	33	33	33	33
g / C, Green / Cycle	0.32	0.32	0.32	0.32	0.32	0.32	0.55	0.55	0.55	0.55	0.55
(v / s)_i Volume / Saturation Flow Rate	0.20	0.11	0.12	0.05	0.05	0.12	0.22	0.23	0.04	0.28	0.28
s, saturation flow rate [veh/h]	1302	1870	1767	968	1870	1589	552	1819	973	1870	1801
c, Capacity [veh/h]	440	600	567	306	600	510	312	992	499	1020	983
d1, Uniform Delay [s]	21.38	15.63	15.64	20.70	14.57	15.65	16.26	8.02	11.68	8.59	8.59
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.30	0.36	0.38	0.27	0.12	0.43	3.55	1.29	0.33	1.82	1.89
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.60	0.36	0.36	0.17	0.16	0.36	0.38	0.42	0.08	0.51	0.51
d, Delay for Lane Group [s/veh]	22.68	15.99	16.02	20.97	14.69	16.08	19.81	9.30	12.01	10.41	10.48
Lane Group LOS	C	B	B	C	B	B	B	A	B	B	B
Critical Lane Group	Yes	No	No	No	No	No	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	3.28	2.05	1.95	0.58	0.79	1.68	1.50	2.74	0.36	3.73	3.62
50th-Percentile Queue Length [ft/ln]	81.94	51.21	48.75	14.44	19.70	41.88	37.39	68.47	8.89	93.37	90.44
95th-Percentile Queue Length [veh/ln]	5.90	3.69	3.51	1.04	1.42	3.02	2.69	4.93	0.64	6.72	6.51
95th-Percentile Queue Length [ft/ln]	147.49	92.17	87.76	25.99	35.45	75.38	67.30	123.25	16.01	168.07	162.79

Movement, Approach, & Intersection Results

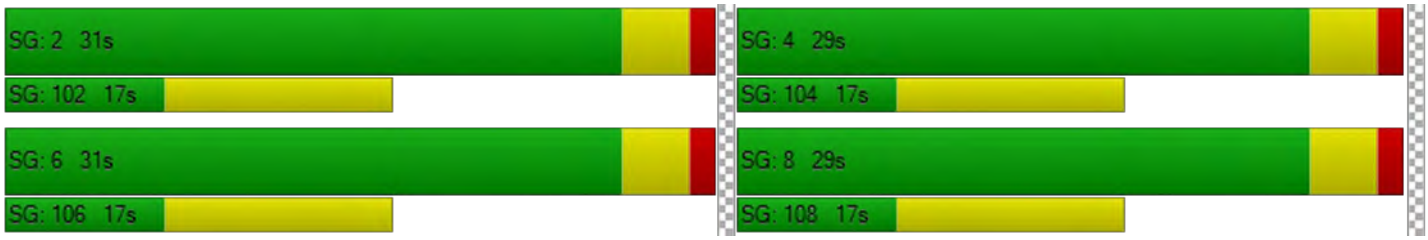
d_M, Delay for Movement [s/veh]	22.68	16.00	16.02	20.97	14.69	16.08	19.81	9.30	9.30	12.01	10.44	10.48
Movement LOS	C	B	B	C	B	B	B	A	A	B	B	B
d_A, Approach Delay [s/veh]	18.58			16.47			11.67			10.51		
Approach LOS	B			B			B			B		
d_I, Intersection Delay [s/veh]	13.61											
Intersection LOS	B											
Intersection V/C	0.554											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	20.01	20.01	20.01	20.01
l_p,int, Pedestrian LOS Score for Intersection	2.419	2.714	3.021	2.619
Crosswalk LOS	B	B	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	900	900	833	833
d_b, Bicycle Delay [s]	9.08	9.08	10.21	10.21
l_b,int, Bicycle LOS Score for Intersection	2.121	2.106	2.439	2.437
Bicycle LOS	B	B	B	B

Sequence

Ring 1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



7th Street & County Line Road RV Fueling

Vistro File: C:\...\PME.vistro

Scenario 11 Existing Plus Ambient Growth Plus Project Plus Cumulative PM Peak Hour

Report File: C:\...\PMEAPC.pdf

6/9/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	County Line Ln (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	SB Left	0.054	9.3	A
2	Coffee Shop Access (NS) at County Line Ln (EW)	Two-way stop	HCM 6th Edition	WB Thru	0.000	0.0	A
3	RV Access (NS) at County Line Ln (EW)	Two-way stop	HCM 6th Edition	NB Left	0.030	8.8	A
4	Coffee Shop/RV Access (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	EB Thru	0.001	0.0	A
5	7th Pl (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	NB Left	0.019	11.1	B
6	I-10 SB Ramps (NS) at County Line Ave (EW)	Two-way stop	HCM 6th Edition	SB Left	2.402	709.7	F
7	I-10 NB Ramps (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	NB Thru	0.007	57.9	F
8	Calimesa Blvd (NS) at County Line Ave (EW)	Signalized	HCM 6th Edition	NB Left	0.613	13.2	B

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: County Line Ln (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.3
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.054

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	4	0	0	1	22	0	0	14	6
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	31	0	7	7	0	0	0	0	11
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	35	0	7	8	23	0	0	15	17
Peak Hour Factor	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	12	0	2	3	8	0	0	5	6
Total Analysis Volume [veh/h]	0	0	0	48	0	10	11	31	0	0	20	23
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.05	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.08	9.57	8.45	9.28	9.76	8.72	7.32	0.00	0.00	7.28	0.00	0.00
Movement LOS	A	A	A	A	A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.20	0.20	0.20	0.02	0.02	0.02	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	5.04	5.04	5.04	0.39	0.39	0.39	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.03			9.18			1.92			0.00		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	4.29											
Intersection LOS	A											

Intersection Level Of Service Report
Intersection 2: Coffee Shop Access (NS) at County Line Ln (EW)

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.000

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	0	7	0	0	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	18	0	0	38
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	25	0	0	42
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	7	0	0	11
Total Analysis Volume [veh/h]	0	0	26	0	0	44
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.85	8.43	0.00	0.00	7.27	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.64		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 3: RV Access (NS) at County Line Ln (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.8
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.030

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	0	7	0	0	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	28	0	18	0	0	10
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	28	0	25	0	0	14
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	0	7	0	0	4
Total Analysis Volume [veh/h]	29	0	26	0	0	15
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.82	8.54	0.00	0.00	7.27	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.09	0.09	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	2.31	2.31	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.82		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	3.66					
Intersection LOS	A					

Intersection Level Of Service Report

Intersection 4: Coffee Shop/RV Access (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	25	21	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	31	11	20
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	57	33	20
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	15	9	5
Total Analysis Volume [veh/h]	0	0	0	60	35	21
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	0.00
Movement LOS				A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 5: 7th Pl (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	11.1
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.019

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	2	36	24	1	49	19
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	8	0	75	8	0	77
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	10	37	100	9	51	97
Peak Hour Factor	0.8620	0.8620	0.8620	0.8620	0.8620	0.8620
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	3	11	29	3	15	28
Total Analysis Volume [veh/h]	12	43	116	10	59	113
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.05	0.00	0.00	0.04	0.00
d_M, Delay for Movement [s/veh]	11.13	9.17	0.00	0.00	7.57	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.21	0.21	0.00	0.00	0.11	0.11
95th-Percentile Queue Length [ft/ln]	5.26	5.26	0.00	0.00	2.71	2.71
d_A, Approach Delay [s/veh]	9.60		0.00		2.60	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	2.76					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 6: I-10 SB Ramps (NS) at County Line Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	709.7
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	2.402

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			25.00			25.00	
Grade [%]		0.00			0.00			0.00			0.00	
Crosswalk		No			No			No			No	

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	471	2	26	0	54	6	263	42	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.04	1.04	1.04	1.00	1.04	1.04	1.04	1.04	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	36	0	37	0	53	22	23	40	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	526	2	64	0	109	28	297	84	0
Peak Hour Factor	0.8290	0.8290	0.8290	0.9640	0.9640	0.9640	0.8290	0.9640	0.9640	0.9640	0.9640	0.8290
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	136	1	17	0	28	7	77	22	0
Total Analysis Volume [veh/h]	0	0	0	546	2	66	0	113	29	308	87	0
Pedestrian Volume [ped/h]		0			0			0			0	

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane		No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance		No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	2.40	0.01	0.07	0.00	0.00	0.00	0.21	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	709.73	709.18	697.60	0.00	0.00	0.00	8.18	0.00	0.00
Movement LOS				F	F	F		A	A	A	A	
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	50.36	50.36	50.36	0.00	0.00	0.00	0.81	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	1258.93	1258.93	1258.93	0.00	0.00	0.00	20.27	0.00	0.00
d_A, Approach Delay [s/veh]	0.00			708.42			0.00			6.38		
Approach LOS	A			F			A			A		
d_I, Intersection Delay [s/veh]	380.10											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 7: I-10 NB Ramps (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	57.9
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.007

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	6	1	263	0	0	0	24	498	0	0	299	278
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	23	0	33	1	0	0	37	52	0	0	40	25
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	29	1	307	1	0	0	62	570	0	0	351	314
Peak Hour Factor	0.9920	0.9920	0.9920	0.8250	0.8250	0.8250	0.9920	0.9920	0.8250	0.8250	0.9920	0.9920
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	0	77	0	0	0	16	144	0	0	88	79
Total Analysis Volume [veh/h]	29	1	309	1	0	0	63	575	0	0	354	317
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No			
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No			
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.20	0.01	0.60	0.00	0.00	0.00	0.07	0.01	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	55.79	57.90	38.36	0.00	0.00	0.00	9.20	0.00	0.00	0.00	0.00	0.00
Movement LOS	F	F	E				A	A			A	A
95th-Percentile Queue Length [veh/ln]	7.18	7.18	7.18	0.00	0.00	0.00	0.22	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	179.39	179.39	179.39	0.00	0.00	0.00	5.51	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	39.91			0.00			0.91			0.00		
Approach LOS	E			A			A			A		
d_I, Intersection Delay [s/veh]	8.56											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 8: Calimesa Blvd (NS) at County Line Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	13.2
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.613

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	80.00	100.00	100.00	115.00	100.00	100.00	105.00	100.00	100.00
Speed [mph]	35.00			45.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	99	133	92	67	180	99	115	510	147	67	382	64
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	8	3	8	11	2	11	14	63	9	6	46	10
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	111	141	104	81	189	114	134	593	162	76	443	77
Peak Hour Factor	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	28	36	27	21	48	29	34	151	41	19	113	20
Total Analysis Volume [veh/h]	113	144	106	83	193	116	137	606	165	78	453	79
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	2	0	0	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	0	0	7	0	0	7	0	0	7	0
Maximum Green [s]	0	120	0	0	120	0	0	120	0	0	120	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	32	0	0	32	0	0	28	0	0	28	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	L	C	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	15	15	15	15	15	15	37	37	37	37	37
g / C, Green / Cycle	0.25	0.25	0.25	0.25	0.25	0.25	0.61	0.61	0.61	0.61	0.61
(v / s)_i Volume / Saturation Flow Rate	0.09	0.07	0.07	0.07	0.10	0.07	0.16	0.43	0.11	0.15	0.15
s, saturation flow rate [veh/h]	1190	1870	1617	1129	1870	1589	872	1802	698	1870	1775
c, Capacity [veh/h]	285	476	412	306	476	405	564	1103	317	1144	1086
d1, Uniform Delay [s]	24.60	17.92	17.99	22.59	18.58	17.98	8.58	7.90	17.39	5.29	5.29
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.89	0.31	0.38	0.47	0.56	0.39	1.02	3.69	1.84	0.49	0.52
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.40	0.27	0.29	0.27	0.41	0.29	0.24	0.70	0.25	0.24	0.24
d, Delay for Lane Group [s/veh]	25.49	18.22	18.38	23.06	19.14	18.36	9.60	11.59	19.23	5.78	5.81
Lane Group LOS	C	B	B	C	B	B	A	B	B	A	A
Critical Lane Group	No	No	No	No	Yes	No	No	Yes	No	No	No
50th-Percentile Queue Length [veh/ln]	1.48	1.35	1.25	0.97	1.98	1.15	0.98	5.63	0.94	1.22	1.17
50th-Percentile Queue Length [ft/ln]	36.94	33.80	31.16	24.24	49.60	28.85	24.53	140.68	23.43	30.44	29.33
95th-Percentile Queue Length [veh/ln]	2.66	2.43	2.24	1.75	3.57	2.08	1.77	9.52	1.69	2.19	2.11
95th-Percentile Queue Length [ft/ln]	66.49	60.83	56.08	43.63	89.28	51.94	44.16	237.93	42.18	54.79	52.80

Movement, Approach, & Intersection Results

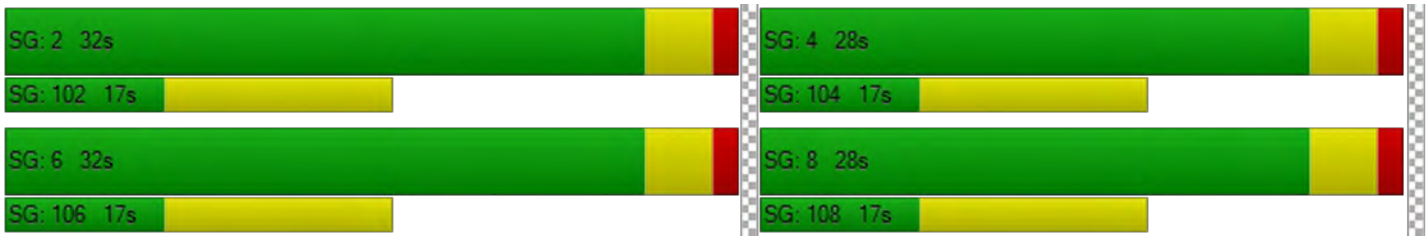
d_M, Delay for Movement [s/veh]	25.49	18.24	18.38	23.06	19.14	18.36	9.60	11.59	11.59	19.23	5.79	5.81
Movement LOS	C	B	B	C	B	B	A	B	B	B	A	A
d_A, Approach Delay [s/veh]	20.54			19.74			11.29			7.51		
Approach LOS	C			B			B			A		
d_I, Intersection Delay [s/veh]	13.21											
Intersection LOS	B											
Intersection V/C	0.613											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	20.01	20.01	20.01	20.01
l_p,int, Pedestrian LOS Score for Intersection	2.447	2.692	2.721	2.626
Crosswalk LOS	B	B	B	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	933	933	800	800
d_b, Bicycle Delay [s]	8.53	8.53	10.80	10.80
l_b,int, Bicycle LOS Score for Intersection	1.859	2.206	3.058	2.063
Bicycle LOS	A	B	C	B

Sequence

Ring 1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



7th Street & County Line Road RV Fueling

Vistro File: C:\...\AME.vistro

Scenario 12 Existing Plus Ambient Growth Plus Project Plus Cumulative AM Peak Hour - With Improvements (TS)

Report File: C:\...\AMEAPCI-TS.pdf

6/9/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
6	I-10 SB Ramps (NS) at County Line Rd (EW)	Signalized	HCM 6th Edition	SB Left	0.823	18.3	B
7	I-10 NB Ramps (NS) at County Line Ave (EW)	Signalized	HCM 6th Edition	NB Right	0.740	8.9	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 6: I-10 SB Ramps (NS) at County Line Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	18.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.823

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			25.00			25.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present					No			No			No	
Crosswalk		No			No			No			No	

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	213	1	16	0	178	7	409	111	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.04	1.04	1.04	1.00	1.04	1.04	1.04	1.04	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	12	0	38	0	45	21	29	41	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	234	1	55	0	230	28	454	156	0
Peak Hour Factor	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	71	0	17	0	69	8	137	47	0
Total Analysis Volume [veh/h]	0	0	0	282	1	66	0	277	34	548	188	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	0	0	0	6	0	0	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	0	0	0	7	0	0	7	0	0	7	0
Maximum Green [s]	0	0	0	0	120	0	0	120	0	0	120	0
Amber [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	0	0	0	49	0	0	11	0	0	11	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	10	0	0	10	0	0	10	0
Rest In Walk					No			No			No	
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall					No			No			No	
Maximum Recall					No			No			No	
Pedestrian Recall					No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group		C	C	L	C
C, Cycle Length [s]		60	60	60	60
L, Total Lost Time per Cycle [s]		4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]		14	38	38	38
g / C, Green / Cycle		0.24	0.63	0.63	0.63
(v / s)_i Volume / Saturation Flow Rate		0.20	0.17	0.51	0.10
s, saturation flow rate [veh/h]		1742	1835	1068	1870
c, Capacity [veh/h]		419	1150	670	1172
d1, Uniform Delay [s]		21.71	5.05	14.51	4.66
k, delay calibration		0.11	0.50	0.50	0.50
I, Upstream Filtering Factor		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		4.40	0.58	10.66	0.29
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity		0.83	0.27	0.82	0.16
d, Delay for Lane Group [s/veh]		26.11	5.63	25.18	4.96
Lane Group LOS		C	A	C	A
Critical Lane Group		Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]		4.79	1.52	8.08	0.84
50th-Percentile Queue Length [ft/ln]		119.87	37.94	202.07	20.98
95th-Percentile Queue Length [veh/ln]		8.39	2.73	12.75	1.51
95th-Percentile Queue Length [ft/ln]		209.65	68.29	318.63	37.76

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	26.11	26.11	26.11	0.00	5.63	5.63	25.18	4.96	0.00
Movement LOS				C	C	C		A	A	C	A	
d_A, Approach Delay [s/veh]	0.00			26.11			5.63			20.01		
Approach LOS	A			C			A			C		
d_I, Intersection Delay [s/veh]	18.33											
Intersection LOS	B											
Intersection V/C	0.823											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	1500	233	233
d_b, Bicycle Delay [s]	30.00	1.88	23.41	23.41
l_b,int, Bicycle LOS Score for Intersection	4.132	2.135	2.073	2.774
Bicycle LOS	D	B	B	C

Sequence

Ring 1	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 7: I-10 NB Ramps (NS) at County Line Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	8.9
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.740

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			35.00			35.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present		No						No			No	
Crosswalk		No			No			No			No	

Volumes

Name												
Base Volume Input [veh/h]	1	0	117	0	0	0	56	334	0	0	519	627
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	24	0	14	1	0	0	30	27	0	0	46	31
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	25	0	136	1	0	0	88	374	0	0	586	683
Peak Hour Factor	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	0	41	0	0	0	27	113	0	0	178	207
Total Analysis Volume [veh/h]	30	0	165	1	0	0	107	453	0	0	710	828
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	2	0	0	0	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	0	0	0	0	0	7	0	0	7	0
Maximum Green [s]	0	120	0	0	0	0	0	120	0	0	120	0
Amber [s]	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	49	0	0	0	0	0	11	0	0	11	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	0	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	10	0	0	10	0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No						No			No	
Maximum Recall		No						No			No	
Pedestrian Recall		No						No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C		L	C	C	R
C, Cycle Length [s]	60		60	60	60	60
L, Total Lost Time per Cycle [s]	4.00		4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00		2.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	9		43	43	43	43
g / C, Green / Cycle	0.15		0.71	0.71	0.71	0.71
(v / s)_i Volume / Saturation Flow Rate	0.12		0.14	0.24	0.38	0.52
s, saturation flow rate [veh/h]	1616		739	1870	1870	1589
c, Capacity [veh/h]	250		485	1332	1332	1132
d1, Uniform Delay [s]	24.46		8.99	3.28	4.01	5.19
k, delay calibration	0.11		0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	5.26		1.05	0.69	1.53	4.18
d3, Initial Queue Delay [s]	0.00		0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00		1.00	1.00	1.00	1.00
PF, progression factor	1.00		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.78		0.22	0.34	0.53	0.73
d, Delay for Lane Group [s/veh]	29.71		10.04	3.98	5.54	9.37
Lane Group LOS	C		B	A	A	A
Critical Lane Group	Yes		No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	2.86		0.81	1.26	2.48	4.20
50th-Percentile Queue Length [ft/ln]	71.48		20.16	31.41	61.99	105.08
95th-Percentile Queue Length [veh/ln]	5.15		1.45	2.26	4.46	7.57
95th-Percentile Queue Length [ft/ln]	128.66		36.28	56.53	111.58	189.13

Movement, Approach, & Intersection Results

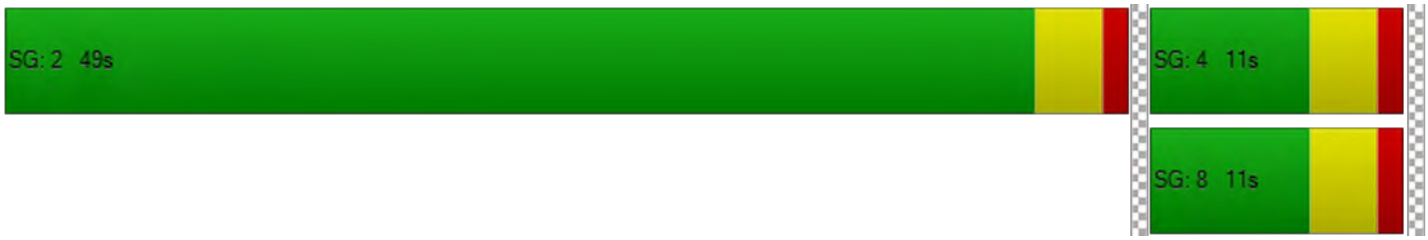
d_M, Delay for Movement [s/veh]	29.71	29.71	29.71	0.00	0.00	0.00	10.04	3.98	0.00	0.00	5.54	9.37
Movement LOS	C	C	C				B	A			A	A
d_A, Approach Delay [s/veh]	29.71			0.00			5.14			7.60		
Approach LOS	C			A			A			A		
d_I, Intersection Delay [s/veh]	8.88											
Intersection LOS	A											
Intersection V/C	0.740											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1500	0	233	233
d_b, Bicycle Delay [s]	1.88	30.00	23.41	23.41
l_b,int, Bicycle LOS Score for Intersection	1.881	4.132	2.484	4.097
Bicycle LOS	A	D	B	D

Sequence

Ring 1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



7th Street & County Line Road RV Fueling

Vistro File: C:\...\PME.vistro

Scenario 12 Existing Plus Ambient Growth Plus Project Plus Cumulative PM Peak Hour - With Improvements (TS)

Report File: C:\...\PMEAPCI-TS.pdf

6/9/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
6	I-10 SB Ramps (NS) at County Line Ave (EW)	Signalized	HCM 6th Edition	SB Left	0.688	17.9	B
7	I-10 NB Ramps (NS) at County Line Rd (EW)	Signalized	HCM 6th Edition	NB Right	0.598	11.0	B

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 6: I-10 SB Ramps (NS) at County Line Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	17.9
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.688

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			25.00			25.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present					No			No			No	
Crosswalk		No			No			No			No	

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	471	2	26	0	54	6	263	42	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.04	1.04	1.04	1.00	1.04	1.04	1.04	1.04	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	36	0	37	0	53	22	23	40	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	526	2	64	0	109	28	297	84	0
Peak Hour Factor	0.8290	0.8290	0.8290	0.9640	0.9640	0.9640	0.8290	0.9640	0.9640	0.9640	0.9640	0.8290
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	136	1	17	0	28	7	77	22	0
Total Analysis Volume [veh/h]	0	0	0	546	2	66	0	113	29	308	87	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	0	0	0	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	0	0	0	7	0	0	7	0	0	7	0
Maximum Green [s]	0	0	0	0	120	0	0	120	0	0	120	0
Amber [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	0	0	0	49	0	0	11	0	0	11	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	10	0	0	10	0	0	10	0
Rest In Walk					No			No			No	
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall					No			No			No	
Maximum Recall					No			No			No	
Pedestrian Recall					No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group		C	C	L	C
C, Cycle Length [s]		60	60	60	60
L, Total Lost Time per Cycle [s]		4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]		23	29	29	29
g / C, Green / Cycle		0.39	0.48	0.48	0.48
(v / s)_i Volume / Saturation Flow Rate		0.35	0.08	0.25	0.05
s, saturation flow rate [veh/h]		1758	1805	1246	1870
c, Capacity [veh/h]		687	859	615	890
d1, Uniform Delay [s]		17.15	8.96	14.50	8.66
k, delay calibration		0.11	0.50	0.50	0.50
I, Upstream Filtering Factor		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		4.34	0.41	2.90	0.22
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity		0.89	0.17	0.50	0.10
d, Delay for Lane Group [s/veh]		21.49	9.38	17.39	8.88
Lane Group LOS		C	A	B	A
Critical Lane Group		Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]		7.71	1.04	3.52	0.61
50th-Percentile Queue Length [ft/ln]		192.82	25.88	87.90	15.21
95th-Percentile Queue Length [veh/ln]		12.27	1.86	6.33	1.10
95th-Percentile Queue Length [ft/ln]		306.69	46.58	158.23	27.38

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	21.49	21.49	21.49	0.00	9.38	9.38	17.39	8.88	0.00
Movement LOS				C	C	C		A	A	B	A	
d_A, Approach Delay [s/veh]	0.00			21.49			9.38			15.52		
Approach LOS	A			C			A			B		
d_I, Intersection Delay [s/veh]	17.95											
Intersection LOS	B											
Intersection V/C	0.688											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	1500	233	233
d_b, Bicycle Delay [s]	30.00	1.88	23.41	23.41
l_b,int, Bicycle LOS Score for Intersection	4.132	2.573	1.794	2.211
Bicycle LOS	D	B	A	B

Sequence

Ring 1	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 7: I-10 NB Ramps (NS) at County Line Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	11.0
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.598

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			35.00			35.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present		No						No			No	
Crosswalk		No			No			No			No	

Volumes

Name												
Base Volume Input [veh/h]	6	1	263	0	0	0	24	498	0	0	299	278
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	23	0	33	1	0	0	37	52	0	0	40	25
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	29	1	307	1	0	0	62	570	0	0	351	314
Peak Hour Factor	0.9920	0.9920	0.9920	0.8250	0.8250	0.8250	0.9920	0.9920	0.8250	0.8250	0.9920	0.9920
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	0	77	0	0	0	16	144	0	0	88	79
Total Analysis Volume [veh/h]	29	1	309	1	0	0	63	575	0	0	354	317
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	2	0	0	0	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	0	0	0	0	0	7	0	0	7	0
Maximum Green [s]	0	120	0	0	0	0	0	120	0	0	120	0
Amber [s]	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	49	0	0	0	0	0	11	0	0	11	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	0	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	10	0	0	10	0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No						No			No	
Maximum Recall		No						No			No	
Pedestrian Recall		No						No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C		L	C	C	R
C, Cycle Length [s]	60		60	60	60	60
L, Total Lost Time per Cycle [s]	4.00		4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00		2.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	15		37	37	37	37
g / C, Green / Cycle	0.25		0.62	0.62	0.62	0.62
(v / s)_i Volume / Saturation Flow Rate	0.21		0.06	0.31	0.19	0.20
s, saturation flow rate [veh/h]	1605		1027	1870	1870	1589
c, Capacity [veh/h]	404		623	1151	1151	978
d1, Uniform Delay [s]	21.37		8.34	6.42	5.49	5.56
k, delay calibration	0.11		0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.73		0.33	1.55	0.69	0.88
d3, Initial Queue Delay [s]	0.00		0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00		1.00	1.00	1.00	1.00
PF, progression factor	1.00		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.84		0.10	0.50	0.31	0.32
d, Delay for Lane Group [s/veh]	26.10		8.67	7.98	6.18	6.44
Lane Group LOS	C		A	A	A	A
Critical Lane Group	Yes		No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	4.67		0.42	3.23	1.66	1.54
50th-Percentile Queue Length [ft/ln]	116.70		10.45	80.74	41.48	38.57
95th-Percentile Queue Length [veh/ln]	8.21		0.75	5.81	2.99	2.78
95th-Percentile Queue Length [ft/ln]	205.28		18.82	145.33	74.67	69.42

Movement, Approach, & Intersection Results

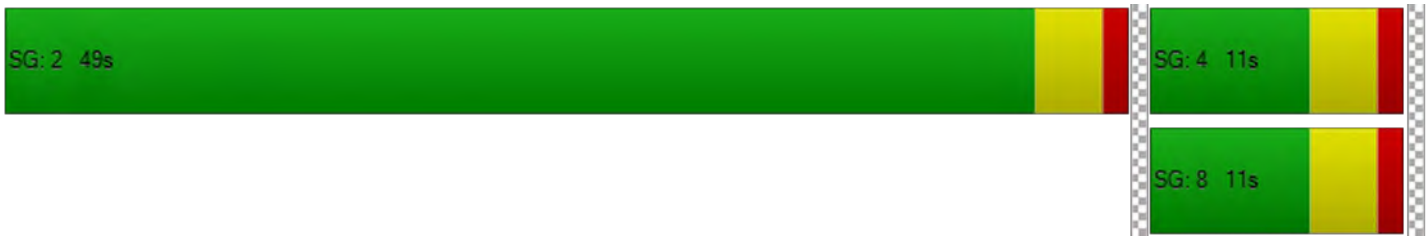
d_M, Delay for Movement [s/veh]	26.10	26.10	26.10	0.00	0.00	0.00	8.67	7.98	0.00	0.00	6.18	6.44
Movement LOS	C	C	C				A	A			A	A
d_A, Approach Delay [s/veh]	26.10			0.00			8.04			6.30		
Approach LOS	C			A			A			A		
d_I, Intersection Delay [s/veh]	11.05											
Intersection LOS	B											
Intersection V/C	0.598											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1500	0	233	233
d_b, Bicycle Delay [s]	1.88	30.00	23.41	23.41
l_b,int, Bicycle LOS Score for Intersection	2.119	4.132	2.612	2.667
Bicycle LOS	B	D	B	B

Sequence

Ring 1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



7th Street & County Line Road RV Fueling

Vistro File: C:\...\AME.vistro

Scenario 13 Existing Plus Ambient Growth Plus Project Plus Cumulative AM Peak Hour - With Improvements (RB)

Report File: C:\...\AMEAPCI-RB.pdf

6/9/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
6	I-10 SB Ramps (NS) at County Line Rd (EW)	Roundabout	HCM 6th Edition	EB Thru		6.5	A
7	I-10 NB Ramps (NS) at County Line Ave (EW)	Roundabout	HCM 6th Edition	WB Right		9.0	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 6: I-10 SB Ramps (NS) at County Line Rd (EW)

Control Type:	Roundabout	Delay (sec / veh):	6.5
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			25.00			25.00	
Grade [%]		0.00			0.00			0.00			0.00	
Crosswalk		No			No			No			No	

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	213	1	16	0	178	7	409	111	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.04	1.04	1.04	1.00	1.04	1.04	1.04	1.04	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	12	0	38	0	45	21	29	41	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	234	1	55	0	230	28	454	156	0
Peak Hour Factor	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	71	0	17	0	69	8	137	47	0
Total Analysis Volume [veh/h]	0	0	0	282	1	66	0	277	34	548	188	0
Pedestrian Volume [ped/h]		0			0			0			0	

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			1			1			
Circulating Flow Rate [veh/h]	570			751			848			0			
Exiting Flow Rate [veh/h]	595			0			259			570			
Demand Flow Rate [veh/h]	0	0	0	234	1	55	0	230	28	454	156	0	
Adjusted Demand Flow Rate [veh/h]	0	0	0	282	1	66	0	277	34	548	188	0	

Lanes

Overwrite Calculated Critical Headway		No	No	No	No	No	No	No	No
User-Defined Critical Headway [s]		4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time		No	No	No	No	No	No	No	No
User-Defined Follow-Up Time [s]		3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)		1420.00	1420.00	1420.00	1420.00	1420.00	1420.00	1420.00	1420.00
B (coefficient)		0.00091	0.00091	0.00091	0.00091	0.00091	0.00091	0.00091	0.00091
HV Adjustment Factor		0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Entry Flow Rate [veh/h]		145	145	68	142	142	35	559	192
Capacity of Entry and Bypass Lanes [veh/h]		718	718	718	657	657	657	1420	1420
Pedestrian Impedance		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]		704	704	704	644	644	644	1393	1393
X, volume / capacity		0.20	0.20	0.09	0.22	0.22	0.05	0.39	0.14

Movement, Approach, & Intersection Results

Lane LOS		A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh]		0.75	0.75	0.31	0.81	0.81	0.17	1.91	0.47
95th-Percentile Queue Length [ft]		18.70	18.70	7.74	20.30	20.30	4.17	47.82	11.67
Approach Delay [s/veh]	0.00	7.17			7.97			5.57	
Approach LOS	A	A			A			A	
Intersection Delay [s/veh]	6.50								
Intersection LOS	A								

Intersection Level Of Service Report
Intersection 7: I-10 NB Ramps (NS) at County Line Ave (EW)

Control Type:	Roundabout	Delay (sec / veh):	9.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	1	0	117	0	0	0	56	334	0	0	519	627
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	24	0	14	1	0	0	30	27	0	0	46	31
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	25	0	136	1	0	0	88	374	0	0	586	683
Peak Hour Factor	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	8	0	41	0	0	0	27	113	0	0	178	207
Total Analysis Volume [veh/h]	30	0	165	1	0	0	107	453	0	0	710	828
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			1			1		
Circulating Flow Rate [veh/h]	571			755			0			140		
Exiting Flow Rate [veh/h]	0			954			755			630		
Demand Flow Rate [veh/h]	25	0	136	0	0	0	88	374	0	0	586	683
Adjusted Demand Flow Rate [veh/h]	30	0	165	0	0	0	107	453	0	0	710	828

Lanes

Overwrite Calculated Critical Headway	No	No		No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00		4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No		No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00		3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00		1420.00	1420.00	1420.00	1420.00
B (coefficient)	0.00091	0.00091		0.00091	0.00091	0.00091	0.00091
HV Adjustment Factor	0.98	0.98		0.98	0.98	0.98	0.98
Entry Flow Rate [veh/h]	31	169		269	303	725	845
Capacity of Entry and Bypass Lanes [veh/h]	845	845		1420	1420	1251	1251
Pedestrian Impedance	1.00	1.00		1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	828	828		1393	1393	1226	1226
X, volume / capacity	0.04	0.20		0.19	0.21	0.58	0.68

Movement, Approach, & Intersection Results

Lane LOS	A	A		A	A	A	B
95th-Percentile Queue Length [veh]	0.11	0.74		0.70	0.81	3.89	5.61
95th-Percentile Queue Length [ft]	2.82	18.50		17.40	20.20	97.34	140.24
Approach Delay [s/veh]	6.16		0.00	4.25		11.08	
Approach LOS	A		A	A		B	
Intersection Delay [s/veh]	8.99						
Intersection LOS	A						

7th Street & County Line Road RV Fueling

Vistro File: C:\...\PME.vistro

Scenario 13 Existing Plus Ambient Growth Plus Project Plus Cumulative PM Peak Hour - With Improvements (RB)

Report File: C:\...\PMEAPCI-RB.pdf

6/9/2020

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
6	I-10 SB Ramps (NS) at County Line Ave (EW)	Roundabout	HCM 6th Edition	EB Thru		5.6	A
7	I-10 NB Ramps (NS) at County Line Rd (EW)	Roundabout	HCM 6th Edition	NB Right		5.8	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 6: I-10 SB Ramps (NS) at County Line Ave (EW)

Control Type:	Roundabout	Delay (sec / veh):	5.6
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			25.00			25.00	
Grade [%]		0.00			0.00			0.00			0.00	
Crosswalk		No			No			No			No	

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	471	2	26	0	54	6	263	42	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.04	1.04	1.04	1.00	1.04	1.04	1.04	1.04	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	36	0	37	0	53	22	23	40	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	526	2	64	0	109	28	297	84	0
Peak Hour Factor	0.8290	0.8290	0.8290	0.9640	0.9640	0.9640	0.8290	0.9640	0.9640	0.9640	0.9640	0.8290
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	136	1	17	0	28	7	77	22	0
Total Analysis Volume [veh/h]	0	0	0	546	2	66	0	113	29	308	87	0
Pedestrian Volume [ped/h]		0			0			0			0	

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			1			1			
Circulating Flow Rate [veh/h]	672			403			873			0			
Exiting Flow Rate [veh/h]	346			0			156			672			
Demand Flow Rate [veh/h]	0	0	0	526	2	64	0	109	28	297	84	0	
Adjusted Demand Flow Rate [veh/h]	0	0	0	546	2	66	0	113	29	308	87	0	

Lanes

Overwrite Calculated Critical Headway		No	No	No	No	No	No	No	No
User-Defined Critical Headway [s]		4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time		No	No	No	No	No	No	No	No
User-Defined Follow-Up Time [s]		3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)		1420.00	1420.00	1420.00	1420.00	1420.00	1420.00	1420.00	1420.00
B (coefficient)		0.00091	0.00091	0.00091	0.00091	0.00091	0.00091	0.00091	0.00091
HV Adjustment Factor		0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Entry Flow Rate [veh/h]		280	280	68	58	58	30	315	89
Capacity of Entry and Bypass Lanes [veh/h]		985	985	985	642	642	642	1420	1420
Pedestrian Impedance		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]		965	965	965	629	629	629	1393	1393
X, volume / capacity		0.28	0.28	0.07	0.09	0.09	0.05	0.22	0.06

Movement, Approach, & Intersection Results

Lane LOS		A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh]		1.17	1.17	0.22	0.29	0.29	0.14	0.85	0.20
95th-Percentile Queue Length [ft]		29.35	29.35	5.50	7.37	7.37	3.62	21.17	4.99
Approach Delay [s/veh]	0.00	6.38			6.63			4.13	
Approach LOS	A	A			A			A	
Intersection Delay [s/veh]	5.64								
Intersection LOS	A								

Intersection Level Of Service Report
Intersection 7: I-10 NB Ramps (NS) at County Line Rd (EW)

Control Type:	Roundabout	Delay (sec / veh):	5.8
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	6	1	263	0	0	0	24	498	0	0	299	278
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	23	0	33	1	0	0	37	52	0	0	40	25
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	29	1	307	1	0	0	62	570	0	0	351	314
Peak Hour Factor	0.9920	0.9920	0.9920	0.8250	0.8250	0.8250	0.9920	0.9920	0.8250	0.8250	0.9920	0.9920
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	0	77	0	0	0	16	144	0	0	88	79
Total Analysis Volume [veh/h]	29	1	309	1	0	0	63	575	0	0	354	317
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			1			1		
Circulating Flow Rate [veh/h]	651			391			0			95		
Exiting Flow Rate [veh/h]	0			389			391			902		
Demand Flow Rate [veh/h]	29	1	307	0	0	0	62	570	0	0	351	314
Adjusted Demand Flow Rate [veh/h]	29	1	309	0	0	0	63	575	0	0	354	317

Lanes

Overwrite Calculated Critical Headway	No	No		No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00		4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No		No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00		3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00		1420.00	1420.00	1420.00	1420.00
B (coefficient)	0.00091	0.00091		0.00091	0.00091	0.00091	0.00091
HV Adjustment Factor	0.98	0.98		0.98	0.98	0.98	0.98
Entry Flow Rate [veh/h]	31	316		306	345	362	324
Capacity of Entry and Bypass Lanes [veh/h]	786	786		1420	1420	1303	1303
Pedestrian Impedance	1.00	1.00		1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	771	771		1393	1393	1278	1278
X, volume / capacity	0.04	0.40		0.22	0.24	0.28	0.25

Movement, Approach, & Intersection Results

Lane LOS	A	A		A	A	A	A
95th-Percentile Queue Length [veh]	0.12	1.95		0.82	0.96	1.14	0.98
95th-Percentile Queue Length [ft]	3.04	48.63		20.47	23.89	28.48	24.56
Approach Delay [s/veh]	9.36		0.00	4.51		5.14	
Approach LOS	A		A	A		A	
Intersection Delay [s/veh]	5.77						
Intersection LOS	A						

Existing Plus Ambient Plus Project Plus Cumulative – Phase 2

7th Street & County Line Road RV Fueling

Vistro File: C:\...\AME.vistro

Scenario 11 Existing Plus Ambient Growth Plus Project Plus Cumulative AM Peak Hour

Report File: C:\...\AMEAPC.pdf

12/16/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	County Line Ln (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	SB Left	0.203	10.0	A
2	Coffee Shop Access (NS) at County Line Ln (EW)	Two-way stop	HCM 6th Edition	NB Left	0.147	9.5	A
3	RV Access (NS) at County Line Ln (EW)	Two-way stop	HCM 6th Edition	NB Left	0.024	8.8	A
4	Coffee Shop/RV Access (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	EB Thru	0.002	0.0	A
5	7th Pl (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	NB Left	0.142	25.0	C
6	I-10 SB Ramps (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	SB Left	9.063	3,921.2	F
7	I-10 NB Ramps (NS) at County Line Ave (EW)	Two-way stop	HCM 6th Edition	NB Left	2.330	931.6	F
8	Calimesa Blvd (NS) at County Line Ave (EW)	Signalized	HCM 6th Edition	EB Left	0.581	14.1	B

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: County Line Ln (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	10.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.203

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	2	0	4	0	20	0	0	12	6
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	156	0	7	8	0	0	0	0	12
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	158	0	11	8	21	0	0	12	18
Peak Hour Factor	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460	0.8460
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	47	0	3	2	6	0	0	4	5
Total Analysis Volume [veh/h]	0	0	0	187	0	13	9	25	0	0	14	21
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.20	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.00	9.46	8.42	9.97	10.46	9.48	7.30	0.00	0.00	7.26	0.00	0.00
Movement LOS	A	A	A	A	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.82	0.82	0.82	0.02	0.02	0.02	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	20.40	20.40	20.40	0.38	0.38	0.38	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.96			9.94			1.93			0.00		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	7.63											
Intersection LOS	A											

Intersection Level Of Service Report
Intersection 2: Coffee Shop Access (NS) at County Line Ln (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.5
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.147

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	0	6	0	0	6
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	131	0	20	0	0	32
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	131	0	26	0	0	38
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	34	0	7	0	0	10
Total Analysis Volume [veh/h]	138	0	27	0	0	40
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.15	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.50	9.09	0.00	0.00	7.27	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.51	0.51	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	12.87	12.87	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.50		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	6.39					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 3: RV Access (NS) at County Line Ln (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.8
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.024

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	0	6	0	0	6
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	22	0	20	0	0	10
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	22	0	26	0	0	16
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	6	0	7	0	0	4
Total Analysis Volume [veh/h]	23	0	27	0	0	17
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.02	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.82	8.52	0.00	0.00	7.27	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.07	0.07	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	1.83	1.83	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.82		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	3.03					
Intersection LOS	A					

Intersection Level Of Service Report

Intersection 4: Coffee Shop/RV Access (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.002

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	25	17	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	156	12	152
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	182	30	152
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	48	8	40
Total Analysis Volume [veh/h]	0	0	0	192	32	160
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	0.00
Movement LOS				A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 5: 7th Pl (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	25.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.142

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	2	165	19	6	113	15
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	23	0	184	21	0	201
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	25	172	204	27	118	217
Peak Hour Factor	0.7140	0.7140	0.7140	0.7140	0.7140	0.7140
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	9	60	71	9	41	76
Total Analysis Volume [veh/h]	35	241	286	38	165	304
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.14	0.33	0.00	0.00	0.13	0.00
d_M, Delay for Movement [s/veh]	24.96	15.23	0.00	0.00	8.36	0.00
Movement LOS	C	C	A	A	A	A
95th-Percentile Queue Length [veh/ln]	2.50	2.50	0.00	0.00	0.32	0.32
95th-Percentile Queue Length [ft/ln]	62.56	62.56	0.00	0.00	7.90	7.90
d_A, Approach Delay [s/veh]	16.46		0.00		2.94	
Approach LOS	C		A		A	
d_I, Intersection Delay [s/veh]	5.54					
Intersection LOS	C					

Intersection Level Of Service Report
Intersection 6: I-10 SB Ramps (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	3,921.2
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	9.063

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			25.00			25.00	
Grade [%]		0.00			0.00			0.00			0.00	
Crosswalk		No			No			No			No	

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	213	1	16	0	178	7	409	111	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.04	1.04	1.04	1.00	1.04	1.04	1.04	1.04	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	12	0	79	0	137	47	29	122	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	234	1	96	0	322	54	454	237	0
Peak Hour Factor	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	71	0	29	0	97	16	137	71	0
Total Analysis Volume [veh/h]	0	0	0	282	1	116	0	388	65	548	286	0
Pedestrian Volume [ped/h]		0			0			0			0	

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane		No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance		No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	9.06	0.03	0.15	0.00	0.00	0.00	0.49	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	3921.15	3899.33	3810.24	0.00	0.00	0.00	11.39	0.00	0.00
Movement LOS				F	F	F		A	A	B	A	
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	47.62	47.62	47.62	0.00	0.00	0.00	2.82	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	1190.52	1190.52	1190.52	0.00	0.00	0.00	70.59	0.00	0.00
d_A, Approach Delay [s/veh]	0.00			3888.85			0.00			7.48		
Approach LOS	A			F			A			A		
d_I, Intersection Delay [s/veh]	924.02											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 7: I-10 NB Ramps (NS) at County Line Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	931.6
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	2.330

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	1	0	117	0	0	0	56	334	0	0	519	627
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	51	0	14	1	0	0	69	80	0	0	100	31
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	52	0	136	1	0	0	127	427	0	0	640	683
Peak Hour Factor	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	0	41	0	0	0	38	129	0	0	194	207
Total Analysis Volume [veh/h]	63	0	165	1	0	0	154	518	0	0	776	828
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No			
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No			
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	2.33	0.00	0.30	0.00	0.00	0.00	0.38	0.01	0.00	0.00	0.01	0.01
d_M, Delay for Movement [s/veh]	931.60	979.72	804.91	0.00	0.00	0.00	19.10	0.00	0.00	0.00	0.00	0.00
Movement LOS	F	F	F				C	A			A	A
95th-Percentile Queue Length [veh/ln]	21.60	21.60	21.60	0.00	0.00	0.00	1.73	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	540.11	540.11	540.11	0.00	0.00	0.00	43.20	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	839.91			0.00			4.38			0.00		
Approach LOS	F			A			A			A		
d_I, Intersection Delay [s/veh]	77.65											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 8: Calimesa Blvd (NS) at County Line Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	14.1
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.581

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	80.00	100.00	100.00	115.00	100.00	100.00	105.00	100.00	100.00
Speed [mph]	35.00			45.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	220	306	56	40	80	149	97	276	52	30	744	87
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	30	1	3	6	2	26	21	48	26	7	76	9
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	259	319	61	48	85	181	122	335	80	38	850	99
Peak Hour Factor	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090	0.9090
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	71	88	17	13	23	50	34	92	22	10	234	27
Total Analysis Volume [veh/h]	285	351	67	53	94	199	134	369	88	42	935	109
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	2	0	0	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	0	0	7	0	0	7	0	0	7	0
Maximum Green [s]	0	120	0	0	120	0	0	120	0	0	120	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	27	0	0	27	0	0	33	0	0	33	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	L	C	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	20	20	20	20	20	20	32	32	32	32	32
g / C, Green / Cycle	0.33	0.33	0.33	0.33	0.33	0.33	0.54	0.54	0.54	0.54	0.54
(v / s)_i Volume / Saturation Flow Rate	0.22	0.11	0.12	0.05	0.05	0.13	0.25	0.25	0.04	0.28	0.28
s, saturation flow rate [veh/h]	1302	1870	1767	968	1870	1589	540	1809	934	1870	1802
c, Capacity [veh/h]	453	617	583	317	617	524	298	971	454	1004	968
d1, Uniform Delay [s]	21.26	15.23	15.24	20.15	14.20	15.42	17.90	8.61	12.99	8.99	8.99
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	1.44	0.34	0.36	0.25	0.11	0.45	4.82	1.64	0.40	2.00	2.07
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.63	0.35	0.35	0.17	0.15	0.38	0.45	0.47	0.09	0.53	0.53
d, Delay for Lane Group [s/veh]	22.70	15.57	15.60	20.40	14.31	15.87	22.73	10.25	13.39	10.99	11.07
Lane Group LOS	C	B	B	C	B	B	C	B	B	B	B
Critical Lane Group	Yes	No	No	No	No	No	No	No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	3.57	2.01	1.91	0.57	0.77	1.80	1.84	3.26	0.39	3.98	3.86
50th-Percentile Queue Length [ft/ln]	89.30	50.28	47.83	14.16	19.32	44.94	45.88	81.48	9.64	99.46	96.44
95th-Percentile Queue Length [veh/ln]	6.43	3.62	3.44	1.02	1.39	3.24	3.30	5.87	0.69	7.16	6.94
95th-Percentile Queue Length [ft/ln]	160.74	90.51	86.10	25.50	34.77	80.89	82.58	146.67	17.34	179.04	173.58

Movement, Approach, & Intersection Results

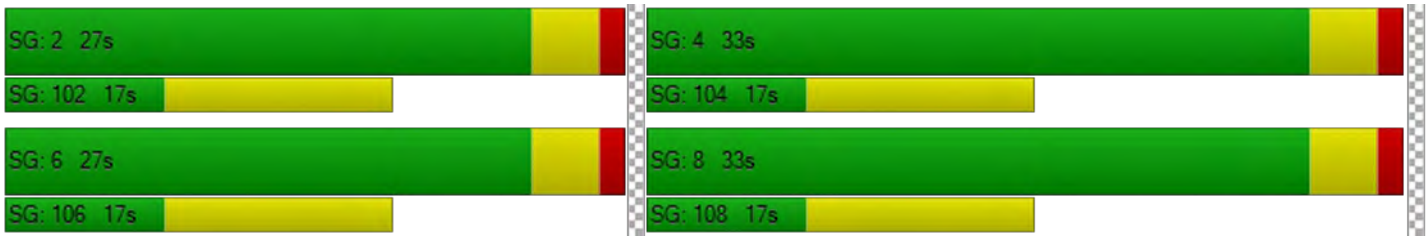
d_M, Delay for Movement [s/veh]	22.70	15.58	15.60	20.40	14.31	15.87	22.73	10.25	10.25	13.39	11.02	11.07
Movement LOS	C	B	B	C	B	B	C	B	B	B	B	B
d_A, Approach Delay [s/veh]	18.47			16.14			13.08			11.12		
Approach LOS	B			B			B			B		
d_I, Intersection Delay [s/veh]	14.08											
Intersection LOS	B											
Intersection V/C	0.581											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	20.01	20.01	20.01	20.01
l_p,int, Pedestrian LOS Score for Intersection	2.432	2.743	3.086	2.632
Crosswalk LOS	B	B	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	767	767	967	967
d_b, Bicycle Delay [s]	11.41	11.41	8.01	8.01
l_b,int, Bicycle LOS Score for Intersection	2.140	2.131	2.535	2.456
Bicycle LOS	B	B	B	B

Sequence

Ring 1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



7th Street & County Line Road RV Fueling

Vistro File: C:\...\PME.vistro

Scenario 11 Existing Plus Ambient Growth Plus Project Plus Cumulative PM Peak Hour

Report File: C:\...\PMEAPC.pdf

12/16/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
1	County Line Ln (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	SB Left	0.154	9.8	A
2	Coffee Shop Access (NS) at County Line Ln (EW)	Two-way stop	HCM 6th Edition	NB Left	0.074	9.2	A
3	RV Access (NS) at County Line Ln (EW)	Two-way stop	HCM 6th Edition	NB Left	0.030	8.8	A
4	Coffee Shop/RV Access (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	EB Thru	0.001	0.0	A
5	7th Pl (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	NB Left	0.039	12.6	B
6	I-10 SB Ramps (NS) at County Line Ave (EW)	Two-way stop	HCM 6th Edition	SB Left	2.835	921.2	F
7	I-10 NB Ramps (NS) at County Line Rd (EW)	Two-way stop	HCM 6th Edition	NB Thru	0.009	93.8	F
8	Calimesa Blvd (NS) at County Line Ave (EW)	Signalized	HCM 6th Edition	NB Left	0.628	13.7	B

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 1: County Line Ln (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.8
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.154

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00			25.00			25.00			25.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	4	0	0	1	22	0	0	14	6
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	97	0	7	7	0	0	0	0	11
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	101	0	7	8	23	0	0	15	17
Peak Hour Factor	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340	0.7340
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	34	0	2	3	8	0	0	5	6
Total Analysis Volume [veh/h]	0	0	0	138	0	10	11	31	0	0	20	23
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No	No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No	No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.15	0.00	0.01	0.01	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.08	9.57	8.45	9.79	10.28	9.23	7.32	0.00	0.00	7.28	0.00	0.00
Movement LOS	A	A	A	A	B	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.58	0.58	0.58	0.02	0.02	0.02	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	14.56	14.56	14.56	0.39	0.39	0.39	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.03			9.75			1.92			0.00		
Approach LOS	A			A			A			A		
d_I, Intersection Delay [s/veh]	6.54											
Intersection LOS	A											

Intersection Level Of Service Report
Intersection 2: Coffee Shop Access (NS) at County Line Ln (EW)

Control Type:	Two-way stop	Delay (sec / veh):	9.2
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.074

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	0	7	0	0	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	66	0	18	0	0	38
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	66	0	25	0	0	42
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	17	0	7	0	0	11
Total Analysis Volume [veh/h]	69	0	26	0	0	44
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.07	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	9.16	8.74	0.00	0.00	7.27	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.24	0.24	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	5.97	5.97	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	9.16		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	4.55					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 3: RV Access (NS) at County Line Ln (EW)

Control Type:	Two-way stop	Delay (sec / veh):	8.8
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.030

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	0	7	0	0	4
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	28	0	18	0	0	10
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	28	0	25	0	0	14
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	7	0	7	0	0	4
Total Analysis Volume [veh/h]	29	0	26	0	0	15
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.03	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	8.82	8.54	0.00	0.00	7.27	0.00
Movement LOS	A	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.09	0.09	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	2.31	2.31	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	8.82		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	3.66					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 4: Coffee Shop/RV Access (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	0.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.001

Intersection Setup

Name						
Approach	Southbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Left	Thru	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	0	0	0	25	21	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	97	11	87
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	123	33	87
Peak Hour Factor	0.9500	0.9500	0.9500	0.9500	0.9500	0.9500
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	32	9	23
Total Analysis Volume [veh/h]	0	0	0	129	35	92
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane			
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance			
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	0.00	0.00	0.00
Movement LOS				A	A	A
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	0.00		0.00		0.00	
Approach LOS	A		A		A	
d_I, Intersection Delay [s/veh]	0.00					
Intersection LOS	A					

Intersection Level Of Service Report
Intersection 5: 7th Pl (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	12.6
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.039

Intersection Setup

Name						
Approach	Northbound		Eastbound		Westbound	
Lane Configuration						
Turning Movement	Left	Right	Thru	Right	Left	Thru
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	25.00		25.00		25.00	
Grade [%]	0.00		0.00		0.00	
Crosswalk	No		No		No	

Volumes

Name						
Base Volume Input [veh/h]	2	36	24	1	49	19
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0
Site-Generated Trips [veh/h]	15	0	134	15	0	137
Diverted Trips [veh/h]	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0
Total Hourly Volume [veh/h]	17	37	159	16	51	157
Peak Hour Factor	0.8620	0.8620	0.8620	0.8620	0.8620	0.8620
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	5	11	46	5	15	46
Total Analysis Volume [veh/h]	20	43	184	19	59	182
Pedestrian Volume [ped/h]	0		0		0	

Intersection Settings

Priority Scheme	Stop	Free	Free
Flared Lane	No		
Storage Area [veh]	0	0	0
Two-Stage Gap Acceptance	No		
Number of Storage Spaces in Median	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.04	0.05	0.00	0.00	0.04	0.00
d_M, Delay for Movement [s/veh]	12.58	9.75	0.00	0.00	7.75	0.00
Movement LOS	B	A	A	A	A	A
95th-Percentile Queue Length [veh/ln]	0.30	0.30	0.00	0.00	0.12	0.12
95th-Percentile Queue Length [ft/ln]	7.39	7.39	0.00	0.00	2.90	2.90
d_A, Approach Delay [s/veh]	10.65		0.00		1.90	
Approach LOS	B		A		A	
d_I, Intersection Delay [s/veh]	2.23					
Intersection LOS	B					

Intersection Level Of Service Report
Intersection 6: I-10 SB Ramps (NS) at County Line Ave (EW)

Control Type:	Two-way stop	Delay (sec / veh):	921.2
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	2.835

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			25.00			25.00	
Grade [%]		0.00			0.00			0.00			0.00	
Crosswalk		No			No			No			No	

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	471	2	26	0	54	6	263	42	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.04	1.04	1.04	1.00	1.04	1.04	1.04	1.04	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	36	0	57	0	99	35	23	80	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	526	2	84	0	155	41	297	124	0
Peak Hour Factor	0.8290	0.8290	0.8290	0.9640	0.9640	0.9640	0.8290	0.9640	0.9640	0.9640	0.9640	0.8290
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	136	1	22	0	40	11	77	32	0
Total Analysis Volume [veh/h]	0	0	0	546	2	87	0	161	43	308	129	0
Pedestrian Volume [ped/h]		0			0			0			0	

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane		No		
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance		No		
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.00	0.00	0.00	2.84	0.01	0.09	0.00	0.00	0.00	0.23	0.00	0.00
d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	921.18	920.32	906.39	0.00	0.00	0.00	8.40	0.00	0.00
Movement LOS				F	F	F		A	A	A	A	
95th-Percentile Queue Length [veh/ln]	0.00	0.00	0.00	56.58	56.58	56.58	0.00	0.00	0.00	0.87	0.00	0.00
95th-Percentile Queue Length [ft/ln]	0.00	0.00	0.00	1414.58	1414.58	1414.58	0.00	0.00	0.00	21.66	0.00	0.00
d_A, Approach Delay [s/veh]	0.00			919.15			0.00			5.92		
Approach LOS	A			F			A			A		
d_I, Intersection Delay [s/veh]	459.44											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 7: I-10 NB Ramps (NS) at County Line Rd (EW)

Control Type:	Two-way stop	Delay (sec / veh):	93.8
Analysis Method:	HCM 6th Edition	Level Of Service:	F
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.009

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	6	1	263	0	0	0	24	498	0	0	299	278
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	36	0	33	1	0	0	56	79	0	0	67	25
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	42	1	307	1	0	0	81	597	0	0	378	314
Peak Hour Factor	0.9920	0.9920	0.9920	0.8250	0.8250	0.8250	0.9920	0.9920	0.8250	0.8250	0.9920	0.9920
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	0	77	0	0	0	20	150	0	0	95	79
Total Analysis Volume [veh/h]	42	1	309	1	0	0	82	602	0	0	381	317
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Priority Scheme	Stop	Stop	Free	Free
Flared Lane	No			
Storage Area [veh]	0	0	0	0
Two-Stage Gap Acceptance	No			
Number of Storage Spaces in Median	0	0	0	0

Movement, Approach, & Intersection Results

V/C, Movement V/C Ratio	0.34	0.01	0.62	0.00	0.00	0.00	0.09	0.01	0.00	0.00	0.00	0.00
d_M, Delay for Movement [s/veh]	91.85	93.80	70.13	0.00	0.00	0.00	9.41	0.00	0.00	0.00	0.00	0.00
Movement LOS	F	F	F				A	A			A	A
95th-Percentile Queue Length [veh/ln]	10.71	10.71	10.71	0.00	0.00	0.00	0.30	0.00	0.00	0.00	0.00	0.00
95th-Percentile Queue Length [ft/ln]	267.69	267.69	267.69	0.00	0.00	0.00	7.51	0.00	0.00	0.00	0.00	0.00
d_A, Approach Delay [s/veh]	72.79			0.00			1.13			0.00		
Approach LOS	F			A			A			A		
d_I, Intersection Delay [s/veh]	15.22											
Intersection LOS	F											

Intersection Level Of Service Report
Intersection 8: Calimesa Blvd (NS) at County Line Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	13.7
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.628

Intersection Setup

Name											
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	1	0	0	1	0	0	1	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	80.00	100.00	100.00	115.00	100.00	100.00	105.00	100.00	100.00
Speed [mph]	35.00			45.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No			No			No			No		
Crosswalk	Yes			Yes			Yes			Yes		

Volumes

Name												
Base Volume Input [veh/h]	99	133	92	67	180	99	115	510	147	67	382	64
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	18	3	8	11	2	18	21	73	19	6	56	10
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	121	141	104	81	189	121	141	603	172	76	453	77
Peak Hour Factor	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790	0.9790
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	31	36	27	21	48	31	36	154	44	19	116	20
Total Analysis Volume [veh/h]	124	144	106	83	193	124	144	616	176	78	463	79
Presence of On-Street Parking	No		No	No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	2	0	0	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	0	0	7	0	0	7	0	0	7	0
Maximum Green [s]	0	120	0	0	120	0	0	120	0	0	120	0
Amber [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	33	0	0	33	0	0	27	0	0	27	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	10	0	0	10	0	0	10	0
Rest In Walk		No			No			No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No			No			No			No	
Maximum Recall		No			No			No			No	
Pedestrian Recall		No			No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	L	C	C	L	C	R	L	C	L	C	C
C, Cycle Length [s]	60	60	60	60	60	60	60	60	60	60	60
L, Total Lost Time per Cycle [s]	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	2.00	0.00	0.00	2.00	0.00	0.00	2.00	0.00	2.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	16	16	16	16	16	16	36	36	36	36	36
g / C, Green / Cycle	0.26	0.26	0.26	0.26	0.26	0.26	0.60	0.60	0.60	0.60	0.60
(v / s)_i Volume / Saturation Flow Rate	0.10	0.07	0.07	0.07	0.10	0.08	0.17	0.44	0.11	0.15	0.15
s, saturation flow rate [veh/h]	1190	1870	1616	1129	1870	1589	864	1799	685	1870	1777
c, Capacity [veh/h]	296	492	425	316	492	418	550	1086	293	1129	1072
d1, Uniform Delay [s]	24.31	17.52	17.59	22.09	18.17	17.67	9.09	8.42	18.93	5.53	5.54
k, delay calibration	0.11	0.11	0.11	0.11	0.11	0.11	0.50	0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	0.94	0.29	0.36	0.44	0.51	0.39	1.16	4.31	2.22	0.52	0.55
d3, Initial Queue Delay [s]	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PF, progression factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.42	0.27	0.28	0.26	0.39	0.30	0.26	0.73	0.27	0.25	0.25
d, Delay for Lane Group [s/veh]	25.26	17.81	17.95	22.53	18.68	18.07	10.24	12.73	21.14	6.05	6.09
Lane Group LOS	C	B	B	C	B	B	B	B	C	A	A
Critical Lane Group	Yes	No	No	No	No	No	No	Yes	No	No	No
50th-Percentile Queue Length [veh/ln]	1.62	1.33	1.22	0.95	1.95	1.22	1.08	6.22	1.00	1.29	1.25
50th-Percentile Queue Length [ft/ln]	40.38	33.30	30.62	23.85	48.75	30.52	27.07	155.42	25.04	32.32	31.15
95th-Percentile Queue Length [veh/ln]	2.91	2.40	2.20	1.72	3.51	2.20	1.95	10.31	1.80	2.33	2.24
95th-Percentile Queue Length [ft/ln]	72.69	59.94	55.12	42.93	87.76	54.93	48.72	257.64	45.08	58.18	56.07

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	25.26	17.82	17.95	22.53	18.68	18.07	10.24	12.73	12.73	21.14	6.07	6.09
Movement LOS	C	B	B	C	B	B	B	B	B	C	A	A
d_A, Approach Delay [s/veh]	20.32			19.29			12.34			7.97		
Approach LOS	C			B			B			A		
d_I, Intersection Delay [s/veh]	13.65											
Intersection LOS	B											
Intersection V/C	0.628											

Other Modes

g_Walk,mi, Effective Walk Time [s]	11.0	11.0	11.0	11.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	20.01	20.01	20.01	20.01
l_p,int, Pedestrian LOS Score for Intersection	2.453	2.706	2.753	2.632
Crosswalk LOS	B	B	C	B
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	967	967	767	767
d_b, Bicycle Delay [s]	8.01	8.01	11.41	11.41
l_b,int, Bicycle LOS Score for Intersection	1.868	2.220	3.104	2.071
Bicycle LOS	A	B	C	B

Sequence

Ring 1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

7th Street & County Line Road RV Fueling

Vistro File: C:\...\AME.vistro

Scenario 12 Existing Plus Ambient Growth Plus Project Plus Cumulative AM Peak Hour - With Improvements (TS)

Report File: C:\...\AMEAPCI-TS.pdf

12/16/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
6	I-10 SB Ramps (NS) at County Line Rd (EW)	Signalized	HCM 6th Edition	WB Left	0.942	28.0	C
7	I-10 NB Ramps (NS) at County Line Ave (EW)	Signalized	HCM 6th Edition	NB Right	0.761	10.3	B

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 6: I-10 SB Ramps (NS) at County Line Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	28.0
Analysis Method:	HCM 6th Edition	Level Of Service:	C
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.942

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			25.00			25.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present					No			No			No	
Crosswalk		No			No			No			No	

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	213	1	16	0	178	7	409	111	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.04	1.04	1.04	1.00	1.04	1.04	1.04	1.04	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	12	0	79	0	137	47	29	122	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	234	1	96	0	322	54	454	237	0
Peak Hour Factor	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	71	0	29	0	97	16	137	71	0
Total Analysis Volume [veh/h]	0	0	0	282	1	116	0	388	65	548	286	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	0	0	0	6	0	0	8	0	7	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	0	0	0	7	0	0	7	0	0	7	0
Maximum Green [s]	0	0	0	0	120	0	0	120	0	0	120	0
Amber [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	0	0	0	18	0	0	42	0	0	42	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	10	0	0	10	0	0	10	0
Rest In Walk					No			No			No	
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall					No			No			No	
Maximum Recall					No			No			No	
Pedestrian Recall					No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group		C	C	L	C
C, Cycle Length [s]		60	60	60	60
L, Total Lost Time per Cycle [s]		4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]		14	38	38	38
g / C, Green / Cycle		0.23	0.63	0.63	0.63
(v / s)_i Volume / Saturation Flow Rate		0.23	0.25	0.58	0.15
s, saturation flow rate [veh/h]		1721	1824	938	1870
c, Capacity [veh/h]		403	1154	569	1183
d1, Uniform Delay [s]		22.97	5.40	18.28	4.79
k, delay calibration		0.11	0.50	0.50	0.50
I, Upstream Filtering Factor		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		18.47	1.00	29.75	0.48
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity		0.99	0.39	0.96	0.24
d, Delay for Lane Group [s/veh]		41.44	6.40	48.03	5.28
Lane Group LOS		D	A	D	A
Critical Lane Group		Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]		7.21	2.41	12.39	1.33
50th-Percentile Queue Length [ft/ln]		180.36	60.29	309.76	33.25
95th-Percentile Queue Length [veh/ln]		11.62	4.34	18.16	2.39
95th-Percentile Queue Length [ft/ln]		290.48	108.53	454.08	59.84

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	41.44	41.44	41.44	0.00	6.40	6.40	48.03	5.28	0.00
Movement LOS				D	D	D		A	A	D	A	
d_A, Approach Delay [s/veh]	0.00			41.44			6.40			33.37		
Approach LOS	A			D			A			C		
d_I, Intersection Delay [s/veh]	28.04											
Intersection LOS	C											
Intersection V/C	0.942											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	467	1267	1267
d_b, Bicycle Delay [s]	30.00	17.63	4.03	4.03
l_b,int, Bicycle LOS Score for Intersection	4.132	2.218	2.307	2.936
Bicycle LOS	D	B	B	C

Sequence

Ring 1	-	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 7: I-10 NB Ramps (NS) at County Line Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	10.3
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.761

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Curb Present	No						No			No		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	1	0	117	0	0	0	56	334	0	0	519	627
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	51	0	14	1	0	0	69	80	0	0	100	31
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	52	0	136	1	0	0	127	427	0	0	640	683
Peak Hour Factor	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	0	41	0	0	0	38	129	0	0	194	207
Total Analysis Volume [veh/h]	63	0	165	1	0	0	154	518	0	0	776	828
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing	0			0			0			0		
v_di, Inbound Pedestrian Volume crossing m	0			0			0			0		
v_co, Outbound Pedestrian Volume crossing	0			0			0			0		
v_ci, Inbound Pedestrian Volume crossing mi	0			0			0			0		
v_ab, Corner Pedestrian Volume [ped/h]	0			0			0			0		
Bicycle Volume [bicycles/h]	0			0			0			0		

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	2	0	0	0	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	0	0	0	0	0	7	0	0	7	0
Maximum Green [s]	0	120	0	0	0	0	0	120	0	0	120	0
Amber [s]	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	49	0	0	0	0	0	11	0	0	11	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	0	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	10	0	0	10	0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No						No			No	
Maximum Recall		No						No			No	
Pedestrian Recall		No						No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C		L	C	C	R
C, Cycle Length [s]	60		60	60	60	60
L, Total Lost Time per Cycle [s]	4.00		4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00		2.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	10		42	42	42	42
g / C, Green / Cycle	0.17		0.69	0.69	0.69	0.69
(v / s)_i Volume / Saturation Flow Rate	0.14		0.22	0.28	0.41	0.52
s, saturation flow rate [veh/h]	1638		695	1870	1870	1589
c, Capacity [veh/h]	287		418	1293	1293	1099
d1, Uniform Delay [s]	23.77		12.60	3.96	4.89	5.97
k, delay calibration	0.11		0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.93		2.49	0.93	2.06	4.79
d3, Initial Queue Delay [s]	0.00		0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00		1.00	1.00	1.00	1.00
PF, progression factor	1.00		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.79		0.37	0.40	0.60	0.75
d, Delay for Lane Group [s/veh]	28.70		15.10	4.88	6.96	10.76
Lane Group LOS	C		B	A	A	B
Critical Lane Group	Yes		No	No	No	Yes
50th-Percentile Queue Length [veh/ln]	3.28		1.56	1.78	3.42	4.95
50th-Percentile Queue Length [ft/ln]	82.01		38.94	44.51	85.53	123.86
95th-Percentile Queue Length [veh/ln]	5.90		2.80	3.20	6.16	8.60
95th-Percentile Queue Length [ft/ln]	147.62		70.09	80.12	153.96	215.12

Movement, Approach, & Intersection Results

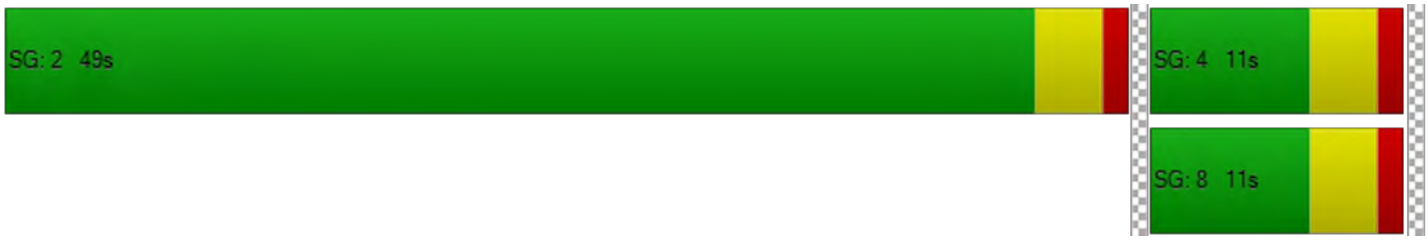
d_M, Delay for Movement [s/veh]	28.70	28.70	28.70	0.00	0.00	0.00	15.10	4.88	0.00	0.00	6.96	10.76
Movement LOS	C	C	C				B	A			A	B
d_A, Approach Delay [s/veh]	28.70			0.00			7.22			8.92		
Approach LOS	C			A			A			A		
d_I, Intersection Delay [s/veh]	10.27											
Intersection LOS	B											
Intersection V/C	0.761											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1500	0	233	233
d_b, Bicycle Delay [s]	1.88	30.00	23.41	23.41
l_b,int, Bicycle LOS Score for Intersection	1.936	4.132	2.668	4.206
Bicycle LOS	A	D	B	D

Sequence

Ring 1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



7th Street & County Line Road RV Fueling

Vistro File: C:\...\PME.vistro

Scenario 12 Existing Plus Ambient Growth Plus Project Plus Cumulative PM Peak Hour - With Improvements (TS)

Report File: C:\...\PMEAPCI-TS.pdf

12/16/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
6	I-10 SB Ramps (NS) at County Line Ave (EW)	Signalized	HCM 6th Edition	SB Left	0.720	18.2	B
7	I-10 NB Ramps (NS) at County Line Rd (EW)	Signalized	HCM 6th Edition	NB Right	0.623	11.4	B

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 6: I-10 SB Ramps (NS) at County Line Ave (EW)

Control Type:	Signalized	Delay (sec / veh):	18.2
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.720

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			25.00			25.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present					No			No			No	
Crosswalk		No			No			No			No	

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	471	2	26	0	54	6	263	42	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.04	1.04	1.04	1.00	1.04	1.04	1.04	1.04	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	36	0	57	0	99	35	23	80	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	526	2	84	0	155	41	297	124	0
Peak Hour Factor	0.8290	0.8290	0.8290	0.9640	0.9640	0.9640	0.8290	0.9640	0.9640	0.9640	0.9640	0.8290
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	136	1	22	0	40	11	77	32	0
Total Analysis Volume [veh/h]	0	0	0	546	2	87	0	161	43	308	129	0
Presence of On-Street Parking				No		No	No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	0	0	0	6	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	0	0	0	7	0	0	7	0	0	7	0
Maximum Green [s]	0	0	0	0	120	0	0	120	0	0	120	0
Amber [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	0	0	0	49	0	0	11	0	0	11	0
Vehicle Extension [s]	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	0	0	0	7	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	0	0	0	10	0	0	10	0	0	10	0
Rest In Walk					No			No			No	
I1, Start-Up Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall					No			No			No	
Maximum Recall					No			No			No	
Pedestrian Recall					No			No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group		C	C	L	C
C, Cycle Length [s]		60	60	60	60
L, Total Lost Time per Cycle [s]		4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]		0.00	0.00	2.00	0.00
l2, Clearance Lost Time [s]		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]		24	28	28	28
g / C, Green / Cycle		0.40	0.46	0.46	0.46
(v / s)_i Volume / Saturation Flow Rate		0.36	0.11	0.26	0.07
s, saturation flow rate [veh/h]		1752	1803	1178	1870
c, Capacity [veh/h]		708	835	543	866
d1, Uniform Delay [s]		16.75	9.79	16.70	9.32
k, delay calibration		0.11	0.50	0.50	0.50
I, Upstream Filtering Factor		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]		4.35	0.70	4.24	0.36
d3, Initial Queue Delay [s]		0.00	0.00	0.00	0.00
Rp, platoon ratio		1.00	1.00	1.00	1.00
PF, progression factor		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity		0.90	0.24	0.57	0.15
d, Delay for Lane Group [s/veh]		21.11	10.48	20.94	9.69
Lane Group LOS		C	B	C	A
Critical Lane Group		Yes	No	Yes	No
50th-Percentile Queue Length [veh/ln]		7.90	1.61	3.98	0.96
50th-Percentile Queue Length [ft/ln]		197.61	40.24	99.61	23.99
95th-Percentile Queue Length [veh/ln]		12.52	2.90	7.17	1.73
95th-Percentile Queue Length [ft/ln]		312.88	72.43	179.29	43.19

Movement, Approach, & Intersection Results

d_M, Delay for Movement [s/veh]	0.00	0.00	0.00	21.11	21.11	21.11	0.00	10.48	10.48	20.94	9.69	0.00
Movement LOS				C	C	C		B	B	C	A	
d_A, Approach Delay [s/veh]	0.00			21.11			10.48			17.62		
Approach LOS	A			C			B			B		
d_I, Intersection Delay [s/veh]	18.22											
Intersection LOS	B											
Intersection V/C	0.720											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	0	1500	233	233
d_b, Bicycle Delay [s]	30.00	1.88	23.41	23.41
l_b,int, Bicycle LOS Score for Intersection	4.132	2.607	1.896	2.281
Bicycle LOS	D	B	A	B

Sequence

Ring 1	-	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	6	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Intersection Level Of Service Report
Intersection 7: I-10 NB Ramps (NS) at County Line Rd (EW)

Control Type:	Signalized	Delay (sec / veh):	11.4
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes	Volume to Capacity (v/c):	0.623

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			35.00			35.00	
Grade [%]		0.00			0.00			0.00			0.00	
Curb Present		No						No			No	
Crosswalk		No			No			No			No	

Volumes

Name												
Base Volume Input [veh/h]	6	1	263	0	0	0	24	498	0	0	299	278
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	36	0	33	1	0	0	56	79	0	0	67	25
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Right-Turn on Red Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	42	1	307	1	0	0	81	597	0	0	378	314
Peak Hour Factor	0.9920	0.9920	0.9920	0.8250	0.8250	0.8250	0.9920	0.9920	0.8250	0.8250	0.9920	0.9920
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	0	77	0	0	0	20	150	0	0	95	79
Total Analysis Volume [veh/h]	42	1	309	1	0	0	82	602	0	0	381	317
Presence of On-Street Parking	No		No				No		No	No		No
On-Street Parking Maneuver Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
Local Bus Stopping Rate [/h]	0	0	0	0	0	0	0	0	0	0	0	0
v_do, Outbound Pedestrian Volume crossing		0			0			0			0	
v_di, Inbound Pedestrian Volume crossing m		0			0			0			0	
v_co, Outbound Pedestrian Volume crossing		0			0			0			0	
v_ci, Inbound Pedestrian Volume crossing mi		0			0			0			0	
v_ab, Corner Pedestrian Volume [ped/h]		0			0			0			0	
Bicycle Volume [bicycles/h]		0			0			0			0	

Intersection Settings

Located in CBD	No
Signal Coordination Group	-
Cycle Length [s]	60
Coordination Type	Time of Day Pattern Isolated
Actuation Type	Fully actuated
Offset [s]	0.0
Offset Reference	LeadGreen
Permissive Mode	SingleBand
Lost time [s]	8.00

Phasing & Timing

Control Type	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss	Permiss
Signal group	0	2	0	0	0	0	0	8	0	0	4	0
Auxiliary Signal Groups												
Lead / Lag	-	-	-	-	-	-	-	-	-	-	-	-
Minimum Green [s]	0	7	0	0	0	0	0	7	0	0	7	0
Maximum Green [s]	0	120	0	0	0	0	0	120	0	0	120	0
Amber [s]	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
All red [s]	0.0	1.0	0.0	0.0	0.0	0.0	0.0	1.0	0.0	0.0	1.0	0.0
Split [s]	0	49	0	0	0	0	0	11	0	0	11	0
Vehicle Extension [s]	0.0	3.0	0.0	0.0	0.0	0.0	0.0	3.0	0.0	0.0	3.0	0.0
Walk [s]	0	7	0	0	0	0	0	7	0	0	7	0
Pedestrian Clearance [s]	0	10	0	0	0	0	0	10	0	0	10	0
Rest In Walk		No						No			No	
I1, Start-Up Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
I2, Clearance Lost Time [s]	0.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	0.0	0.0	2.0	0.0
Minimum Recall		No						No			No	
Maximum Recall		No						No			No	
Pedestrian Recall		No						No			No	
Detector Location [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Detector Length [ft]	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I, Upstream Filtering Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Exclusive Pedestrian Phase

Pedestrian Signal Group	0
Pedestrian Walk [s]	0
Pedestrian Clearance [s]	0

Lane Group Calculations

Lane Group	C		L	C	C	R
C, Cycle Length [s]	60		60	60	60	60
L, Total Lost Time per Cycle [s]	4.00		4.00	4.00	4.00	4.00
l1_p, Permitted Start-Up Lost Time [s]	0.00		2.00	0.00	0.00	0.00
l2, Clearance Lost Time [s]	2.00		2.00	2.00	2.00	2.00
g_i, Effective Green Time [s]	16		37	37	37	37
g / C, Green / Cycle	0.26		0.61	0.61	0.61	0.61
(v / s)_i Volume / Saturation Flow Rate	0.22		0.08	0.32	0.20	0.20
s, saturation flow rate [veh/h]	1611		1002	1870	1870	1589
c, Capacity [veh/h]	417		592	1137	1137	966
d1, Uniform Delay [s]	21.14		9.16	6.82	5.81	5.78
k, delay calibration	0.11		0.50	0.50	0.50	0.50
I, Upstream Filtering Factor	1.00		1.00	1.00	1.00	1.00
d2, Incremental Delay [s]	4.70		0.49	1.77	0.80	0.91
d3, Initial Queue Delay [s]	0.00		0.00	0.00	0.00	0.00
Rp, platoon ratio	1.00		1.00	1.00	1.00	1.00
PF, progression factor	1.00		1.00	1.00	1.00	1.00

Lane Group Results

X, volume / capacity	0.84		0.14	0.53	0.34	0.33
d, Delay for Lane Group [s/veh]	25.84		9.65	8.59	6.60	6.68
Lane Group LOS	C		A	A	A	A
Critical Lane Group	Yes		No	Yes	No	No
50th-Percentile Queue Length [veh/ln]	4.82		0.59	3.59	1.89	1.60
50th-Percentile Queue Length [ft/ln]	120.62		14.74	89.82	47.17	39.92
95th-Percentile Queue Length [veh/ln]	8.43		1.06	6.47	3.40	2.87
95th-Percentile Queue Length [ft/ln]	210.68		26.53	161.67	84.91	71.86

Movement, Approach, & Intersection Results

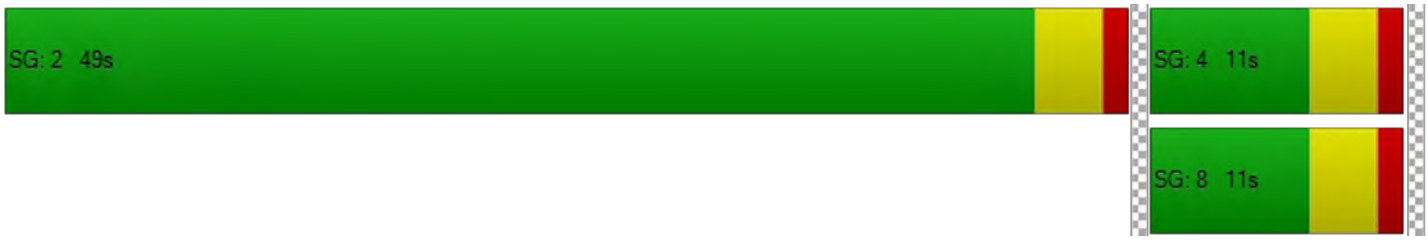
d_M, Delay for Movement [s/veh]	25.84	25.84	25.84	0.00	0.00	0.00	9.65	8.59	0.00	0.00	6.60	6.68
Movement LOS	C	C	C				A	A			A	A
d_A, Approach Delay [s/veh]	25.84			0.00			8.71			6.64		
Approach LOS	C			A			A			A		
d_I, Intersection Delay [s/veh]	11.36											
Intersection LOS	B											
Intersection V/C	0.623											

Other Modes

g_Walk,mi, Effective Walk Time [s]	0.0	0.0	0.0	0.0
M_corner, Corner Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
M_CW, Crosswalk Circulation Area [ft²/ped]	0.00	0.00	0.00	0.00
d_p, Pedestrian Delay [s]	0.00	0.00	0.00	0.00
l_p,int, Pedestrian LOS Score for Intersection	0.000	0.000	0.000	0.000
Crosswalk LOS	F	F	F	F
s_b, Saturation Flow Rate of the bicycle lane	2000	2000	2000	2000
c_b, Capacity of the bicycle lane [bicycles/h]	1500	0	233	233
d_b, Bicycle Delay [s]	1.88	30.00	23.41	23.41
l_b,int, Bicycle LOS Score for Intersection	2.140	4.132	2.688	2.711
Bicycle LOS	B	D	B	B

Sequence

Ring 1	2	4	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 2	-	8	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ring 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-



7th Street & County Line Road RV Fueling

Vistro File: C:\...\AME.vistro

Scenario 13 Existing Plus Ambient Growth Plus Project Plus Cumulative AM Peak Hour - With Improvements (RB)

Report File: C:\...\AMEAPCI-RB.pdf

12/16/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
6	I-10 SB Ramps (NS) at County Line Rd (EW)	Roundabout	HCM 6th Edition	EB Thru		7.1	A
7	I-10 NB Ramps (NS) at County Line Ave (EW)	Roundabout	HCM 6th Edition	WB Right		10.8	B

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 6: I-10 SB Ramps (NS) at County Line Rd (EW)

Control Type:	Roundabout	Delay (sec / veh):	7.1
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			25.00			25.00	
Grade [%]		0.00			0.00			0.00			0.00	
Crosswalk		No			No			No			No	

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	213	1	16	0	178	7	409	111	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.04	1.04	1.04	1.00	1.04	1.04	1.04	1.04	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	12	0	79	0	137	47	29	122	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	234	1	96	0	322	54	454	237	0
Peak Hour Factor	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290	0.8290
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	71	0	29	0	97	16	137	71	0
Total Analysis Volume [veh/h]	0	0	0	282	1	116	0	388	65	548	286	0
Pedestrian Volume [ped/h]		0			0			0			0	

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			1			1			
Circulating Flow Rate [veh/h]	683			851			848			0			
Exiting Flow Rate [veh/h]	626			0			410			683			
Demand Flow Rate [veh/h]	0	0	0	234	1	96	0	322	54	454	237	0	
Adjusted Demand Flow Rate [veh/h]	0	0	0	282	1	116	0	388	65	548	286	0	

Lanes

Overwrite Calculated Critical Headway		No	No	No	No	No	No	No	No
User-Defined Critical Headway [s]		4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time		No	No	No	No	No	No	No	No
User-Defined Follow-Up Time [s]		3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)		1420.00	1420.00	1420.00	1420.00	1420.00	1420.00	1420.00	1420.00
B (coefficient)		0.00091	0.00091	0.00091	0.00091	0.00091	0.00091	0.00091	0.00091
HV Adjustment Factor		0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Entry Flow Rate [veh/h]		145	145	119	198	198	67	559	292
Capacity of Entry and Bypass Lanes [veh/h]		655	655	655	657	657	657	1420	1420
Pedestrian Impedance		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]		642	642	642	644	644	644	1393	1393
X, volume / capacity		0.22	0.22	0.18	0.30	0.30	0.10	0.39	0.21

Movement, Approach, & Intersection Results

Lane LOS		A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh]		0.84	0.84	0.66	1.27	1.27	0.34	1.91	0.77
95th-Percentile Queue Length [ft]		20.93	20.93	16.38	31.64	31.64	8.38	47.82	19.28
Approach Delay [s/veh]	0.00	8.13			9.10			5.56	
Approach LOS	A	A			A			A	
Intersection Delay [s/veh]	7.12								
Intersection LOS	A								

Intersection Level Of Service Report
Intersection 7: I-10 NB Ramps (NS) at County Line Ave (EW)

Control Type:	Roundabout	Delay (sec / veh):	10.8
Analysis Method:	HCM 6th Edition	Level Of Service:	B
Analysis Period:	15 minutes		

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	1	0	117	0	0	0	56	334	0	0	519	627
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	51	0	14	1	0	0	69	80	0	0	100	31
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	52	0	136	1	0	0	127	427	0	0	640	683
Peak Hour Factor	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250	0.8250
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	16	0	41	0	0	0	38	129	0	0	194	207
Total Analysis Volume [veh/h]	63	0	165	1	0	0	154	518	0	0	776	828
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			1			1		
Circulating Flow Rate [veh/h]	685			856			0			221		
Exiting Flow Rate [veh/h]	0			1002			856			697		
Demand Flow Rate [veh/h]	52	0	136	0	0	0	127	427	0	0	640	683
Adjusted Demand Flow Rate [veh/h]	63	0	165	0	0	0	154	518	0	0	776	828

Lanes

Overwrite Calculated Critical Headway	No	No		No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00		4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No		No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00		3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00		1420.00	1420.00	1420.00	1420.00
B (coefficient)	0.00091	0.00091		0.00091	0.00091	0.00091	0.00091
HV Adjustment Factor	0.98	0.98		0.98	0.98	0.98	0.98
Entry Flow Rate [veh/h]	65	169		323	364	792	845
Capacity of Entry and Bypass Lanes [veh/h]	762	762		1420	1420	1161	1161
Pedestrian Impedance	1.00	1.00		1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	747	747		1393	1393	1139	1139
X, volume / capacity	0.08	0.22		0.23	0.26	0.68	0.73

Movement, Approach, & Intersection Results

Lane LOS	A	A		A	A	B	B
95th-Percentile Queue Length [veh]	0.28	0.84		0.87	1.02	5.71	6.81
95th-Percentile Queue Length [ft]	6.89	21.05		21.87	25.58	142.70	170.29
Approach Delay [s/veh]	6.85		0.00	4.62		13.92	
Approach LOS	A		A	A		B	
Intersection Delay [s/veh]	10.78						
Intersection LOS	B						

7th Street & County Line Road RV Fueling

Vistro File: C:\...\PME.vistro

Scenario 13 Existing Plus Ambient Growth Plus Project Plus Cumulative PM Peak Hour - With Improvements (RB)

Report File: C:\...\PMEAPCI-RB.pdf

12/16/2019

Intersection Analysis Summary

ID	Intersection Name	Control Type	Method	Worst Mvmt	V/C	Delay (s/veh)	LOS
6	I-10 SB Ramps (NS) at County Line Ave (EW)	Roundabout	HCM 6th Edition	EB Thru		5.8	A
7	I-10 NB Ramps (NS) at County Line Rd (EW)	Roundabout	HCM 6th Edition	NB Right		6.0	A

V/C, Delay, LOS: For two-way stop, these values are taken from the movement with the worst (highest) delay value. For all other control types, they are taken for the whole intersection.

Intersection Level Of Service Report
Intersection 6: I-10 SB Ramps (NS) at County Line Ave (EW)

Control Type:	Roundabout	Delay (sec / veh):	5.8
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	0	0	0	1	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]		30.00			30.00			25.00			25.00	
Grade [%]		0.00			0.00			0.00			0.00	
Crosswalk		No			No			No			No	

Volumes

Name												
Base Volume Input [veh/h]	0	0	0	471	2	26	0	54	6	263	42	0
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.00	1.00	1.00	1.04	1.04	1.04	1.00	1.04	1.04	1.04	1.04	1.00
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	0	0	0	36	0	57	0	99	35	23	80	0
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	0	0	0	526	2	84	0	155	41	297	124	0
Peak Hour Factor	0.8290	0.8290	0.8290	0.9640	0.9640	0.9640	0.8290	0.9640	0.9640	0.9640	0.9640	0.8290
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	0	0	0	136	1	22	0	40	11	77	32	0
Total Analysis Volume [veh/h]	0	0	0	546	2	87	0	161	43	308	129	0
Pedestrian Volume [ped/h]		0			0			0			0	

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			1			1			
Circulating Flow Rate [veh/h]	721			446			873			0			
Exiting Flow Rate [veh/h]	360			0			220			721			
Demand Flow Rate [veh/h]	0	0	0	526	2	84	0	155	41	297	124	0	
Adjusted Demand Flow Rate [veh/h]	0	0	0	546	2	87	0	161	43	308	129	0	

Lanes

Overwrite Calculated Critical Headway		No	No	No	No	No	No	No	No
User-Defined Critical Headway [s]		4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time		No	No	No	No	No	No	No	No
User-Defined Follow-Up Time [s]		3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
A (intercept)		1420.00	1420.00	1420.00	1420.00	1420.00	1420.00	1420.00	1420.00
B (coefficient)		0.00091	0.00091	0.00091	0.00091	0.00091	0.00091	0.00091	0.00091
HV Adjustment Factor		0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Entry Flow Rate [veh/h]		280	280	89	83	83	44	315	132
Capacity of Entry and Bypass Lanes [veh/h]		947	947	947	642	642	642	1420	1420
Pedestrian Impedance		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]		928	928	928	629	629	629	1393	1393
X, volume / capacity		0.30	0.30	0.09	0.13	0.13	0.07	0.22	0.09

Movement, Approach, & Intersection Results

Lane LOS		A	A	A	A	A	A	A	A
95th-Percentile Queue Length [veh]		1.24	1.24	0.31	0.44	0.44	0.22	0.85	0.31
95th-Percentile Queue Length [ft]		30.96	30.96	7.74	10.94	10.94	5.49	21.17	7.64
Approach Delay [s/veh]	0.00	6.67			7.05			4.10	
Approach LOS	A	A			A			A	
Intersection Delay [s/veh]	5.85								
Intersection LOS	A								

Intersection Level Of Service Report
Intersection 7: I-10 NB Ramps (NS) at County Line Rd (EW)

Control Type:	Roundabout	Delay (sec / veh):	6.0
Analysis Method:	HCM 6th Edition	Level Of Service:	A
Analysis Period:	15 minutes		

Intersection Setup

Name												
Approach	Northbound			Southbound			Eastbound			Westbound		
Lane Configuration												
Turning Movement	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right
Lane Width [ft]	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00	12.00
No. of Lanes in Pocket	0	0	0	0	0	0	1	0	0	0	0	0
Pocket Length [ft]	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Speed [mph]	30.00			30.00			35.00			35.00		
Grade [%]	0.00			0.00			0.00			0.00		
Crosswalk	No			No			No			No		

Volumes

Name												
Base Volume Input [veh/h]	6	1	263	0	0	0	24	498	0	0	299	278
Base Volume Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Heavy Vehicles Percentage [%]	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Growth Factor	1.04	1.04	1.04	1.00	1.00	1.00	1.04	1.04	1.00	1.00	1.04	1.04
In-Process Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Site-Generated Trips [veh/h]	36	0	33	1	0	0	56	79	0	0	67	25
Diverted Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Pass-by Trips [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Existing Site Adjustment Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Other Volume [veh/h]	0	0	0	0	0	0	0	0	0	0	0	0
Total Hourly Volume [veh/h]	42	1	307	1	0	0	81	597	0	0	378	314
Peak Hour Factor	0.9920	0.9920	0.9920	0.8250	0.8250	0.8250	0.9920	0.9920	0.8250	0.8250	0.9920	0.9920
Other Adjustment Factor	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
Total 15-Minute Volume [veh/h]	11	0	77	0	0	0	20	150	0	0	95	79
Total Analysis Volume [veh/h]	42	1	309	1	0	0	82	602	0	0	381	317
Pedestrian Volume [ped/h]	0			0			0			0		

Intersection Settings

Number of Conflicting Circulating Lanes	1			1			1			1		
Circulating Flow Rate [veh/h]	698			431			0			128		
Exiting Flow Rate [veh/h]	0			408			431			929		
Demand Flow Rate [veh/h]	42	1	307	0	0	0	81	597	0	0	378	314
Adjusted Demand Flow Rate [veh/h]	42	1	309	0	0	0	82	602	0	0	381	317

Lanes

Overwrite Calculated Critical Headway	No	No		No	No	No	No
User-Defined Critical Headway [s]	4.00	4.00		4.00	4.00	4.00	4.00
Overwrite Calculated Follow-Up Time	No	No		No	No	No	No
User-Defined Follow-Up Time [s]	3.00	3.00		3.00	3.00	3.00	3.00
A (intercept)	1420.00	1420.00		1420.00	1420.00	1420.00	1420.00
B (coefficient)	0.00091	0.00091		0.00091	0.00091	0.00091	0.00091
HV Adjustment Factor	0.98	0.98		0.98	0.98	0.98	0.98
Entry Flow Rate [veh/h]	44	316		328	370	389	324
Capacity of Entry and Bypass Lanes [veh/h]	753	753		1420	1420	1265	1265
Pedestrian Impedance	1.00	1.00		1.00	1.00	1.00	1.00
Capacity per Entry Lane [veh/h]	738	738		1393	1393	1240	1240
X, volume / capacity	0.06	0.42		0.23	0.26	0.31	0.26

Movement, Approach, & Intersection Results

Lane LOS	A	B		A	A	A	A
95th-Percentile Queue Length [veh]	0.19	2.08		0.89	1.05	1.32	1.02
95th-Percentile Queue Length [ft]	4.63	52.02		22.37	26.19	32.88	25.54
Approach Delay [s/veh]	9.84		0.00	4.66		5.48	
Approach LOS	A		A	A		A	
Intersection Delay [s/veh]	6.04						
Intersection LOS	A						

APPENDIX E

TRAFFIC SIGNAL WARRANT WORKSHEETS

PEAK HOUR VOLUME WARRANT
(Rural Areas)

Existing

Major Street Name = **I-10 SB Ramps**

Total of Both Approaches (VPH) = **499**

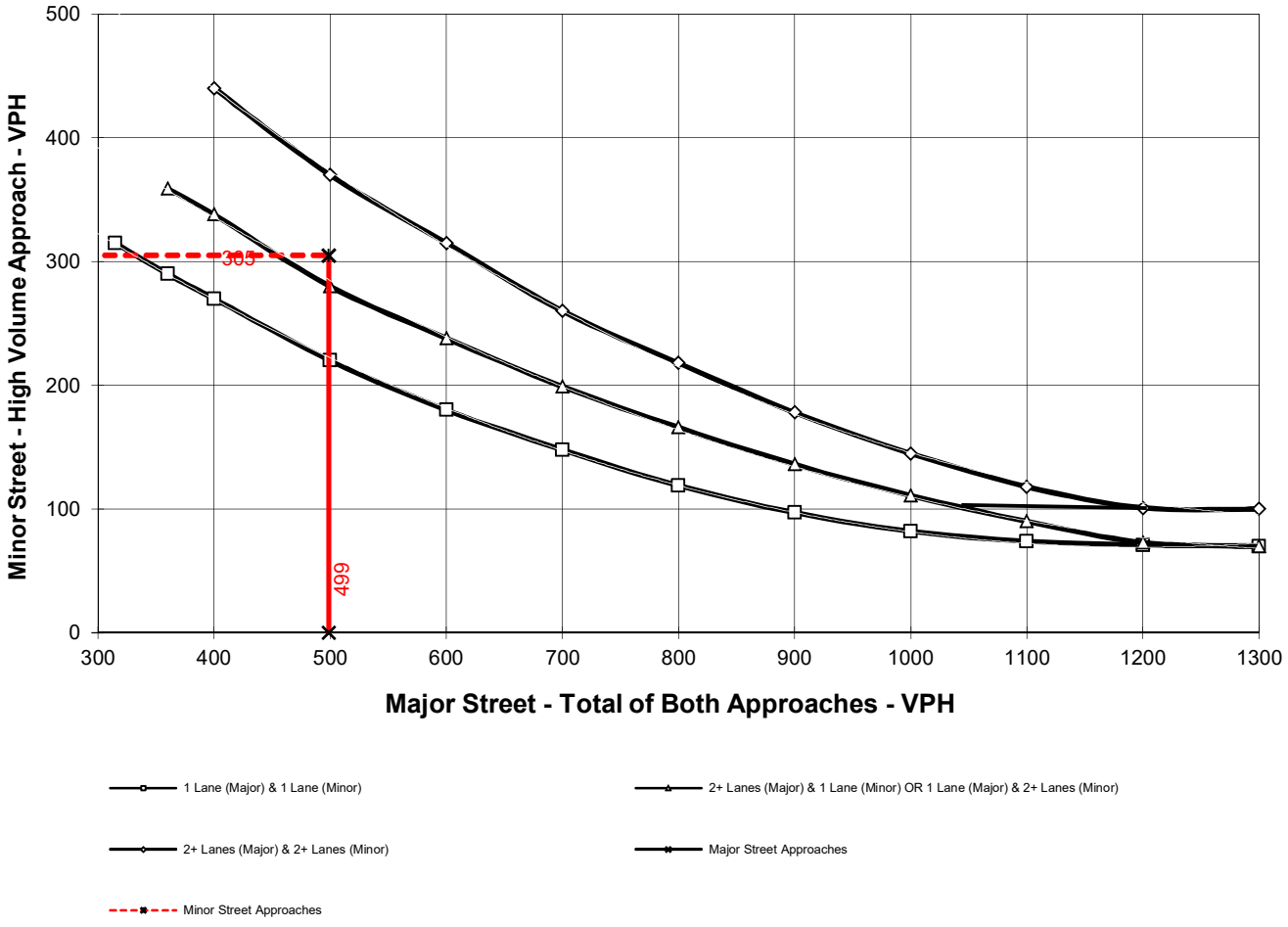
Number of Approach Lanes Major Street = **1**

Minor Street Name = **County Line Road**

High Volume Approach (VPH) = **305**

Number of Approach Lanes Minor Street = **1**

WARRANTED FOR A SIGNAL



** NOTE:
100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 75 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

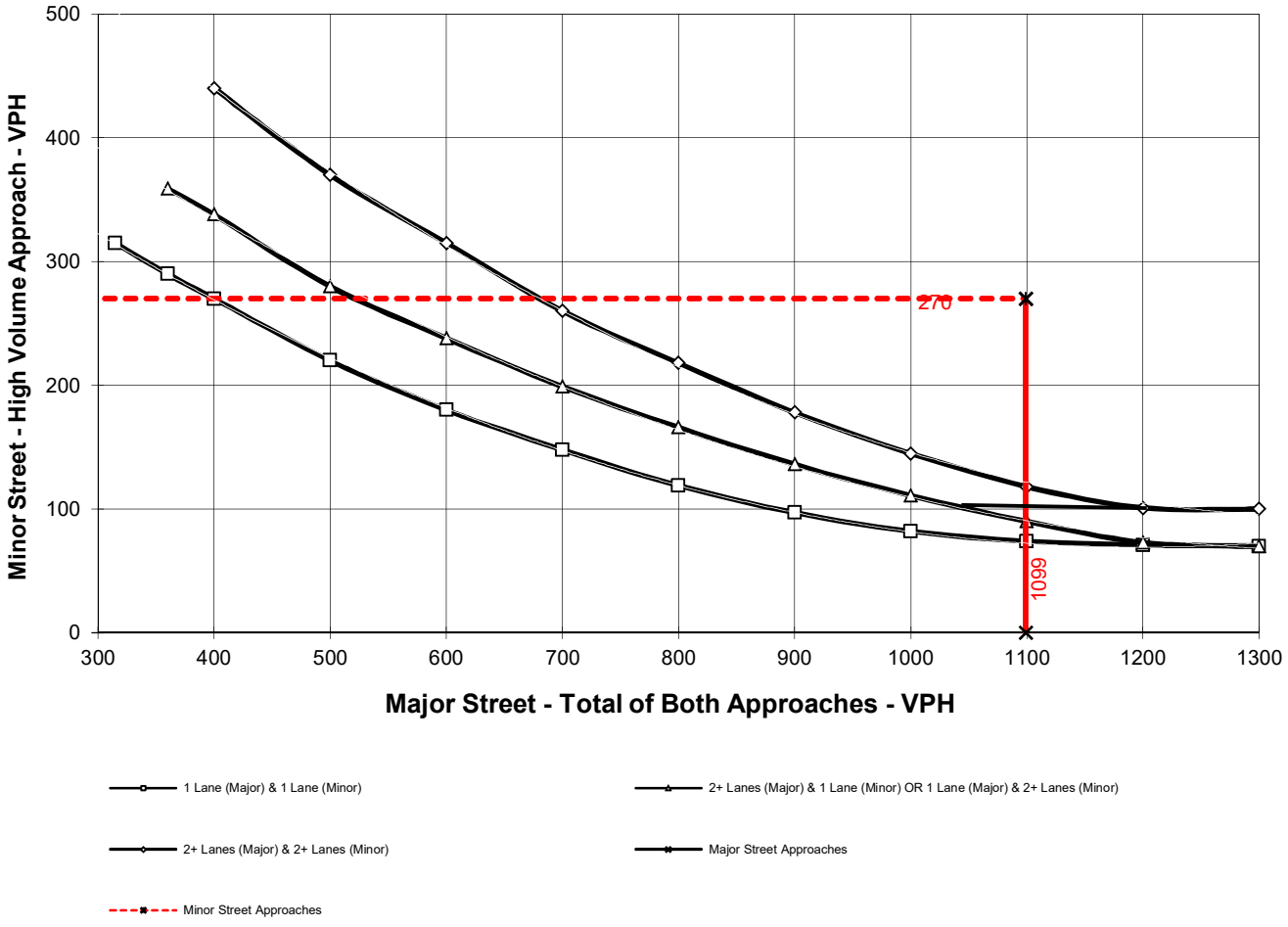
PEAK HOUR VOLUME WARRANT
(Rural Areas)

Existing

Major Street Name = **County Line Avenue**
Total of Both Approaches (VPH) = **1099**
Number of Approach Lanes Major Street = **2**

Minor Street Name = **I-10 NB Ramps**
High Volume Approach (VPH) = **270**
Number of Approach Lanes Minor Street = **1**

WARRANTED FOR A SIGNAL



** NOTE:
100 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACH WITH TWO OR MORE LANES AND 75 VPH APPLIES AS THE LOWER THRESHOLD VOLUME FOR A MINOR STREET APPROACHING WITH ONE LANE.

APPENDIX F

TRANSPORTATION UNIFORM MITIGATION FEE (TUMF) IMPROVEMENT NETWORK

2019 Pass Zone 5-Year Transportation Improvement Program

Fiscal Year			FY18-19	FY19-20	FY20-21	FY21-22	FY22-23	Current Programmed Phase Balance	Total Phase Payments/ Expenditures	Original Programmed Phase Cost
Forecast Revenues			$ 10,100,000	$ 1,010,000	$ 1,020,100	$ 1,030,301	$ 1,040,604	$ 15,488,075	$ -	$ 15,488,075
Carryover Revenues *(As of 12/11/18)*			$ -	$ 4,861,925	$ 2,621,925	$ 642,025	$ (327,674)			
Available Revenues			$ 10,100,000	$ 5,871,925	$ 3,642,025	$ 1,672,326	$ 712,930			
Programmed/Expenditures		***Status* Phase*****								
Cities of Banning and Beaumont										
17-PS-BAN-1191	Highland Springs Avenue Interchange	PA&ED						$ -	$ -	$ -
		PSE						$ -	$ -	$ -
		ROW	$ 800,000					$ 800,000	$ -	$ 800,000
		CON	$ 1,200,000					$ 1,200,000	$ -	$ 1,200,000
City of Banning										
06-PS-BAN-1109	Sunset Avenue Grade Separation	PA&ED						$ -	$ -	$ -
		PSE						$ -	$ -	$ -
		ROW	$ 360,792					$ 360,792	$ -	$ 360,792
		CON						$ -	$ -	$ -
City of Beaumont										
19-PS-BEA-1204	Potrero Boulevard Interchange (Phase II)	PA&ED						$ -	$ -	$ -
		PSE						$ -	$ -	$ -
		ROW						$ -	$ -	$ -
		CON		$ 3,000,000	$ 2,000,000			$ 5,000,000	$ -	$ 5,000,000
City of Calimesa										
19-PS-CAL-1205	County Line Road Interchange	PA&ED		$ 250,000				$ 250,000	$ -	$ 250,000
		PSE			$ 1,000,000	$ 1,000,000		$ 2,000,000	$ -	$ 2,000,000
		ROW				$ 1,000,000	$ 1,000,000	$ 2,000,000	$ -	$ 2,000,000
		CON						$ -	$ -	$ -
16-PS-CAL-1189	Cherry Valley Boulevard Interchange	PA&ED						$ -	$ -	$ -
		PSE	$ 2,100,000					$ 2,100,000	$ -	$ 2,100,000
		ROW					$ 1,000,000	$ 1,000,000	$ -	$ 1,000,000
		CON						$ -	$ -	$ -
County of Riverside										
06-PS-BAN-1109	Sunset Avenue Grade Separation	PA&ED						$ -	$ -	$ -
		PSE	$ 202,307					$ 202,307	$ -	$ 202,307
		ROW	$ 46,225					$ 46,225	$ -	$ 46,225
		CON	$ 528,751					$ 528,751	$ -	$ 528,751
Total Programmed Capital Expenditures			***$ 5,238,075***	***$ 3,250,000***	***$ 3,000,000***	***$ 2,000,000***	***$ 2,000,000***			
Total Programmed Carryover Balance*			***$ 4,861,925***	***$ 2,621,925***	***$ 642,025***	***$ (327,674)***	***$ (1,287,070)***			

Summary Table

Fiscal Year	FY18-19	FY19-20	FY20-21	FY21-22	FY22-23	*5-Year Total Available Forecast/Cash*	*5-Year Total Programmed*	*5-Year Balance*
Available Revenues	$ 10,100,000	$ 5,871,925	$ 3,642,025	$ 1,672,326	$ 712,930			
Funded Programmed	$ 5,238,075	$ 3,250,000	$ 3,000,000	$ 2,000,000	$ 2,000,000	$ 14,201,005	$ 15,488,075	$ (1,287,070)
Carryover Balance	$ 4,861,925	$ 2,621,925	$ 642,025	$ (327,674)	$ (1,287,070)			

APPENDIX G

VEHICLES MILES TRAVELED ANALYSIS

Background

California Senate Bill 743 (SB 743) directs the State Office of Planning and Research (OPR) to amend the California Environmental Quality Act (CEQA) Guidelines for evaluating transportation impacts to provide alternatives to Level of Service that "promote the reduction of greenhouse gas emissions, the development of multimodal transportation networks, and a diversity of land uses." In December 2018, the California Natural Resources Agency certified and adopted the updated CEQA Guidelines package. The amended CEQA Guidelines, specifically Section 15064.3, recommend the use of Vehicle Miles Travelled (VMT) as the primary metric for the evaluation of transportation impacts associated with land use and transportation projects. In general terms, VMT quantifies the amount and distance of automobile travel attributable to a project or region. Agencies may currently opt-in to applying the updated CEQA guidelines for VMT analysis and implementation is required State-wide by July 1, 2020.

The updated CEQA Guidelines allow for lead agency discretion in establishing methodologies and thresholds provided there is substantial evidence to demonstrate that the established procedures promote the intended goals of the legislation. Where quantitative models or methods are unavailable, Section 15064.3 allows agencies to assess VMT qualitatively using factors such as availability of transit and proximity to other destinations. The Technical Advisory on Evaluating Transportation Impacts in CEQA (State of California, December 2018) ["Technical Advisory"] provides technical considerations regarding methodologies and thresholds with a focus on office, residential, and retail developments as these projects tend to have the greatest influence on VMT.

VMT Assessment and Screening

The project VMT assessment has been performed in accordance with the Final City of Calimesa Transportation Impact Analysis Guidelines for Vehicle Miles Traveled and Level of Service Assessment (May 2020).

The City of Calimesa guidelines state that the following activities generally will not require detailed VMT analysis based on substantial evidence provided in the OPR Technical Advisory supporting SB 743 implementation or is related to projects that are local serving which, by definition, would decrease the number of trips or the distance those trips travel to access the development (and are therefore VMT reducing projects):

- Projects located in a Transit Priority Areas (TPA) (as defined in the City guidelines)
- Projects located in a low-VMT generating area (as defined later in the City guidelines)
- Local serving K-12 schools
- Local parks
- Day care centers
- Local-serving gas stations
- Local-serving banks
- Local-serving hotels (e.g. non-destination hotels)
- Student housing projects
- Local-serving medical facilities
- Local serving community colleges that are consistent with the assumptions noted in the RTP/SCS
- Projects generating less than 110 daily vehicle trips. This generally corresponds to the following "typical" development potentials:
    - 11 single family housing units
    - 16 multi-family, condominiums, or townhouse housing units
    - 10,000 square feet of office
    - 15,000 square feet of light industrial
    - 63,000 square feet of warehousing
    - 79,000 square feet of high-cube transload and short-term storage warehouse

The Technical Advisory contains guidance indicating that local-serving retail, defined as less than 50,000 square feet, would typically shorten trips and reduce VMT. New retail development typically redistributes shopping trips rather than creating new trips. By adding retail opportunities into the urban fabric and thereby improving proximity, local-serving retail tends to shorten trips and reduce VMT.

Presumption of Less Than Significant VMT Impact for Local Serving Retail Projects

The proposed project anticipated to have similar VMT characteristics as local-serving retail and gas stations since the total project is less than 50,000 square feet and the proposed RV fueling amenities are an addition to the adjacent local-serving gasoline station. Furthermore, the proposed RV fueling pumps and coffee/donut shop at the project site would introduce a new opportunity for such services in the community and thereby shorten the distance that patrons would otherwise travel to other similar uses. Therefore, the proposed project meets the screening criteria from the City of Calimesa and the Technical Advisory for presumption of less than significant VMT impact for local-serving gas station and retail uses.

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